In the College of Business Administration

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

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

Faculty
Emeritus: Barnett, Brodshatzer, Butler, Capettini, Chow, Doran, Garrett, Houston, Lightner, K., Meier, Meigs, Samuelson, Toole, Venable, Whittington, Williamson
Director: Chang
The Vern E. Odmark Chair in Accountancy: Chang
Professors: Anderson, Chang, Grudnitski, Krygowsky, Oestreich
Associate Professors: Chan, DeBesokley, Fleming, Gill, Joh
Assistant Professors: Kawada, Luo

Offered by the Charles W. Lamden School of Accountancy
Master of Business Administration.
Master of Science degree in accountancy.
Major in accounting with the B.S. degree in business administration.
Major in general business with the B.S. degree in business administration. See Business Administration.
Minor in accounting.
Certificate in accounting.

The Vern E. Odmark Chair in Accountancy
Established in recognition of Dr. Vern Odmark for his 25 years of teaching at SDSU, basic support is provided by contributions from friends, alumni, and corporations, including many major national accounting firms. The chair acknowledges the university’s objective of continuing the high standards of teaching excellence and professionalism that characterized Odmark’s career.

Dr. Chee W. Chow, widely recognized across the country for the breadth of his research and his technical thoroughness, held the chair from 1984 until his retirement in 2006. Dr. Janie Chang, recognized for research and teaching, was awarded the chair in fall 2006.

The Major
The major in accounting provides basic concepts of accounting and business knowledge to students seeking professional careers in the field. Growing with the increased complexity of the business world, accounting continues to offer a wide choice of careers and opportunities.

The School of Accountancy offers two programs at the undergraduate level: The Business Accounting Program and the BS/MS 4+1 degree program (BMACC) for a B.S. and M.S. in Accountancy.

The Business Accounting Program offers courses to prepare students for a variety of entry-level financial or general business positions, or for graduate work in accounting, business, or law. This track leads to a B.S. in Business Administration, Accounting.

The BS/MS 4+1 degree program (BMACC) is for students who plan to pursue professional accounting careers in public accounting firms, corporations, and not-for-profit and governmental organizations.

Business Honors Program
The Business Honors Program offers excellent upper division business students the opportunity to explore issues in our local, regional, and global business environments focusing on the social and ethical responsibilities that business has to the community and society. Honors students will enroll in a one unit business honors seminar each semester. During their enrollment they will participate in activities to promote their academic and personal growth, documenting their work in a written portfolio.

Generally, students should apply to this program at the time of application to upper division business. Applicants must submit an essay with their application. Applicants must have a 3.6 cumulative GPA or good standing in the Weber Honors College. Students not meeting these requirements may petition for admission to the program. Successful completion of the Business Honors Program will be recognized at graduation. Contact Dr. Robert A. Judge, Department of Management Information Systems, for more information about this program.

Statement on Computers
Before enrolling in upper division courses in the College of Business Administration, students must be competent in the operation of personal computers, including word processing and spreadsheets. Business students are strongly encouraged to have their own computers capable of running word processing, spreadsheet, presentation, e-mail, and Internet applications such as those found in packages sold by major software publishers. Availability of on-campus computing resources can be limited due to increasing demand across the university.

Retention Policy
The College of Business Administration expects that all business students will make reasonable academic progress towards the degree. Business premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.9 may be removed from the premajors and placed in undeclared. Upper division business majors earning less than a 2.0 average in their major GPA for two consecutive semesters may be removed from business and placed in undeclared.

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

Transfer Credit

Lower Division: Courses clearly equivalent in scope and content to San Diego State University courses required for minors or as preparation for all business majors will be accepted from regionally accredited United States institutions and from foreign institutions recognized by San Diego State University and the College of Business Administration.

Upper Division: It is the policy of the San Diego State University College of Business Administration to accept upper division transfer credits where (a) the course content, requirements, and level are equivalent to San Diego State University courses and (b) where the course was taught in an AACSB International—The Association to Advance Collegiate Schools of Business accredited program. Exceptions require thorough documentation evidencing the above standards.

Impacted Program
The accounting major is impacted. Before enrolling in any upper division courses in business administration, students must advance to an upper division business major and obtain a business major code. To be admitted to an upper division business major (accounting, finance, financial services, real estate, information systems, management, or marketing), students must meet the following criteria:

a. Complete with a grade of C or higher: Accounting 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 189; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290 (RWS 290 is not required for the accounting major); and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (Cr/NC);

b. Complete a minimum of 60 transferable semester units;

c. Have a cumulative GPA of 2.9.

Students who meet all requirements except the GPA may request to be placed on the waiting list. While all spaces are usually filled by eligible students, if there is room in the program after all the fully-qualified students have been accommodated, students will be admitted from the waiting list in GPA order. Contact the Business Advising Center (EBA-448), 619-594-5828, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).
Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Accounting Major

With the B.S. Degree in Business Administration
(Major Code: 05021) (SIMS Code: 221908)
A minor is not required with this major.

Preparation for the Major. Complete with a grade of C or higher: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 185; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); and either Statistics 119 or Economics 201. (24 units)

These prerequisite courses may not be taken 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.

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Accountancy 390W and earn a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Business Accounting Program Major. Forty-eight upper division units consisting of Accountancy 331, 332, 333, 334, 390W with a grade of C (2.0) or better, Accountancy 431, 432, and six units of upper division accountancy electives (not including Accountancy 325 or 326); Business Administration 300, 310, 323, 350, 360, 370; Business Administration 404, 405, or 458 (three units), Management Information Systems 301. A “C” (2.0) average or better is required in the courses stipulated here for the major.

BS/MS 4+1 Degree Program (BMACC). (SIMS Code: 221912)
The BS/MS 4+1 degree program (BMACC) is for students who plan to pursue professional accounting careers in public accounting firms, corporations, and not-for-profit and government organizations. Students must successfully complete 150 units to be awarded simultaneously the B.S. degree in Business Administration, Accounting, and then the M.S. degree in Accountancy.

Students must apply and be admitted to the BS/MS 4+1 degree program (BMACC). All students must have a satisfactory score on the Graduate Management Admissions Test, a minimum overall GPA of 3.0, a minimum SDSU GPA of 3.0, and a minimum upper division SDSU College of Business Administration GPA of 3.0. Students may apply for the program at any time during their undergraduate studies after completing at least two upper division core accountancy courses (must include Accountancy 331) with a minimum grade of 3.0 among the completed courses (upper division Accountancy core courses include Accountancy 331, 332, 333, 334, 431, 432).

Students attain graduate status when they have earned at least 120 units towards the completion of the BMACC program. No more than nine units may be in 500-level courses to meet the requirements for the master’s program. At least 15 units of 500-, 600-, and 700-numbered courses must be in accounting courses (to include Accountancy 790) and must include at least 12 units in courses numbered 650 and above (in special cases, nine units with adviser approval). Students must achieve at least a 3.0 average in the courses numbered 500 and above and specified on their official program for the 30 unit master’s degree. Courses numbered 500 and above must be completed within seven years of the first course completed on the master’s degree program. If for any reason a student does not satisfactorily complete the requirements for the Master of Science in Accountancy degree, they will be awarded the B.S. degree in Business Administration in Accounting, upon completion of the requirements for the B.S. degree.

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

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<thead>
<tr>
<th>JUNIOR YEAR (Fall Semester)</th>
<th>Units</th>
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<tr>
<td>Accountancy 331...............................</td>
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<td>Business Administration 360..........................</td>
<td>3</td>
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<tr>
<td>Management Information Systems 301..........................</td>
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<tr>
<td>General Education Explorations of Human Experience...........</td>
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<tr>
<td>Accountancy 332...............................</td>
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<td>Business Administration 323..........................</td>
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<td>General Education Explorations of Human Experience...........</td>
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<td>Graduate accountancy elective 500- and above...........</td>
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<tr>
<td>General Education Explorations of Human Experience...........</td>
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<td>Graduate elective 600- and above..........................</td>
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<tr>
<td>Graduate elective 600- and above..........................</td>
<td>3</td>
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<tr>
<td>Prepare and pass professional certification examination...</td>
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| Total preparation for the major | 150 |

| Electives (See BMACC Adviser) | 61 |

Overall total for BS/MS 4+1 degree program (BMACC) 150
Accountancy

Accounting Minor
(SIMS Code: 221910)

The minor in accounting consists of a minimum of 24 units to include Accountancy 201, 202, 331*, 332*, 333, 334, Economics 101, 102. Accountancy 201 and 202 must be completed with a minimum grade of C (2.0) to declare the minor.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. Students with a major in the College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Business Advising Center. Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Business Advising Center for admissions criteria and procedures.

* Finance majors must substitute Accountancy 431 and 432 or two Accountancy 500-level electives for accountancy 331 and 332. Accountancy 390W is waived for finance majors who are also seeking an accounting minor in taking Accountancy 431.

Accounting Certificate
(SIMS Code: 221903)

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

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

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

* General Education prerequisite waived for students in this program.

Courses (ACCTG)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

**ACCTG 201. Financial Accounting Fundamentals (3)**

Theory and practice of accounting applicable to recording, summarizing, and reporting of business transactions for external reporting and other external uses. Asset valuation, revenue and expense recognition; various asset, liability, and capital accounts.

**ACCTG 202. Managerial Accounting Fundamentals (3)**

Prerequisite: Minimum grade of C in Accountancy 201. Proof of completion of prerequisite required: Copy of transcript.

Selection and analysis of accounting information for internal use by managers. Using financial information for planning and control purposes.

**ACCTG 296. Experimental Topics (1-4)**

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

**ACCTG 325. Intermediate Managerial and Tax Accounting (3)**

Prerequisites: Accountancy 202; Management Information Systems 180; Mathematics 120; and either Statistics 119 or Economics 201. Approved upper division business major or minor or other approved major. Not open to accounting majors. Proof of completion of prerequisites required: Copy of transcript.

Theories, practices, and concepts to provide planning and control information to decision makers; tax considerations that impact managerial planning and decision making. May not be taken for credit by accounting majors.

**ACCTG 326. Intermediate Financial Accounting (3)**

Prerequisites: Accountancy 202; Management Information Systems 180; Mathematics 120; and either Statistics 119 or Economics 201. Approved upper division business major or minor or other approved major. Not open to accounting majors. Proof of completion of prerequisites required: Copy of transcript.

Concepts and methods underlying financial statements (including IFRS introduction). Not open to students with credit in Accountancy 325 and 326. (Accountancy 331 and 332 formerly numbered Accountancy 321.)

**ACCTG 331. Intermediate Accounting I (3)**

Prerequisites: Admission to accounting major, minor, or certificate. Minimum grade of C in Accountancy 201 and 202. For approved business majors, credit or concurrent registration in Business Administration 310. Completion of General Education requirement in Communication and Critical Thinking. Proof of completion of prerequisites required: Copy of transcript.

Theories, practices, and concepts needed to satisfy the decision making requirements of external users; financial reporting for enterprises engaged in international trade of business. May not be taken for credit by accounting majors.

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

Prerequisites: Admission to accounting major, minor, or certificate. Minimum grade of C in Accountancy 331. Proof of completion of prerequisites required: Copy of transcript.

Concepts and methods underlying taxation of business entities. Not open to students with credit in Accountancy 325 and 326. (Accountancy 331 and 332 formerly numbered Accountancy 321.)

**ACCTG 333. Accounting Information Systems (3)**

Prerequisite: Minimum grade of C in Accountancy 331. Proof of completion of prerequisite required: Copy of transcript.

Accounting information systems for internal and external decision-making. (Accountancy 333 and 334 formerly numbered Accountancy 322.)

**ACCTG 334. Intermediate Accounting II (3)**

Prerequisite: Minimum grade of C in Accountancy 331. Proof of completion of prerequisite required: Copy of transcript.

Financial reporting issues; preparation and use of financial statement information. (Accountancy 333 and 334 formerly numbered Accountancy 322.)
ACCTG 390W. Reporting Techniques for Accountants (4)
Prerequisite: Minimum grade of C in Accountancy 331. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in Rhetoric and Writing Studies 280, 281, or Linguistics 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisite required: Test score or verification of exemption; copy of transcript.
Advanced preparation of written and oral reports with application to professional needs of accountants. (Formerly numbered Information and Decision Systems 390W/Management Information Systems 390W.)

ACCTG 409. Field Study in Taxation (1) Cr/NC
Prerequisite: Consent of instructor. Individual study. Maximum credit six units. Proof of completion of prerequisite required: Copy of transcript.
Income tax preparation in the field. Follows procedures of IRS VITA Program. IRS instruction followed by faculty supervised fieldwork. Student must be available for special IRS tax school. Not applicable to an accounting major or minor. Maximum credit three units.

ACCTG 431. Auditing (3)
Prerequisites: Minimum grade of C in Accountancy 333 and credit or concurrent registration in Accountancy 390W. Proof of completion of prerequisite required: Copy of transcript.
Audit of financial statements in accordance with generally accepted auditing standards; ethics in auditing. (Accountancy 431 and 432 formerly numbered Accountancy 421.)

ACCTG 432. Cost Management (3)
Prerequisites: Business Administration 323. For accounting majors, a minimum grade of C in Accountancy 331. For finance majors, a minimum grade of C in Accountancy 326 and Rhetoric and Writing Studies 290. Proof of completion of prerequisites required: Copy of transcript.
Use of accounting information to facilitate managerial business decisions; cost management and ethics in managerial accounting. (Accountancy 431 and 432 formerly numbered Accountancy 421.)

ACCTG 496. Selected Topics in Accountancy (1-4)
Prerequisite: Consent of department chair. Selected areas of concern in accountancy. May be repeated with new content with consent of department chair. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

ACCTG 498. Investigation and Report (1-3)
Prerequisite: Consent of instructor and senior standing.
A comprehensive and original study of a problem connected with accounting under the direction of one or more members of the accounting staff. May be repeated with new content. Maximum credit six units.

ACCTG 499. Special Study (1-3)
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

ACCTG 501. Advanced Financial Accounting (3)
Prerequisites: Minimum grade of C in Accountancy 334. Proof of completion of prerequisite required: Copy of transcript.
Advanced financial accounting topics. Partnerships, consolidations, foreign currency transactions and financial statements, accounting for derivatives and hedging, accounting for bankruptcy and reorganizations.

ACCTG 503. Federal Taxation of Individuals (3)
Prerequisites: Accountancy 201 and 202. Approved upper division business major, business minor, or other approved major. Proof of completion of prerequisite required: Copy of transcript.
Taxation of individuals, including income, deductions, credits, social security taxes, and property transactions.

ACCTG 505. Fraud Examination (3)
Prerequisite: Accountancy 431 or 626. Proof of completion of prerequisite required: Copy of transcript.
Skills and tools for auditors, consultants, tax professionals, managers. Techniques and technologies for fraud investigation and interviewing. Case analysis, research of public records, ethical decision-making for accountants. Service learning project.

ACCTG 508. Accounting for Not-For-Profit Organizations (3)
Prerequisite: Minimum grade of C in Accountancy 326 or 331. Proof of completion of prerequisite required: Copy of transcript.
Accounting for not-for-profit accounting for governmental units, hospitals, colleges, and universities. Budgetary accounting, appropriations, encumbrances, internal controls, and auditing procedures.

ACCTG 522. International Financial Reporting (3)
Prerequisite: Accountancy 390W; minimum grade of C in Accountancy 334 (or Accountancy 620 and 625). Proof of completion of prerequisites required: Copy of transcript.
Accounting convergence, IASB-FASB joint projects. US and international financial reporting issues and standards.

ACCTG 596. Contemporary Topics in Accounting (1-3)
Prerequisites: Business major approved by the College of Business Administration and consent of instructor.
Contemporary topics in modern accounting. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate advisor.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Administration, Rehabilitation and Postsecondary Education
In the College of Education

OFFICE: Education and Business Administration 246
TELEPHONE: 619-594-6115
http://interwork.sdsu.edu/arpe

Accredited by the Council on Rehabilitation Education.

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

Offered by the Department
Doctor of Education degree in educational leadership.
Concentration in community college/postsecondary leadership.
Master of Arts degree in education.
Concentration in educational leadership with a specialization in postsecondary education.
Concentration in educational leadership with a specialization in student affairs in postsecondary education.
Master of Science degree in rehabilitation counseling.
Concentration in clinical rehabilitation and clinical mental health counseling.
Minor in leadership development.
Certificate in cognitive disabilities (refer to the Graduate Bulletin).
Certificate in community college teaching (refer to the Graduate Bulletin).
Certificate in institutional research, planning, and assessment (refer to the Graduate Bulletin).
Certificate in psychiatric rehabilitation (refer to the Graduate Bulletin).
Certificate in rehabilitation administration (refer to the Graduate Bulletin).
Certificate in rehabilitation counseling (refer to the Graduate Bulletin).
Certificate in rehabilitation technology (refer to Engineering section in the Graduate Bulletin).
Certificate in workforce education and lifelong learning (refer to the Graduate Bulletin).
Certificate in supported employment and transition specialist (refer to the Graduate Bulletin).

Leadership Development Minor
(Minor Code: 08271) (SIMS Code: 331907)
The minor in leadership development consists of a minimum of 17 units to include Administration, Rehabilitation and Postsecondary Education 205, 380, 403; Educational Leadership 404, 405; and six units of electives selected from Communication 371, Political Science 375, Public Administration 330, 340, 490, Philosophy 329, 330, 332, 340.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (ARP)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES
ARP 201. Introductory Statistics and Research Design for Education (3) [GE]
Prerequisites: Intermediate algebra, satisfaction of the Entry-Level Mathematics requirement, and consent of instructor.
Understanding, interpreting, and applying educational research. Basic research design, sampling, distributions, reliability, validity, descriptive statistics, inferential statistics, hypothesis testing, tests of significance, and evaluating an education research report. Students with credit or concurrent registration in the following lower division courses will be awarded a total of four units for the two (or more) courses: Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Economics 201; Political Science 201; Psychology 280; Sociology 201; Statistics 119, 250.
ARP 205. Exploring Leadership (3)
Understanding, applying and critiquing leadership theories, examining personal strengths, values, goals, and philosophy of leadership.
ARP 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.
**UPPER DIVISION COURSES**
(Also Acceptable for Advanced Degrees)

ARP 380. Principles of Adult and Vocational Education (3)
Principles, practices, scope, and functions of adult and vocational education.

ARP 382. Directed Teaching (2-4) Cr/NC
Prerequisite: Administration, Rehabilitation and Postsecondary Education 380.
Systematic observation, participation, and teaching under supervision in an occupational subject matter area. Application to take this course must be made in preceding semester.

ARP 397. Problems in Education (Credit to be arranged)
(Offered only in the College of Extended Studies)
Prerequisite: Consent of instructor.
Class study of specially selected problems in education. Does not apply to pattern requirements for credentials. Credit earned in this course not applicable to a bachelor's degree.

ARP 403. Field laboratory in Leadership: Campus and Other Postsecondary Settings (1)
Prerequisite: Administration, Rehabilitation and Postsecondary Education 205.
Laboratory on campus and at other postsecondary settings to integrate academic work with experiences on campus and in postsecondary settings.

ARP 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

ARP 499. Special Study (1-3)
Prerequisite: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.
Individual study. Maximum credit six units.

**UPPER DIVISION COURSES**
(Intended for Undergraduates)

ARP 380. Principles of Adult and Vocational Education (3)
Principles, practices, scope, and functions of adult and vocational education.

ARP 382. Directed Teaching (2-4) Cr/NC
Prerequisite: Administration, Rehabilitation and Postsecondary Education 380.
Systematic observation, participation, and teaching under supervision in an occupational subject matter area. Application to take this course must be made in preceding semester.

ARP 397. Problems in Education (Credit to be arranged)
(Offered only in the College of Extended Studies)
Prerequisite: Consent of instructor.
Class study of specially selected problems in education. Does not apply to pattern requirements for credentials. Credit earned in this course not applicable to a bachelor's degree.

ARP 403. Field laboratory in Leadership: Campus and Other Postsecondary Settings (1)
Prerequisite: Administration, Rehabilitation and Postsecondary Education 205.
Laboratory on campus and at other postsecondary settings to integrate academic work with experiences on campus and in postsecondary settings.

ARP 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

ARP 499. Special Study (1-3)
Prerequisite: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.
Individual study. Maximum credit six units.

**GRADUATE COURSES**
Refer to the Graduate Bulletin.
Aerospace Engineering
In the College of Engineering

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

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

Faculty
Emeritus: Conly, Dharmarajan, Pierucci, Shuts, Wang
Chair: Nosseir
Professors: Jacobs, Katz, Naran, Nosseir, Plotkin, Venkataraman
Associate Professor: Demasi
Assistant Professor: Liu

Offered by the Department
Doctor of Philosophy degree in engineering sciences: (bioengineering), (electrical and computer engineering), (mechanical and aerospace engineering), (structural engineering).
Master of Engineering.
Master of Science degree in aerospace engineering.
Major in aerospace engineering with the B.S. degree.

Transfer Credit
No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of engineering work attempted at this university. At that time, and upon recommendation of the department, credit will be given for the unaccredited work.

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

I. Communication and Critical Thinking: 9 units
You may not use Credit/No Credit grades in this section.
1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)

II. Foundations of Learning: 29 units
A. Natural Sciences and Quantitative Reasoning (17 units):
   1. Physical Sciences (11 units)
      Engineering students will take Chemistry 202 (4 units) or Chemistry 200 (5 units)
      Physics 195 (3 units)
      Physics 195L (1 unit)
      Physics 196 (3 units)
   2. Life Sciences (3 units)
      Engineering students will take Biology 100 or 101
   3. Mathematics (satisfied under A.1. above)
   4. Mathematics/Quantitative Reasoning
      Engineering students will take Mathematics 150, 3 units applicable to General Education. You may not use Credit/No Credit grades.
B. Social and Behavioral Sciences (3 units)

C. Humanities (9 units)
   Complete three courses in three different areas. One of these courses and the one under IV.A. below must be taken in the same department.

III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.

IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing (60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Total 9 units; must include one course of cultural diversity.
A. Upper division Humanities (3 units)
   Three units must be taken from the same department as one of the Humanities courses selected in Foundations of Learning.
B. Upper division Social and Behavioral Sciences (3 units).
C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

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

The aerospace industry, the second largest industry in our country, is one of the largest employers of engineers. Opportunities for employment in entry level positions in large aircraft companies, general aviation manufacturers, or government aerospace-related laboratories are good. Graduates of the program are also qualified to continue their formal education at the graduate level or to accept entry level positions in several nonaerospace fields.

Impacted Program
The aerospace engineering major is an impacted program. To be admitted to the aerospace engineering major, students must meet the following criteria:
   a. Complete with a grade of C or higher: Aerospace Engineering 200 or Mechanical Engineering 200; Chemistry 202 (or 200); Mathematics 152, 151; Physics 195, 196. These courses cannot be taken for credit/no credit (Cr/NC);
   b. Have an overall cumulative GPA of 2.5.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).
Aerospace Engineering Major

With the B.S. Degree

(Major Code: 09021) (SIMS Code: 441001)

Students majoring in aerospace engineering must include in their program a sequence of fundamental courses. In addition, the students have the opportunity to satisfy their particular areas of interest by selecting a pattern of study indicated in the sequence below. This pattern includes typical aerospace engineering topics, such as aerospace vehicle design, performance, structural analysis, aerodynamics, and propulsion.

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

**Preparation for the Major.** Aerospace Engineering 123, 280; Aerospace Engineering 200 or Mechanical Engineering 200; Aerospace Engineering 220 or Mechanical Engineering 220; Biology 100 or 101; Chemistry 202 (or 200); Electrical Engineering 204; Mathematics 150, 151, 252; Mechanical Engineering 101, 202, 240; Physics 195, 195L, 196, 197. (50 units)

Aerospace Engineering 200 or Mechanical Engineering 200; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196 must be completed with a grade of C or higher. These courses cannot be taken for credit/no credit (Cr/NC).

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

**Graduation Writing Assessment Requirement.** Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

**Major.** A minimum of 51 upper division units to include Aerospace Engineering 301, 302, 303, 310, 320, 340, 341, 342, 403, 410, 430, 440, 460A, 460B, 515; Civil Engineering 301 (or Mechanical Engineering 304); 302; Mechanical Engineering 350; and six units selected from Aerospace Engineering 510, 520, 530, 535, 540, 550.

Other electives may be substituted with consent of the adviser and department chair.

**Master Plan.** The master plan provides an advising record for aerospace engineering majors and should be initiated by the student with their faculty adviser during the second semester of the freshman year. All students must have a master plan on file in the department prior to enrollment in Aerospace Engineering 301 or 310. The master plan must be reviewed each semester with the faculty adviser before registration. All course substitutions must be approved by the department chair.

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**Courses (A E)***

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

**LOWER DIVISION COURSES**

A E 123. The Aerospace Engineer (1)
- Introduction to professional aerospace engineering. Emphasis on aeronautics and astronautics.

A E 200. Statics (3)
- Prerequisites: Physics 195 and credit or concurrent registration in Mathematics 151. Proof of completion of prerequisites required: Copy of transcript or registration confirmation.
- Force systems, equilibrium, structures, distributed forces, friction, virtual work, moments of inertia, vector algebra. (Formerly numbered Engineering Mechanics 200.)

A E 220. Dynamics (3)
- Prerequisite: Aerospace Engineering 200 or Mechanical Engineering 200 with a grade of C or better. Proof of completion of prerequisite required: Copy of transcript.
- Kinetics of a particle; central force motion; systems of particles; work and energy; impulse and momentum; moments and products of inertia; Euler's equations of motion; vibration and time response; engineering applications. (Formerly numbered Engineering Mechanics 220.)

A E 280. Methods of Analysis (3)
- Prerequisite: Mathematics 151 with minimum grade of C. Recommended: Mathematics 252.
- Selected topics from ordinary differential equations, the Laplace transform, Fourier series, and linear algebra, with engineering applications. (Formerly numbered Engineering Mechanics 220.)

A E 296. Experimental Topics (1-4)
- Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
A E 400. Aircraft Propulsion Systems (3)
Prerequisite: Aerospace Engineering 302 or Mechanical Engineering 351.
Theory and performance characteristics of aircraft propulsion systems including reciprocating engines, turbojets, ramjets, etc.

A E 440. Aircraft Stability and Control I (3)
Prerequisite: Aerospace Engineering 303.
Static stability and control, general equations of unsteady motion, stability derivatives, stability of uncontrolled motion, response of aircraft to actuation of controls.

A E 402. High Speed Aerodynamics (3)
Prerequisites: Aerospace Engineering 301 and Mechanical Engineering 350.
Supersonic flow, two- and three-dimensional compressible flow, wave propagation, two- and three-dimensional method of characteristics, transonic flow.

A E 303. Experimental Aerodynamics (2)
One lecture and three hours of laboratory.
Prerequisites: Aerospace Engineering 341 and credit or concurrent registration in Aerospace Engineering 301.

A E 310. Aerospace Structural Analysis (3)
Prerequisites: Mechanical Engineering 240, and Civil Engineering 301 (or Mechanical Engineering 304).
Methods of static structural analysis of problems encountered in flight of aerospace vehicles.

A E 320. Aerospace Flight Mechanics (3)
Prerequisites: Aerospace Engineering 220 or Mechanical Engineering 220 and Aerospace Engineering 280.
Two-body orbital mechanics including geocentric orbits and interplanetary transfers.

A E 340. Fluid Mechanics (3)
Prerequisites: Aerospace Engineering 220 or Mechanical Engineering 220; and credit or concurrent registration in Aerospace Engineering 280.
Fluid statics. Laminar and turbulent flow of liquids and gases in pipes, nozzles, and channels. Dimensional analysis and modeling. Drag forces on moving or immersed objects. (Formerly numbered Engineering Mechanics 340.)

A E 341. Fluid Mechanics Laboratory (1)
Three hours of laboratory.
Prerequisites: Credit or concurrent registration in Aerospace Engineering 340.

A E 403. Aerospace Engineering Senior Project (3)
One lecture and six hours of laboratory.
Prerequisites: Aerospace Engineering 302, 303, 340.
Design and build an aerospace project, conduct experimental measurements, perform analyses of measured data.

A E 410. Aerospace Structural Dynamics (3)
Prerequisite: Credit or concurrent registration in Aerospace Engineering 310.
Methods of structural dynamic analysis of problems encountered in aerospace vehicles.

A E 430. Aircraft Stability and Control II (3)
Prerequisite: Aerospace Engineering 303.
Aircraft motion is analyzed using the equations of motion, stability derivatives, and control derivatives derived in basic dynamics courses. Design for stability, control, and responses is presented in a realistic application context. Emphasis is on the analysis process using linearization, root locus, eigenvalue analysis, and frequency response techniques.

A E 460A. Aerospace Engineering Applications (3)
One lecture and five hours of design activity.
Prerequisites: Aerospace Engineering 302, 303, 310.
Student projects in aerospace design.

A E 460B. Aerospace Engineering Applications (2)
Six hours of laboratory.
Prerequisite: Aerospace Engineering 460A.
Student projects in aerospace design.

A E 496. Advanced Aerospace Engineering Topics (1-3)
Prerequisite: Consent of instructor.
Modern developments in engineering. See Class Schedule for specific content. Maximum credit six units for any combination of Aerospace Engineering 496, 499, and 596.

A E 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units for any combination of Aerospace Engineering 496, 499, and 596.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

A E 510. Finite Element Methods in Aerospace Structures (3)
Prerequisite: Aerospace Engineering 410.
Static and dynamic analysis of aerospace structures utilizing finite element methods. (Formerly numbered Engineering Mechanics 510.)

A E 515. Methods of Analysis (3)
Prerequisite: Aerospace Engineering 280 with minimum grade of C.
Selected topics from vector calculus, partial differential equations, and complex analysis, with engineering applications. (Formerly numbered Engineering Mechanics 510.)

A E 520. Intermediate Aerospace Flight Mechanics (3)
Prerequisite: Aerospace Engineering 320.
Rigid-body dynamics with applications in spacecraft attitude dynamics.

A E 530. Rocket and Space Propulsion (3)
Prerequisite: Aerospace Engineering 430.
Equilibrium combustion thermodynamics. Performance of rocket propelled vehicles. Rocket propulsion fundamentals. Topics in chemical (solid and liquid) and electrical propulsion systems.

A E 535. Mechanics of Composite Structures (3)
(Former course as Mechanical Engineering 535)
Prerequisites: Aerospace Engineering 280 and Aerospace Engineering 310 or Mechanical Engineering 314.
Micro- and macro-mechanics of composite materials, classical lamination theory, initial failure prediction and progressive failure analysis of laminates, analysis of beam and plate structures, stiffness and strength based design of composites. Not open to students with credit in Mechanical Engineering 540. (Formerly numbered Engineering Mechanics 530.)

A E 540. Aircraft Stability and Control II (3)
Prerequisite: Aerospace Engineering 440.
Dynamic stability and control of rigid aircraft; general equations of unsteady motion, stability derivatives, perturbed state thrust forces and moment, special problems in dynamic stability and response.

A E 550. Viscous Flow (3)
Prerequisites: Aerospace Engineering 340 and credit or concurrent registration in Aerospace Engineering 515.

A E 596. Advanced Aerospace Engineering Topics (3)
Prerequisite: Consent of instructor.
Modern developments in aerospace engineering. May be repeated with new content. See Class Schedule for specific content. Maximum credit of six units for any combination of Aerospace Engineering 496, 499, and 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Aerospace Studies
In the College of Professional Studies and Fine Arts

OFFICE: Exercise and Nutritional Sciences 385
TELEPHONE: 619-594-5545

Faculty
Chair: Grimes
Professor: Grimes
Assistant Professors: Boethin, Kim, LaBouliere

Offered by the Department
AFROTC curriculum.
Minor in aerospace studies.

AFROTC Curriculum
The department offers a three- or four-year Air Force Reserve Officers Training Corps program designed to develop officers who have broad understanding and high growth potential. For qualified students, two, three, or four-year scholarships are available in certain areas on a competitive basis. Scholarships pay full tuition at SDSU and various laboratory, textbook, and incidental fees plus a monthly nontaxable allowance of $300-$500 during the school year. Cadets participate in dialogues, problem solving, and other planning activities designed to develop leaders and managers. All coursework is done on campus with the exception of field trips and one field training encampment conducted at a military base.

A four week field training camp is required for all students during the summer between the sophomore and junior years. Field training emphasizes military orientation for the junior officer and aircraft and aircrew familiarization. Cadets receive physical training and participate in competitive sports. They observe selected Air Force units perform everyday operations, and they are trained in drill and ceremonies, preparation for inspections, and the use of weapons. Upon completion of the AFROTC program and all requirements for a bachelor's degree, cadets are commissioned Second Lieutenants in the Air Force and serve a minimum of four years active duty. Graduates go on active duty in a specialty consistent with their academic major, their desires, and existing Air Force needs. Graduates may request a delay from entry on active duty to continue their education or may apply for Air Force sponsored graduate study to begin immediately upon entry on active duty.

Applying for the Program
SDSU students enroll in aerospace classes by signing up for courses in the same manner as other university classes. There is no advance application needed for the freshman or sophomore years. However, an orientation program, held just prior to the start of each term, is recommended and designed to give new cadets a broad, realistic introduction to Air Force officer training and provide them with helpful, important information on meeting academic requirements. Contact the Aerospace Studies Department as early as possible for additional information and sign-up procedures. The last two years of AFROTC (AS 300/400) lead to the commission as a Second Lieutenant for which students must apply during the sophomore year. The application process involves taking the Air Force Officer Qualification Test (AFOQT), a physical examination, a physical fitness test, and a personal interview. Students from other institutions in the San Diego area are eligible to take AFROTC and should check with the department to obtain enrollment procedures. More information about the program can be obtained from the following websites: DET075.com, AFROTC.com, and AirForce.com.

Aerospace Studies Minor
(Minor Code: 01019) (SIMS Code: 660101)
The minor in aerospace studies consists of a minimum of 15 units in aerospace studies, 12 of which must be upper division. Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (A.S)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

A S 91A-91B. Leadership Laboratory (1-1) Cr/NC
One hour and fifty minutes of activity per unit.
Prerequisites for AFROTC cadets: Concurrent registration in Aerospace Studies 100A for Aerospace Studies 91A; concurrent registration in Aerospace Studies 100B for Aerospace Studies 91B. Designed to prepare junior cadets for positions as leaders and managers of the cadet corps and a commission in the US Air Force. Application of principles of motivation, time management, organizational behavior, and participative group management in solving problems. Leadership laboratory is open to students who are members of the Reserve Officer Training Corps or who are eligible to pursue a commission as determined by the professor of aerospace studies. Credit earned in this course is not applicable to a bachelor's degree.

A S 92A-92B. Leadership Laboratory (1-1) Cr/NC
One hour and fifty minutes of activity per unit.
Prerequisites for AFROTC cadets: Concurrent registration in Aerospace Studies 200A for Aerospace Studies 92A; concurrent registration in Aerospace Studies 200B for Aerospace Studies 92B. Designed to prepare junior cadets for positions as leaders and managers of the cadet corps and a commission in the US Air Force. Application of principles of motivation, time management, organizational behavior, and participative group management in solving problems. Leadership laboratory is open to students who are members of the Reserve Officer Training Corps or who are eligible to pursue a commission as determined by the professor of aerospace studies. Credit earned in this course is not applicable to a bachelor's degree.

A S 93A-93B. Leadership Laboratory (1-1) Cr/NC
One hour and fifty minutes of activity per unit.
Prerequisites for AFROTC cadets: Concurrent registration in Aerospace Studies 300A for Aerospace Studies 93A; concurrent registration in Aerospace Studies 300B for Aerospace Studies 93B. Demonstration laboratory designed to develop leadership and management skills, problem-solving skills, and exercise group planning, organizing and coordinating activities. Leadership laboratory is open to students who are members of the Reserve Officer Training Corps or who are eligible to pursue a commission as determined by the professor of aerospace studies. Credit earned in this course is not applicable to a bachelor's degree.

A S 94A-94B. Leadership Laboratory (1-1) Cr/NC
One hour and fifty minutes of activity per unit.
Prerequisites: Concurrent registration in Aerospace Studies 400A for Aerospace Studies 94A; concurrent registration in Aerospace Studies 400B for Aerospace Studies 94B. Demonstration laboratory designed to develop leadership and management skills, problem-solving skills, and exercise group planning, organizing and coordinating activities. Leadership laboratory is open to students who are members of the Reserve Officer Training Corps or who are eligible to pursue a commission as determined by the professor of aerospace studies. Credit earned in this course is not applicable to a bachelor's degree.
A S 100A-100B. Foundations of the United States Air Force (1-1)
Meets one hour per week.
Prerequisite for AFROTC cadets: Concurrent registration in Aerospace Studies 91A for Aerospace Studies 100A; concurrent registration in Aerospace Studies 91B for Aerospace Studies 100B.
Introduction to organizational structure, mission of selected military organizations, selected topics that contribute to understanding the Air Force today. Includes professional appearance, customs and courtesies, officerhip and core values, basic communications, officer opportunities, and benefits.

A S 200A-200B. Evolution of USAF Air and Space Power (1-1)
Meets one hour per week.
Prerequisite for AFROTC cadets: Concurrent registration in Aerospace Studies 92A for Aerospace Studies 200A; concurrent registration in Aerospace Studies 92B for Aerospace Studies 200B.
Study of air and space power through a historical perspective. Techniques for improving communication, discussion of Air Force heritage, leadership basics. Ethics, values, problem solving, and Air Force core values.

A S 233. Field Training Unit (2-3) Cr/NC
Required for advanced cadets, military orientation and flight familiarization. Credit granted for four- or six-week field training camp on basis of individual student application with approval of Aerospace Studies department chair.

UPPER DIVISION COURSES
(Intended for Undergraduates)

A S 300A-300B. Air Force Leadership Studies (3-3)
Air Force leadership and management principles. Responsibility and authority of an Air Force officer, subordinate leadership, ethics, standards of conduct, and officer values. Improving writing, briefing skills, counseling, and feedback process.

A S 400A-400B. National Security Affairs/Preparation for Active Duty (3-3)
Role of professional officer in democratic society, socialization within armed services, requisites for adequate national security forces. Political, economic, and social constraints on national defense structure and impact of technological and international developments on defense policy making.

A S 499. Special Study (1-3)
Prerequisite: Consent of Aerospace Studies department chair.
Individual study. Maximum credit six units.
Africana Studies
In the College of Arts and Letters

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

Faculty
Emeritus: Chambers, Cornwell, Kornweibel, Weber
Chair: Toombs
Associate Professors: Alkebulan, Nesbitt, Toombs
Assistant Professor: Alameen-Shavers
Lecturers: Fisher, Merritt, Reddick

Offered by the Department
Major in Africana studies with the B.A. degree in liberal arts and sciences.
Minor in Africana studies.
Minor in African studies. See Interdisciplinary Programs.

The Major
Africana studies offers a broad, interdisciplinary program. The curriculum is designed to focus on a variety of subjects pertaining to the Africana experience. It is also concerned with strengthening links between black students and the black community, and developing frameworks for social change and the struggle for black dignity. It seeks, in short, to provide a total educational experience of the Africana culture. The courses offered in Africana studies are available to anyone who is interested.

The major provides excellent preparation for the fields of law, government, foreign service, business administration, research, consulting, librarianship, counseling, program development, program design, program analysis, urbanology, and writing, to name a few, as well as the more traditional Africana studies profession of teaching.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The Africana studies major is an impacted program. To be admitted to the Africana studies major, students must meet the following criteria:

a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPS)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Africana Studies Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22111) (SIMS Code: 110301)

All candidates for the degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in Africana studies courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major. Africana Studies 101 and 170A; and three units selected from Africana Studies 170B, 240, 260. (9 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Study Abroad Requirement. Majors specializing in African Studies or Diaspora Studies are required to complete a minimum of three units of study abroad experience in Africa or in the Black diaspora (excluding the United States). To meet this requirement, majors must have the study abroad experience approved with written consent of the undergraduate adviser and department chair.

Major. A minimum of 27 upper division units to include Africana Studies 327, 490, and 12 units selected from one of the following areas: six units from one of the other areas and three units from the remaining area. Up to six units, with appropriate content, of 496 and 499 in any combination may be applied to an area of specialization with the approval of the department chair. With the exception of Africana Studies 485, no course may be used to satisfy more than one area of specialization.


African Studies: Africana Studies 423, 465 [or French 465], 466, 470, 472, 473, 485; Humanities 350; Political Science 364; Religious Studies 328*. Study abroad is required.

Diaspora Studies: Africana Studies 320, 351 [or Religious Studies 351], 421, 476, 485. Study abroad is required.

*Additional prerequisites required.

Africana Studies Minor
(SIMS Code: 110301)

The minor in Africana studies consists of a minimum of 18 units in Africana Studies, of which 12 units must be upper division, to include Africana Studies 101 and three additional units selected from the courses for preparation for the major, Africana Studies 327, and three units selected from each of the three areas of the major.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
Courses (AFRAS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

AFRAS 101. Introduction to Africana Studies: Social and Behavioral Sciences (3) [GE]
Interdisciplinary introduction of African American thought and behavior. Subject areas include social systems, economic empowerment, self development, family dynamics, use of power, cognitive styles, interethnic communication and international relations. Review of relevant literature in social and behavioral sciences. (Formerly numbered Africana Studies 101A.)

AFRAS 120. Composition (3) [GE]
Prerequisites: Satisfaction of the English Placement Test and Writing Competency requirements. (See the Graduation Requirements section of catalog.) Proof of completion of prerequisites required: Copy of EPT or competency scores or verification of exemption; proof of credit (Cr) in Rhetoric and Writing Studies 92.

Designed to develop and enhance composition and reading skills. Focus on writing skills that contribute to academic growth and development. Not open to students with credit in a higher-numbered composition course or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

AFRAS 140. Oral Communication (3) [GE]
Practice in speaking, critical listening, reasoning and organizing. Theory and techniques of communications used to evaluate the effect they have on the lives of Blacks and others. Not open to students with credit in Chicana and Chicano Studies 111A or Communication 103.

AFRAS 170A-170B. Afro-American History (3-3) [AI]
American history from a Black perspective. These courses satisfy the graduation requirement in American Institutions.

AFRAS 200. Intermediate Expository Writing and Research Fundamentals (3) [GE]
Prerequisites: Satisfaction of the English Placement Test and Writing Competency requirement and Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100 or Rhetoric and Writing Studies 100 or 101. Proof of completion of prerequisites required: Test scores or verification of exemption; proof of transcript.

Development of intermediate expository writing skills and application of practical research principles. Not open to students with credit in Chicana and Chicano Studies 200, English 200, Linguistics 200, or Rhetoric and Writing Studies 200.

AFRAS 240. Africana Intellectual Thought (3) [GE]
Major theories and theory-makers and production of a global black intellectual tradition. Thoughts and writings of major black leaders as they relate to liberation, struggle, resistance, and cultural production.

AFRAS 260. Africana Literary Study (3) [GE]

AFRAS 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

AFRAS 300. Political Economy of African Diaspora (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

Political economy of urban growth, development, and redevelopment in African diaspora, examined in historical and contemporary contexts. Race and class inequality and conflict; effectiveness of public and private sector decisions and programs.

AFRAS 321. Black Political Participation in America (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

Afro-American political life and development in the United States. Interaction between Afro-Americans and various actors, institution processes, and policies of the American system of politics and governance.

AFRAS 322. African American Political Thought (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

Political and social thought underlying principles, goals, strategies developed by African Americans in struggle for social development and human rights. Focus on twentieth century thought.

AFRAS 327. Critical Theories in Africana Studies (3)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

Major historical and contemporary theories and thinkers that have defined and continue to define discipline of Africana studies. Comparative analyses of diverse voices and perspectives.

AFRAS 331. The Black Family (3)
Structure and functions of the Black family in contemporary American society.

AFRAS 332. Black Women: Myth and Reality (3)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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

AFRAS 341. Cultural Patterns and African American Identity (3) [GE]
Prerequisite: Africana Studies 101 or completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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

AFRAS 351. Black Religions and Spirituality (3)
(Same course as Religious Studies 351)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Major Black religious and spiritual responses and expressions in Africa and Black diaspora, including creation of institutions to support and advance religious and spiritual matters.

AFRAS 360. Communications and Community Action (3)
Prerequisite: Completion of the General Education requirement in Communication and Critical Thinking, I.1., Oral Communication.

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

AFRAS 363. Sociocultural Analysis of Black Languages (3)
(Same course as Linguistics 363)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Social and cultural functions of Black languages, verbal and nonverbal, in Afro-American life, and their profound impact on larger society. Also, a probe into issues concerning validity of Black English.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisite</th>
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<tr>
<td>AFRAS 365A</td>
<td>African American Literature to 1900 (3) [GE]</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Issues of literary form, canon formation, and sociopolitical impact of the literature upon African American culture.</td>
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<tr>
<td>AFRAS 365B</td>
<td>African American Literature After 1900 (3) [GE]</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Writing by African American authors after 1900. Issues of literary form, canon formation and sociopolitical impact of the literature upon African American and American culture of the twentieth and twenty-first centuries.</td>
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<tr>
<td>AFRAS 380</td>
<td>Blacks in the American Justice System (3) [GE]</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Interpretation and application of constitutional principles and judicial decisions to political and social problems faced by Afro-Americans.</td>
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<tr>
<td>AFRAS 385</td>
<td>African American Music (3) [GE]</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. African American music from its African roots to present. Consideration of musical styles, events, significant contributors as well as role of sociocultural values in development of music.</td>
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<tr>
<td>AFRAS 421</td>
<td>Black Urban Experience (3) [GE]</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Major social science literature of international Black urban experience. Behavior, culture, and oppressions unique to urban environment.</td>
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<tr>
<td>AFRAS 422</td>
<td>Modern Civil Rights Movement (3)</td>
<td>Prerequisite: Africana Studies 101. Key events, strategies, and theoretical debates that emerged from struggle for black equality during modern civil rights movement in the United States from 1945 to present.</td>
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<tr>
<td>AFRAS 423</td>
<td>Black Nationalism (3)</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Black nationalism in the world, with emphasis on comparative analysis of writings of leading nationalist (and Pan-Africanist) thinkers and theorists.</td>
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<td>AFRAS 455</td>
<td>Africana Class, Gender, and Sexualities (3) [GE]</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Intersection of race, class, gender, and sexualities within Africana culture and experience and impact on Africana world-view.</td>
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<tr>
<td>AFRAS 465</td>
<td>Africa in Literature and Film (3) [GE] (Same course as French 465)</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. African cultural history through literature and film. Consistency/variety of African cultural expressions and conventions in literature and film. Taught in English.</td>
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<tr>
<td>AFRAS 466</td>
<td>Afroturism (3)</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Interdisciplinary study of African and African American contributions to science fiction, comic book art, pop culture, and its origins and influences.</td>
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<tr>
<td>AFRAS 470</td>
<td>Comparative History: Afro-American and African Heritage (3) [GE]</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Conceptual framework of African history and a comparative study of Afro-American institutions.</td>
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<tr>
<td>AFRAS 471</td>
<td>Africana History (3)</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Major themes in African American historical development as they relate to African survivals in diaspora; growth of free Africana communities; Reconstruction; history of United States social movements; movement leadership and daily life, and concurrent developments in Africa. Not open to students with credit in Africana Studies 471A and 471B.</td>
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<tr>
<td>AFRAS 472</td>
<td>African Enslavement (3) [GE]</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Comparative history of enslavement of Africans in the Americas and Muslim world, African servitude, and modern day enslavement.</td>
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<td>AFRAS 473</td>
<td>Women in Africa (3) [GE]</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Historical and contemporary roles women have occupied in Africa as political leaders, spiritual authoritative figures, and mothers in various African societies; from classical Africa to the present.</td>
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<tr>
<td>AFRAS 476</td>
<td>History and Culture of Hip Hop (3)</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Comparative history of enslavement of Africans in the Americas and Muslim world, African servitude, and modern day enslavement.</td>
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<tr>
<td>AFRAS 485</td>
<td>Blacks in the Arts (3)</td>
<td>Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Academic and artistic perspectives on Black participation in and contributions to the creative and performing arts. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.</td>
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<tr>
<td>AFRAS 490</td>
<td>Senior Seminar (3)</td>
<td>Prerequisite: Open only to majors who have completed the first semester of junior year. Capstone experience in which mastery of practice, theories, concepts, and issues central to Africana studies is demonstrated.</td>
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<tr>
<td>AFRAS 496</td>
<td>Experimental Topics (1-4)</td>
<td>Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.</td>
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<tr>
<td>AFRAS 499</td>
<td>Special Study (1-3)</td>
<td>Prerequisite: Consent of instructor. Individual study. Maximum credit six units.</td>
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</tbody>
</table>
American Indian Studies
In the College of Arts and Letters

OFFICE: Arts and Letters 331
TELEPHONE: 619-594-6991 / FAX: 619-594-2646

Faculty
Emeritus: Kilpatrick
Chair: Kamper
Professor: Field
Associate Professor: Kamper
Adjunct: Cayleff, Colston, Connolly, Cooper, Garrett, Ortiz, Reinholz, Robinson-Zanartu, Spilde

Offered by the Department
Major in American Indian studies with the B.A. degree in liberal arts and sciences.
Minor in American Indian studies.

The Major
A major in American Indian studies provides students with a liberal arts education focused on cultural diversity. The American Indian studies program takes an interdisciplinary approach to the study of Native American peoples. Using literature, art, history, and politics as touchstones, students come to understand the individual, as well as tribal character of Indian people. Special emphasis is given to the tribes of Southern California. Courses also draw comparisons between American Indian life and the life of other members of American society. Career opportunities for graduates include jobs in business, education, government, politics, social sciences, and health and human services. Students may also find positions in programs and institutions located on local Indian reservations. Federal agencies also seek people with knowledge about and experience with American Indian people and their culture. Agencies include the Bureau of Indian Affairs, the Indian Health Services, the Bureau of Land Management, and the U.S. Forestry Services.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The American Indian studies major is an impacted program. To be admitted to the American Indian studies major, students must meet the following criteria:

a. Complete preparation for the major;

b. Complete a minimum of 60 transferable semester units;

c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

American Indian Studies Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22121) (SIMS Code: 110702)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in American Indian studies can apply to the degree.

A minor is not required with this major.

Preparation for the Major
American Indian Studies 110; and 140 or 141, (6 units)

Language Requirement
Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement
Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major
A minimum of 25 upper division units to include American Indian Studies 420, 485, 498, and 18 units selected from American Indian Studies 300, 320, 331, 370, 430, 435, 440, 451, 460, 470 (or Religious Studies 470), 480, 499. Courses with American Indian content from other departments may be applied to this major with written consent of the undergraduate adviser.

American Indian Studies Minor
(SIMS Code: 110701)
The minor in American Indian studies consists of a minimum of 18 units, 12 of which must be upper division courses selected from American Indian studies or other appropriate departments (e.g., anthropology, linguistics, political science, Latin American studies) in consultation with the departmental adviser.

Courses (AMIND)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

AMIND 110. American Indian Heritage (3) [GE]
Major American Indian themes, beliefs, and practices and their impact on Western civilization through institutions, art, literature, philosophy, and religion.

AMIND 120. Written Communication (3) [GE]
Prerequisite: Satisfaction of the English Placement Test and Writing Competency requirements. (See the Graduation Requirements section of catalog.) Proof of completion of prerequisite required: Copy of EPT or competency scores or verification of exemption; proof of credit (Cr) in Rhetoric and Writing Studies 92. Understanding of rhetoric of written argument from interdisciplinary perspectives, with reference to American Indian content. Designed to develop and enhance composition and reading skills. Focus on writing skills that contribute to academic growth and development. Not open to students with credit in a higher-numbered composition course or Africana Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

AMIND 140. U.S. History from an American Indian Perspective to 1870 (3) [AI]
U.S. history from an indigenous perspective pre-Columbian contact to 1870. Examines Native American societies with attention to white intrusion, U.S. constitution and legislation to remove Indians, control of their land and impact upon indigenous culture and society. Satisfies the American Institutions requirement in American history and United States Constitution.
AMIND 141. U.S. History from an American Indian Perspective Since 1870 (3) [AI]
U.S. history from an indigenous perspective from 1870 to the present. Examines Native American societies, political systems, and reservations. Attention given to historical, contemporary, political, socioeconomic issues, the U.S. and California constitutions and their impact on Native Americans. Satisfies the American Institutions requirement in American history and California government.

AMIND 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES
(Intended for Undergraduates)

AMIND 300. American Indian Oral Tradition (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Pre-twentieth century American Indian oral and symbolic traditions including creation and origin legends, coyote stories, ceremonial songs, oratory, and memoirs.

AMIND 320. American Indians in Contemporary Society (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.
Sociological understanding of the American Indian groups in contemporary society with emphasis on the relationship to dominant society and why the focus has been on Indians as social problems.

AMIND 331. The American Indian Political Experience (3)
(Same course as Political Science 331)
Prerequisite: American Indian Studies 110 or Political Science 102.
Social and political responses to dominant group policies by American Indian as compared to other minority groups.

AMIND 370. Tribal Gaming: Cultural and Political Context (3)
(Same course as Hospitality and Tourism Management 370)
Prerequisite: Upper division standing.
Social and political context of American Indian tribal gaming, political relationships between federal and tribal governments, contemporary examples of tribal gaming, sociocultural and economic forces leading to gaming as strategy for economic development, and responses by non-Indian communities to tribal gaming.

AMIND 420. Indian Peoples of California (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.
Indian peoples of California. Their histories and cultures from oral traditions to contemporary issues. Focus on selected Indian tribes and communities.

AMIND 430. American Indian Poetry and Fiction (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Contemporary American Indian poetry and fiction explored in works of Welch, Ortiz, Momaday, Siko, Deloria, Allen, Erdrich, and others.

AMIND 435. Indians Through Film and Television (3) [GE]
Ethnographic film-making. Impact of movies and television on popular concepts of Indians. Films viewed in class.

AMIND 440. American Indian History (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Historical analysis of Indian-White contact. Emphasis on the impact of historical events upon the various cultures.

AMIND 451. American Indian Identity (3) [GE]
(Same course as Anthropology 451)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.
Multidisciplinary perspectives on American Indian identity today. Topics include perspectives from political, ethnic, cultural and legal standpoints, both within and outside of indigenous communities, as well as diachronic variation in perspectives.

AMIND 460. American Indian Languages (3) [GE]
(Same course as Anthropology 460 and Linguistics 460)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

AMIND 470. American Indian Spirituality and Epistemologies (3) [GE]
(Same course as Religious Studies 470)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Spiritualities, prophecies, and renewals of the Indian way compared through symbols and ceremony. Religions surveyed as they have been influenced by foreign elements and philosophies. Influences on values and tribalism as reflected through symbols and other measures.

AMIND 480. Issues in American Indian Education (3) [GE]
Prerequisites: American Indian Studies 110 and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences.

AMIND 485. Federal Indian Law (3)
Prerequisite: American Indian Studies 110, 140, or 141.
Legal relationship between the United States and Indian people and Indian tribes as field of Indian law was developed and has changed over the years until the present.

AMIND 496. Topics in American Indian Studies (1-3)
An undergraduate seminar. See Class Schedule for specific content. Maximum credit six units. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

AMIND 498. American Indian Community Service Experience (1) [CR/NC]
Service learning experience in local American Indian community, mentoring, tutoring, or interning at Indian Education Center, Indian Health Center, or similar experience. Minimum of 35 contact hours. Service experience coordinated by supervising American Indian studies faculty with target community organization.

AMIND 499. Special Study (1-4)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.
Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Anthropology Major

With the B.A. Degree in Liberal Arts and Sciences

(Major Code: 22021) (SIMS Code: 110901)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in anthropology courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major. Anthropology 101, 102, and 103. (9 units)

These prerequisite courses may not be taken Cr/NC. The minimum grade in each class is C or higher.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirements. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Graduation Survey. All majors will complete an online survey assessing their experiences in the department and educational outcomes in the major. Students answer the survey online at the Department of Anthropology webpage. The survey must be completed during the student's final semester.

Major. A minimum of 36 upper division units, at least 33 of which are in anthropology, to include Anthropology 301, 302, 303, 304, one course may be substituted with another upper division anthropology course with consent of the department; six units selected from the following "methods" courses: Anthropology 348, 360, 495, 505, 508, 520, 531, 532; 499 and 583 with consent of the department; and 18 additional upper division units, at least 15 of which are in anthropology, one course of the 18 additional upper division units may be selected from one of the following courses (which will also satisfy three units of the General Education requirement in I.V.A., B., or C.): American Indian Studies 420, Biology 315, 326, Chicana and Chicano Studies 301, Geography 312, History 406, 441, Philosophy 330, 332, Political Science 435, Religious Studies 376, Sociology 320, 355, Women's Studies 310, 382.

Anthropology Minor

(SIMS Code: 110901)

The minor in anthropology consists of a minimum of 18 units in anthropology to include two courses selected from Anthropology 101, 102, or 103, and 12 upper division units in anthropology.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
Examples from a worldwide sample of prehistoric and historic societies. Methods of data recovery and analysis suitable for General Education in combination with Geography 101 or 103.

ANTH 102. Introduction to Socio-Cultural Anthropology (3) [GE]
Cross-cultural survey of systems of social, political, and economic organization, language, gender, kinship, religion, and subsistence; culture change and intercultural connections; ethnographic field methods and theories of culture; contemporary applications.

ANTH 103. Introduction to Archaeology and World Prehistory (3) [GE]
Archaeology emphasizing the modern relevance of understanding the past. Beginning six to seven million years ago in Africa, highlighting the physical and cultural evolution of our human lineage.

ANTH 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES
(Interested for Undergraduates)

ANTH 301. Principles of Biological Anthropology (3)

ANTH 302. Principles of Archaeology (3)
Prerequisite: Anthropology 101. History, method, and theory of archaeological data acquisition and interpretation. Methods of data recovery and analysis suitable to resolution of historical and processual questions. Archaeological examples from a worldwide sample of prehistoric and historic societies.

ANTH 303. Principles of Socio-Cultural Anthropology (3)
Prerequisite: Anthropology 102. Development of theories which explain nature of culture and cultural variation. Applications of theory of culture to field methods in ethnography and interpretation of ethnographic findings.

ANTH 304. Principles of Anthropological Linguistics (3)
Prerequisite: Anthropology 102. Structural nature of language. How languages differ, change and influence each other. Language families of the world. Significance of language for human social life in a variety of cultures.

ANTH 348. Historical Archaeology (3) [GE]
Prerequisites: Anthropology 102 and completion of the General Education requirement in Foundations of Learning I.B., Social and Behavioral Sciences required for nonmajors.
How historical texts and archaeological artifacts are used to understand colonial expansion and indigenous response across the globe over last half millennium. Incorporates native and European worldviews in investigation of archaeological sites from historical times.

ANTH 349. Roots of Civilizations (3) [GE]
Prerequisite: Open only to upper division students who have completed the General Education requirement in Foundations of Learning II.C., Humanities.
Origins and major attributes common to civilizations. Form and function of fundamental characteristics in different civilizations. Examples taken from Africa, Asia, the Near East and the New World.

ANTH 350. Cultures Around the Globe (3) [GE]
Prerequisites: Anthropology 102 and completion of the General Education requirement in Foundations of Learning I.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 interrelations. Ethnological theories reviewed and applied in interpreting illustrative societies.

ANTH 353. Sustainability and Culture (3) [GE]
(Same course as Sustainability 353)
Prerequisite: Completion of the General Education requirement in Foundations of Learning I.B., Social and Behavioral Sciences required for nonmajors.
Examination of efforts of anthropology to understand sustainability and provide solutions to human-environmental problems. Compares and explores sustainability in a variety of contexts and scales, from San Diego region to diverse communities around the world.

ANTH 355. Exploring Primate Behavior (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning I.A. Natural Sciences and Quantitative Reasoning. If a biological sciences course is not taken to satisfy Foundations of Learning I.A. 2. Life Sciences, a college course in biological sciences is required.
World of our closest living relatives. What it means to be a primate, where primates live, how primates have evolved into different groups and adapted to different environments, and what primates are threatened with extinction and why.

ANTH 360. From the Grave: Modern Forensic Anthropology (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning I.A. 2. Life Sciences. If a biological sciences course is not taken to satisfy Foundations of Learning I.A. 2. Life Sciences, a college course in biological sciences is required.
Physical anthropology and skeletal biology within medicolegal context. Methodologies used in science of forensic anthropology, as interdisciplinary nature and authorities in related fields.

ANTH 402. Dynamics of Biocultural Diversity (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning I.A. 2. Life Sciences. If a biological sciences course is not taken to satisfy Foundations of Learning I.A. 2. Life Sciences, a college course in biological sciences is required.
Interaction of biology and culture in human populations. Relating genetic and cultural processes to the changes in human populations over time.

ANTH 410. Language in Culture (3) [GE]
Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations of Learning I.A. 2. Life Sciences. If a biological sciences course is not taken to satisfy Foundations of Learning I.A. 2. Life Sciences, a college course in biological sciences is required.
Survey of anthropological interests in the study of language and of linguistic interests in the sociocultural context of language.

ANTH 422. Music and Culture (3) [GE]
Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations of Learning I.C., Humanities required for nonmajors.
How the forms, functions and meanings of music vary crossculturally. Understanding a society’s music historically, holistically and experientially, with emphasis on non-Western music. Universals of music and music use. Ethnological theories of music and music change.

ANTH 424. The Supernatural in Cross-Cultural Perspective (3) [GE]
Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations of Learning I.C., Humanities required for nonmajors.
The Magic and religion. Conceptions of the supernatural in a cross section of world’s cultures. Anthropological theories relating to supernatural beliefs and practices.
ANTH 439. Cultural Comparisons Through Film (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Principles of cultural anthropology to include signs and proxemics, cultural prerequisites, kinship and social organization, and law and values. Feature and documentary films.

ANTH 440. Mesoamerican Civilization Before the Europeans (3) [GE]
Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Pre-European cultures and civilizations of Mexico and upper Central America from 25,000 years ago to arrival of Spanish in 1517. Regional histories, economies, social organizations, ideologies, and political systems, settlement patterns, architecture, and art.

ANTH 442. Cultures of South America (3) [GE]
Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Indian cultures in terms of origins, migration, relation to habitat, cultural variation and relevance to contemporary trends. Development of Inca civilization, the effects of the Spanish conquest and its aftermath.

ANTH 451. American Indian Identity (3) [GE]
(Same course as American Indian Studies 451)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.
Multidisciplinary perspectives on American Indian identity today. Topics include perspectives from political, ethnic, cultural and legal standpoints, both within and outside of indigenous communities, as well as diachronic variation in perspectives.

ANTH 460. American Indian Languages (3) [GE]
(Same course as American Indian Studies 460 and Linguistics 460)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

ANTH 471. Archaeology of North America (3)
Prerequisite: Anthropology 101 or 102.
Origins of the American Indian and survey of the main prehistoric cultures of the North American continent.

ANTH 495. Internship in Applied Anthropology (1-3) Cr/NC
Prerequisites: Anthropology 301, 302, 303, 304.
Supervised field placement of students in campus or community organization, museums, cultural resource management firms, social service and management agencies, forensic laboratories and other offices including business firms where concepts and principles of anthropology can be put into practice. May be repeated for maximum credit three units.

ANTH 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

ANTH 499. Special Study (1-3)
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

ANTH 501. Primate Behavioral Ecology (3)
Prerequisite: Anthropology 301.
Ecology and behavior of nonhuman primates to include history of primate ecological research, feeding ecology, predation, demography and dispersal, reproduction, conflict and cooperation, conservation as well as contemporary primatology.

ANTH 505. Human Osteology (3)
Two lectures and three hours of laboratory. Prerequisite: Anthropology 301.
Identification of individual bones and teeth; sex, age, and racial variation; stature reconstruction; continuous and discontinuous morphological variations; paleopathology. Training in observations, measurements, and analyses.

ANTH 508. Medical Anthropology (3)
Prerequisite: Anthropology 303.
Socio-cultural ecology of disease, medical health beliefs and practices in cultural context, and complexities of health care delivery in pluralistic societies.

ANTH 510. Environmental and Ecological Anthropology (3)
Prerequisite: Anthropology 303.
Ecological thinking in anthropology with focus on relationships between human environmental and ecological systems in tribal, peasant, and industrial societies. Cultural aspects of how and why human societies have maintained or undermined their ecosystems.

ANTH 520. Ethnographic Field Methods (3)
Prerequisite: Anthropology 303.
Problems and techniques of field work in ethnographic and social anthropological research; field work projects conducted using various qualitative and quantitative research techniques. Students work with informants in various settings.

ANTH 529. Urban Anthropology (3)
Prerequisite: Anthropology 303.
Urban adaptations of past and present societies. Descriptive topics and applied concerns regarding urban origins, migrations, kinship, ethnicity, stratification, and change. Ethnographic examples drawn from Western and non-Western societies.

ANTH 531. Methods in Applied Anthropology (3)
Prerequisite: Anthropology 303.
Anthropological concepts and methodologies to solve human problems in both western and non-western societies through intervention, community development, impact assessment, and cultural communication.

ANTH 532. Anthropology of Development and Conservation (3)
Prerequisite: Anthropology 303.
Anthropological perspectives on design, implementation, and assessment of development projects and conservation initiatives in “Third World.” Interlinkages between resource exploitation, underdevelopment, and local autonomy; and political and ethical dilemmas faced by anthropologists involved in projects.

ANTH 533. Race, Ethnicity, and Identity (3)
Prerequisite: Anthropology 303.
Theories and practices of race, ethnicity, and identity from a cross-cultural and anthropological perspective. History of race in US and other regions, focusing on how identities are constructed around concepts of difference.
ANTH 536. Gender and Human Sexuality (3)
Prerequisite: Anthropology 303.
Constructions of gender and sexuality from anthropological perspective. Social constructions of body, norms, deviance, and medicalization of sexuality.

ANTH 537. Anthropology of Childhood (3)
Prerequisite: Anthropology 303.
Childhood in diverse cultural settings; evolutionary, biosocial, and health-related aspects of childhood; social and cultural uses of idea of childhood; enculturation and children's relationship to material culture.

ANTH 540. Contemporary Cultures of Mesoamerica (3)
Prerequisite: Anthropology 303.
Utilizing ethnographic data to explore growth shifts in development of contemporary cultures of Mesoamerica from precontact to today. Countries may include Mexico, Belize, Costa Rica, El Salvador, Guatemala, Nicaragua, and Panama.

ANTH 582. Regional Anthropology (3)
Prerequisite: Consent of Instructor.
Study of societies in a major geographical region of the world such as Africa, the Arctic, East Asia, Europe, Latin America, the Middle East, North America, Oceania, or South Asia. See Class Schedule for specific content. May be repeated with new content. Maximum credit six units.

ANTH 583. Topical Anthropology (3)
Prerequisite: Consent of instructor.
Study of a major subdiscipline such as political anthropology, economic anthropology, social anthropology, psychological anthropology, cultural ecology, applied anthropology, anthropological genetics, or environmental archaeology. See Class Schedule for specific content. May be repeated with new content. Maximum credit six units.

ANTH 596. Topics in Anthropology (1-3)
Prerequisite: Consent of instructor.
Advanced topics in anthropology. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Arabic
In the Department of Linguistics and Asian/Middle Eastern Languages
In the College of Arts and Letters

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
http://www-rohan.sdsu.edu/dept/linguist/index.html

Faculty
Chair: Osman
Professor: Osman
Lecturer: El Cheddadi

Offered by the Center for Islamic and Arabic Studies
Minor in Islamic and Arabic studies.

Offered by International Business
Major in international business, with emphasis in Arabic.

Offered by Social Science
Major in social science, with emphasis in Islamic and Arabic studies.

Islamic and Arabic Studies Minor
(Minor Code: 22159) (SIMS Code: 115102)
Offered by the Center for Islamic and Arabic Studies, the minor in Islamic and Arabic studies consists of a minimum of 18 units, 12 of which must be upper division, to include Political Science 363; Religious Studies 328*; six units from History 473, 474, 574; and three units of lower division religious studies. Three additional units may be selected from Arabic 101, 102, 201, 202, 330; History 473, 474, 574.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

* Additional prerequisites required.

Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Arabic to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Arabic 201 or the equivalent level of achievement. The usual sequence of coursework is Arabic 101, 102, 201, and 202. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:
1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters, thus fulfilling the language requirement.

Courses (ARAB)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

Native speakers of Arabic will not receive credit for taking lower division courses in Arabic except with advance approval from the department.

No credit will be given for lower division courses taken after successfully completing any upper division Arabic course taken in Arabic.

No credit will be given for Arabic 101, 102, 201, 202 taken out of sequence.

ARAB 101. Elementary Arabic I (4) [GE]
Four lectures plus laboratory.
Introduction to Arabic, with emphasis on language of everyday conversation. Focus on vocabulary and structures needed for elementary speaking, listening, and reading. Not open to students with credit in Arabic 102, 201, or 202.

ARAB 102. Elementary Arabic II (4) [GE]
Four lectures plus laboratory.
Prerequisite: Arabic 101 or two years of high school Arabic. Continuation of Arabic 101. Develops vocabulary and structures needed for elementary speaking, listening, and reading, with emphasis on the language of everyday conversation. Not open to students with credit in Arabic 201 or 202.

ARAB 201. Intermediate Arabic I (4) [GE]
Four lectures plus laboratory.
Prerequisite: Arabic 101.
Further development of speaking, listening, reading, and writing skills, with emphasis on the language of everyday conversation. Not open to students with credit in Arabic 202.

ARAB 202. Intermediate Arabic II (4) [GE]
Four lectures plus laboratory.
Prerequisite: Arabic 201.
Further development of speaking, listening, reading, and writing skills, with emphasis on the language of everyday conversation.

ARAB 296. Topics in Arabic Studies (1-4)
Topics in Arabic language, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
UPPER DIVISION COURSES
(Intended for Undergraduates)

All upper division courses in Arabic are taught in Arabic unless otherwise stated.
No credit will be given for Arabic 301, 302 taken out of sequence.

ARAB 301. Advanced Arabic I (4) [GE]
Four lectures plus laboratory.
Prerequisites: Arabic 202; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Advanced facility in oral expression and writing for practical purposes; exposure to various dialects through newspaper and media Arabic; elements of literary and classical language.

ARAB 302. Advanced Arabic II (4) [GE]
Four lectures plus laboratory.
Prerequisites: Arabic 301; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Continuation of Arabic 301. More advanced writing and longer expository texts. Reading modern and classical texts.

ARAB 330. Arabic Culture (3) [GE]
Prerequisites: Upper division standing; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Cultures of Arabic speaking peoples of the Near East, Middle East, and North Africa, as reflected in literature, the arts, history, political and social institutions. Taught in English.

ARAB 350. Advanced Conversational Arabic (4) [GE]
Four lectures plus laboratory.
Prerequisites: Arabic 202; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Study of one or more spoken varieties of Arabic, with emphasis on advanced conversational proficiency. Social and cultural topics, conversational strategies and stylistic features. May be repeated with new content. Maximum credit eight units.

ARAB 496. Topics in Arabic Studies (1-4)
Topics in Arabic language, literature, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit eight units.

ARAB 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.
Offered by the School of Art and Design

Master of Arts degree in art
- Emphasis in Art History
- Emphasis in Applied Design
- Emphasis in Sculpture
- Emphasis in Painting and Printmaking
- Emphasis in Multimedia Design

Offered by the School of Art and Design

Major Academic Plans (MAPs)

Impacted Programs

Emphasis in the School of Art and Design are impacted. Students must enter the university under the designated major code for selected programs. To be admitted to the selected program, refer to the program description for specific impacted criteria.

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Art Major

With the B.A. Degree in Liberal Arts and Sciences

Art Major

Although a degree in art is often pursued as a means of self-fulfillment and creative growth, graduates of the school are employed in a variety of settings. The programs in graphic design, multimedia, and interior design have a preprofessional orientation supplemented by a strong liberal arts background. Interior design can lead to interior, architectural, landscape design or city planning. Graphic design can lead to magazine and book design; corporate design; branding; design for film, television, and the recording industry; information design; environmental graphic design; packaging; advertising; interface design for kiosks and the Internet; and type design. Multimedia prepares students in the areas of interactive and time-based media, such as animation, book arts, gaming, instructional systems, motion graphics, net art, photography, publishing, video and film, and web design. The areas of painting, printmaking, and sculpture prepare students for professional attitudes toward the fine arts and the continuance of their educational experience in graduate schools with the goal of teaching at institutions of higher learning. The applied design program can be developed to specialize in ceramics, furniture design/woodworking, jewelry/metalwork, fiber arts, and textile design leading to design positions for industry in a variety of three-dimensional products, prop technicians for theatre and film, as well as independent entrepreneurial ventures in custom designed products.

Emphasis in Art History

(Major Code: 10031) (SIMS Code: 660517)

Impact Program. The art history emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the art history emphasis, students must meet the following criteria:

a. Complete with a grade of C or higher: Art 100, 101, 258, and 259. These courses cannot be taken for credit/no credit (Cr/NC);

b. Have a cumulative GPA of 2.50 or higher;

c. Students not meeting the minimum GPA may petition for special consideration.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).
Preparation for the Major. Art 100, 101, 258, 259, 263, and three units of art electives. Art 100, 101, 258, and 259 must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr/NC). (18 units)

Students completing the California Community College Associate in Arts in Art History for Transfer (AA-T) will satisfy preparation for the major. If Art 101 was not completed as part of the AA-T, it must be completed at SDSU.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. French or German is recommended for those students who plan to pursue graduate study in art history. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International or Professional Experience Requirement. Completion of a study abroad or international experience selected from an SDSU study abroad approved program; or an approved art internship experience by successfully completing Art 452. Completion of a study abroad or international experience selected from an SDSU study abroad approved program; or an approved art internship experience by successfully completing Art 452. A minimum of 30 upper division units in art history to include Art 578 and 593; and 21 units selected from Art 371, 557 through 577 (three of the units must be from Art 557, 559, or 560), and three units of art electives.

Emphasis in Studio Arts
(Major Code: 10021) (SIMS Code: 660589)

Impacted Program. The studio arts emphasis is designated as an impacted program and specific criteria, which include a portion of the preparation for the Major, are used to admit students. To be admitted to the studio arts emphasis, students must meet the following criteria:

- Complete with a grade of C or higher: Art 100, 101, 103, 104, 103, 258, and 259. These courses cannot be taken for credit/no credit (Cr/NC);
- Have a cumulative GPA of 2.50 or higher;
- Students not meeting the minimum GPA may petition for special consideration.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 103, 104, 258, 259, six units selected from Art 216, 220, 223, 231, and six units of art electives. Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr/NC). (30 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 30 upper division units in art to include three units from each of the areas listed below, six additional units in one of the areas; six units of art electives; and six units of art history (Art 371, 557 through 578, and 593).

- Fiber: Art 435, 436, 535, 536
- Metal: Art 331, 431, 432, 531, 532
- Clay: Art 325, 326, 425, 525, 526
- Wood: Art 323, 423, 523, 524

Emphasis in Graphic Design
(Major Code: 10091) (SIMS Code: 660557)

Impacted Program. The graphic design emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the graphic design emphasis, students must meet the following criteria:

- Complete with a grade of C or higher: Art 100, 101, 103, 104, 258, and 259. These courses cannot be taken for credit/no credit (Cr/NC);
- Have a cumulative GPA of 3.00 or higher;
- Students not meeting the minimum GPA may petition for special consideration.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 103, 104, 241, 242, 258, 259, and six units of lower division art electives (Art 240 recommended). Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr/NC). (30 units)

Art Major
With the B.A. Degree in Applied Arts and Sciences
(Major Code: 10021) (SIMS Code: 660501)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

A minor is not required with this major.

Emphasis in Applied Design
(Major Code: 10021) (SIMS Code: 660509)

Impacted Program. The applied design emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the applied design emphasis, students must meet the following criteria:

- Complete with a grade of C or higher: Art 100, 101, 103, 104, 258, and 259. These courses cannot be taken for credit/no credit (Cr/NC);
- Have a cumulative GPA of 2.50 or higher;
- Students not meeting the minimum GPA may petition for special consideration.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 103, 104, 258, 259, six units selected from Art 216, 220, 223, 231, and six units of art electives. Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr/NC). (30 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 30 upper division units in art to include three units from each of the areas listed below, six additional units in one of the areas; six units of art electives; and six units of art history (Art 371, 557 through 578, and 593).

- Fiber: Art 435, 436, 535, 536
- Metal: Art 331, 431, 432, 531, 532
- Clay: Art 325, 326, 425, 525, 526
- Wood: Art 323, 423, 523, 524
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 33 upper division units in art to include Art 341, 342A, 345; six units selected from Art 441, 442, 450, 454; six units selected from Art 445B, 445C, 541, 542, 545; six units of upper division art electives; six units of art history (Art 371, 557 through 578, and 593); Art 577 recommended.

Emphasis in Interior Design
(Major Code: 02031) (SIMS Code: 660565)
Impacted Program. The interior design emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the interior design emphasis, students must meet the following criteria:

a. Complete with a grade of C or higher: Art 100, 101, 103, 104, 258, and 259. These courses cannot be taken for credit/no credit (Cr/NC);

b. Have a cumulative GPA of 2.50 or higher;

c. Students not meeting the minimum GPA may petition for special consideration.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 103, 104, 148, 249, 250, 251, 258, 259; and three units of lower division art electives. Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr/NC). (33 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 30 upper division units in art to include Art 347, 352, 451, 453, 552, 553; six units of upper division art electives; and six units of art history (Art 371, 557 through 578, and 593; Art 577 recommended).

Emphasis in Multimedia
(Major Code: 06991) (SIMS Code: 660560)
Impacted Program. The multimedia emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the multimedia emphasis, students must meet the following criteria:

a. Complete with a grade of C or higher: Art 100, 101, 103, 104, 258, and 259. These courses cannot be taken for credit/no credit (Cr/NC);

b. Have a cumulative GPA of 2.75 or higher;

c. Students not meeting the minimum GPA may petition for special consideration.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 103, 104, 240, 242, 258, 259; and six units of art electives, excluding Art 157. Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr/NC). (30 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 30 upper division units in art to include Art 340 and 344; six units of art history (Art 371, 557 through 578, and 593); three units selected from Art 342A, 346, 348; nine units selected from Art 342A, 342B, 343, 346, 348, 407, 408, 440, 442, 444, 445B, 446, 448, 524, 540, 544, 545; six units of art electives (may include Professional Studies and Fine Arts 530).

Emphasis in Painting and Printmaking
(Major Code: 10201) (SIMS Code: 660573)
Impacted Program. The painting and printmaking emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the painting and printmaking emphasis, students must meet the following criteria:

a. Complete with a grade of C or higher: Art 100, 101, 103, 104, 258, and 259. These courses cannot be taken for credit/no credit (Cr/NC);

b. Have a cumulative GPA of 2.50 or higher;

c. Students not meeting the minimum GPA may petition for special consideration.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 103, 104, 204, 240, 258, 259; three units selected from Art 102, 203, 210, 216; three lower division art electives. Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr/NC). (30 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 33 upper division units in art to include six units of art history (Art 371, 557 through 578, and 593); six units selected from Art 340, 346, 403, 404, 406, 407, 410; three units selected from Art 500, 503, 504, 511; 12 units selected from Art 344, 407, 408, 410, 411, 416, 443, 446, 456, 506; six units of upper division art electives.

Emphasis in Sculpture
(Major Code: 10021) (SIMS Code: 660581)
Impacted Program. The sculpture emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the sculpture emphasis, students must meet the following criteria:

a. Complete with a grade of C or higher: Art 100, 101, 103, 104, 258, and 259. These courses cannot be taken for credit/no credit (Cr/NC);

b. Have a cumulative GPA of 2.50 or higher;

c. Students not meeting the minimum GPA may petition for special consideration.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 103, 104, 216, 220, 258, 259; and six units of lower division art electives. Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr/NC). (30 units)
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 30 upper division units to include Art 416, 516, 517; three units selected from Art 331, 431, 432; three units selected from Art 323 or 524; three units selected from Art 325, 326, 346; six units of upper division art electives; six units of art history (Art 371, 557 through 578, and 593).

Art Major
In Partial Preparation for the Single Subject Teaching Credential With the B.A. Degree in Applied Arts and Sciences

(Major Code: 10021) (SIMS Code: 660505)

This major satisfies the B.A. degree in applied arts and sciences. The degree may be used to satisfy some of the application requirements for the single subject teaching credential program at SDSU.

Candidates for the single subject credential program at SDSU must complete all requirements as outlined in this catalog under Dual Language and English Learner Education or Teacher Education.

Impacted Program. The art major in preparation for the single subject teaching credential is an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the art major in preparation for the single subject teaching credential, students must meet the following criteria:

a. Complete with a grade of C or higher: Art 100, 101, 103, 104, 258 and 259. These courses cannot be taken for credit/no credit (Cr/NC);
b. Have a cumulative GPA of 2.50 or higher;
c. Students not meeting the minimum GPA may petition for special consideration.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 103, 104, 204, 220, 240, 258, 259; three units of lower division art electives; Psychology 101; and either Child and Family Development 270 or Psychology 230. Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr/NC). (36 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 32 upper division units to include Art 385, 386A, 386B, 387, 340 or 407, 559; three units of non-western art history selected from Art 561, 564, 565; six units of art electives; and one course selected from each sequence below:

Sequence 1. Design Arts: Art 343, 344, 348, 443, 444, 448, 540, 544

Sequence 2. 2D Arts: Art 346, 403, 404, 406, 407, 410, 411

Sequence 3. 3D Arts: Art 323, 325, 326, 331, 416, 423, 425, 431, 432, 436, 516, 524, 531, 532

Art Minor

(Minor Code: 10021) (SIMS Code: 660501)

The minor in art consists of a minimum of 21 units in art, to include Art 100, 101, and a minimum of nine units of upper division courses in art selected from art education, art and design appreciation, art history, applied design, book arts, ceramics, drawing and illustration, exhibition design, fibers, furniture and wood, interior design, jewelry and metalwork, multimedia, painting, photography, printmaking, and sculpture.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Art History Minor

(Minor Code: 10031) (SIMS Code: 660518)

The minor in art history includes a minimum of 21 units in art distributed as follows: Nine units to include Art 258, 259, 263. Twelve units selected from Art 371, 557 through 578, and 593; and with consent of instructor selected Art 396 courses with art history content.

Courses in the minor may not be used toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (ART)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

ART 100. Drawing I (3) Six hours.
Fundamentals of observational and subjective drawing in a variety of media.

ART 101. Two Dimensional Design (3) Six hours.
Fundamentals of elements and organizing principles of two dimensional design to include basic color theory in a variety of media.

ART 102. Drawing II (3) Six hours.
Prerequisite: Art 100.
Line and value in drawing; emphasis on structure and proportion, sketching, gesture, and contour drawing.

ART 103. Three Dimensional Design (3) Six hours.
Fundamentals of elements and organizing principles of three dimensional design to include a variety of media and processes.

ART 104. Artists and Designers in Real Time (3) Six hours.
Prerequisite: Art 100.
Overview of professional practice in contemporary art, design, art history. Readings and discussion contextualize presentation topics.

ART 148. Visual Presentation (3) Six hours.
Prerequisite: Art 100.
Design drawing techniques including interior presentation drawings, interior detailing, architectural drafting, and lettering. Tools and materials used in the design professions.

ART 157. Introduction to Art (3) [GE] An illustrated lecture course dealing with the meaning of art derived from an investigation of the principles of art. Designed to increase the understanding and appreciation of art.

ART 203. Life Drawing I (3) Six hours.
Prerequisite: Art 100.
Drawing from the nude model. Maximum credit six units.

ART 204. Painting I (3) Six hours.
Prerequisites: Art 100 and 101.
Pictorial composition and techniques of painting.

ART 210. Printmaking I (3) Six hours.
Prerequisites: Art 100 and 101.
Introduction and exploration of basic printmaking media. Emphasis on aesthetic and technical processes in intaglio, lithography, relief and serigraphy.

ART 216. Sculpture I (3) Six hours.
Prerequisite: Art 103.
Introduction and experimentation of basic sculpture ideas, methods, and materials. Maximum credit six units.
ART 217. Figurative Sculpture I (3)  
Six hours.  
Prerequisite: Art 103.  
Creative experimentation with sculptural forms from the human figure.

ART 220. Design in Crafts (3)  
Six hours.  
Prerequisite: Art 103.  
Visual and structural form in crafts.

ART 223. Introduction to Woodworking (3)  
Six hours.  
Prerequisite: Art 103.  
Principles of design through the making of furniture. Basic techniques in woodworking and joinery.

ART 226. Introduction to Ceramics (3)  
Six hours.  
Prerequisite: Art 100, 101, or 103.  
Introduction to design and construction of ceramic forms and use of glaze for surface enhancement, to include traditional approaches to basic clay-working hand skills, contemporary issues and imagery, and craft history.

ART 231. Jewelry and Metals IA (3)  
Six hours.  
Prerequisite: Art 103.  
Design and construction of jewelry and small objects in non-ferrous metals. Basic fabrication, forming, and surface embellishment techniques for metal. Not open to students with credit in Art 331.

ART 240. Fundamentals of Digital Media (3)  
Six hours.  
Prerequisite: Grade of C (2.0) or better in Art 101.  
Principles of digital media used in visual communication.

ART 241. Graphic Design I (3)  
Six hours.  
Prerequisites: Grade of C (2.0) or better in Art 100, 101, 103, 104, 258, 259.  
Computer proficiency required with working knowledge of vector graphics software consistent with current industry standards.  
Proof of completion of prerequisites required: Copy of transcript.  
Principles of two-dimensional design applied to graphic form, including form/counter form, contrast, progression, and sequence.

ART 242. Typography I (3)  
Six hours.  
Prerequisites: Grade of C (2.0) or better in Art 100, 101, 103, 104, 258, 259.  
Computer proficiency required with working knowledge of vector graphics and page layout software consistent with current industry standards.  
Proof of completion of prerequisites required: Copy of transcript.  
Fundamentals of typography including history, theory, and practice with emphasis on study of letterforms and type design; principles of two-dimensional design and hierarchy applied to basic typographic layout.

ART 247. The House and Its Environment (3)  
Architecture, interior design, landscape and city planning for forming the physical and aesthetic environment. Not open to students with credit in Art 347.

ART 248. Digital Presentation (3)  
Six hours.  
Prerequisite: Art 101.  
Methods and media of the professional artist and designer stressing art principles.

ART 249. Environmental Presentation (3)  
Six hours.  
Prerequisite: Art 148.  
Methods, materials, and tools of the professional environmental designer stressing art principles.

ART 250. The Contemporary House (3)  
Six hours.  
Prerequisite: Art 148.  
Elementary problems in neighborhood planning, house design, and landscaping.

ART 251. Introduction to Interior Design (3)  
Six hours.  
Prerequisites: Art 101 and 148.  
Elementary functional and aesthetic studies in interior space and form. Relationships of light, color, texture, shape and volume.

ART 258. Introduction to Art History I (3) [GE]  
Art development in painting, sculpture, architecture, and handicrafts from the dawn of art to the Renaissance. Illustrated.

ART 259. Introduction to Art History II (3) [GE]  
The period from the Renaissance through the modern school treated in the same manner as in Art 258.

ART 263. Asian Art (3)  
Arts of Asian countries including China, India, and Japan from prehistoric to pre-modern times. Role of religious belief and state ideology in shaping visual characteristics of regional cultures in Asia.

ART 296. Experimental Topics (1-4)  
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES  
(Intended for Undergraduates)

ART 323. Furniture Design and Woodworking I (3)  
Six hours.  
Prerequisite: Art 103. Recommended: Art 148.  
Basic methods of forming, decorating, glazing, and firing pottery forms with emphasis on the use of the potter’s wheel.

ART 325. Ceramics IA: Throwing (3)  
Six hours.  
Prerequisite: Art 100, 101, or 103.  
Basic methods of forming, decorating, glazing, and firing pottery forms with emphasis on the use of the potter’s wheel.

ART 326. Ceramics IB: Handbuilt (3)  
Six hours.  
Prerequisite: Art 100, 101, or 103.  
Design and construction of handbuilt ceramic forms and application of glaze for surface enhancement. Traditional approaches and contemporary issues.

ART 331. Jewelry and Metals IB (3)  
Six hours.  
Prerequisite: Art 103.  
Creative design and construction in metal of jewelry and small objects. Techniques in three-dimensional forming and constructions in nonferrous metals.

ART 339A. Software for Graphic Design I (1)  
Two hours.  
Prerequisites: Art 103, 104, and major standing.  
Vector, page layout, and image editing software consistent with current industry standards within graphic design practice.

ART 339B. Software for Graphic Design II (1)  
Two hours.  
Prerequisite: Art 339A.  
Web design software consistent with current industry standards within graphic design practice.

ART 339C. Software for Graphic Design III (1)  
Two hours.  
Prerequisite: Art 339A.  
Motion graphics software consistent with current industry standards within graphic design practice.

ART 340. Digital Photography I (3)  
Six hours.  
Prerequisites: Art 100, 101; or Art 240 or 248.  
Visual communication and expression using digital photographic media and digital imaging techniques.
ART 341. Graphic Design II (3)
Six hours.
Prerequisites: Grade of C (2.0) or better in Art 241, 242, 345. Computer proficiency required with working knowledge of vector graphics and page layout software consistent with current industry standards. Proof of completion of prerequisites required: Copy of transcript.
Graphic form with emphasis on visual translation techniques, visual metaphor, signs and symbols.

ART 342A. Typography II (3)
Six hours.
Prerequisites: Grade of C (2.0) or better in Art 241, 242, 345. Computer proficiency required with working knowledge of vector graphics and page layout software consistent with current industry standards. Proof of completion of prerequisites required: Copy of transcript.
Typographic layout and page systems including theories of visual organization, proportion, and grids with emphasis on expression and communication.

ART 342B. Letterpress (3)
Six hours.
Prerequisite: Grade of C (2.0) or better in Art 210 or 242. History, technology, and process of relief printing using moveable type and photopolymer plates to create individual and collaborative page designs that integrate image and text. Maximum credit six units.

ART 343. Illustration I (3)
Six hours.
Prerequisite: Art 102, 203, or 204. Visual notation, sketching, representational drawing, and visual translation related to art and design.

ART 344. Design for the Internet I (3)
Six hours.
Prerequisite: Grade of C (2.0) or better in Art 240, 241, 242, or 340. Creative and practical applications of interactive visual communication for presentation on the Internet. (Formerly numbered Art 344A.)

ART 345. History of Graphic Design (3)
Prerequisites: Grade of C (2.0) or better in Art 258 and 259. Proof of completion of prerequisites required: Copy of transcript.
Evolution of graphic communication from prehistory through postmodern design and the digital revolution.

ART 346. Introduction to Book Arts (3)
Six hours.
Prerequisite: Art 204, 210, 220, 240, 241, or 242.
Terminology, tools, materials, and reproduction processes related to the making of books; historical and contemporary book structures; and development of content in the form of image and text. Maximum credit six units.

ART 347. The House and Its Environment (3)
Architecture, interior design, landscape, and city planning for forming the physical and aesthetic environment, its simplicities and complexities. Not open to students with credit in Art 247.

ART 348. Three Dimensional Digital Media (3)
Six hours.
Prerequisite: Art 240, 241, 242, 248, or 340.
Design communication utilizing digital media as it relates to three-dimensional objects and spatial environments.

ART 352. Methods and Materials of Interior Design (3)
Prerequisite: Art 451.
Topics in successful professional practice including codes, legal liabilities, contractual agreements, project management. Lectures in field settings illustrate methods and materials of installation and explore environmental systems.

ART 357. World Art in Contemporary Life (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.
World art and technology from ancient to post modern era and their relationship to contemporary culture and life. Gallery visits required.

ART 371. Medieval Art (3)
Prerequisite: Art 258.
Development of painting, sculpture, and architecture from time of Constantine through Gothic period.

ART 385. Art Education History and Practice (3)
Six hours.
Prerequisites: Art 103, 104, 258, 259.
History and theory of art education. Role of art in child and adolescent development, art heritage, diversity and equity in art education and teaching methodologies. For art majors interested in pursuing the single subject teaching credential.

ART 386A. Art Field Experience with Elementary and Middle School Students (1)
Prerequisites: Art 101, upper division standing, and consent of instructor.
Prepares pre-service teachers to be effective educators of visual art. Field observation, class lectures on lesson planning, instructional techniques, and strategies for teaching art to elementary school and middle school students.

ART 386B. Art Field Experience with High School Students (1)
Prerequisites: Art 101, upper division standing, and consent of instructor.
Prepares pre-service teachers to be effective educators of visual art. Field observation, class lectures on lesson planning, instructional techniques, and strategies for teaching art to high school students.

ART 387. Art for Elementary Teacher (3)
Six hours.
Prerequisite: Art 101, or upper division standing and consent of instructor.
A design-crafts course that explores in depth materials and processes primarily used by the elementary school teacher.

ART 403. Life Drawing II (3)
Six hours.
Prerequisite: Art 203.
Drawing the nude model. Maximum credit six units.

ART 404. Painting II (3)
Six hours.
Prerequisite: Art 204.
Concepts that enhance basic painting principles and a broad range of painting issues. Maximum credit six units.

ART 406. Experimental Processes in Art (3)
Six hours.
Prerequisite: Art 203, 204, 210, 216, 220, 240, or 248.
Structure in picture making.

ART 407. Black and White Photography (3)
Six hours.
Prerequisites: Art 100, 101, and 103.
Black and white photography and darkroom techniques combined with independent research in contemporary art and photography. Criticism in contemporary context. Maximum credit six units.

ART 408. Color Photography (3)
Six hours.
Prerequisites: Art 100, 101, and 103.
Color photography as a fine art medium, including color theory, camera exposure controls, image processing techniques, electronic flash, and lighting techniques. Maximum credit six units.

ART 409. Photography: Past and Present (3)
Prerequisite: Art 258 or 259 for art majors or Art 157 for non-art majors.
Artistic, technological, social, and political influences on photography from 1839 to contemporary practice. Aesthetic philosophies, major movements, important practitioners and influences on acceptance of photography as art. Photography incorporated in other art mediums.

ART 410. Intaglio Printmaking (3)
Six hours.
Prerequisite: Art 210 or 346.
Creative intaglio-etching, drypoint, aquatint, engraving and variations. Emphasis on fine print quality and technical development. Maximum credit six units.

ART 411. Lithography (3)
Six hours.
Prerequisites: Art 100 and 101. Recommended: Art 210.
Creative lithography-stone and plate planographic process. Emphasis on fine print quality and technical development. Maximum credit six units.
ART 412. Museums from the Inside (3)
Prerequisite: Art 157 or 258 or 259.
How museums work. The institutional mission statement, community involvement, trustees, business functions and strategies, fundraising, promotions, branding, non-profit accounting, curatorial, education, outreach, collection management, facilities design, research, exhibitions, collection, and public security.

ART 416. Sculpture II (3)
Six hours.
Prerequisite: Art 216.
Intermediate level investigations into sculptural ideas, processes, and materials. Maximum credit six units.

ART 423. Furniture Design and Woodworking II (3)
Six hours.
Prerequisite: Art 323.
Intermediate individual design: Exploration of materials, processes and function. Specialized techniques focusing on case construction, making of drawers and doors for furniture. Maximum credit six units.

ART 425. Ceramics II (3)
Six hours.
Prerequisite: Art 325 or 326.
Continuation of Art 325 or 326. Further development of knowledge, skills and philosophy of ceramics through individual creative projects.

ART 431. Jewelry and Metals IIA - Jewelry (3)
Six hours.
Prerequisite: Art 231 or 331.
Further development of design and metalworking skills specifically related to jewelry. Specialized techniques such as casting, chasing, stone setting, die forming and enameling. Maximum credit six units.

ART 432. Jewelry and Metals IIB - Metalsmithing (3)
Six hours.
Prerequisite: Art 231 or 331.
Creative design and techniques in metalsmithing. Maximum credit six units.

ART 435. Fiber Construction I (3)
Six hours.
Prerequisite: Art 103. Recommended: Art 220.
Textile structures with emphasis on nonloom techniques. Maximum credit six units.

ART 436. Fiber Surface Design I (3)
Six hours.
Prerequisite: Art 103. Recommended: Art 220.
Successful investigation of the textile surface, using a broad variety of media and processes appropriate for both the individual designer and commercial reproduction. Media include stencil, block, silkscreen, batik, and tie-dye. Maximum credit six units.

ART 440. Digital Photography II (3)
Six hours.
Prerequisites: Grade of C (2.0) or better in Art 340, or 240 and 407.
Visual and creative expression using digital photographic media with emphasis on refining technical and conceptual visual communication skills. Maximum credit six units.

ART 441. Graphic Design III (3)
Six hours.
Prerequisite: Grade of C (2.0) or better in Art 341, or 342A.
Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. Proof of completion of prerequisites required: Copy of transcript. Principles and theories of design; branding, typography, illustration, and photography applied to three-dimensional form within a specified social and cultural context with emphasis on strategy and concept; structure, functionality and materials; and modular systems.

ART 442. Typography III (3)
Six hours.
Prerequisite: Grade of C (2.0) or better in Art 341, or 342A.
Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. Proof of completion of prerequisites required: Copy of transcript. Typographic problem solving, including more complex text materials and type with image. Maximum credit six units with consent of instructor.

ART 443. Illustration II (3)
Six hours.
Prerequisite: Grade of C (2.0) or better in Art 343.
Drawing and illustration methods, materials, tools, and processes as they relate to art and design.

ART 444. Design for the Internet II (3)
Six hours.
Prerequisite: Grade of C (2.0) or better in Art 344.
Intermediate design and development for World Wide Web. Topics include Web standards, CSS, advanced scripting, and experimental applications. Maximum credit six units. (Formerly numbered Art 344B.)

ART 445A. Professional Practice in Art and Design (1) Cr/NC
Two hours.
Prerequisite: Any 300-level art course.
Evolution role of the artist and designer in contemporary art and design practice, standards of professional conduct, and business practices.

ART 445B. Graphic Design Internship (3) Cr/NC
Prerequisites: Grade of C (2.0) or better in two of the following: Art 441, 442, 450, 454, or 541, and portfolio review. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. Proof of completion of prerequisites required: Copy of transcript. Field experience with practicing professionals. Maximum credit six units with consent of instructor.

ART 445C. Senior Portfolio/Exhibition (3)
Six hours.
Prerequisites: Grade of C (2.0) or better in two of the following: Art 441, 442, 450, 454, or 541 for graphic design majors. Grade of C (2.0) or better in two of the following: Art 444, 448, 540, or 544 for multimedia majors; and portfolio review. Computer proficieny required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. Proof of completion of prerequisites required: Copy of transcript. Planning, strategy, and development of a comprehensive body of design work to be professionally presented in a portfolio and/or exhibition format. Maximum credit six units with consent of instructor.

ART 446. The Printed Book (3)
Six hours.
Prerequisite: Art 340, 342A, 342B, 346, 407, or 410.
Survey, analysis and conceptual design methods of residential interiors stressing materials, equipment, components and structural detailing. Maximum credit six units.

ART 448. Sequential Media (3)
Six hours.
Prerequisite: Grade of C (2.0) or better in Art 340, 341, 344, or 348.
Study and presentation of sequential imagery related to digital video production and motion graphics. Maximum credit six units.

ART 450. Packaging Design (3)
Six hours.
Prerequisite: Grade of C (2.0) or better in Art 341, 342A. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. Proof of completion of prerequisites required: Copy of transcript. Principles and theories of design: branding, typography, illustration, and photography applied to two-dimensional form within a specified social and cultural context with emphasis on strategy and concept; structure, functionality and materials; and modular systems.

ART 451. Residential Interior Design (3)
Six hours.
Prerequisites: Art 249, 250, 251.
Survey, analysis and conceptual design methods of residential interiors stressing materials, equipment, components and structural detailing. Maximum credit six units.

ART 452. Art and Design Internship (3) Cr/NC
Prerequisite: Any 400-level art course.
Field experience with practicing professional artists and designers. Maximum credit six units.
ART 453. Mixed Use Interior Design (3) Six hours.  
Prerequisites: Art 249, 250, 251. 
Materials and techniques of nonresidential space planning, 
Estimating, specification writing, contractual agreements, record 
keeping, budgets, and project supervision. Required field trips to 
professional offices, studios, and showrooms.

ART 454. Environmental Graphic Design (3) Six hours.  
Prerequisites: Grade of C (2.0) or better in Art 341, 342A, 
Computer proficiency required with working knowledge of vector 
graphics, page layout, digital image editing, web design, and motion 
graphics software consistent with current industry standards. 
Proof of completion of prerequisites required: Copy of transcript. 
Identification and communication systems applied to environmental 
solutions. Landmark and wayfinding systems in interior, exterior, and 
aricultural environments. Maximum credit six units with consent of 
instructor.

ART 496. Experimental Topics (1-4) 
Selected topics. May be repeated with new content. See Class 
Schedule for specific content. Limit of nine units of any combination of 
296, 496, 596 courses applicable to a bachelor's degree.

ART 498. Senior Project (3) 
Nine hours for 498A. 
Prerequisite: Consent of instructor. Investigation in art. Formal presentation of project. 
A. Studio project.

ART 499. Special Study (1-3) 
Prerequisite: Consent of instructor. 
Individual study. Maximum credit six units.

UPPER DIVISION COURSES 
(Also Acceptable for Advanced Degrees)

ART 500. Advanced Drawing (3) Six hours. 
Prerequisites: One year of 400-level studio art coursework and 
consent of instructor. 
Drawing emphasizing qualitative aspect of visual subject matter. 
Maximum credit six units.

ART 502. Inter-Media (1-3) Two hours for each unit of credit. 
Prerequisites: Upper division standing and consent of instructor. 
Process and materials in plane and space. Maximum credit six 
units. M.F.A. students: Maximum credit six units applicable to the M.A. 
degree; nine units applicable to the M.F.A. degree.

ART 503. Life Drawing and Painting III (3) Six hours. 
Prerequisites: Art 204 and 403. 
Drawing and painting from nude and costumed models. Maximum 
credit six units.

ART 504. Painting III (3) Six hours. 
Prerequisite: Art 404. 
Approaches to contemporary concepts in painting. Maximum 
credit six units.

ART 506. Contemporary Issues (3) 
Prerequisite: Upper division standing. 
Art and design issues relevant to contemporary global society. 
Sources of inspiration in art and design practice and topical issues 
examined. Field trips.

ART 511. Advanced Lithography (3) Six hours. 
Prerequisite: Art 411. 
Advanced creative lithography printmaking in color. Emphasis on 
fine print quality in color process and color technology unique to this 
medium. Maximum credit six units.

ART 516. Sculpture III (3) Six hours. 
Prerequisite: Art 416. 
Advanced level investigations into sculptural ideas, processes, 
and materials. Maximum credit six units.

ART 517. Figurative Sculpture II (3) Six hours. 
Prerequisite: Art 216 or 217. 
Figurative study with emphasis on individual exploration. Maximum 
credit six units.

ART 523. Furniture Design and Woodworking III (3) Six hours. 
Prerequisites: Six units of Art 423. 
Advanced individual design: Exploration of materials, process 
and function. Continued focus on development of personal design 
statements and specialized techniques. Maximum credit six units.

ART 524. Digital Fabrication for Art and Design (3) Six hours. 
Prerequisite: A 300- or 400-level art or design course. 
Design, visualization, and fabrication processes utilizing modeling 
and machining software. Basic techniques in computer-aided design 
(CAD) and computer-aided manufacturing (CAM). Small-scale 
production techniques and outsourcing for artists and designers. 
Maximum credit six units.

ART 525. Ceramics III (3) Six hours. 
Prerequisite: Art 425. 
Study of ceramic design through creative projects of clay forms. 
Maximum credit six units.

ART 526. Clay and Glaze Technology in Ceramic Design (3) Six hours. 
Prerequisite: Art 425. 
Experimentation and application of research concerning the use 
of ceramic materials and techniques as an integral part of the design 
process. Maximum credit six units.

ART 531. Jewelry and Metals IIIA-Jewelry (3) Six hours. 
Prerequisite: Art 431. 
Problems involving fabrication processes already studied in order 
to increase technical competence while exploring personal design 
statements; specialized techniques such as phototetching and 
electroforming. Maximum credit six units.

ART 532. Jewelry and Metals IIIB-Metalsmithing (3) Six hours. 
Prerequisite: Art 432. 
Advanced problems involving metal processes to increase 
technical competence while exploring personal design 
statements and specialized techniques. Maximum credit six units.

ART 535. Fiber Construction II (3) Six hours. 
Prerequisite: Art 435. 
Advanced study in nonloom techniques. Techniques to include: 
looping, braiding, plaiting, and special fabricating techniques. 
Experimentation with new man-made fibers and with synthetic 
commercial dyes. Maximum credit six units.

ART 536. Fiber Surface Design II (3) Six hours. 
Prerequisite: Art 436. 
Application of design for the textile surface, appropriate for both 
the individual designer and commercial reproduction. Maximum 
credit six units.

ART 540. Advanced Photographic Imagery (3) Six hours. 
Prerequisites: Grade of C (2.0) or better in Art 440, or Art 340 and 
407. 
Visual and creative expression using photographic media, 
including traditional and digital processes. Emphasis on conceptual 
project development and portfolio. Maximum credit six units with 
consent of instructor.
ART 541. Graphic Design IV (3)  
Six hours.  
Prerequisites: Grade of C (2.0) or better in two of the following: Art 441, 442, 450, 454. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. Proof of completion of prerequisite required: Copy of transcript. 

ART 542. Typography IV (3)  
Six hours.  
Prerequisites: Grade of C (2.0) or better in Art 442. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. Proof of completion of prerequisite required: Copy of transcript. 

Individual creative and scholarly research in typography, conceptual and contextual exploration, typographic experimentation based on theory, strategy, and problem solving. Maximum credit six units with consent of instructor. 

ART 543. Illustration III (3)  
Six hours.  
Prerequisite: Grade of C (2.0) or better in Art 443. Strategy and problem solving of professional illustration as related to art and design; individual conceptual and contextual exploration. Maximum credit six units. 

ART 544. Emerging Technologies in Multimedia (3)  
Six hours.  
Prerequisite: Grade of C (2.0) or better in Art 344, or 348, or 440, or 448, or 540. 

Advanced creative studies in emerging electronic communications, including cyberstudios, Internet and multimedia. Exploration in collaborative, interdisciplinary, and international projects. Maximum credit six units with consent of instructor. 

ART 545. Design Studio (3)  
Six hours.  
Prerequisites: Grade of C (2.0) or better in two of the following: Art 441, 442, 450, 454, 541, and portfolio review. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. Proof of completion of prerequisites required: Copy of transcript. 

Solutions to design problems for clients in a studio environment including business procedures and production management. Development of a professional level portfolio. Maximum credit six units with consent of instructor. 

ART 546. Advanced Book Arts (3)  
Prerequisite: Art 446. 
Design and creation of limited edition artist books and independent projects made with mixed media and hand printing techniques such as letterpress, intaglio, woodcut, lithography, photography, and experimental media. Maximum credit six units. 

ART 547. Environmental Theory (3)  
Prerequisite: Art 247 or 347. 
Survey of alternative solutions to the problem of design of the physical environment. 

ART 552. Work Environment Interior Design (3)  
Six hours.  
Prerequisite: Art 453. 
Projects in architectural interiors involving the use and perception of enclosed spaces. Space planning systems analysis. Maximum credit six units. 

ART 553. Commercial Interior Design (3)  
Six hours.  
Prerequisite: Art 552. 
Projects in interiors involving space planning analysis, specification writing, materials selection and furnishing design appropriate to commercial needs. Maximum credit six units. 

ART 557. Nineteenth Century European Art (3)  
Prerequisite: Art 259. 
Development of painting, sculpture, and architecture from the French Revolution to 1900. 

ART 559. Twentieth Century European and American Art Since 1945 (3)  
Prerequisite: Art 259. 
Major developments in the visual arts and art criticism since 1945. 

ART 560. History of American Art (3)  
Prerequisite: Art 259. 
Development of painting, sculpture, and architecture from the Native American art and Colonial Period to the present. 

ART 561. Mesoamerican Art: Olmecs to Aztecs (3)  
Prerequisite: Art 259. 
Art and architecture of Mesoamerica from Olmecs to Aztecs. Role of art as transmitter of cultural information and world view. Continuities and ideologies that characterize Mesoamerican civilizations. Field trips required. 

ART 563. Modern Mexican Art (3)  
Prerequisites: Art 258 and 259. 
Mexican art from 1900 to present. Emphasis on images created after Mexican Revolution (1910-1920) in murals, painting, architecture, prints, photography, film, conceptual art. Construction of national identity, debate between national/international currents in art and role of public art. Field trip. 

ART 564. Art of China (3)  
Prerequisite: Art 258 or 259 or 263. 
History of Chinese art from prehistoric times through the Ching Dynasty. 

ART 565. Art of Japan (3)  
Prerequisite: Art 258 or 259 or 263. 
History of Japanese art from prehistoric times to the Meiji Restoration. 

ART 566. History of Japanese Painting Tenth to Twentieth Centuries (3)  
Prerequisite: Art 258 or 259 or 263. 
History of Japanese painting from tenth to twentieth centuries, emphasizing art from three social groups: aristocrats, warriors, and merchants. Analysis of motifs, iconography, and styles of art schools developed during these periods, reinforced by social history. 

ART 568. Art of Crete, Mycenae, Greece, and Rome (3)  
Prerequisite: Art 258. 
Development of painting, sculpture, architecture, and crafts from prehistoric times to the fifth century A.D. 

ART 571A. Modern Art of Latin America (3)  
Prerequisites: Art 258 and 259. 
Historical, political, and social contexts of leading artists and artistic movements in Latin America from late-nineteenth to mid-twentieth century. Field trips required. 

ART 571B. Contemporary Art of Latin America (3)  
Prerequisites: Art 258 and 259. 
Work created by leading contemporary Latin American artists from 1960 to present. Field trips required. 

ART 573A. Italian Art of the Fourteenth and Fifteenth Centuries (3)  
Prerequisite: Art 259. 
Italian arts, architecture, artists, and patrons from fourteenth century Proto-Renaissance period through fifteenth century revival of classical humanism in city states of Florence, Siena, Bologna, Mantua, and Padua. 

ART 573B. Italian Art in the Sixteenth Century (3)  
Prerequisite: Art 259. 
High Renaissance in Florence and Rome, followed by disintegration of classical principles and domination of Mannerism in Central and Northern Italy and history of arts of Venice in sixteenth century. 

ART 575. European Art from 1600 to 1750 (3)  
Prerequisite: Art 259. 
Architecture, sculpture, and painting of the Baroque and Rococo periods. 

ART 577. History of Architecture (3)  
Prerequisites: Art 258 and 259. 
Architecture from primitive times to the present. 

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ART 578. Seminar in History of Museums and Exhibitions (3)
Prerequisite: At least one course selected from Art 557, 559, or 560.
Origin, history, and function of the museum. Theories of collecting, museums, and construction of knowledge. Role of elites in formation and construction of museums, controversial exhibitions, exhibitionary practices, and globalism.

ART 591. Gallery Exhibition Design (3)
Six hours.
Prerequisites: Fifteen units of art.
Fundamental art elements and principles applied to the theories and techniques of gallery exhibition design.

ART 593. History and Methodology of Art History (3)
Prerequisite: Twelve units of upper division art history.
Readings and discussions on the historiography of art and on modern methodologies for art historical research.

ART 596. Advanced Studies in Art and Art History (1-4)
Prerequisites: Twelve units of art and art history and consent of instructor.
Advanced topics in art and art history. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Arts and Letters

OFFICE: Arts and Letters 600
TELEPHONE: 619-594-5028
FAX: 619-594-6281
http://cal.sdsu.edu

Faculty
Faculty assigned to teach College of Arts and Letters courses (CAL) are drawn from departments within the college.

Courses (CAL)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSE

CAL 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES
(Intended for Undergraduates)

CAL 450. Study Abroad (1-3)
Prerequisite: Upper division standing.
Study abroad in Arts and Letters. See Class Schedule for specific content and geographic location. May be repeated with new content and approval of major adviser for a maximum of three units applicable to a bachelor's degree.

CAL 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
Asian Studies
In the College of Arts and Letters

OFFICE: Arts and Letters 473
TELEPHONE: 619-594-0931 / FAX: 619-594-0257
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Faculty
Asian and Pacific Studies is administered by the Asian and Pacific Studies Committee. Faculty assigned to teach courses in Asian and Pacific studies are drawn from Anthropology, Art and Design, Chinese, Economics, English and Comparative Literature, Geography, History, Japanese, Journalism and Media Studies, Linguistics and Asian/Middle Eastern Languages, Philosophy, Political Science, Public Health, Religious Studies, Sociology, Speech, Language, and Hearing Sciences, Women’s Studies.

Emeritus: Madhavan, Weiner
Director: Sandra A. Wawrytko (Philosophy)
Undergraduate Adviser: Sandra A. Wawrytko (Philosophy)
Committee: An (Geography), Edgerton-Tarpley (History), Ghosh (Women’s Studies), Guan (Political Science), K. Hansen (Japanese), W. Hansen (Religious Studies), Higurashi (Japanese), Hua (Women’s Studies), Kitajima (Japanese), Li (Social Work), Pang (Teacher Education), Riley (Anthropology), Samraj (Linguistics), Timalsina (Religious Studies), Tsou (Geography), Varadarajan (Political Science), Wawrytko (Philosophy), Wong (Sociology and Dean, College of Arts and Letters), Wu (Linguistics and Asian/Middle Eastern Languages), Yu (Public Health), Zhang (Chinese), Zhong (Journalism and Media Studies).

Offered by Asian and Pacific Studies
Master of Arts degree in Asian studies.
Major in Asian studies with the B.A. degree in liberal arts and sciences.
Minor in Asian studies.
Minor in Chinese studies.
Minor in Japan studies.

The Major
The importance of the immense and varied regions of Asian and the Pacific Rim are reflected in the rich culture and history of Asian people, Asian contributions to the world’s literature and art, religion and philosophy, as well as contemporary international relations and economics.

The major in Asian studies is multidisciplinary. Students can enroll in classes from a wide range of departments and programs, such as anthropology, art, Chinese, comparative literature, economics, history, Japanese, philosophy, political science, religious studies, sociology, and women’s studies. Because the program draws its faculty from multiple programs and departments on the SDSU campus, the major is able to provide resources for understanding East Asia, South Asia, Southeast Asia, the Pacific Rim, the relation of these peoples and cultures to North America, and Asian American diaspora communities. Areas of special interest may be pursued in depth.

The major provides students with the background for careers that require an understanding of Asia, whether in academic, business, government, or community and social services. Students in the major develop an understanding of cultural heritage, societies, and languages, as well as the social, political, and environmental issues of the Asian and Pacific regions. Nonmajors who wish to increase their understanding about Asian and Pacific peoples and cultures will find courses available in Asian Studies.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The Asian studies major is an impacted program. To be admitted to the Asian studies major, students must meet the following criteria:

a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Asian Studies Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 03011) (SIMS Code: 111101)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in Asian studies courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major. Asian Studies 100, 101. (6 units)

Language Requirement. Competency (equivalent to that attained through three semesters or five quarters of college study) in one Asian language, unless specifically waived by the undergraduate adviser. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 27 upper division units in Asian Studies. Courses from other departments acceptable for the Asian Studies major include: Art 564*, 565*, 566; Chinese 496, 499; Comparative Literature 451, 530*; History 420, 421, 422, 566, 567, 570, 574; Japanese 421*; 496, 499; Korean 321, 430; Philosophy 351, 353, 514*, 565, 575*; Political Science 362, 365, 575*; Religious Studies 338, 339, 345, 581*, 582*, 583*, 596*; Women’s Studies 331.

Other Asian-content courses may be applied to the major with written approval of the undergraduate adviser.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the Asian Studies undergraduate adviser and filed with the Office of Advising and Evaluations.

* Acceptable when of relevant content.
* Indicates course with prerequisites not included in requirements listed above.

Emphasis in Chinese Studies and Language
Close to one quarter of humanity lives in China, as has been the case for most of human history. Two of the world’s major religions originated in China, as did key technologies ranging from paper and porcelain manufacturing to gunpowder and the magnetic compass. China’s literature, art, poetry, and love of history are also world famous. In the 21st...
Chinese Studies Minor

(SIMS Code: 111101)

The minor in Chinese studies consists of a minimum of 15 units to include three units of Asian Studies 150 or Chinese 100; History 567; Philosophy 351; Political Science 365; and three units selected from Art 564, History 566, Religious Studies 340, or 499 (Special Study), or another upper division course with appropriate focus on China, with approval of minor adviser.

Courses in the minor may not be counted toward the major, and may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Japan Studies Minor

(SIMS Code: 111111)

The minor in Japan studies consists of a minimum of 12 units of upper division courses selected from Art 565, 566, Asian Studies 451 [or Comparative Literature 451], 458, 459, History 570, Japanese 499, Political Science 362, Religious Studies 341, 345, or other upper division courses in a department with appropriate content on Japan, with approval of minor adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Asian Studies Minor

(SIMS Code: 111101)

The minor in Asian studies consists of a minimum of 18 units to include Asian Studies 100, 101; and any combination of 12 units of upper division courses in Asian studies, in Asian-content courses approved for the major, or upper division courses approved by the undergraduate adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Asian Studies

Chinese Studies or Track (b) Chinese Language.

proved program in mainland China, Taiwan, Hong Kong, or Macao.

Students are required to fulfill the capstone requirement for the major.

Language Requirement. The language requirement for graduation is automatically fulfilled by completing coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Study Abroad Requirement. Capstone Experience (3 units). Students are required to fulfill the capstone requirement for the emphasis by study abroad for one semester on an SDSU pre-approved program in mainland China, Taiwan, Hong Kong, or Macao.

Track (a): Chinese Studies

(SIMS Code: 111103)

Major. A minimum of 24 upper division units in Chinese studies to include History 567, Philosophy 351, Political Science 365; three units selected from Art 564, Religious Studies 340; three units selected from History 567, Political Science 362; and nine units selected from Asian Studies 499, Communication 496*, History 420, 421, 435*, Journalism and Media Studies 450*, Political Science 575, Religious Studies 338, 345.

Track (b): Chinese Language

(SIMS Code: 111104)

Major. A minimum of 24 upper division units to include Chinese 301, 302; six units selected from History 567, Philosophy 351, Political Science 365; 12 units selected from Chinese 354, 431, 433, 434, 496*.

ASIAN 100. State and Society in the Asia Pacific (3) [GE]

Social, political, and economic foundations of Asia Pacific societies. Emphasis on diversity of Asian cultures, their relationship with each other and within the global community.

ASIAN 101. Asian Thought and Cultures (3) [GE]

Intellectual and cultural underpinnings of East, Southeast, South, and Central Asia, from ancient to present, by means of a comparative overview of philosophies, religions, literatures, architectural design, visual and performing arts, highlighting continuing influence of tradition in contemporary Asian societies.

ASIAN 150. Understanding the Chinese World (3) [GE]

Traditions of Chinese civilization and their contemporary transformations. Chinese civilization through introductory modules on geography, language, religions, philosophies, arts, history, and politics of Chinese world.

ASIAN 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

lower division courses

ASIAN 100. State and Society in the Asia Pacific (3) [GE]

Social, political, and economic foundations of Asia Pacific societies. Emphasis on diversity of Asian cultures, their relationship with each other and within the global community.

ASIAN 101. Asian Thought and Cultures (3) [GE]

Intellectual and cultural underpinnings of East, Southeast, South, and Central Asia, from ancient to present, by means of a comparative overview of philosophies, religions, literatures, architectural design, visual and performing arts, highlighting continuing influence of tradition in contemporary Asian societies.

ASIAN 150. Understanding the Chinese World (3) [GE]

Traditions of Chinese civilization and their contemporary transformations. Chinese civilization through introductory modules on geography, language, religions, philosophies, arts, history, and politics of Chinese world.

ASIAN 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.
Asian Studies

UPPER DIVISION COURSES (Intended for Undergraduates)

ASIAN 300. Asia’s Global Future (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Survey of contemporary Asia Pacific region and future prospects, politically, socially, and economically, as historically grounded in cultural and philosophical roots.

ASIAN 310. Contemporary Issues in Asian-American Communities (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Diverse processes, economic, political, and cultural, that have shaped formation and continued growth of diasporan communities in Asia Pacific region. Historical origins and contemporary status of diasporan communities.

ASIAN 320. Asian Environmental Issues (3) [GE]
Major Asian environmental issues such as acid rain in China, dams on Mekong Delta, deforestation, and biodiversity conservation in Southeast Asia, population density in Bangladesh, overpopulation in China and India, and impending failure of Green Revolution.

ASIAN 410. Asian History Since 1600 (3) [GE]
(Same course as History 421)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
History of Philippines and Filipino immigration to US. Current issues in Filipino American communities to include labor, health, gender and sexuality, race relations, family culture, and parenting, youth and the elderly, ethnic identity, and empowerment.

ASIAN 420. Asian American Experiences (3) [GE]
(Same course as History 422)
Prerequisite: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Experiences of Asian/Pacific Islander Americans to include immigration, colonialism, imperialism, exclusion, citizenship, labor, family, community, gender, popular culture, refugees, multi-racial tensions, globalization, and resistance.

ASIAN 451. Modern Asian Literature (3) [GE]
(Same course as Comparative Literature 451)
Prerequisite: Asian Studies 100 or 101 or Comparative Literature 270A or 270B or English 220; and completion of the General Education requirement in Foundations of Learning II.C. Humanities required for nonmajors.
Asian literatures from modern period of China, Japan, India, Korea, Philippines, Vietnam, and others.

ASIAN 456. Contemporary Asian Film (3) [GE]
Two lectures and two hours of laboratory.
Prerequisite: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C. Humanities required for nonmajors.
Contemporary Asian cinema focused on aesthetic and cinematic aspects of film. Methodologies of cultural criticism that elaborate relationships between media, representation, ethnicity, and national identity.

ASIAN 458. Asian Traditions (3) [GE]
Prerequisite: Six units of Asian-content courses or upper division standing, and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Social, cultural, economic, and political traditions of South, Southeast, and East Asia; how they functioned in theory and practice prior to twentieth century.

ASIAN 459. Modern Asian Cultures (3) [GE]
Prerequisite: Six units of Asian-content courses or upper division standing, and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Interdisciplinary investigation of East and Southeast Asian countries and regions. Western colonialism to rise of Asia as an economic and political power; ethnicity in Asian politics and society; terrorism, leadership struggles, and secessionist movements in Indonesia, Burma, and the Philippines.

ASIAN 460. Contemporary Issues in Filipino-American Communities (3) [GE]
Prerequisite: Upper division standing and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
ASIAN 490. Study Abroad in Asian Studies (3) [GE]
Prerequisite: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. See Class Schedule for additional prerequisites.
ASIAN 496. Experimental Topics (1–4)
Prerequisite: Six units of Asian-content courses. Selected topics in 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.
ASIAN 499. Special Study (1-3)
Prerequisites: At least six units of upper division work completed toward the major or minor in Asian studies and consent of the instructor.
Individual study. Maximum credit six units.

UPPER DIVISION COURSE (Also Acceptable for Advanced Degrees)

ASIAN 596. Selected Studies in Asian Cultures (3)
Topics on various aspects of Asian studies. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Astronomy
In the College of Sciences

OFFICE: Physics 131
TELEPHONE: 619-594-6182 / FAX: 619-594-1413
E-MAIL: astro@sciences.sdsu.edu
http://mintaka.sdsu.edu

Faculty
Emeritus: Angione, Daub, Etzel, May, Nelson, Talbert
Chair: Shafter
Professors: Orosz, Sandquist, Shafter, Welsh
Associate Professors: Leonard, Quimby
Adjunct: Blanco, Rao-Sudhakar, Thompson, Young

Offered by the Department
Master of Science degree in astronomy.
Major in astronomy with the B.A. degree in liberal arts and sciences.
Major in astronomy with the B.S. degree in applied arts and sciences.
Minor in astronomy.

The Major
Will the universe expand forever? Is there life on other planets?
How are stars formed? These are the types of questions being
addressed by students majoring in astronomy. Some areas of study
in astronomy include the sun, the solar system, the stars, the Milky Way,
the galaxies, and cosmology.

SDSU is the only institution in the California State University system
that offers a complete academic program in astronomy. Students
actively participate in all phases of observational astronomical
research.

Joint faculty and student research activities are principally in
the area of observational astrophysics. These include ongoing
investigations of cosmology, eclipsing binary stars, low mass stars,
planetary nebulae, galactic clusters, exterior galaxies, and extrasolar
planets.

Much of this work is done at the Mount Laguna Observatory
operated by the university. Modern astronomical detectors are
employed that produce digital data, which lend themselves to
computer analysis. Faculty and students also participate in space
astrophysics projects. The department has excellent computer
facilities at the observatory and on-campus.

Graduates with a bachelor's degree are trained in the application
of the scientific method to the realm of astronomy and astrophysics,
which requires a good foundation of understanding of physics
and mathematics. Additionally, our students obtain useful skills
in computing applications and in the use of modern electronic
instrumentation. Many of our graduates find employment in industry,
with astronomical observatories, or with government agencies or
government contractors. These jobs support continuing research
and include telescope operators, instrument makers, opticians,
officetechnicians, programmers, image analysts, and laboratory
technicians. Some of our graduates pursue advanced degrees.

Employment opportunities for astronomers who have advanced
degrees include positions in colleges and universities, in national
observatories and government laboratories, in planetariums, and in
industry and private companies.

Impacted Program
The astronomy major is an impacted program. To be admitted to
the astronomy major, students must meet the following criteria:

a. Complete preparation for the major;

b. Complete a minimum of 60 transferable semester units;

c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements
for the major described in the catalog in effect at the time they are
accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses
needed to fulfill your major requirements. The MAPs website was
created to help students navigate the course requirements for their
majors and to identify which General Education course will also fulfill
a major preparation course requirement.

Astronomy Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 19111) (SIMS Code: 770501)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this
catalog on “Graduation Requirements.” No more than 48 units in
astronomy courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major.
Astronomy 201; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, 197L. (27 units)
Recommended: Chemistry 200, Computer Science 107.

Language Requirement. Competency (equivalent to that which
is normally attained through three consecutive semesters of college
study) is required in one foreign language to fulfill the graduation
requirement. Refer to the section of this catalog on “Graduation
Requirements.”

Graduation Writing Assessment Requirement.
Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C
(2.0) or better. See “Graduation Requirements” section for a complete
listing of requirements.

Major.
A minimum of 27 upper division units in astronomy and
physics to include Astronomy 350, 440, 450; Mathematics 342A;
Physics 350, 354; and nine units selected with the approval of the

Astronomy Major
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 19111) (SIMS Code: 770502)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this
catalog on “Graduation Requirements.”

Preparation for the Major.
Astronomy 201; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, 197L. (27 units)
Recommended: Chemistry 200, Computer Science 107.

Graduation Writing Assessment Requirement.
Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C
(2.0) or better. See “Graduation Requirements” section for a complete
listing of requirements.

Major.
A minimum of 36 upper division units in astronomy and
physics to include Astronomy 350, 440, 450, 498A, 498B; Physics
350, 354, 360, 400A; and 12 units selected from Astronomy 320, 510;

Minor in Mathematics.
All candidates for the B.S. degree in astronomy
must complete a minor in mathematics, to include Mathematics 342A,
342B, and three additional upper division units of electives in mathe-
matics. Recommended: Mathematics 541; Statistics 551A.

Astronomy Minor
(SIMS Code: 770501)

The minor in astronomy consists of a minimum of 15 units to
include Astronomy 201 and 12 upper division units selected from
Astronomy 301, 310, 350, 440+, 450+, 510, or 496 subject to approval
of the minor adviser.

Courses in the minor may not be counted toward the major, but may
be used to satisfy preparation for the major and general education
requirements, if applicable. A minimum of six upper division units
must be completed in residence at San Diego State University.

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Astronomy

Courses (ASTR)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

ASTR 101. Principles of Astronomy (3) [GE]
- Discover the universe: planets, stars, galaxies, and our place in the cosmos: the Big Bang; how stars shine; comets, meteors, nebulae, the Milky Way; black holes and other exotic objects. Not open to students with credit in Astronomy 201.

ASTR 201. Astronomy for Science Majors (3) [GE]
- Directed toward students with a strong interest in science and mathematics. Understanding the night sky, introduction to the solar system, star formation and evolution, extrasolar planets, nature of the Milky Way and other galaxies, origin and fate of the universe. Students with credit in Astronomy 101 and 201 will receive a total of three units of credit toward graduation. A nighttime field trip to Mount Laguna Observatory is required.

ASTR 296. Experimental Topics (1-4)
- Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 courses applicable to a bachelor’s degree with approval of the graduate adviser. See Graduate Bulletin for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 courses applicable to a bachelor’s degree with approval of the graduate adviser.

ASTR 301. Cosmology and Gravitational Collapse (3) [GE]
- Prerequisite: Completion of the General Education requirement in Foundations of Learning II. A.1. Physical Sciences.
- Einstein’s theory of general relativity applied to problems of gravitational collapse (stellar evolution, neutron stars, black holes) and cosmology (origin and evolution of the universe).

ASTR 310. Astrobiology and the Search for Extraterrestrial Life (3) [GE]
- Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.1. Physical Sciences or II.A.2. Life Sciences.
- Extraterrestrial life in our solar system and other planetary systems; formation of stars and planets; UFOs and SETI; origin and evolution of life on earth; life in extreme environments; cosmology and structure of universe.

ASTR 320. Solar System Astronomy (3)
- Prerequisites: Astronomy 201 and Physics 197, 197L.
- Structures of the planets; their surfaces, atmospheres, and satellite systems; asteroids, comets, and meteoroids. The Sun, its structure, energy production, and influence in the solar system. Life in the solar system.

ASTR 350. Astronomical Techniques (3)
- Prerequisite: Astronomy 201.
- Astronomical observation and optics. Data acquisition and reduction for modern astronomical instrumentation including photometry, direct imaging, and spectroscopy. Techniques for obtaining precise measurements and determining measurement uncertainties.

ASTR 400. Astrophysics of Stars (3)
- Prerequisites: Credit or concurrent registration in Mathematics 342A and Physics 354.
- Radiative transfer theory, atmospheres of stars and the emergent spectrum, interior structure and evolution of stars, stellar pulsations.

ASTR 450. Astrophysics of Star Systems (3)
- Prerequisites: Credit or concurrent registration in Mathematics 342A and Physics 354.
- Applications of physics in study of star clusters, the interstellar medium and galactic structure, galaxies, and cosmology.

ASTR 496. Experimental Topics (3)
- Selected topics. May be repeated once with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

ASTR 498A. Senior Project (1)
- Prerequisite: A student’s academic program must demonstrate that they are on track to graduate within one academic year. Selection and design of individual projects.

ASTR 498B. Senior Project (2)
- Prerequisite: Astronomy 498A.
- Six hours of laboratory. Individual research project culminating in a final written report.

ASTR 499. Special Study (1-3)
- Prerequisite: Consent of instructor.
- Individual study. Maximum credit six units.

UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

ASTR 510. Exoplanets (3)
- Prerequisites: Astronomy 350 and 440, or Physics 350 and 354 with minimum grade of B-, and consent of instructor.
- Extrasolar planet detection; mass and radius determination; transits and eclipses; orbital dynamics and transit timing variations; internal and atmospheric characteristics; the exoplanet population and formation scenarios.

ASTR 596. Advanced Topics in Astronomy (2-3)
- Prerequisite: Consent of instructor.
- Selected topics in astronomy or astrophysics. May be repeated with new content upon approval of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES

Refer to the Graduate Bulletin.
Biology
In the College of Sciences

OFFICE: Life Sciences 104
TELEPHONE: 619-594-6767
UNDERGRADUATE ADVISING OFFICE: Life Sciences 135
TELEPHONE: 619-594-6442 / FAX: 619-594-5676
http://www.bio.sdsu.edu

Faculty
Chair: Reeder
Vice Chair: Bohonak
Professors: Anderson, Bernstein, Berta, Bizzozo, Bohonak, Buono, Burns, Deutschman, Donan, Edwards, Glombitski, Harris, Hedrin, Hovel, Kelley, Lipson, Maloy, Mcclenaghan, McGuire, Oechel, Pozos, Reeder, Rohwer, Segall, Simpson, Sussman, Welter, Williams, Zeller
Associate Professors: Clark, Dinsdale, Feuer, Hentschel, Lai, Lewison, Waters, Wolkowicz, Zayas
Assistant Professor: Long
Lecturers: Garver, Martin, Norgard-Sumricht, Paolini

Offered by the Department
Doctor of Philosophy degree in biology, ecology, and evolutionary biology.
Master of Arts degree in biology.
Master of Science degree in biology.
Master of Science degree in microbiology.
Major in biology with the B.A. degree in liberal arts and sciences.
Major in biology with the B.S. degree in applied arts and sciences.
Emphasis in cellular and molecular biology.
Emphasis in ecology.
Emphasis in evolution and systematics.
Emphasis in marine biology.
Emphasis in zoology.
Major in microbiology with the B.A. degree in liberal arts and sciences.
Major in microbiology with the B.S. degree in applied arts and sciences.
Program in study in biology in preparation for the single subject teaching credential in science.
Minor in biology.
Certificate in biotechnology.
Certificate in preprofessional health preparation.

The Majors

Biology. The Department of Biology offers a dynamic and modern program in biology which prepares students both academically and practically for vocations in science and science-related fields or for entry into graduate studies. The major is designed to present a basic background in modern biology and in the supportive disciplines of chemistry, mathematics and physics, and to provide specialized training selected by the student from a variety of areas. The wide range of faculty expertise and research interest allows the department to offer a curriculum which includes general and advanced courses in plant and animal sciences, marine sciences, genetics and physiology, ecology, molecular biology, microbiology, immunology, endocrinology, entomology, evolution, and systematics. Formal programs of study within the major include Emphases in Cell and Molecular Biology, Ecology, Evolution and Systematics, Marine Biology, and Zoology. Special studies opportunities with SDSU faculty and scientists at cooperating institutions allow qualified students to gain research experience on an individual basis.

The department offers a specific program of courses to fulfill the state of California's science requirements for the Single Subject Teaching Credential in Biological Science. Students successfully completing one of these programs may be certified by the department as having demonstrated subject competency as required in part for acceptance into College of Education single subject credential program.

The department also offers a program leading to the Biotechnology Certificate. The purpose of this program is to prepare undergraduate and graduate students for employment in public and private organizations utilizing biotechnology.

The rapid advances in theoretical and applied biology, the growing demands in health care and the expansion of general interest in and concern for the environment are just a few of the factors which continue to increase society's need for biologists. Some examples: a biology degree is the common precursor for the medical, dental, veterinarian and allied health professions; government agencies involved in environment protection, public health and conservation need ecologists, inspectors, laboratory technicians and wildlife, forest, coast and park managers; government and private agriculture agencies need entomologists and botanists; private companies, government laboratories and universities involved in biotechnology need microbiologists and molecular biologists; zoos, wild animal parks and aquaria need zoologists; the secondary school system needs biology teachers; textbook and scientific supply companies need science majors. Whether your goal is to work in a laboratory or a forest, there is opportunity for fulfillment and growth in the field of biology.

Microbiology. Microbiology is the study of bacteria, viruses, yeasts, molds, algae and protozoa. These microorganisms are found associated with plants and animals, in soil, and in fresh and marine waters. Many of the free-living species participate in maintaining the quality of our environment. Certain species affect the health and well-being of plants and animals, including humans, by causing infectious diseases. Microorganisms are often used in the molecular biology laboratory as research tools, for experiments in genetic engineering, and in the manufacture of food and chemicals.

The microbiology major is designed to provide the student with a background in basic biology, microbiology, and the disciplines of chemistry, mathematics and physics. The curriculum includes introductory and advanced courses (most with laboratories) in general and pathogenic microbiology, immunology, virology, physiology, and genetics as well as courses in food and industrial microbiology, marine microbiology, and molecular biology.

Microbiologists find positions with governmental agencies, in university and private research laboratories, in biotechnology, medical and industrial laboratories, in schools as teachers, with scientific supply companies, or with textbook companies. Depending on the situation, a microbiologist may conduct fundamental and applied research, identify disease-causing microorganisms in medical or veterinary specimens, participate in studies of the environment (e.g., soil, ocean, lakes), aid in the manufacture of pharmaceuticals, food, or beverages, or provide quality and safety control. The microbiology major is excellent preparation for entrance into medical, dental, veterinary, and graduate schools. The Emphasis in Clinical Laboratory Science and Public Health Microbiology prepares students to become, after a postgraduate internship, licensed medical technologists or certified public health microbiologists.

Impacted Programs

The biology and microbiology majors are impacted programs. To be admitted to the biology or microbiology major, students must meet the following criteria:

a. Complete with a minimum GPA of 2.70 and a grade of C or higher:
   - Biology 203, 203L, 204, 204L, 212; Chemistry 200, 201, 232, 232L; Mathematics 124; and Physics 180A, 180B, 182A, 182B.
   - These courses cannot be taken for credit/no credit (Cr/NC);

b. Have a cumulative GPA of 2.60 or higher;

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).
Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Biology Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 04011) (SIMS Code: 71402)
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.
These prerequisite courses may not be taken Cr/NC and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.
Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
Major. A minimum of 24 upper division units to include Biology 352, 354, 366, 366L, and Chemistry 365. Elective courses include all upper division biology courses numbered 350 and above (except Biology 497 and 499), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, 560). A minimum of two elective courses must be biology laboratory courses, at least one of which must be an organismal level course selected from Biology 350, 458, 460, 512, 514, 515, 516A, 523, 524, 525, 526, 528, 530, 531, 535.
All courses not included above must have specific approval of the department.
All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.
Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department and be filed with the Office of Advising and Evaluations.

Biology Major
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 04011) (SIMS Code: 771401)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”
A minor is not required with this major.
These prerequisite courses may not be taken Cr/NC and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
Major. A minimum of 36 upper division units to include Biology 352, 354, 366, 366L, and Chemistry 365. Elective courses include all upper division biology courses numbered 350 and above, and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, 560). A minimum of two elective courses must be biology laboratory courses, at least one of which must be an organismal level course selected from Biology 350, 458, 460, 512, 514, 515, 516A, 523, 524, 525, 526, 528, 530, 531, 535.
All courses not included above must have specific approval of the department.
All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.
Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department and be filed with the Office of Advising and Evaluations.

Biology Major
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 04011) (SIMS Code: 771433)
These prerequisite courses may not be taken Cr/NC and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
Major. A minimum of 36 upper division units to include Biology 352, 354, 366, 366L, 567, 567L or 562, Chemistry 365. The remaining units must be selected from Biology and Chemistry 496 and/or 596 (maximum 3 units), Biology 497 and 499 and/or Chemistry 498 (maximum 3 units), Biology 480, 490, 510, 511, 528, 549, 554, 556, 557, 562, 567L, 568 [or Bioinformatics and Medical Informatics 568], 570, 575, 576, 584, 485 or 585, 589, 590, and Chemistry 432, 432L. At least one course must be an organismal level course. Approval of the Emphasis in Cellular and Molecular Biology adviser is required for credit in Biology 497, Chemistry 498, Biology or Chemistry 496, 499, and 596 and other courses not listed above to be included in the emphasis. This approval must be filed with the Office of Advising and Evaluations.
Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department adviser and be filed with the Office of Advising and Evaluations.

Biology Major
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 04011) (SIMS Code: 771434)
Preparation for the Major. Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. A computer programming course (e.g. Computer Science 107) is recommended. (37 units)
These prerequisite courses may not be taken Cr/NC and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
Major. A minimum of 36 upper division units to include Biology 352, 354, 366, 366L, Chemistry 365, and at least 15 units of electives selected from Biology 496 and/or 596 (maximum 3 units), 497 and 499 (maximum 3 units), 490, 508, 509, 512, 514, 516A, 516B, 517, 518, 526, 527, 527L, 528, 535, 538 [or Environmental Science 538], 540, 542, 544 [or Environmental Science 544], 560, 562, 597A. At least one of the above electives must be a laboratory course. The remaining units must include an organismal level course selected from Biology 458, 460, 512, 514, 515, 516A, 523, 524, 525, 526, 528,
530, 531, 535. Other electives include all biology courses numbered 350 and above (except Biology 452), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, 560). Approval of the Emphasis in Ecology adviser is required for credit in Biology 496, 497, 499, 596, and other courses not listed above to be included in the 15 upper division ecology electives. This approval must be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

**Time Limitation.** All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department adviser and be filed with the Office of Advising and Evaluations.

**Emphasis in Evolution and Systematics**

(SIMS Code: 771435)

**Preparation for the Major.** Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. (37 units)

These prerequisite courses may not be taken Cr/NC and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.

**Graduation Writing Assessment Requirement.** Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

**Major.** A minimum of 36 upper division units to include Biology 352, 354, 366, 366L, 509, Chemistry 365, and at least 12 units of electives selected from Biology 496 and/or 596 (maximum 3 units), 497 and 499 (maximum 3 units), 458, 460, 490, 508, 510, 511, 512, 515, 518, 523, 524, 525, 526, 527, 527L, 528, 530, 531, 568 [or Bioinformatics and Medical Informatics 568], 576. Two of the above electives must be laboratory courses, one of which must be an organismal level course selected from Biology 458, 460, 512, 515, 523, 524, 525, 526, 528, 530, 531. Other electives include all biology courses numbered 350 and above (except Biology 452), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, 560). Approval of the Emphasis in Evolution and Systematics adviser is required for credit in Biology 496, 497, 499, 596, and other courses not listed above to be included in the 12 units of evolution and systematics electives. This approval must be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

**Time Limitation.** All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department adviser and be filed with the Office of Advising and Evaluations.

**Emphasis in Zoology**

(SIMS Code: 771438)

**Preparation for the Major.** Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. (37 units)

These prerequisite courses may not be taken Cr/NC and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.

**Graduation Writing Assessment Requirement.** Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

**Major.** A minimum of 36 upper division units to include Biology 352, 354, 366, 366L, Chemistry 365, and at least 12 units of electives selected from Biology 496 and/or 596 (maximum 3 units), 497 and 499 (maximum 3 units), 458, 460, 490, 512, 515, 516A, 523, 524, 525, 526. The remaining units must be selected from biology courses numbered 350 and above (except Biology 452), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, 560). Approval of the Emphasis in Zoology adviser is required for credit in Biology 496, 497, 499, 596, and other courses not listed above to be included in the 15 units of zoology electives. This approval must be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

**Time Limitation.** All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department adviser and be filed with the Office of Advising and Evaluations.

**Microbiology Major**

With the B.A. Degree in Liberal Arts and Sciences

(Major Code: 04111) (SIMS Code: 771452)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in biology courses can apply to the degree. A minor is not required with this major.

**Preparation for the Major.** Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. (37 units)

These prerequisite courses may not be taken Cr/NC and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.
Biology

Language Requirement: Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. It is recommended that students select French, German, or Russian to satisfy this requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include at least 33 units from Biology 350, 352, 354, 366, 366L, 480, 485, 549, 584, Chemistry 365, and Biology 528 or 567L with approval of the microbiology adviser. The remaining units to be selected from Biology 528, 554, 556, 557, 567L, 590, Chemistry 432, 432L. To be included in this major courses not listed above must have the prior approval of the Microbiology adviser and be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department and be filed with the Office of Advising and Evaluations.

Microbiology Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 04111) (SIMS Code: 771451)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

A minor is not required with this major.


These prerequisite courses may not be taken Cr/NC and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Biology 350, 352, 354, 366, 366L, 485 or 585, 528 or 584, 549, 567L, Chemistry 365, and at least five to six units of electives selected from Biology and Chemistry 496 and 596 (maximum 3 units), Biology 497 and 499 (maximum 3 units), Biology 490, 490, 528, 554, 556, 557, 562, 567, 567L, 568 [or Bioinformatics and Medical Informatics 568], 585, 590, Chemistry 432, 432L. Prior approval of the microbiology adviser is required for credit in Biology 490, 496, 497, 499, 596, Chemistry 496, 596, and other courses not listed above to be included in the electives. This approval must be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department and be filed with the Office of Advising and Evaluations.

Emphasis in Clinical Laboratory Science and Public Health Microbiology
(SIMS Code: 771450)

The emphasis in clinical laboratory science and public health microbiology is a program of required and elective courses which prepares students for the Public Health Microbiologist and Clinical Laboratory Scientist academic certification and licensing examinations.


These prerequisite courses (excluding Chemistry 251) may not be taken Cr/NC and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include at least 33 units from Biology 350, 352, 354, 366, 366L, 480, 485, 549, 584, Chemistry 365, and Biology 528 or 567L with approval of the microbiology adviser. The remaining units to be selected from Biology 528, 554, 556, 557, 567L, 590, Chemistry 432, 432L. To be included in this major courses not listed above must have the prior approval of the Microbiology adviser and be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department and be filed with the Office of Advising and Evaluations.

Biology Major

In preparation for the Single Subject Teaching Credential in Science/Biological Sciences
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 04011) (SIMS Code: 771405)

Students applying to the College of Education’s graduate program for the Single Subject Teaching Credential in Science/Biological Sciences must be certified by this department for subject matter competency. This certification requires earning a B or better in Biology 452 and either (1) passing the required examinations (CSET), or (2) completing the subject matter preparation program described below.

Certification through the completion of appropriate coursework requires (1) completion of the courses described under the General Biology Degree Requirements, B.S. degree (preparation for the major and major) including the following electives in the major: Biology 354L, 436, 452, 590*, and at least one course from Biology 458, 460, 515, 523, 524, 525, 526, 530 or 531 (it is recommended that Biology 497 or 499 be taken as electives for the major); (2) earning a B or better in Biology 452, (3) completing Geological Sciences 101, 104, and Physics 490 (History of Science and Technology). Teacher Education 280, Special Education 450, and Education 451 are recommended as Teacher Credential Program prerequisites. No coursework substitutions are permitted for the SSTC program of study. The Department of Biology credential adviser (LS-135) must be consulted for certification.

Please refer to the Teacher Education section of this catalog for other requirements and prerequisites for the credential program.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department and be filed with the Office of Advising and Evaluations.

All courses not included above must have the prior approval of the department and the substitution filed with the Office of Advising and Evaluations.

* Biology 336 may be substituted for Biology 590 and still satisfy SSTC/CSET waiver requirements; however, Biology 336 will not count as an elective for the major.

Biology Minor

The minor in biology consists of a minimum of 16 units to include Biology 204, 204L, and at least 12 units of upper division courses selected from one of the areas below. At least one of the selected courses must be a biology laboratory course numbered 350 or above. A maximum of three units of Biology 497 and 499 may be included in the minor with prior approval of the department. For courses requiring Biology 215 as a prerequisite, a college level course in statistics may be acceptable with the approval of the instructor. Courses may be substituted for those in areas below with approval of the biology adviser, and this approval must be filed with the Office of Advising and Evaluations.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed at San Diego State University.

The minor in biology requires prerequisite courses that do not count towards the units in the minor. See descriptions of each area below.

**General Biology**
(SIMS Code: 771401)
Prerequisites: Biology 100, 100L or Biology 203, 203L and Chemistry 200. Required: Biology 204, 204L; 12 units of upper division biology to include at least two courses in ecology and evolution: Biology 315, 324, 326, 327, 352, 354; at least one course in human biology: Biology 307 or 336; at least one upper division biology course with laboratory (2-4 units): see course descriptions.

**Cellular and Molecular Biology**
(SIMS Code: 771421)
Prerequisites: Biology 203, 203L, Chemistry 200, 201, 232, 232L, 365. Required: Biology 204, 204L, and at least 12 units of the following electives: Biology 342, 350, 352, 366, 366L, 480, 510, 511, 528, 549, 554, 567, 568 [or Bioinformatics and Medical Informatics 568], 570, 575, 576, 584, 589, 590, and 485 or 585, and 556 or 557. At least one elective must be a laboratory course.

**Ecology**
(SIMS Code: 771422)
Prerequisites: Biology 203, 203L, Chemistry 200. Required: Biology 204, 204L, 354, and at least nine units of the following electives: Biology 315, 324, 327, 354L, 509, 512, 514, 515, 516A, 517, 518, 523, 524, 525, 526, 527, 527L, 528, 531, 540, 542, 544 [or Environmental Science 544]. At least one elective must be a laboratory course.

**Evolutionary Biology**
(SIMS Code: 771423)
Prerequisites: Biology 203, 203L, Chemistry 200. Required: Biology 204, 204L, 352, and at least nine units of the following electives: Biology 352, 508, 509, 510, 511, 512, 523, 524, 525, 526, 527, 527L, 528, 531, 540, 542, 544 [or Environmental Science 544]. At least one elective must be a laboratory course.

**Marine Biology**
(SIMS Code: 771425)
Prerequisites: Biology 203, 203L, Chemistry 200. Required: Biology 204, 204L, 324 and at least nine units of the following electives: Biology 512, 514, 515, 516A, 517, 518, and 542. At least one elective must be a laboratory course.

**Plant Biology**
(SIMS Code: 771426)
Prerequisites: Biology 203, 203L, Chemistry 200. Required: Biology 204, 204L, 458 or 460 or 530 or 531 or 535. At least 8-9 units of the following electives (to total 12 upper division units): Biology 326, 458, 460, 530, 531, 535. At least one elective must be a laboratory course.

**Biotechnology Certificate**
(SIMS Code: 771479)
Matriculated students must apply for admission to the program before completion of 15 certificate units and must complete all prerequisite and required courses with a GPA of 2.5 or better.

The certificate requires 13 prerequisite units – Biology 350, 366, 366L, Chemistry 365 and 25-29 certificate units including Biology 497 and/or 499 (5 units must be pre-approved by the certificate adviser), 567, 567L, 568 [or Bioinformatics and Medical Informatics 568], 594, and three electives selected from Biology 510, 549, 554, 570, 575, 584, 585, 590, Chemistry 563, 564. Prerequisite and certificate courses may be utilized in the biology, chemistry, and microbiology majors and minors as appropriate.

**Preprofessional Health Preparation Certificate**
(Offered only in the College of Extended Studies)
(SIMS Code: 552862)
A significant amount of preparation is needed to enter professional health programs to include medical, dental, veterinary, pharmacy, physician assistant, optometry, podiatry, and other schools. The specific coursework necessary varies by career and by school. Relevant extra-curricular experience is expected, and letters of recommendation must be coordinated. This certificate offers non-degree seeking students the opportunity to complete the coursework necessary for these careers, and obtain guidance and assistance from staff members solely dedicated to preprofessional health preparation.

**Admission Requirements**
To be admitted to the certificate program, students must have earned a bachelor’s degree and demonstrate by previous coursework and/or work experience evidence of potential for excelling in one of the health programs this certificate covers: allied health fields, chiropractic medicine, dentistry, medicine, optometry, pharmacy, physician assistant, podiatry, veterinary medicine. Not covered in this program are nursing, occupational therapy, physical therapy.

The SDSU Preprofessional Health Advising office is responsible for the coordination of the certificate program in conjunction with the Department of Biology and the College of Extended Studies. Applications may be submitted prior to entering the program or before the completion of nine semester units of coursework that would be applicable to the certificate. Previous courses taken at SDSU will be considered when developing a personalized course plan after admission.

Students are required to submit an Open University registration form each semester to the College of Extended Studies.

**Certificate Requirements**
Students must complete a minimum of 12 units of new coursework (subsequent to the bachelor’s degree) at SDSU with a cumulative grade point average of 3.0 or better. Each course must be completed with a grade of C (2.0) or better. Specific course requirements will be approved by the preprofessional health adviser based on the intended program and previous coursework. Approved courses may include Accountancy 201, Biology 203, 203L, 204, 204L, 212, 215, 248, 249, 250A, 250B, 250C, 261, 336, 350, 352, 366, 366L, 436, 485, 554, 576, 585, 590, Chemistry 200, 201, 232, 232L, 365, 432, 432L, Economics 101, Mathematics 122 or 124 (or Mathematics 150 and 151), Philosophy 329, 330, Physics 180A and 182A; 180B and 182B; or 195, 195L, 196, 196L, 197, 197L, Psychology 101, 456, Public Health 305, 362, Rhetoric and Writing Studies 100, 200, 503W or 508W, Sociology 101, Spanish 101.

Completion of the certificate also requires a personal statement, application to a professional health program, and associated application materials. A fee is required for the application committee process. This fee is in addition to tuition and registration fees. Students must petition the Preprofessional Health Advising office for the certificate upon completion of all requirements.
Courses (BIOL)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

BIOL 100. General Biology (3) [GE]
Prerequisite recommended: Concurrent registration in Biology 100L.
A beginning course in biology stressing processes common to living organisms. Not applicable to biological sciences majors; see Biology 203, 203L, 204, 204L. Not open after Biology 203, 204.

BIOL 100L. General Biology Laboratory (1) [GE]
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Biology 100.
A laboratory course in biology stressing processes common to living organisms. Not applicable to biological sciences majors; see Biology 203, 203L, 204, 204L. Not open after Biology 203L, 204L.

BIOL 211L. Fundamentals of Microbiology Laboratory (2)
Six hours of laboratory.
Prerequisites: Credit or concurrent registration with a grade of C or better in Biology 211.
Fundamentals of microbiology, including study of bacteria, fungi, protozoa, and algae of environment, including disease-producing organisms, their actions and reactions.

BIOL 211. Human Anatomy (4)
Two lectures and six hours of laboratory.
Prerequisite: Grade of C or better in Biology 100, 203, or 211.
Gross and microscopic anatomy of organ system of human body.

BIOL 215. Biostatistics (3) [GE]
Two lectures and three hours of laboratory.
Prerequisites: Credit or concurrent registration in Biology 203, 203L or 204, 204L and Mathematics 122, 124, 141, or 150.
Methods and experience in defining and solving quantitative problems in biology, including design of experiments, and parametric and nonparametric statistical techniques. Students with credit or concurrent registration in the following lower division courses will be awarded a total of four units for the two (or more) courses: Biology 215, 247A, 247B, 247C, 247D; Mathematics 201; Civil Engineering 160; Economics 201; Political Science 201; Psychology 280; Sociology 201; Statistics 119, 250.

BIOL 246. Colloquium in Biomedical Sciences (1)
Prerequisite: University level biology course.
Current biomedical research projects ranging from cell biology to behavioral research. Research paper required. Maximum credit two units.

BIOL 247. Advanced Degree Programs in the Sciences: Application Strategies (1) Cr/NC
Two hours of activity.
Prerequisite: Junior or senior standing.
Instruction in preparing competitive applications to sciences' M.S. and Ph.D. degree programs to include development of the required personal statement. Introduction to sources of financial support, such as national fellowship programs, and development of interview skills and materials. Maximum credit one unit for any combination of Biology 247, 248, 249.

BIOL 248. Careers in Biological Sciences (1) Cr/NC
Career opportunities in biological sciences. Specialists in major biological areas will present information about their fields and how best to prepare for careers. Maximum credit one unit for any combination of Biology 247, 248, 249.

BIOL 249. Career Choices in the Health Professions (1) Cr/NC
Career opportunities in allied health professions; trends in health care; discussion of medical ethics; practicing professionals will present about their fields and how best to prepare for careers in their area of health care. Maximum credit one unit for any combination of Biology 247, 248, 249.

BIOL 250. Preprofessional Topics (1) Cr/NC
Designed to expose the preprofessional student to the profession of his/her choice through speakers and selected readings. Emphasis on alternatives and meeting stresses as a preprofessional student. Maximum credit one unit for any combination of Biology 250A-250B-250C.
A. Topics in Medicine.
B. Topics in Dentistry.
C. Topics in Veterinary Medicine.

BIOL 251. Human Anatomy Internship (2)
Six hours of laboratory.
Prerequisites: Biology 212 and consent of instructor.
Interns will master the material from human anatomy, develop and teach study skills, and apply skill set in administering a laboratory course in human anatomy. Maximum credit four units.

BIOL 261. Human Physiology (4)
Three lectures and three hours of laboratory.
Prerequisites: Biology 212. Credit or concurrent registration in Chemistry 102 (or Chemistry 100 and credit or concurrent registration in Chemistry 130).
Human function viewed from cellular through organ system levels of organization. Intended primarily for prenursing students. Not applicable to biological sciences majors. Not open to students with credit in Biology 336, 436, or 590.
BIOI 277. Medical Terminology (2)
Prerequisite recommended: Biology 100 or 203 or 204. Words and word components used in medical and allied medical practice translated, investigated, and applied.

BIOI 291C. Biostatistics Laboratory (1)
Prerequisites: Recommendation by department and consent of instructor. Special laboratory course designed for biology majors with credit in a statistics course other than Biology 215.

BIOI 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.

BIOI 299. Special Study (1-3)
Individual research experience and interaction with researchers at an introductory level. Projects involve approximately 45 hours of laboratory or fieldwork per unit and a research report. Hours are flexible and arranged between the student and the researcher. Maximum credit four units.

UPPER DIVISION COURSES
(Required for Undergraduates)

Writing Requirement: Completion of the Graduation Writing Assessment Requirement or the eligibility to enroll in an upper division writing course is a prerequisite for all upper division biology courses numbered 450 and above.

BIOI 307. Biology of Sex (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological science course is not taken to satisfy General Education II.A.2. Life Sciences, a college course in biological science is required.

Reproductive adaptations in humans, and comparatively in other species. Topics include sex differences, mate choice and mating behavior, fertility regulation, fertilization and embryonic development, sex ratios, parental investment, effects of aging, and life history strategies. Not applicable to biological sciences majors.

BIOI 315. Ecology and Human Impacts on the Environment (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological science course is not taken to satisfy General Education II.A.2. Life Sciences, a college course in biological science is required.

Ecological characteristics of natural ecosystems and basic effects of human society upon those systems, emphasizing resource management, food production, global environmental problems, and future directions. Not applicable to biological sciences majors.

BIOI 324. Life in the Sea (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological science course is not taken to satisfy General Education II.A.2. Life Sciences, a college course in biological science 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.

BIOI 326. Plants, Medicines, and Drugs (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological science course is not taken to satisfy General Education II.A.2. Life Sciences, a college course in biological science 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.

BIOI 327. Conservation of Wildlife (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological science course is not taken to satisfy General Education II.A.2. Life Sciences, a college course in biological science is required.

Global ecosystems and their dynamics, with emphasis on sustainable human use and preservation of biodiversity. Not applicable to biological sciences majors. Not open to students with credit in Biology 540.

BIOI 335. The Human Body (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. Survey of human body with emphasis on intricacy of design and integration of various organ systems. Not open to nursing or exercise and nutritional sciences majors, or to students with credit in any college-level human physiology or anatomy course. Not applicable to biological sciences majors. (Formerly numbered Biology 541.)

BIOI 336. Principles of Human Physiology (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological sciences course is not taken to satisfy General Education II.A.2. Life Sciences, a college course in biological sciences is required.

Systems of the human body, their interrelationships and control systems which regulate them. Not open to students with credit in a college course in human physiology. Not applicable to biological sciences majors.

BIOI 340A. Preventive Dentistry Program (1) Cr/NC
Four hours of clinical and other activities.
Prerequisites: Upper division standing and active predental file in the Preprofessional Health Advising Office. Participation in clinic, dental observation, marketing activities and two field trips. Maximum credit four units. Not applicable to biological sciences majors.

BIOI 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. Minimum user credit six units. Not applicable to biological sciences majors.

BIOI 342. Emerging Technologies in Human Health Care (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological sciences course is not taken to satisfy General Education II.A.2. Life Sciences, a college course in biological sciences is required.

Present and emerging medical technologies to include basic science, potential for treating diseases, and societal issues related to these technologies, utilizing regenerative medicine as a model. Not applicable to biological sciences majors.

BIOI 348. Health Professions Internship (1-3)
Prerequisites: 3.0 overall GPA, completion of lower division writing competency requirement, and consent of instructor. Internship in a health care setting; term paper required. Maximum credit three units. Not applicable to biological sciences majors.

BIOI 350. General Microbiology (4)
Two lectures and six hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L; Chemistry 232, 232L. Actions and reactions of microorganisms in response to their environment, both natural and as changed by other organisms, including man. Also includes an introduction to pathogens.

BIOI 352. Genetics and Evolution (3)
Two lectures and two hours of activity.
Prerequisites: Biology 203, 203L, 204, 204L, 215. Principles of transmission genetics, population genetics, and evolution.

BIOI 354. Ecology and the Environment (3)
Two lectures and one hour of discussion.
Prerequisites: Biology 203, 203L, 204, 204L, 215. Credit or concurrent registration in Mathematics 124. Fundamental concepts in population, community, and ecosystem ecology.

BIOI 354L. Experimental Ecology (2)
One hour of discussion and three hours of laboratory.
Prerequisites: Credit or concurrent registration in Biology 354. Methods of research in ecology; approaches to analysis of populations, communities, and ecosystems.

BIOI 366. Biochemistry, Cell and Molecular Biology II (4)
Prerequisite: Chemistry 365. Limited to Biology and Microbiology majors. Major topics include Cell and Molecular Biology with Emphasis in Biochemistry, SIMS Codes: 771401-771452 and 772609. Concepts of modern integrated molecular biology, cell biology, and biochemistry.
Biology

BIOL 36L. Biochemistry, Cell and Molecular Biology Laboratory (2)
Six hours of laboratory.
Prerequisite: Credit or concurrent registration in Biology 36L.
Basic laboratory approaches in biochemistry, cell biology, and molecular biology.

BIOL 436. Human Physiology Laboratory (2)
One lecture and three hours of laboratory.
Prerequisite: Credit or concurrent registration in Biology 336 or 506.
Human physiology and rationale of current week's laboratory and experimental outcomes of previous week's laboratory. Not open to students with credit in Biology 261.

BIOL 452. Science Concept Development and Integration (3)
Two lectures and three hours of activity.
Prerequisite: Senior standing, or participation in the science single subject credential program.
Development and integration of biological science content knowledge, introduction to learning theory, and transformation of knowledge. Designed for students preparing for the single subject teaching credential in life sciences.

BIOL 458. Plant Biology (4)
Three lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L.
Topics include basic plant morphology, anatomy, and taxonomy, plant genetics, agricultural breeding and propagation techniques, vegetables and fruits, spices and herbs, beverage plants, woods and plant fibers.

BIOL 480. Clinical Hematology (3)
Prerequisites: Biology 203 and Chemistry 365 or 560.
Theoretical and practical background for study of normal and pathological blood cells to include laboratory techniques. Course meets State of California requirements as a hematology course for students entering training programs in clinical laboratory sciences.

BIOL 480L. Clinical Hematology Laboratory (1)
Offered only in the College of Extended Studies
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Biology 480.
Improves access to highly competitive clinical laboratory sciences training programs.

BIOL 485. Principles of Immunology (3)
Prerequisites: Biology 203, 203L, Chemistry 365, credit or concurrent registration in Biology 36L. Recommended: Biology 360.
Basic areas of immunology to include inflammation, generation of immune response, antibody production, lymphocyte development and function, hypersensitivities and AIDS, major histocompatibility complex and cytokines. Designed to give a basic background in the immune system.

BIOL 490. Undergraduate Honors Research (3)
Prerequisites: Upper division standing with GPA of at least 3.20, four units of Biology 497 and/or 499, and approval of honors research program coordinator.
Experience in designing and carrying out independent research in a laboratory setting plus a written record of experimental design and results in the form of an honors research thesis to be presented at an undergraduate research forum and/or defended before a committee. Does not satisfy laboratory requirement in major. Maximum credit three units.

BIOL 496. Experimental Topics (1-4)
Selected topics. May be repeated once with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

BIOL 497. Undergraduate Research (1-3)
Fifty hours of research per unit.
Prerequisites: Upper division status in good standing and consent of instructor.
Individual research project, supervised by faculty. Research course with research paper or other presentation of results. Maximum credit six units applicable to general biology major, three units to microbiology major, for any combination of Biology 497 and 499.

BIOL 499. Special Study (1-3)
Fifty hours of activity per unit.
Prerequisites: Upper division status in good standing and consent of instructor.
Individual study, internship, other supervised laboratory or field project or experience. Credit involves 50 hour activity per unit per semester and a report. Maximum credit six units applicable to biology major, three units applicable to microbiology major, for any combination of Biology 497 and 499.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

Writing Requirement: Completion of the Graduation Writing Assessment Requirement or the eligibility to enroll in an upper division writing course is a prerequisite for all upper division biology courses numbered 450 and above.

BIOL 508. Coevolution (3)
Prerequisites: Biology 352 and 354.
Coevolution in interspecific interactions, like herbivory, predation, parasitism, competition, pollination, and mimicry.

BIOL 509. Evolutionary Biology (3)
Two lectures and two hours of activity.
Prerequisite: Biology 352.
Evolutionary biology including genetics of populations, speciation, systematic biology, adaptation, role of development in evolution, evolutionary behavior, and comparative biology. Evolutionary biology as the central organizing principle of biology.

BIOL 510. Molecular Evolution (3)
Prerequisites: Biology 352 and 366 or graduate standing.
Molecular evolution including concepts of homology and convergence, the nearly neutral theory of evolution, evolution of new protein function, detecting selection, multi-gene family evolution and evolutionary genomics.

BIOL 511. Evolution of Development (3)
Prerequisites: Biology 352 and 354.
Dynamic relationship between regulatory functions that control development and the evolutionary process, and vice versa, illustrated with evidence derived from developmental, phylogenetic, paleontological, computational, and ecological research. Emphasis on genomic regulatory networks of transcriptional regulatory elements and cell-signaling pathways.

BIOL 512. Evolution and Ecology of Marine Mammals (3)
Two lectures and three hours of laboratory.
Prerequisites: Biology 352 and 354.
Biogeography of marine mammals including pinnipeds, cetaceans, and sirenians, evolution, diet and foraging strategies, social organization, reproductive strategies, echolocation, diving physiology, and conservation.

BIOL 514. Biology of the Algae (4)
Three lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L, and six units of upper division coursework in the major.
Evolution, life histories, morphology, physiology, and ecology of micro and macro algae, with attention to both marine and freshwater taxa, and of sea-grasses.

BIOL 515. Marine Invertebrate Biology (4)
Two lectures and six hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L.
Strongly recommended: Completion of three to six upper division units in the major. Structure and function, ecology, behavior, physiology and phyletic relationships of marine invertebrate animals.
BIOL 516A. Marine Larval Ecology Research Part 1 (4)
Three lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L, 215.

BIOL 516B. Marine Larval Ecology Research Part 2 (4)
Three lectures and three hours of laboratory.
Prerequisites: Biology 516A and consent of instructor.
Research experience investigating marine invertebrate larval ecology.

BIOL 517. Marine Ecology (4)
Two lectures and six hours of laboratory.
Prerequisite: Biology 354.
Ecological concepts as applied to pelagic and benthic marine organisms and their environment. Field and laboratory experience in oceanographic techniques, particularly the coastal environment.

BIOL 518. Biology of Fishes (4)
Three lectures and three hours of laboratory.
Prerequisite: Biology 354.
Ecology, anatomy, physiology, evolution, taxonomy, environmental constraints, habitats, feeding, behavior, growth, reproduction, biotic interactions, population dynamics, and assemblage structure. Fisheries biology concepts to include stock-recruitment models, density dependence and population regulation, management of fisheries, and conservation. Not open to students with credit in Biology 520 and 541.

BIOL 523. Herpetology (4)
Two lectures and six hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L. Recommended: Biology 352.
Evolution, systematics, distribution, and ecology of amphibians and reptiles of the world.

BIOL 524. Ornithology (4)
Two lectures, six hours of laboratory or field excursions, and a field project.
Prerequisites: Biology 203, 203L, 204, 204L. Strongly recommended: Completion of three to six upper division units in the major.
Study and identification of birds, especially those of the Pacific Coast and the San Diego region.

BIOL 525. Mammalogy (4)
Two lectures and six hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L. Strongly recommended: Completion of three to six upper division units in the major.
Evolution, systematics, distribution and ecology of mammals of the world.

BIOL 526. Terrestrial Arthropod Biology (4)
Two lectures and six hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L. Strongly recommended: Biology 352 and completion of three to six upper division units in the major.
Structure, function, behavior, ecology, evolution, and relationships of major groups of terrestrial arthropods, including insects, arachnids, and myriapods. Identification and natural history of southern California diversity.

BIOL 527. Animal Behavior (3)
Prerequisites: Biology 203, 203L, 204, 204L, 215; Psychology 211 and 260 for psychology majors.
Biological bases of animal behavior with emphasis on ethological approach, including evolution and adaptive significance of behavior.

BIOL 527L. Animal Behavior Laboratory (1)
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Biology 527.
Animal behavior with emphasis on ethological approach to include evolution and adaptive significance of behavior, data collection and analysis, scientific writing and results.

BIOL 528. Microbial Ecology (3)
Two lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L. Recommended: Biology 350 and 354.
Roles of microorganisms in soil, aquatic and marine ecosystems, microbial adaptations to the environment, and interactions within microbial communities and between microbes and multicellular organisms. Laboratory techniques to isolate and study microbes.

BIOL 530. Plant Systematics (4)
Two lectures and six hours of laboratory, field trips.
Prerequisites: Biology 203, 203L, 204, 204L.
Fundamentals of plant taxonomy with emphasis on identification of plants native and naturalized to California. Plant collecting techniques. Field trips are required.

BIOL 535. Plant Ecology (4)
Three lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L. Strongly recommended: Biology 354.
Plant adaptation and response to living and non-living environment including aspects of plant evolution, demography, ecophysiology community and ecosystem dynamics and soil-plant relationships. Terrestrial systems emphasized.

BIOL 538. Environmental Policy and Regulations (3)
(Same course as Environmental Science 538)
Prerequisite: Biology 354.
History of biological conservation and environmental laws; regulations governing biological resources; role of biologists; environmental impact analysis; operation of regulatory and resource agencies; biologists as expert witnesses; wetland protection and mitigation, state heritage programs, role of nongovernmental agencies.

BIOL 540. Conservation Ecology (3)
Two lectures and three hours of laboratory.
Prerequisite: Biology 354.
Human impacts on ecosystems, the resultant endangerment and extinction of plant and animal species, and strategies for the protection and recovery of threatened forms.

BIOL 542. Ecological Signaling in the Environment (3)
Prerequisites: Biology 354 and Chemistry 201.
Ecological consequences of species interactions mediated by signals in terrestrial and aquatic ecosystems. Evaluating primary literature and conveying science to a broad audience.

BIOL 544. Terrestrial Ecosystems and Climate Change (3)
(Same course as Environmental Science 544)
Prerequisite: Biology 354.
Controls on fluxes and stocks of nutrients within terrestrial ecosystems. Ecological responses, feedbacks to climate change. Climate systems, water transport, production and decomposition, nutrient cycling, stable isotopes, spatial and temporal integration.

BIOL 544L. Global Change Science Laboratory (2)
(Same course as Environmental Science 544L)
Six hours of laboratory.
Prerequisite: Biology 354.
Ecological methods in ecosystem and climate change science to include chemical analysis of stable isotopes and elements and meteorological measurements. Modeling, data interpretation, and presentations.

BIOL 549. Microbial Genetics and Physiology (3)
Prerequisite: Biology 350 or 366.
Physiology of microbial growth, bacterial structure and function, genetics of bacteriophages and bacteria.

BIOL 554. Molecular Virology (3)
Prerequisites: Biology 366 and Chemistry 365.
Molecular aspects of structure, genetics, and replication of viruses, virus-host interactions, pathogenesis of virus infections, diagnostic virology, and antiviral vaccines and drugs; emphasis on human pathogens.
BIOL 556. Scanning Electron Microscopy Laboratory (2)
Six hours of laboratory.
Prerequisites: Biology 204, 204L, and Physics 180B.
Biological specimen preparation and operation of scanning electron microscope.

BIOL 557. Transmission Electron Microscopy Laboratory (3)
One lecture and six hours of laboratory.
Prerequisites: Biology 204, 204L, and Physics 180B.
Biological sample preparation and operation of transmission electron microscope.

BIOL 560. Animal Physiology (3)
Prerequisites: Biology 203, 203L, 204, 204L; Chemistry 365; Physics 180B, 182A, and 182B.
Physiology of vertebrate and invertebrate animals with emphasis on diversity of solutions to physiological problems and on functional integration of organ systems.

BIOL 561. Radiation Biology (3)
Prerequisites: Biology 203, 203L, 204, 204L; Physics 180B, 182A, and 182B. Recommended: Biology 366.
Principles underlying radiological reactions of ionizing radiations. Effects of ionizing radiations at the biochemical, cell, organ, and organism levels.

BIOL 562. Ecological Metagenomics (3)
Two lectures and three hours of laboratory.
Prerequisites: Credit or concurrent registration in Biology 354 and 366.
Next generation DNA sequencing technology with emphasis on ecological applications in microbial communities. Metagenomic analysis of taxonomic identification, physiological function, and the ecological role of the microbial community in the broader ecosystem.

BIOL 567. Advanced Biochemistry, Cellular, and Molecular Biology (4)
Prerequisites: Biology 366 and Chemistry 365.
Advanced concepts of cellular biology, molecular biology, and biochemistry.

BIOL 567L. Biochemistry, Cellular, and Molecular Biology Laboratory II (2)
Six hours of laboratory.
Prerequisites: Biology 366 and 366L. Recommended: Biology 350. Intermediate laboratory approaches to biochemistry, cellular biology, and molecular biology at a level appropriate for both advanced undergraduate and graduate students.

BIOL 568. Bioinformatics (3)
(Same course as Bioinformatics and Medical Informatics 568)
Two lectures and three hours of laboratory.
Prerequisite: Biology 366.
Bioinformatics analysis methods and programming skills. Practical bioinformatic software for sequence analysis, bioinformatic algorithms and programming fundamentals.

BIOL 570. Neurobiology (3)
Prerequisite: Biology 366 or 590 or Psychology 360 for psychology majors.
Structure and function of the nervous system to include cellular and molecular mechanisms underlying neuronal excitability and synaptic function, nervous system development, cellular and systems analysis of sensory, motor and higher brain functions. Emphasis on experimental approaches.

BIOL 575. Molecular Basis of Heart Disease (3)
Prerequisite: Biology 366 or 590.
Current literature on the molecular basis of disordered physiology leading to heart disease.

BIOL 576. Developmental Biology (3)
Prerequisite: Biology 366 and 367. Recommended: Biology 567.
Fundamental processes of development from fertilized egg to organism. Emphasis on cellular and molecular mechanisms common to development of metazoan organisms.

BIOL 584. Medical Microbiology (3)
Prerequisites: Biology 350 and 366.
Major bacterial and viral pathogens; molecular mechanisms of pathogenesis, microbial toxins and antimicrobial agents; immune response to microbial infections; biochemical and molecular diagnostics.

BIOL 585. Cellular and Molecular Immunology (3)
Prerequisite: Biology 366. Recommended: Credit or concurrent registration in Biology 567 and 567L.
Cellular and molecular aspects of the immune response. Genetics of immunoglobulins, major histocompatibility complex, lymphocyte development and their manifestations on immune responsiveness, lymphokines immunopathologies including AIDS, and contemporary immunological techniques. Not open to students with credit in Biology 485.

BIOL 589. Stem Cell and Regenerative Biology (3)
Prerequisites: Biology 366 and credit or concurrent registration in Biology 366L.
Stem cell basics, cloning, tissue engineering, research on animal models of regeneration, political and ethical issues surrounding stem cell debate.

BIOL 590. Physiology of Human Systems (4)
Three lectures and one hour of discussion.
Prerequisites: Biology 366, Chemistry 365, Physics 180B, 182B.
Human physiology presented at both cellular and organ system levels; neurophysiology, muscle physiology, cardiovascular physiology and respiration, kidney function, hormone function and reproduction. For students majoring in a natural science or pre-professional studies.

BIOL 594. Biotechnology Research Rounds (2) Cr/NC
Prerequisites: Biology 366 and credit or concurrent registration in Biology 567.
Research methods in biotechnology community. Speakers from local biotechnology companies and research institutes discuss power and limitations of current research methods being applied to develop new therapeutics. Evaluation of approaches, results, and utility of these technologies. Not applicable to biology or microbiology majors.

BIOL 596. Special Topics in Biology (1-4)
Prerequisite: Consent of instructor.
Advanced selected topics in modern biology. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate advisor.

BIOL 597A. Univariate Statistical Methods in Biology (3)
Two lectures and three hours of laboratory.
Prerequisite: Biology 352 or 354 or 366.
Application of univariate statistical techniques in biological sciences.

**GRADUATE COURSES**
Refer to the Graduate Bulletin.
Business Administration
In the College of Business Administration

OFFICE: Education and Business Administration 448
TELEPHONE: 619-594-5828 / FAX: 619-594-7046
http://www.sdsu.edu/business

A Member of the AACSB International—The Association to Advance Collegiate Schools of Business.

Faculty
Faculty assigned to teach in Business Administration are drawn from departments in the College of Business Administration.

Offered by the College
Master of Business Administration degree.
Master of Business Administration degree for executives.
Master of Science degree in business administration.
Master of Business Administration degree and Juris Doctor degree.
Master of Business Administration and Master of Arts in Latin American studies degrees (concurrent program).
Major in general business with the B.S. degree in business administration.

The Majors
Business administration offers a major in General Business that is open to all students, including students who have completed the approved Transfer Model Curriculum in Business. For additional majors, minors, additional programs, and courses in the College of Business Administration, see listings under Accountancy, Finance, Management, Management Information Systems, and Marketing.

General Business Major
Business refers to the multitude of activities required to accomplish commercial transactions in society. Included in the process of business are management activities, designed to direct, organize, and lead the processes needed to accomplish transactions; financial activities, designed to provide for and support the capital needed for transactions to occur; information system activities, designed to plan and organize the processes required to ensure activity; and accounting activities, designed to monitor and audit overall business activity.

The General Business major provides an overview and fundamental working knowledge of the varied aspects of business. Students receive a broad and generalized understanding of the function of business and how the various sub-disciplines of business interact to contribute to the success of an organization. Students select courses across all business sub-disciplines, obtaining an understanding of the field of business. Courses are selected within a particular sub-discipline to develop specialized knowledge of a particular area of business.

Positions available to graduates with a General Business major are those that require a broad, overarching understanding of the business function, rather than a specialized knowledge within a particular business sub-discipline. Examples are in retailing, sales, and other service industries.

Business Honors Program
The Business Honors Program offers excellent upper division business students the opportunity to explore issues in our local, regional, and global business environments focusing on the social and ethical responsibility that business has to the community and society. Honors students will enroll in a one unit business honors seminar each semester. During their enrollment they will participate in activities to promote their academic and personal growth, documenting their work in a written portfolio.

Generally, students should apply to this program at the time of application to upper division business. Applicants must submit an essay with their application. Applicants must have a 3.6 cumulative GPA or good standing in the Weber Honors College. Students not meeting these requirements may petition for admission to the program. Successful completion of the Business Honors Program will be recognized at graduation. Contact Dr. Robert A. Judge, Department of Management Information Systems, for more information about this program.

Statement on Computers
Before enrolling in upper division courses in the College of Business Administration, students must be competent in the operation of personal computers, including word processing and spreadsheets. Business students are strongly encouraged to have their own computers capable of running word processing, word processing, spreadsheet, and Internet applications such as those found in packages sold by major software publishers. Availability of on-campus computing resources can be limited due to increasing demand across the university.

Retention Policy
The College of Business Administration expects that all business students will make reasonable academic progress towards the degree. Business premajors who have completed preparatory courses, earned 60 units, but have less than a 2.9 may be removed from the premajors and placed in undeclared. Upper division business majors earning less than a 2.0 average in their major GPA for two consecutive semesters may be removed from business and placed in undeclared.

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

Transfer Credit
Lower Division: Courses clearly equivalent in scope and content to San Diego State University courses required for minors or as preparation for all business majors will be accepted from regionally accredited United States institutions and from foreign institutions recognized by San Diego State University and the College of Business Administration.

Upper Division: It is the policy of the San Diego State University College of Business Administration to accept upper division transfer credits where (a) the course content, requirements, and level are equivalent to San Diego State University courses and (b) where the course was taught in an AACSB International—The Association to Advance Collegiate Schools of Business—accredited program. Exceptions require thorough documentation evidencing the above standards.

Impacted Program
All majors in the College of Business Administration are impacted. Before enrolling in any upper division courses in business administration, students must advance to an upper division business major and obtain a business major code. To be admitted to an upper division business major (accounting, finance, financial services, general business, real estate, information systems, management, or marketing), students must meet the following:

a. Complete with a grade of C or higher: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three- unit finite mathematics course); Rhetoric and Writing Studies 290 (RWS 290 is not required for the accounting major); and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (Cr/NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.9;
Students who meet all requirements except the GPA may request to be placed on the waiting list. While all spaces are usually filled by eligible students, if there is room in the program after all the fully qualified students have been accommodated, students will be admitted from the waiting list in GPA order. Contact the Business Advising Center (EBA-448), 619-594-5828, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

**General Business Major**

With the B.S. degree in Business Administration

(Major Code: 05011) (SIMS Code: 221751)

The General Business major is open to all students, including students who have completed the California Community College Associate in Science in Business for Transfer (AS-T) degree completing the Transfer Model Curriculum (TMC) for business.

A minor is not required with this major.

**Preparation for the Major.** Complete with a grade of C or higher:

Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290, and either Statistics 119 or Economics 201. (27 units)

These prerequisite courses may not be taken Cr/NC; the minimum grade in each class is C. Additional progress requirements must be met before a student is admitted to the upper division general business major.

**Graduation Writing Assessment Requirement.** Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

**Major.** Forty upper division units consisting of Business Administration 300, 310, 323, 350, 360, 370; Business Administration 404, 405, or 458 (three units); Accountancy 325 or 326; three units selected from Finance 321, 326, 327, 328, 329, and 331; three units selected from Management 352, 357, 358; three units selected from Management Information Systems 306, 315, and 380; four units selected from Marketing 371, 372, 373, 376, 377; seven units selected from 400-level and 500-level courses in the College of Business Administration. A “C” (2.0) average or better is required in the courses stipulated here for the major.

**Business Administration Minor**

(Minor Code: 05010) (SIMS Code: 221750)

(See also, minors in Accounting, Entrepreneurship, Finance, Information Systems, Management, Marketing, and Real Estate.)

The minor in business administration provides a general overview of business for non-business majors. While it is open to qualified students from all majors (except majors in the College of Business Administration, Hospitality and Tourism Management, or International Business), it is particularly recommended for students whose career plans include self-employment or small business management. The minor in business administration is administered by the Business Advising Center (EBA-448), 619-594-5828.

The minor in business administration consists of a minimum of 21 to 23 units to include Business Administration 323, 350, 370; Accountancy 201; Management Information Systems 180; and six to eight units selected from Finance 327, 328; Management 352, 358; Marketing 371, 373, 476.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Business Advising Center (EBA-448) for admissions criteria and procedures.

**Business Administration Certificate**

(Imperial Valley Campus Only)

(SIMS Code: 221703)

This certificate is designed primarily for persons who want to gain an increased understanding of essential principles through upper division business courses, and for students who decide to go on to pursue the B.S. degree with a major in either management, finance, accounting, marketing, information systems, or real estate at the San Diego campus. For those not seeking the B.S. degree it provides a program designed to give self-improvement opportunities for the purpose of securing employment, promotion or upward mobility on the job.

All students seeking admission to the program must have successfully completed 56 transferable lower division units with a grade point average of 2.0. This includes completion of the lower division preparation required for any business administration major, i.e., Accountancy 201, 202; Economics 101, 102; Finance 240; Management Information Systems 180; Mathematics 120 (or an approved calculus course); Rhetoric and Writing Studies 290, and Statistics 119 or Economics 201.

The certificate will be awarded upon successful completion of the following courses: Business Administration 323, 350, 370; Business Administration 360 or Management Information Systems 301; and three units selected from Finance 321, 358; or Management 444. (15 units)

**Courses**

(B A)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

**LOWER DIVISION COURSES**

B A 100. Exploration of Business (1) Cr/NC

Prerequisite: Member of College of Business Administration learning community.

Business careers and business education. Skills needed, opportunities, and options within various occupations. Study and interpersonal skills for academic and personal success. Special sessions featuring campus resources to include library, advising, health and wellness services. (Formerly numbered Business Administration 106B.)

B A 299. Special Study (1-4)

Prerequisites: Consent of department chair and instructor. Individual study. Maximum credit six units.

**UPPER DIVISION COURSES**

(Reserved for Undergraduates)

B A 300. Ethical Decision Making in Business (1)

Prerequisite: Management Information Systems 180. Approved upper division business major, and an unsuccessful appeal by the College of Business Administration. Proof of completion of prerequisites required: Copy of transcript.

Theoretical concepts and dimensions of ethics in business decisions. Ethics of decision alternatives using different approaches and philosophies, with application of an integrative ethical decision model to cases from various business subdisciplines.

B A 310. Foundations of Business in a Global Environment (1)

Prerequisite: Approved upper division major.

Introduction to the program of study leading to the Bachelor of Science in Business Administration. Integration of various business disciplines to accomplish strategic goals. Presentation of the concept of global awareness, one of the fundamental pillars of global competency necessary in today’s business world.
B A 311. Lavin Entrepreneur I Seminar (1) Cr/NC
Prerequisite: Admission to Lavin Entrepreneur Program.
Lavin entrepreneurs will be introduced to entrepreneurship as a potential path for future career development. Students will begin developing entrepreneurial competencies, professional networks, and be introduced to the basics of ideation, opportunity recognition, and business model development.

B A 312. Lavin Entrepreneur II Seminar (1) Cr/NC
Prerequisite: Business Administration 311.
Lavin entrepreneurs will continue building their entrepreneurial competencies and mindset, utilizing entrepreneurship frameworks for business opportunity assessment, ideation, and feasibility analysis techniques in ventures, and how to interact and negotiate with strategic partners.

B A 323. Fundamentals of Finance (3)
Prerequisites: Approved upper division business major, business minor, or another major approved by the College of Business Administration. For approved business majors, credit or concurrent registration in Business Administration 310. Proof of completion of prerequisites required: Copy of transcript.
Objectives of financial management. Financing the business enterprise. Internal financial management. Introduction to the cost of capital, valuation, dividend policy, leverage, international finance, and the techniques of present value and its applications. Sources of capital. (Formerly numbered Finance 323.)

B A 350. Management and Organizational Behavior (3)
Prerequisites: Management Information Systems 180 or Mathematics 120; Statistics 119 or Economics 201. Approved upper division business major, business minor, or another major approved by the College of Business Administration. For approved business majors, credit or concurrent registration in Business Administration 310. Proof of completion of prerequisites required: Copy of transcript.
Human behavior at individual, interpersonal, and group levels including effect of organization structure on behavior. Emphasis on managerial roles, historical evolution of management, ethics, and behavior in multicultural contexts. (Formerly numbered Management 350.)

B A 360. Introduction to Operations and Supply Chain Management (3)
Prerequisites: Management Information Systems 180; Mathematics 120; Statistics 119 or Economics 201. Approved upper division business major, business minor, or another major approved by the College of Business Administration. For approved business majors, credit or concurrent registration in Business Administration 310. Proof of completion of prerequisites required: Copy of transcript.
Managerial concepts and quantitative methods associated with the design, execution, and management of operations and supply chain systems. (Formerly numbered Management Information Systems 302 and Information and Decision Systems 302.)

B A 370. Marketing (3)
Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. For approved business majors, credit or concurrent registration in Business Administration 310. Marketing majors must complete this course with a minimum grade of C (2.0). Proof of completion of prerequisites required: Copy of transcript.
Function of marketing in organizations and society. Strategic marketing planning in domestic and global settings to include marketing concepts, consumer behavior, market research, product planning, pricing, distribution, promotion, and influence of the external environment on marketing decisions. (Formerly numbered Marketing 370.)

B A 400. Business Honors Seminar (1) Cr/NC
Prerequisite: Admission to the College of Business Honors Program. Current issues affecting local, national, and global business environments. Maximum credit five units.

B A 401. Business Internship (1) Cr/NC
Prerequisite: Approved upper division business major, business minor, or another major approved by the College of Business Administration. Internships with business firms, non-profit organizations, or government agencies. Work done under joint supervision of intern organization and academic supervisor. Not applicable for credit in the major. Maximum credit four units with new content.

B A 402. Exploration of Business Career Development (1) Cr/NC
Prerequisite: Upper division standing in the College of Business Administration.
Prepare students for careers after college and transition from college to career. Personal preparation and analysis of identification of best career options for each student.

B A 404. Small Business Consulting (3)
Prerequisites: Approved upper division business major; Business Administration 300, 310, 323, 350, 370; Business Administration 360 or Management Information Systems 301; and consent of instructor. Counseling of existing small businesses. Application of principles from all fields of business administration. Maximum credit six units.

B A 405. International Business Strategy and Integration (3)
Prerequisites: Business Administration 300, 323, 350, 370; Business Administration 360 or Management Information Systems 301. Proof of completion of prerequisites required: Copy of transcript.
Integration of business administration principles and concepts for strategy design, implementation, and control in domestic, and global markets. Establishment of top management policy emphasizing through case studies, experiential exercises, and simulations. (Formerly numbered Management 405.)

B A 411. Lavin Entrepreneur III Seminar (1) Cr/NC
Prerequisite: Business Administration 312.
Lavin entrepreneurs will focus on implementing learned entrepreneurial competencies into refined business models, refining start-up opportunities through customer iteration and development. Understand data metrics, successful customer interaction, and pivoting the business model toward success.

B A 412. Lavin Entrepreneur IV Seminar (1) Cr/NC
The final deliverable of this capstone course in presenting an iterated business model canvas to potential investors. Lavin entrepreneurs have the potential, knowledge, and tools to launch a company, bring their viable business opportunity to life.

B A 458. Management Decision Games (1-3)
Prerequisites: Consent of instructor. Approved upper division business major; Business Administration 300, 310, 323, 350, 370; Business Administration 360 or Management Information Systems 301. Proof of completion of prerequisites required: Copy of transcript.
Integrated managerial decision making within a dynamic environment through the use of business games. (Formerly numbered Management 458.)

B A 496. Selected Topics in Business Administration (1-4)
Prerequisite: Consent of department chair.
Selected areas of concern in business administration. May be repeated with new content with consent of department chair. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Chemistry
In the College of Sciences

OFFICE: Geology/Mathematics/Computer Science 209
TELEPHONE: 619-594-5595 / FAX: 619-594-4634
E-MAIL: cheminfo@sdsu.edu
http://www.sci.sdsu.edu/chemistry

Certified by the American Chemical Society.

Faculty
Emeritus: Abbott, Bennett, Chatfield, Cobble, Dahms, Grubbs, Jensen, Jones, Joseph, Landis, Lebherz, Mathewson, Metzger, O’Neal, Richardson, Ring, Roeder, Stewart, Stumph, Walba, Woodson
Chair: Tong
Professors: Carrano, Cooksy, Grojahn, Huxford, Tong
Associate Professors: Bergdahl, Cole, Harrison, Love, Pullman, Smith, van der Geer
Assistant Professors: Gustafson, Holland, Kalyuzhny, Purse

Offered by the Department of Chemistry and Biochemistry
Doctor of Philosophy degree in chemistry.
Major Academic Plans (MAPs)

The Major
Through the study of chemistry, students can better understand their environment and develop new materials that provide for a higher quality of life. Chemists are involved in a wide range of careers in research, development and the production of new goods. Basic chemical research provides society with discoveries of new substances and the means to predict their chemical and physical properties. In developmental chemistry, professionals find ways to put them to use. There are careers in methods of production to provide these materials to society in a cost-effective way. In each of these areas, there are subspecialties in analytical, biochemical, inorganic, organic, or physical chemistry.

The Department of Chemistry and Biochemistry offers five degree programs leading to the Bachelor of Arts degree, the Bachelor of Science degree, the Master of Arts degree, the Master of Science degree, and the Doctor of Philosophy degree (with the University of California, San Diego).

There are several options available in the undergraduate program for those wishing either a major or a minor in chemistry. A chemistry major with the Bachelor of Science degree and certificate of the American Chemical Society is designed to qualify students for many types of positions as chemists and for admission to graduate study.

The chemistry major with the Bachelor of Arts degree and certificate of the American Chemical Society is specifically designed to prepare students for careers and graduate work requiring a strong chemistry background. With an appropriate choice of electives, graduates can meet the requirements for admission to medical, dental and pharmaceutical schools. A minor in biology is recommended.

The use of chemistry electives allows a student to focus on a particular area in chemistry such as analytical chemistry, biochemistry, chemical physics, inorganic chemistry, organic chemistry, or physical chemistry.

Impacted Program
The chemistry major is an impacted program. To be admitted to the chemistry major, students must meet the following criteria:

a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/imymap for the recommended courses needed to fulfill your major requirements. This MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Chemistry Major
With the B.S. Degree in Applied Arts and Sciences and Certificate of the American Chemical Society
(Major Code: 19051) (SIMS Code: 772601)
(SIMS Code: 772613 - Georgia)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

Preparation for the Major.
Chemistry 200, 201, 232, 232L, 251; Mathematics 150, 151, 252, and Physics 195, 195L, 196, 196L. (39 units) Recommended: Physics 197 and 197L.

Students completing the California Community College Associate in Science in Chemistry for Transfer (AA-T) will satisfy preparation for the major. If Chemistry 251 and Mathematics 252 were not completed prior to matriculation, it must be completed at SDSU.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Chemistry 410A, 410B, 417, 427, 432, 432L, 457, 520A-520B, 550, 560, one unit of 498, and eight units of upper division electives in chemistry. Six of the eight units may be in related subjects with the approval of the department.

Emphasis in Biochemistry
(SIMS Code: 772609)

Preparation for the Major. Chemistry 200, 201, 232, 232L, 251; Biology 254, 254L; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L. (43 units) Recommended: Physics 197 and 197L.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Chemistry 410A, 410B, 432, 432L, 457, 550, 560, 567; four units selected from Chemistry 562, 563, 564; one unit of Chemistry 498; and the remaining units selected from Chemistry 496, 497, 498, and any 500-level chemistry course; Biology 350, 352, 485, 549, 570, 590. The addition of Chemistry 417, 427, and 520A qualifies this program for ACS certification.
Chemistry Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 19051) (SIMS Code: 772612)
and Certificate of the American Chemical Society

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” Candidates who wish to graduate with 120 units must complete both American Institutions courses at the upper division level. No more than 49 units in chemistry courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major.
Chemistry 200, 201, 232, 232L, 251; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L. (39 units) Recommended: Physics 197 and 197L.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of this catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 30 upper division units in chemistry to include Chemistry 410A, 410B, 417, 427, 432, 432L, 457, 520A, 550, 560; one unit of Chemistry 498A and 498B (3 units). Recommended: Physics 197 and 197L.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of this catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 32 upper division units to include Chemistry 410A, 410B, 417 or 457, 432, 432L, 498 (1 unit), 520A, 550, 560; Astronomy 310; Geological Sciences 412; Physics 499 (History of Science and Technology).

Additional Requirements for Subject Matter Preparation Certification. Satisfactory Grades. At most one course with a C- or lower among the courses listed under Preparation for the Major, and at most one course with a C- or lower among the courses listed under the Major. If a course is repeated, the highest grade will count.

Formative Assessment. Completion of a satisfactory, preliminary portfolio two semesters prior to graduation. Contact the subject matter preparation adviser for information.

Summative Assessment. Completion of a satisfactory, final portfolio and a positive recommendation from the senior project supervisor.

Chemical Physics Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 19081) (SIMS Code: 772801)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” Individual master plans for each student are filed with the chemistry and physics undergraduate department. Contact the subject matter preparation program adviser.

A minor is not required with this major.

Preparation for the Major.
Chemistry 200, 201, 232, 232L, 251; Communication 103; Mathematics 150, 151; Physics 180A, 180B, 182A, 182B; Mathematics 252 OR Physics 195, 195L, 196, 196L, 197, 197L; Teacher Education 211B. (51 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Chemistry 410A, 410B, 417, 457, 432, 432L, 498 (1 unit), 520A, 550, 560; Chemistry 538 or Physics 538; and Research Project: Chemistry 497 (3 units) or Chemistry 498 (3 units) or Physics 498A and 498B (3 units).
Chemistry Minor
(Minor Code: 19051) (SIMS Code: 772601)

The following courses are prerequisite to the chemistry minor and do not count toward the 15 units required for the minor: Chemistry 200, 201. (10 units.)

The minor in chemistry consists of 15 units in chemistry to include Chemistry 232, 232L, 251; and six units of upper division electives. Strongly recommended: Chemistry 410A, 410B.*

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

* Additional prerequisites in mathematics and physics required for these courses.

Courses (CHEM)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

CHEM 100. Introduction to General Chemistry with Laboratory (4) [GE]
Three lectures and three hours of laboratory. Elementary principles of chemistry used to illustrate nature and development of modern scientific thought. Not open to students with credit in Chemistry 105 or 200.

CHEM 102. Introduction to General, Organic, and Biological Chemistry (5) [GE]
Four lectures and three hours of laboratory.
Prerequisite: High school chemistry or Chemistry 100.
Concepts of general, organic, and biological chemistry necessary to understanding human biochemistry and pharmacology, including chemical bonding, stereochemistry, acidity, thermodynamics, carbohydrates, lipids, enzymes, proteins, and nucleic acids. Open only to students applying for entrance to the nursing major.

CHEM 130. Elementary Organic Chemistry (3)
Introduction to compounds of carbon including both aliphatic and aromatic substances. Not open to students with credit in Chemistry 231 or 232.

CHEM 160. Introductory Biochemistry (3)
Prerequisite: Chemistry 130.
Fundamental principles of the chemistry of life. This course is intended primarily for majors in nutrition and related fields. Not applicable for admission to the School of Nursing.

CHEM 200. General Chemistry (5)
Three lectures, one hour of discussion, and three hours of laboratory.
Prerequisites: Knowledge of introductory chemistry as demonstrated by completion of Chemistry 100 with a grade of C or better; or satisfaction of the Entry-Level Mathematics requirement and qualification on the Chemistry Department Placement Examination.

General principles of chemistry with emphasis on inorganic materials.

CHEM 201. General Chemistry (5)
Three lectures and three hours of laboratory.
Prerequisites: Chemistry 200 or 202 with a grade of C or better.
Continuation of Chemistry 200. General principles of chemistry with emphasis on fundamentals of chemical reactions.

CHEM 202. General Chemistry for Engineers (4)
Three lectures and three hours of laboratory.
Prerequisite: Knowledge of introductory chemistry as demonstrated by completion of Chemistry 100 with a grade of C or better; or satisfaction of the Entry-Level Mathematics requirement and qualification on the Chemistry Department Placement Examination.

General principles of chemistry with emphasis on inorganic and physical chemistry and chemistry basics for engineers. Not open to students with credit in Chemistry 200. Restricted to chemical physics and engineering majors.

CHEM 232. Organic Chemistry (3)
Prerequisites: Chemistry 201 with a grade of C or better and credit or concurrent registration in Chemistry 232L.
Properties and synthesis of organic compounds including reaction mechanisms. Same course as lecture portion of Chemistry 231. Not open to students with credit in Chemistry 231.

CHEM 232L. Organic Chemistry Laboratory (1)
Three hours of laboratory.
Prerequisites: Chemistry 201 with a grade of C or better and credit or concurrent registration in Chemistry 232.
Properties and synthesis of organic compounds including methods of separation and purification techniques. Same course as laboratory portion of Chemistry 231. Not open to students with credit in Chemistry 231.

CHEM 251. Analytical Chemistry (5)
Three lectures and six hours of laboratory.
Prerequisites: Chemistry 201 and credit or concurrent registration in Mathematics 124 or 150.
Introduction to the theory and practice of analytical chemistry including gravimetric, volumetric, and instrumental methods.

CHEM 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

CHEM 299. Special Study (1-4)
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Intended for Undergraduates)

CHEM 300. Forensic Science (3) [GE]
Prerequisite: Chemistry 100 or completion of General Education requirement in Foundations of Learning I.A. Natural Sciences and Quantitative Reasoning.
Techniques and case studies of mysteries solved by molecular analysis: chemical and DNA analysis of crime scenes, biochemical explanations of mysterious deaths and accidents, molecular hallmarks of forgery, chemical methods in crime deterrence, chemical causes of fires and structure failure. Not applicable to chemistry majors.

CHEM 308. Chemistry as a Unifying Science (3) [GE]
(Offered only at IVC)
Prerequisite: Completion of the General Education requirement in Foundations I.A., Natural Sciences and Quantitative Reasoning.
Atomic-molecular theory of matter; use of concepts of chemistry to explain observable phenomena in everyday life, including physical properties and chemical changes; connections between chemistry and biology; earth science, and physical science. Open only to liberal studies majors. Not applicable to chemistry majors.

CHEM 365. Biochemistry, Cell and Molecular Biology I (3)
Prerequisites: Biology 203, 203L, and Chemistry 232, 232L.
Basic concepts of modern integrated biochemistry, cell and molecular biology. Not open to students with credit in Chemistry 560. Applicable to chemistry major or minor only with approval from department.

CHEM 410A. Physical Chemistry (4)
Three lectures and three hours of laboratory.
Prerequisites: Chemistry 232, 232L, 251; Mathematics 252; Physics 195, 195L, and 196, 196L. Recommended: Physics 197 and 197L. For chemistry teaching major only: The mathematics and physics requirements may be replaced by Mathematics 150, 151, 252 and Physics 180A, 180B OR Mathematics 150, 151, and Physics 195, 195L, 196, 196L.
Theoretical principles of chemistry with emphasis on mathematical relations. Theory and practice in acquisition and statistical analysis of physical measurements on chemical systems.

CHEM 410B. Physical Chemistry (3)
Three lectures.
Prerequisites: Chemistry 232, 232L, 251, 410A.
Theoretical principles of chemistry with emphasis on mathematical relations. Theory and practice in acquisition and statistical analysis of physical measurements on chemical systems.
CHEM 417. Advanced Physical Chemistry Laboratory (2)  
Six hours of laboratory.  
Prerequisites: Chemistry 251, 410A, and credit or concurrent registration in Chemistry 410B.  
Experimental physical chemistry. Emphasis on interpretation and statistical evaluation of instrument-derived results, record keeping, report writing, and individual initiative in observing results.

CHEM 427. Inorganic Chemistry Laboratory (1)  
Three hours of laboratory.  
Prerequisite: Credit or concurrent registration in Chemistry 520A.  
Laboratory course designed to introduce students to techniques used in synthesis, characterization, and manipulation of inorganic compounds and materials.

CHEM 432. Organic Chemistry (3)  
Prerequisites: Chemistry 232 with a grade of C or better and credit or concurrent registration in Chemistry 432L.  
Continuation of Chemistry 232. Same course as lecture portion of Chemistry 431. Not open to students with credit in Chemistry 431.

CHEM 432L. Organic Chemistry Laboratory (1)  
Three hours of laboratory.  
Prerequisites: Chemistry 232L with a grade of C or better and credit or concurrent registration in Chemistry 432.  
Continuation of Chemistry 232L. Same course as laboratory portion of Chemistry 431. Not open to students with credit in Chemistry 431.

CHEM 457. Instrumental Methods of Chemical Analysis Laboratory (2)  
Six hours of laboratory.  
Prerequisites: Chemistry 251, 432, 432L, and credit or concurrent registration in Chemistry 410B; concurrent registration in Chemistry 550.  
Application of instrumental methods of chemical separations and analysis frequently used in all disciplines of chemistry.

CHEM 496. Selected Topics in Chemistry (1-4)  
Prerequisite: Consent of instructor.  
Selected topics in modern chemistry. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

CHEM 497. Undergraduate Research (1-3) Cr/NC  
Individual laboratory investigation. Maximum credit six units applicable to all chemistry major and minor degrees.

CHEM 498. Senior Project (1-3)  
Prerequisite: Three one-year courses in chemistry.  
Individual laboratory investigation and report on a problem. Maximum credit three units.

CHEM 499. Special Study (1-4)  
Prerequisite: Consent of instructor.  
Individual study. Maximum credit six units.

UPPER DIVISION COURSES  
(Also Acceptable for Advanced Degrees)

CHEM 507. Advanced Physical Chemistry (3)  
Prerequisite: Chemistry 410B.  
Problems in chemical thermodynamics, statistical mechanics, chemical kinetics, quantum chemistry and molecular structure and spectroscopy, with applications.

CHEM 520A-520B. Inorganic Chemistry (3-3)  
Prerequisite: Chemistry 410A. Chemistry 520A is prerequisite to 520B.  
Nature of chemical bond and an advanced systematic study of representative and transition elements and their compounds.

CHEM 531. Synthetic Organic Chemistry (3)  
Prerequisites: Chemistry 432, 432L.  
Modern methods, strategies, and mechanisms in advanced organic synthesis. Retrosynthetic analysis of and synthetic routes towards biologically important compounds.

CHEM 538. Polymer Science (3)  
(Same course as Physics 538)  
Prerequisites: Chemistry 200 or 202; and Chemistry 410B or Physics 380 or Mechanical Engineering 560.  
Structure, synthesis, physical properties, and utilities of polymers.

CHEM 550. Instrumental Methods of Chemical Analysis (2)  
Prerequisites: Chemistry 232, 232L, and credit or concurrent registration in Chemistry 410A; credit or concurrent registration in Chemistry 457 for undergraduate students only. Chemistry majors in the teaching credential program (BA in Applied Arts and Sciences) can replace Chemistry 457 with credit or concurrent registration in Chemistry 417. Chemical Physics majors can replace Chemistry 457 with credit or concurrent registration in Physics 311.  
Theory and application of instrumental methods of chemical separation and analysis most frequently used in all disciplines of chemistry.

CHEM 560. General Biochemistry (3)  
Prerequisites: Chemistry 232, 232L, and credit or concurrent registration in Chemistry 410A, 432, 432L.  
The structure, function, metabolism, and thermodynamic relationships of chemical entities in living systems. Not open to students with credit in Chemistry 365.

CHEM 562. Intermediary Metabolism (2)  
Prerequisite: Chemistry 365 or 560.  
Catabolic and biosynthetic pathways of carbohydrate, lipid, amino acid, and nucleotide metabolism; TCA cycle, mitochondrial and chloroplast electron transport chains, ATP generation and their interactions and control. Not open to students with credit in Chemistry 361.

CHEM 563. Nucleic Acid Function and Protein Synthesis (2)  
Prerequisite: Chemistry 365 or 560.  
DNA replication, RNA transcription, RNA processing, and protein translation, including chemical mechanisms of synthesis and cellular mechanisms of regulating gene expression; genomics, recombinant DNA, and DNA topology. Not open to students with credit in Chemistry 361.

CHEM 564. Receptor Biochemistry and Protein Modification (2)  
Prerequisite: Chemistry 365 or 560.  
Biochemical study of receptors, second messengers, and cellular proteins that participate in extracellular and intracellular communication, with focus on protein structures, post-translational modifications, and biochemical mechanisms that regulate receptors and effector enzymes.

CHEM 567. Biochemistry Laboratory (3)  
One lecture and six hours of laboratory.  
Prerequisite: Chemistry 560.  
Theory and practice of procedures used in study of life at molecular level. Includes purification and characterization of enzymes, isolation of cell components, and use of radioactive tracer techniques.

CHEM 571. Environmental Chemistry (3)  
Prerequisites: Chemistry 232, 232L, 251; consent of instructor for all other majors.  
Fundamentals of chemistry applied to environmental problems. Chemistry of ecosystems; analysis of natural constituents and pollutants; sampling methods; transport of contaminants; regulations and public policy.

CHEM 596. Advanced Special Topics in Chemistry (1-3)  
Prerequisite: Consent of instructor.  
Advanced selected topics in modern chemistry. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate advisor.

GRADUATE COURSES  
Refer to the Graduate Bulletin.
Chicana and Chicano Studies
In the College of Arts and Letters

OFFICE: Arts and Letters 348
TELEPHONE: 619-594-6452

Faculty
Emeritus: Griswold del Castillo, Rodriguez, Villarino
Chair: Iglesias Prieto
Professors: Hicks, Iglesias Prieto, Ortiz
Associate Professors: Del Castillo, González-Rivera, Ibarra
Assistant Professor: Hernández

Offered by the Department
Master of Arts degree in Chicana and Chicano studies.
Major in Chicana and Chicano studies with the B.A. degree in liberal arts and sciences.
Minor in Chicana and Chicano studies.
Minor in United States-Mexico border studies.
Certificate in United States-Mexico border studies.

The Major
Chicana and Chicano studies is a multi- and interdisciplinary-field that takes as its focus the study Chicana/o-Mexicana/o, and other Latina/o populations, the US-Mexico border/lands, and society at large. Through an academically rigorous program, the Department of Chicana and Chicano Studies seeks to develop bachelors of art who have both a general knowledge of the history, cultures, and social life of Chicana/o-Mexicana/o communities over time and in comparative and global contexts, as well as an in-depth understanding of the social, political, and economic inequalities and challenges faced by Chicana/o-Mexicana/o, and other Latina/o communities. Students will learn to critically interrogate assumptions about race/ethnicity, class, gender, citizenship, and sexuality, among other axes of power, as well as understand the influence of border/lands in marking the experiences of Chicana/o-Mexicana/o communities and society at large.

The department was created in 1969, and has its origins in the Chicano Movement, which envisioned and fought for a world free of inequality. In this spirit, Chicana and Chicano studies majors will acquire the knowledge and skills to exercise responsible leadership, effectively engage diverse communities, and advocate for social justice and equality.

Chicana and Chicano studies majors are prepared for graduate study and careers in federal, state, and local government; education; law; journalism; and nonprofit and grassroots organizations.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The Chicana and Chicano studies major is an impacted program. To be admitted to the Chicana and Chicano studies major, students must meet the following criteria:

a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Chicana and Chicano Studies Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22131) (SIMS Code: 114905)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in Chicana and Chicano studies courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major.
Chicana and Chicano Studies 110 and 150. (6 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Students are encouraged to satisfy this language requirement in Spanish. Refer to section of catalog on “Graduation Requirements.
Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Chicana and Chicano Studies 396W and earn a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
Major. A minimum of 33 upper division units to include 27 units selected from Chicana and Chicano Studies 301, 303, 306, 310, 320, 335 [or English 335], 340B, 350A, 350B, 355, 375, 380, 396W, 400, 405, 450, 480, 496, 497, 498, 499, 596, Women’s Studies 512; and six units selected from Chicana and Chicano Studies 340A, 376, and 410.

Chicana and Chicano Studies Minor
(SIMS Code: 114905)

The minor in Chicana and Chicano studies consists of a minimum of 18 units to include Chicana and Chicano Studies 110 and 150; and 12 units of upper division courses selected from Chicana and Chicano Studies courses.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

United States-Mexican Border Studies Minor
(SIMS Code: 114902)

The minor in United States-Mexican Border Studies consists of a minimum of 22 units. Spanish 201 and 12 units in upper division courses to include Chicana and Chicano Studies 355, and six units selected from Chicana and Chicano Studies 306, 310, 355, 375, 380, 405.

The following additional nine units must be taken to complete the minor.
International Economics/Business: Three units selected from Chicana and Chicano Studies 301; Economics 360, 365, 458, 565; Finance 329; Marketing 376.
Regional Geography/History and Politics/Society: Six units selected from History 550, 551; Journalism and Media Studies 591; Political Science 555, 556; Social Work 350; Sociology 350, 390, 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.

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United States-Mexico Border Studies Certificate  
(SIMS Code: 118701)

The United States-Mexico Border Studies Certificate program is an interdisciplinary program integrating border studies courses from academic units throughout the campus. The objective of the program is to train students from diverse academic backgrounds within a multi-disciplinary border studies curriculum that provides direct experience in border institutions and policy issues in both the public and private sectors. The program requires 21 units, and a level 3 of Spanish proficiency on a scale of 5, as indicated on the Foreign Service Language Examination. Students must apply for admission to the program before completing nine certificate units and are required to plan their program with an adviser. Contact the Department of Chicana and Chicano Studies.

Required courses: Chicana and Chicano Studies 355 and three units of an internship, either Chicana and Chicano Studies 498 or from the student’s major if it is carried out as a border-oriented internship.

Fifteen units selected from the following areas, at least three units from each area. In addition to the courses listed and with the approval of the adviser, students may take border-related courses from other areas, but no more than six units can be from a single department. Courses in the certificate may not be counted toward the minor.

- **Evolution of Social and Environmental Regions**: Chicana and Chicano Studies 375; Geography 496; History 551.
- **Political and Economic Systems**: Chicana and Chicano Studies 306; Economics 458, 496, 565; Political Science 568.
- **Cultural and Social Institutions**: Chicana and Chicano Studies 376; Education 451.

**Special Problems/Human Services**: Chicana and Chicano Studies 496, Border Research Topics.

**Language Requirement for the B.A. Degree in Liberal Arts and Sciences**

Students electing the study of Náhuatl to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Chicana and Chicano Studies 201 or the equivalent level of competency. The usual sequence of coursework is Chicana and Chicano Studies 101, 102, and 201. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

**High School Equivalents**

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

**Courses (CCS)**

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

**LOWER DIVISION COURSES**

**CCS 100. Chicana and Chicano Heritage (3) [GE]**
Cultural achievements and thought of Spanish-speaking peoples of North America; development of aesthetic and ethical values. North American intellectual history and influence of philosophical orientations of native and Mestizo peoples. Implications for social change.

**CCS 101. Elementary Náhuatl I (4) [GE]**
Four lectures plus laboratory. Introduction to basic Náhuatl vocabulary and grammar. Colonial and modern texts and translations in their cultural contexts. Not open to students with credit in Chicana and Chicano Studies 102 or 201.

**CCS 102. Elementary Náhuatl II (4) [GE]**
Four lectures plus laboratory. Prerequisite: Chicana and Chicano Studies 101. Continuation of Elementary Náhuatl I. Language development through vocabulary and grammar. Reading colonial, modern texts, and translations. Conversational language development through cultural context. Not open to students with credit in Chicana and Chicano Studies 201.

**CCS 110. Introduction to Chicana and Chicano Studies (3)**

**CCS 111A. Oral Communication (3) [GE]**
Training in oral expression. Chicana and Chicano Studies 111A is equivalent to Communication 103. Not open to students with credit in Africana Studies 140 or Communication 103 or 204.

**CCS 111B. Written Communication (3) [GE]**
Continuation of Elementary Náhuatl I. Language development through vocabulary and grammar. Reading colonial, modern texts, and translations. Conversational language development through cultural context. Not open to students with credit in a higher-numbered composition course or Africana Studies 120 or American Indian Studies 120 or English 100 or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

**CCS 120A-120B. Chicana and Chicano Role in the American Political System (3-3) [AI]**
Semester I: Relationship between Chicana and Chicano communities and the American political system. Semester II: The Chicana and Chicano in relation to city, county, and state institutions in California. This year-long course satisfies the graduation requirement in American Institutions.

**CCS 141A-141B. History of the United States (3-3) [AI]**
Spanish, Mexican, and Chicano influences on US history. Semester I: Comparative development of the United States and Mexico to 1865. Semester II: Mexican Americans in US history; US and Mexican national histories compared from 1865 to the present. This year-long course satisfies the graduation requirement in American Institutions.

**CCS 150. Critical Issues in Chicana Studies (3)**
Critical themes in Chicana feminist scholarship: power and resistance; work, family, and culture; cultural representations and presentations; social and biological reproduction.
CCS 200. Intermediat Expository Research and Writing (3) [GE]
Especially designed for bilingual/bicultural students.
Prerequisites: Satisfaction of the English Placement Test and Writing Competency requirements and Chicana and Chicano Studies 111B or Africana Studies 120 or American Indian Studies 120 or English 100 or Linguistics 100 or Rhetoric and Writing Studies 100 or 101. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

CCS 201. Intermediate Náhuatl I (4) [GE]
Four lectures plus laboratory.
Prerequisite: Chicana and Chicano Studies 102.
Further development of reading, writing, listening, and speaking skills in Náhuatl, with emphasis on language used in everyday conversations and reading of historical texts.

CCS 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units. Combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

CCS 301. Political Economy of the Chicano People (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. Recommended: Chicana and Chicano Studies 110.
Political and economic roots of the oppression and exploitation of the Chicano from historical, institutional and theoretical points of view. Parallel between the experience of the Chicano and other Hispanic groups.

CCS 303. Chicana and Chicano Community Studies (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. Recommended: Chicana and Chicano Studies 110.
Chicana and Chicano communities from a comparative perspective. Systematic inquiry into methods and issues in community studies. Contemporary social, institutional, and political affairs.

CCS 306. Mexican Immigration (3)
Immigration from Mexico in the context of US immigration history and policies. Comparative study of political, economic, and cultural factors. Undocumented immigration and current US law.

CCS 310. Mexican and Chicano Music (3) [GE]
(Same course as Latin American Studies 310)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Humanities required for nonmajors. Music of Mexico and the Southwest, including folk dances appropriate for children and adults. Emphasis on the corrido, its history and development in Mexico and the United States. Course will be taught bilingually.

CCS 320. Chicana and Chicano Lifestyles (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

CCS 335. Chicana and Chicano Literature (3) [GE]
(Same course as English 335)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Ideas, forms, history of significant Chicana and Chicano prose, poetry, and other literary genres.

CCS 340A. Gender, Sex, and Politics in Colonial Mexico (3)
Prerequisite recommended: Chicana and Chicano Studies 141A or 350A.
History of Mexican women under Spanish colonial rule. Women's agency and diversity of experiences, as they relate to class, race, religion, and sexuality. Nonheteronormative (LGBTQ) sexualities.

CCS 340B. Chicana Women's History: 1848-Present (3)
Prerequisites recommended: Chicana and Chicano Studies 111B and upper division standing.
History of Chicanas in the United States from 1848 to present, focusing on impact of Mexican American War, important female historical figures, and issues related to race, class, religion, and sexuality.

CCS 350A-350B. Chicana and Chicano History (3-3) [GE]
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Semester I: Review of indigenous origins; Hispanic institutions and northward expansion; the Mexican Republic; attention to women's socioeconomic status and significance. Semester II: US encroachment and the US-Mexican War; Chicana and Chicano contributions; the multilingual and multicultural Southwest.

CCS 355. The United States-Mexico International Border (3) [GE]
(Same course as Latin American Studies 355)
Prerequisites: Upper division standing; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Historical problems and movements in the US-Mexican border region, in particular those impacting Spanish-speaking populations on both sides of the border. Contemporary border issues from a historical perspective.

CCS 375. Chicana and Chicano Culture and Thought (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Chicana and Chicano as a synthesis of different cultural traditions and perspectives. Philosophical concepts from pre-Cortesian times to the present.

CCS 380. Chicana and Chicano Prose (3)
(Same course as Latin American Studies 380)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Recommended: Chicana and Chicano Studies 110.

CCS 396W. Chicana and Chicano Prose (3)
Prerequisite: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units, completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in WRS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisite required: Test scores or verification of exemption; copy of transcript.
A writing workshop. Mutual criticism. Exploration of new form and content in Mexican American prose. Maximum credit six units.

CCS 400. Chicana and Chicano Literature (3) [GE]
(Same course as Latin American Studies 400)
Prerequisite: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Chicana and Chicano Studies

**CCS 405. Performing Transnational Citizenship (3)**
Prerequisite: Upper division standing.
Civic, cultural, postnational, and social constructions of citizenship in a local, global, and transnational context. Citizenship and rights of Mexican undocumented migrant and immigrant groups.

**CCS 410. Capstone: Critical Discourse in Chicana and Chicano Studies (3)**
Prerequisite: Upper division standing. Open only to Chicana and Chicano Studies majors.
Ethical and substantive issues and themes pertinent to borderland communities in the US-Mexican region.

**CCS 450. Chicano and Latino Theatre (3) [GE]**
Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Contemporary Chicano theatre including works by people of Puerto Rican, Cuban American, and other Latin American origins in the United States.

**CCS 480. Chicanas and Chicanos and the Schools (3)**
The Chicana and Chicano child's experience in the school system from preschool through high school with emphasis on social, intellectual, and emotional growth and development.

**CCS 496. Selected Topics in Chicana and Chicano Studies (1-3)**
May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

**CCS 497. Senior Thesis (3)**
Prerequisite: Senior standing. Open only to Chicana and Chicano Studies majors and minors, and consent of department.
Faculty-supervised independent study culminating in a research paper or project on history, ethnos, and social perspectives of Chicana and Chicano studies and indicative of scholarly interest in continued learning.

**CCS 498. Internship in US-Mexico Border (3)**
Nine to twelve hours per week plus four class meetings.
Prerequisites: Upper division standing, Chicana and Chicano Studies 355, and consent of instructor.
Internship in public or private sector institution, agency, or organization engaged in US-Mexican binational relations or border-related issues.

**CCS 499. Special Study (1-3)**
Prerequisites: Consent of instructor.
Individual study. Maximum credit six units.

**UPPER DIVISION COURSES**
(Also Acceptable for Advanced Degrees)

**CCS 548. Race and Ethnicity in United States History (3)**
(Same course as History 548)
Prerequisite: Upper division or graduate standing.
Race and ethnicity in America from colonial period through twentieth century to include historical construction of identity; colonization, slavery, state formation; labor, immigration, politics of whiteness; applicability of black/white binary of a multiethnic society.

**CCS 554. United States-Mexico Transborder Populations and Globalization (3)**
Prerequisite: Upper division or graduate standing.

**CCS 596. Topics in Chicana and Chicano Studies (1-3)**
Prerequisite: Consent of instructor.
Advanced topics in Chicana and Chicano studies. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

**GRADUATE COURSES**
Refer to the Graduate Bulletin.
Child and Family Development
In the College of Education

OFFICE: Education and Business Administration 403
TELEPHONE: 619-594-5380 / FAX: 619-594-5921
E-MAIL: cfdev@mail.sdsu.edu

Faculty
Emeritus: Balkwell, Deutsch, Roberts, Ross
Chair: Ribiiblatt
Professors: Hokoda, Ribiiblatt
Assistant Professors: Garrity, Longstreth, Rieth, Schaack, Shapiro
Lecturers: Booth, Gardner, Tung

Offered by the Department
Master of Science degree in child development.

Concentration in early childhood mental health.
Major in child development with the B.S. degree in applied arts and sciences.
Minor in child development.
Certificate in early care and education.
Certificate in family life education.

The Major
The interdisciplinary major in child development draws from many fields of study, including biology, psychology, and sociology, and prepares students for a variety of professional specialties. Graduates with competencies in this major find positions in preschools, child care centers, schools, hospitals, clinics, residential institutions, counseling centers, mental health centers, social services and public welfare agencies, family service agencies, family planning clinics, community programs, business and industry, and government agencies.

Field experience programs offer students supervised work in community agencies, children's programs, the SDSU Children's Center, San Diego City Schools, and various San Diego agencies. All children's programs are mainstreamed and a wide range of special needs and at-risk populations are served.

The child development degree also provides a flexible curriculum base for continuation into graduate programs in child development, family studies, or early childhood mental health. Majors may also continue graduate work in related fields such as marriage and family therapy; occupational and physical therapy; social work; psychology; law; or sociology. Also available are programs leading to the multiple subject and single subject teaching credentials, and a specialist law; or sociology. Also available are programs leading to the multiple subject and single subject teaching credentials, and a specialist law; or sociology. Also available are programs leading to the multiple subject and single subject teaching credentials, and a specialist law; or sociology. Also available are programs leading to the multiple subject and single subject teaching credentials, and a specialist

The child development minor is an importantadjunct for students in areas such as anthropology, education, nursing, psychology, recreation, social work, and sociology.

Impacted Program
The child development major is an impacted program. To be admitted to the child development major, students must meet the following criteria:

a. Complete with a grade of C or higher: Child and Family Development 125, 270, 270L (one unit), 272, 275, 278; Biology 100; Psychology 101; Sociology 101; and Psychology 280, or Sociology 201, or a three unit elementary statistics course.

b. These courses cannot be taken for credit/no credit (Cr/NC).

Special Instructions
1. Background Check. Child and family development premajors and transfer students must successfully pass a background check in order to be placed in educational and community settings. Red flag issues which prevent placement may impede progression and successful completion of degree requirements.

2. Tuberculosis Clearance. Evidence of a negative tuberculosis test must be provided periodically for community-based classes. Clearance statements may be secured from SDSU Health Services, private physicians or HMOs, or public health agencies.

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Child Development Major
With the B.S. Degree in Applied Arts and Sciences (Major Code: 08231) (SIMS Code: 330909)

- All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”
- A minor is not required with this major.
- A minor is not required with this major.

Preparation for the Major
Child and Family Development 135, 270, 270L (one unit), 272, 273, 278; Biology 100; Psychology 101; Sociology 101; Psychology 280, or Sociology 201, or a three unit elementary statistics course. (27-28 units)

- These prerequisite courses may not be taken Cr/NC. The minimum grade in each class is C or higher.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 50 upper division units to include Child and Family Development 335, 353A, 353B, 353C, 370, 375A, 375B, 375C, 475, 537, 560, 575, 578, 590, 598, and one of the two specializations listed below.

- Child Development Specialist: Child and Family Development 377, 378A (one unit), and 378B (one unit) or 378D (one unit), 380, 477, and 577.

Family Development Specialist: Child and Family Development 378C (one unit), 378D (one unit), 536, and nine units selected with the approval of the program adviser.

Requirements for the Major: Child development majors are required to complete three units or 120 hours (minimum) in one of the following three study areas with the preapproval of the undergraduate adviser.

1. Study Abroad. Courses taken as part of study abroad may count toward the completion of the child development degree. Students need to work with the undergraduate adviser to make sure their selection of classes will qualify.

2. Research. Selected topics are determined by the Department of Child and Family Development. Contact department for directions to register in research laboratories (Child and Family Development 499).

Assignments will be made after an interview with the department chair.

3. Community Based Learning. Students work directly with children and service providers in preselected community outreach programs/agencies to further their career and professional development. Students register in Child and Family Development 597 and work under supervision of faculty as well as service providers.
Child and Family Development

Reflective Learning Portfolio (Child and Family Development 596). Students are required to prepare a portfolio to reflect, integrate, and synthesize their cumulative learning experience acquired in child and family development courses, study abroad programs, involvement in research projects with faculty, and/or internships. The reflective portfolio will be a capstone culminating experience to provide the opportunity to integrate knowledge and understanding of the child and family development curriculum with their academic and personal growth.

Child Development Minor
(SIMS Code: 330909)

The minor in child development consists of a minimum of 19 units to include Child and Family Development 270, 270L (one unit), Psychology 101, and 12 upper division units selected from Child and Family Development courses.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Early Care and Education Certificate
(SIMS Code: 330911)

The certificate program in early care and education is designed to strengthen skills and competencies of students interested in careers in early care and education forming and fostering relationships-based interactions with young children ages 0-3 and their families. The certificate program is designed for individuals working on degrees in child development, health science, psychology, and social work. It also provides a self-improvement opportunity for individuals seeking employment working with infants and toddlers and their families.

There are two categories for admission to the certificate:

Category A: Matriculated SDSU students with upper division major status in child development. A maximum of 19 units of the 37 units required for the certificate may be counted towards the major in child development, if applicable.

Category B: Matriculated SDSU students in non-child development majors and non-matriculated SDSU students. Matriculated students from other majors who do not have the preparation for the major in child development will be required to complete the lower division prerequisites first and then the 37 upper division units required for the certificate. Non-matriculated students from the field who have completed the child development units to meet the requirements for teaching in the early childhood field (minimum 24 units in child development) can enroll through the College of Extended Studies for certificate classes and will not be required to complete the lower division prerequisites.

The certificate requires 37 units to include Child and Family Development 135, 270, 270L, 272, 275, 278, 375A, 377, 378A (one unit), 378B (one unit), 380, 477, 560, 565, 577, 580, 585, 595, 597 (six units).

Courses must be completed with a grade of “C” or better in addition to an internship of eight hours per week for two semesters (240 hours).

Courses in the certificate may not be counted toward the child development minor.

Family Life Education Certificate
(SIMS Code: 662925)

The purpose of this certificate program is to prepare students for careers in Family Life Education (FLE). FLE is an educational program designed to strengthen relationships in the home and foster positive individual, couple, and family development. The program is designed for individuals working on degrees in child development, health science, psychology, and social work. It also provides a self-improvement opportunity for people seeking employment, promotion, or upward mobility on the job who are not enrolled in degree programs. The certificate corresponds to the 10 content areas of FLE established by the National Council on Family Relations (NCFR): 1) Families and Individuals in Societal Contexts; 2) Internal Dynamics of Families; 3) Human Growth and Development Across the Life Span; 4) Human Sexuality; 5) Interpersonal Relationships; 6) Family Resource Management; 7) Parent Education and Guidance; 8) Family Law and Public Policy; 9) Professional Ethics and Practice; 10) Family Life Education Methodology.

Awarding of the certificate requires completion of an approved pattern of five to six courses (15-18 units) with a grade of “C” or better in each of the courses in one of the 10 areas of FLE. Each area requires the student to take a core of nine units to include Child and Family Development 270, 270L (one unit), and three additional courses specific to the selected area. The course offerings in each area prepare students for advanced knowledge in that area. For example, courses for the Human Sexuality area meet the criteria for training and standards of the American Association of Sex Educators and Counselors. Contact the department for a full list of required courses for all 10 areas of FLE. A 45 hour internship specific to the chosen content area is required. Courses in the certificate may not be counted toward the minor.

* Indicates course with prerequisites not included in requirements listed above.

Courses (CFD)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

CFD 135. Principles of Family Development (3) [GE]

Intimacy, compatibility, conflict, and communication in relationship formation and adjustment.

CFD 170. Child and Adolescent Development from a Cultural Perspective (3) [GE]

(Same course as Teacher Education 170)

Theories of human development using a cultural/ecological framework applied to case studies and direct observations. Open only to liberal studies majors. Not open to students with credit in Child and Family Development 270, Psychology 230, or Teacher Education 170.

CFD 270. Human Development Across the Lifespan (3)

Prerequisites: Psychology 101, concurrent registration in Child and Family Development 270L (one unit). Proof of completion of prerequisite required: Copy of transcript.

Development from conception to old age; emphasis on biological, cognitive, and socio-emotional development. Not open to students with credit in Child and Family Development 170, Psychology 230, or Teacher Education 170.

CFD 270L. Principles of Observation: Child Development Laboratory (1-3)

Three hours of laboratory for each unit. Prerequisites: Psychology 101; credit or concurrent registration in Child and Family Development 270. Proof of completion of prerequisite required: Copy of transcript.

Multiple methods of observing and recording individual and group behavior of children. Observations required. May be repeated with consent of instructor. Maximum credit three units.

CFD 272. Child, Family, and Community Engagement (3)

Prerequisites: Child and Family Development 135, 270, 270L (one unit); Sociology 101. Proof of completion of prerequisites required: Copy of transcript.

Individual and family needs and the social institutions and agencies attempting to meet these needs. Social issues, service programs, program analyses, and program effectiveness emphasized.

CFD 275. Learning Environments and Developmentally Appropriate Practices (3)

Two lectures and two hours of activity. Prerequisites: Child and Family Development 270, 270L (one unit). Proof of completion of prerequisites required: Copy of transcript.

Design, implementation, and evaluation of developmentally appropriate practices for children and families.

CFD 278. Nutrition, Health, and Safety for Children (2)

Prerequisites: Child and Family Development 135, 270, and 270L (one unit).

Health, safety and nutrition practices, and policies for young children in the context of the family, culture, and community.

CFD 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.
UPPER DIVISION COURSES
(Reserved for Undergraduates)

CFD 335. Interactions in Culturally Diverse Families (3)
Prerequisites: Completion of all lower division preparation for the major courses with a grade of C (2.0) or better.
Proof of completion of prerequisites required: Copy of transcript.
- Family interaction patterns throughout the life cycle in a multicultural society. Emphasis on theories, research findings, and family practices.

CFD 353A. Parenting the Young Child (1)
Prerequisites: Child and Family Development 135, 270, 270L (one unit).
- Parenting from conception to age five. Attachment, temperament, behavior regulation in cultural context. Effects of parenting styles and interactions on child's developmental outcomes.

CFD 353B. Parenting the School-Age Child (1)
Prerequisites: Child and Family Development 135, 270, 270L (one unit).
- Parenting the school-age child (ages 5-12). Developmental tasks, parent-child relationship, parenting styles, parents' role as managers, parent involvement in education. Boundaries and behavioral guidelines for raising an emotionally competent child.

CFD 353C. Parenting the Teen and Young Adult (1)
Prerequisites: Child and Family Development 135, 270, 270L (one unit).
- Theories and research on parenting teens and young adults within cultural contexts. Effects of parent-child relationship, parenting styles and discipline on identity formation, separation individuation, and intimacy.

CFD 370. Research, Assessment, and Evaluation of Children and Families (3)
Prerequisite: Completion of all lower division preparation for the major courses with a grade of C (2.0) or better.
Proof of completion of prerequisites required: Copy of transcript.
- Methods for measuring child, caregiver, and family behavior. Evaluation of reliability and validity. Includes research design, sampling techniques, data collection strategies, and values/ethics.

CFD 375A. Human Development and Learning: Infant/Toddler (2)
Prerequisites: Credit or concurrent registration in one of two required Child and Family Development 378 laboratory courses in area of specialization, selected with consent of adviser. Completion of all lower division preparation for the major courses with a grade of C (2.0) or better.
Proof of completion of prerequisites required: Copy of transcript.
- Physiological, psychological, and social-emotional development of the human organism in cultural contexts from conception to three years of age.

CFD 375B. Human Development and Learning: Early/Middle Childhood (2)
Prerequisites: Credit or concurrent registration in one of two required Child and Family Development 378 laboratory courses in area of specialization, selected with consent of adviser. Completion of all lower division preparation for the major courses with a grade of C (2.0) or better.
Proof of completion of prerequisites required: Copy of transcript.
- Physiological, psychological, cognitive, and socio-emotional development of the human organism in cultural contexts from age 3 to age 12. Not open to students with credit in Child and Family Development 371 and 375.

CFD 375C. Human Development and Learning: Adolescence/Adulthood (2)
Prerequisites: Credit or concurrent registration in one of two required Child and Family Development 378 laboratory courses in area of specialization, selected with consent of adviser. Completion of all lower division preparation for the major courses with a grade of C (2.0) or better.
Proof of completion of prerequisites required: Copy of transcript.
- Physiological, psychological, cognitive, and socio-emotional development of the human organism in cultural contexts from age 12 to old age. Not open to students with credit in Child and Family Development 371 and 375.

CFD 377. Leadership and Adult Supervision in Child and Family Development Programs (3)
Prerequisites: Child and Family Development 375A, 375B; and two units selected from Child and Family Development 378A, 378B, or 378D.
Proof of completion of prerequisites required: Copy of transcript.
- Development of leadership, communication, conflict resolution, and supervision of professionals in child and family development programs.

CFD 378A. Laboratory Experiences: Infants/Toddlers (1-3) Cr/NC
Three hours of laboratory for each unit of credit.
Prerequisites: Credit or concurrent registration in Child and Family Development 375A. Completion of all lower division preparation for the major courses with a grade of C (2.0) or better.
Proof of completion of prerequisites required: Copy of transcript.
- Directed experiences in mainstream settings for infants and toddlers. Observing, screening, assessing, designing and implementing developmentally appropriate activities. Maximum credit three units with consent of instructor.

CFD 378B. Laboratory Experiences: Preschool/Kindergarten (1-3) Cr/NC
Three hours of laboratory for each unit of credit.
Prerequisites: Credit or concurrent registration in Child and Family Development 375B. Completion of all lower division preparation for the major courses with a grade of C (2.0) or better.
Proof of completion of prerequisites required: Copy of transcript.
- Directed experiences in mainstream settings for children ages 3 to 6, preschool, and kindergarten children. Observing, screening, assessing, designing and implementing developmentally appropriate activities. Maximum credit three units with consent of instructor.

CFD 378C. Laboratory Experiences: Age 6 Through Adolescence (1-3) Cr/NC
Three hours of laboratory for each unit of credit.
Prerequisites: Credit or concurrent registration in Child and Family Development 375B or 375C. Completion of all lower division preparation for the major courses with a grade of C (2.0) or better.
Proof of completion of prerequisites required: Copy of transcript.
- Directed experiences in mainstream settings for children ages six through adolescence. Observing, screening, assessing, designing and implementing developmentally appropriate activities. Maximum credit three units with consent of instructor.

CFD 378D. Laboratory Experiences: Adolescence (1-3) Cr/NC
Three hours of laboratory for each unit of credit.
Prerequisites: Credit or concurrent registration in Child and Family Development 375B or 375C. Completion of all lower division preparation for the major courses with a grade of C (2.0) or better.
Proof of completion of prerequisites required: Copy of transcript.
- Directed experiences in intergenerational programs. Observing, screening, assessing, designing and implementing developmentally appropriate interactions for children and their families/caregivers. Maximum credit three units with consent of instructor.

CFD 380. Early Language and Literacy Development in a Linguistically Diverse Society (3)
Prerequisites: Child and Family Development 375A and 375B; and Child and Family Development 378A or 378B or 378D. Completion of all lower division preparation for the major courses with a grade of C (2.0) or better.
Proof of completion of prerequisites required: Copy of transcript.
- Language acquisition and early literacy development. Brain development and socio-emotional learning. Applications of developmentally appropriate and culturally responsive practice to enhance language, literacy, and school readiness.

CFD 390. The Hospitalized Child (3)
Prerequisites: Completion of all lower division preparation for the major courses with a grade of C (2.0) or better. Child and Family Development 353A, 353B, 353C, 375A, 375B, 375C, and two units selected from Child and Family Development 378A, 378B, or 378D.
Proof of completion of prerequisites required: Copy of transcript.
- Psychosocial needs of hospitalized child. Best practices for working with children and their families, and application of patient care vs. family centered care. Stress reduction, coping theories, and role of certified child life specialist.

CFD 437. Violence in Relationships (3) [GE]
Prerequisites: Psychology 101, Sociology 101, and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences.
- Impact of relationship violence on individual development and ecological relationships. Historical and cultural contexts, child abuse and neglect, courtship violence, elder abuse, and violence in communities.
CFD 475. Promoting Behavior Support and Classroom Organization in Early Childhood Settings (3)

Individual and systems-level approach to supporting young child behavior. Strategies for self-regulation, and three-tiers intervention, in early education settings and at home, to support all children, a targeted group of children who require additional support, and individual children who require intensive support.

CFD 477. Administration of Child Development Programs (3)
Prerequisites: Child and Family Development 375A, 375B, 380; and two units selected from Child and Family Development 378A, 378B, or 378D. Proof of completion of prerequisite required: Copy of transcript.

Programs for young children: design, implementation, and evaluation. Research applications and legal requirements for public and private sectors.

CFD 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

CFD 499. Special Study (1-3)
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

CFD 536. Divorce and Remarriage (3)
Prerequisites: Child and Family Development 335, 370, and Sociology 101. Proof of completion of prerequisites required: Copy of transcript.

Integration of family theories and research findings. Emphasis on adjustment to divorce and remarriage throughout life cycles, across cultures, social classes, and ethnicities.

CFD 537. Child Abuse and Family Violence (3)

Multidisciplinary approach to child abuse and family violence including maltreatment, mistreatment, neglect, sexual abuse.

CFD 560. Theories in Socio-Emotional Development (3)
Prerequisites: Consent of instructor: Child and Family Development 370, and Sociology 101. Proof of completion of prerequisites required: Copy of transcript.

Socio-emotional development from infancy to adulthood. Theory of mind, emotional intelligence, and relationship-based development.

CFD 565. Best Practices of Care for Infants/Toddlers (3)
Prerequisites: Consent of instructor: Child and Family Development 370, and Sociology 101. Proof of completion of prerequisites required: Copy of transcript.

Best practices of care for infants and toddlers to include respectful, attential physical care, its basic principles and the practical components of best practices for care of young children. Design environments of care that ensure safety and optimum growth and development in collaboration with families via meaningful connections between child care and child’s home and culture.

CFD 575. Public Policy and Professional Ethics in Child and Family Development (3)
Prerequisites: Child and Family Development 370, 375A, 375B, 375C, two units from Child and Family Development 378A, 378B, 378C, or 378D, and Child and Family Development 526 or 537 or 590.

Proof of completion of prerequisites required: Copy of transcript.

Ethical guidelines and other standards related to child and family development. Informed advocates for equitable educational practices and policies.

CFD 577. Professionalism and Advanced Administration of Child Development Programs (3)
Prerequisite: Child and Family Development 477. Proof of completion of prerequisite required: Copy of transcript.

Problem analysis and development of successful organizational strategies for child development program delivery. Leadership, effective communication, social and ethical issues from a multicultural perspective.

CFD 578. Conflict Resolution Across the Life Span (4)
Three lectures and three hours of laboratory. Prerequisites: Child and Family Development 335, 370, 375A, 375B, 375C, 475, and two units from Child and Family Development 378A, 378B, 378C, or 378D, and Child and Family Development 537 and 560 with an overall grade of C (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Theories of conflict development and resolution across lifespan. Parenting styles, discipline, behavior and class management, and conflict resolution techniques used in relationships. Directed experiences using conflict resolution techniques in various settings.

CFD 580. Observation and Assessment of Young Children’s Environments and Relationships (3)
Prerequisite: Senior standing.

Ecobehavioral and developmental techniques and procedures to measure development, relationships, and environments. Administration of measures in class and in field.

CFD 585. Family Involvement and Engagement with Young Children: Work with Families at Risk (3)
Prerequisites: Senior standing, Concurrent registration in Child and Family Development 597.

Role of parents and caregivers in supporting and enhancing developmental outcomes. Home visitation programs, practices, and techniques. Field experience working with families at risk.

CFD 590. Children with Special Needs (4)
Three lectures and three hours of laboratory. Prerequisites: Completion of five child and family development courses with a grade of C (2.0) or better for majors; consent of instructor for graduate students. Proof of completion of prerequisites required: Copy of transcript.

Adaptive and maladaptive processes throughout life span with emphasis on etiology, development, and adjustment of emotional, psychological, and physical disorders. Directed experience with special needs individuals and their families with focus on inclusion.

CFD 595. Early Childhood Mental Health: Theory and Practice (3)
Prerequisite: Senior standing.

Neurorelational framework to understand brain development and mental health. Emotional and behavioral regulation support at home and in educational settings.

CFD 596. Advanced Studies in Child and Family Development (1-6)
Prerequisite: Nine upper division units in child and family development.

Advanced study of selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

CFD 597. Field Experience in Child and Family Development Programs (3) Cr/NC
Prerequisites: Consent of instructor; completion of five child and family development courses with a grade of C (2.0) or better in each course.

Proof of completion of prerequisites required: Copy of transcript.

Work experience in child and family development. Application of theoretical and evidence-based information with reflective supervision from faculty and field supervisor. Development of professional identity, cultural self-awareness, and career goals. Maximum credit six units.

CFD 598. Reflective Learning Portfolio (1) Cr/NC
Two hours of activity. Prerequisite: Senior standing. Limited to child development majors. Major code: 08231.

Capstone course to mentor child development majors to integrate knowledge acquired throughout child and family development program. Create portfolio and reflective essay.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Courses (CHIN)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

Native speakers of Mandarin Chinese will not receive credit for taking lower division courses except with advance approval from the department.

All lower division courses in Chinese are taught in Chinese.

No credit will be given for lower division courses taken after successfully completing any upper division Chinese course taken in Chinese.

No credit will be given for Chinese 101, 102, 201, 202 taken out of sequence or concurrently.

CHIN 100. Elementary Conversational Chinese (3)

Introductory conversational course for students with little or no previous background in Chinese. Focuses on daily tasks that one may encounter when first going to a Chinese-speaking community. Develops elementary listening and speaking skills needed for accomplishing these tasks.

CHIN 101. Elementary Chinese I (5) [GE]

Five lectures and one hour of laboratory. Rudiments of Mandarin pronunciation; listening, speaking, reading, and writing with emphasis on communicative ability; acquisition of the most useful phrases and vocabulary items, and over 300 characters; familiarity with basic sentence structures of Mandarin; information on Chinese culture. See Class Schedule for appropriate section based on your background in Chinese.

CHIN 102. Elementary Chinese II (5) [GE]

Five lectures and one hour of laboratory. Prerequisite: Chinese 101. Development of facility to comprehend and produce spoken Chinese. Acquisition of advanced language structures and an additional 400 characters. Emphasis on connected discourse. See Class Schedule for appropriate section based on your background in Chinese.

CHIN 201. Intermediate Chinese I (5) [GE]

Five lectures and one hour of laboratory. Prerequisite: Chinese 102. Continuation of Chinese 201. Reading of contemporary work and writing of short passages in Chinese. Acquisition of an additional 400 characters. See Class Schedule for appropriate section based on your background in Chinese.

CHIN 202. Intermediate Chinese II (5) [GE]

Five lectures and one hour of laboratory. Prerequisite: Chinese 201.

Continuation of Chinese 201. Reading of contemporary work and writing of short passages in Chinese. Acquisition of an additional 400 characters. See Class Schedule for appropriate section based on your background in Chinese.

CHIN 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
UPPER DIVISION COURSES
(Intended for Undergraduates)

All upper division courses in Chinese are taught in Chinese unless otherwise stated.

No credit will be given for Chinese 301 and 302 taken out of sequence.

CHIN 301. Advanced Chinese I (3) [GE]
Prerequisites: Chinese 202 and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Greater facility in oral expression and writing for practical purposes; exposure to various styles of language; newspaper and media Chinese; elements of literary and classical language.

CHIN 302. Advanced Chinese II (3) [GE]
Prerequisites: Chinese 301 and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Continuation of Chinese 301. Writing paragraphs and longer expository texts. Reading modern and classical literature.

CHIN 354. Varieties of Written Chinese (3)
Prerequisite: Chinese 202.
Different genres of Chinese writing from multiple time periods and regions of the Chinese speaking world. Samples both practical and creative genres, and recent innovative uses of language by Internet bloggers and in chat rooms.

CHIN 431. Advanced Conversational Chinese (3)
Prerequisite: Credit or concurrent registration in Chinese 302.
Conversation practice on practical, social, and cultural topics, with aid of spoken language materials such as plays and videotapes; learning conversational strategies and stylistic features.

CHIN 433. News Media Chinese (3)
Prerequisite: Credit or concurrent registration in Chinese 302.
Understanding Chinese newspapers and other non-print media materials; special structural characteristics; differences between media types and between speech and writing; reading strategies using schemas and contextual inferences; importance of world knowledge and background information.

CHIN 434. Business Chinese (3)
Prerequisite: Credit or concurrent registration in Chinese 302.
Developing ability to function in Chinese business environment; familiarity with business correspondence, telecommunication, advertising, business terminology and stylistic features, information on intercultural communication, social and cultural background.

CHIN 496. Topics in Chinese Studies (1-4)
Topics in Chinese language, literature, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit eight units.

CHIN 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.
Civil Engineering
In the College of Engineering

OFFICE: Engineering 424
TELEPHONE: 619-594-6071
E-MAIL: ccee@sdsu.edu

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

Faculty
Emeritus: Banks, Chang, Chou, Gurl, Hayhurst, Johnson, Krishnamoorthy, McGhee, Noorany, Sharabi
Chair: Supernak (Interim)
The AGC Paul S. Roel Chair in Construction Engineering and Management: Walsh
The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering: Mladenov
Professors: Bayasi, Buyuksonmez, Ponce, Supernak, Valdes, Walsh, Westermo
Associate Professors: Dowell, Garoma Ararso, Mitropoulos
Assistant Professors: Alves, Kinoshiba, Mladenov

Offered by the Department of Civil, Construction, and Environmental Engineering
Doctor of Philosophy degree in engineering sciences:
(bioengineering), (electrical and computer engineering), (mechanical and aerospace engineering), (structural engineering).
Master of Engineering.
Master of Science degree in civil engineering.
Concentration in environmental engineering.
Major in civil engineering with the B.S. degree.
Major in construction engineering with the B.S. degree.
Major in environmental engineering with the B.S. degree.

The Associated General Contractors (AGC) Paul S. Roel Chair in Construction Engineering and Management
The AGC Paul S. Roel Chair in Construction Engineering and Management is funded with an endowment established by generous gifts from members of the Associated General Contractors in San Diego Chapter. Recognizing the need for expert construction professionals, the local construction community has invested considerable resources in this new degree program. In particular, the endowment is funded by a significant gift from Roel Construction, in honor of Paul S. Roel, the son of the company's founder and the man responsible for moving the family business to San Diego in 1959. The first appointee to the Chair, Dr. Kenneth D. Walsh, is an accomplished teacher-scholar, with a research background in improvement of production systems in construction in residential, commercial, and heavy civil settings.

The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering
The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering is funded with an endowment created by generous gifts from William G. Leonhard, Jr. and his parents, William E. and Wyllis M. Leonhard. After Bill Leonhard graduated from San Diego State in 1964, he entered a career in the Air Force, rising to the rank of colonel. In January 1990, he retired from the Air Force, spent the next several years in private industry, and retired again in 1998.

The current chair, Dr. Natalie Mladenov, promotes excellence in undergraduate education, research in environmental engineering, and conducts scholarly activities on the topic of water quality in environmental engineering.

Mission of the Department
The mission of the Department of Civil, Construction, and Environmental Engineering is to provide a high quality undergraduate and graduate education in the civil, construction, and environmental engineering areas as well as the advising and other support needed to ensure the students' academic success and preparation for a productive engineering career. In addition, through research and continuing professional development, the faculty produce, enhance and promote new developments within their areas of expertise for the benefit of society and the furtherance of their profession.

The objective of the program is to give the student a basic knowledge of civil, construction, and environmental engineering, as well as the interdisciplinary background and skills to meaningfully participate in and contribute technical advances toward this profession. The program integrates technical aspects with studies in the social sciences and humanities to ensure appropriate sensitivity to socially related problems.

Instruction is given both at the undergraduate level, leading to the bachelor's degree, and at the graduate level, leading to the master's or doctoral degrees. The undergraduate program builds upon concepts of mathematics, physics, chemistry and basic engineering with specialized study in civil, construction, and environmental engineering. Engineering design is emphasized, particularly in conjunction with computer utilization and practical engineering problems. Aspects of safety and engineering ethics are woven throughout the program. Breadth and depth of social science and humanities studies is assured by department approved courses. Completion of the undergraduate degree prepares the student for an entry-level professional position in addition to informal or formal graduate studies.

Many students who complete the undergraduate programs of the department choose to continue their formal studies on a full- or part-time basis at San Diego State University or at another institution. (See the Graduate Bulletin for additional information.)

The civil, construction, and environmental engineering programs are enhanced through cooperation with the American Society of Civil Engineers, the American Public Works Association, the Associated General Contractors, the Chi Epsilon Civil Engineering Honor Society, and other national organizations who sponsor student chapters to further aid the student's professional development. The chapters at San Diego State University have won many awards in regional and national competition with other schools throughout the country.

Educational Objectives
The objectives of the civil engineering program are: 1) to provide graduates with the technical knowledge and skills required to practice civil engineering; 2) to provide graduates with an understanding of the ethical, social, legal, and professional issues faced in civil engineering practice; and 3) to provide graduates with a solid foundation for graduate studies, continuing education, and life-long professional development.

Transfer Credit
No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of engineering work attempted at this university. At that time, and upon recommendation of the department, unaccredited work will be evaluated for full or partial credit.
General Education

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

I. Communication and Critical Thinking: 9 units

- Oral Communication (3 units)
- Composition (3 units)
- Intermediate Composition and Critical Thinking (3 units)

II. Foundations of Learning: 29 units

A. Natural Sciences and Quantitative Reasoning (17 units):
   - Engineering students will take Chemistry 202 (4 units) or Chemistry 200 (5 units)
   - Physics 195 (3 units)
   - Physics 195L (1 unit)
   - Physics 196 (3 units)

B. Life Sciences (3 units)

C. Humanities (9 units)

- Complete three courses in three different areas. One of these courses and the one under IV.A. below must be taken in the same department. Civil engineering students will take Construction Engineering 101.

III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.

IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing (60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Total 9 units; must include one course of cultural diversity.

A. Upper division Humanities (3 units)

- Three units must be taken from the same department as one of the Humanities courses selected in Foundations of Learning.

B. Upper division Social and Behavioral Sciences (3 units)

C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

The Major

Civil engineering is the application of engineering principles to the improvement of the human environment. The civil engineering major prepares students to design and supervise the construction of buildings, dams, roads, harbors, airports, tunnels, and bridges. It also provides training in the planning and construction of the complex systems that supply clean water to cities, remove sewage, control floods, and perform other functions which ensure continued health and safety.

Civil engineers are needed in both the private and public sectors. They are employed in the aerospace industry, usually as structural engineers; design and construction of roads, buildings, bridges, airports, dams and other structures; research and teaching at colleges and universities (with an advanced degree); public utilities and transportation; manufacturers, and offshore drilling, environmental pollution, and energy self-sufficiency. New job opportunities in civil engineering will result from growing demands in housing, industrial buildings, power generating plants, and transportation systems.

Impacted Program

The civil engineering major is an impacted program. To be admitted to the civil engineering major, students must meet the following criteria:

a. Complete with a grade of C or higher: Aerospace Engineering 200 or Mechanical Engineering 200; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit (Cr/NC);

b. Have an overall cumulative GPA of 2.5.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the major at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/um/imap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Civil Engineering Major

With the B.S. Degree

(Major Code: 09081) (SIMS Code: 442001)

The program below describes 135 units required for the degree. Each course specifically listed in the program is required. In addition, the total number of units specified in each elective category represents the minimum requirement.

Preparation for the Major. Civil Engineering 100, 121, 160 (or Statistics 250), 218, 220; Aerospace Engineering 200 or Mechanical Engineering 200; Aerospace Engineering 220 or Mechanical Engineering 220; Aerospace Engineering 280; Biology 100 or 101; Chemistry 202 (or 200); Construction Engineering 101; Mathematics 150, 151, 252; Physics 195, 195L, 196, (51 units)

Aerospace Engineering 200 or Mechanical Engineering 200; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196 must be completed with a grade of C or higher. These courses cannot be taken for credit/no credit (Cr/NC).

Engineering Science Elective. At least one of the following courses: Electrical Engineering 204; Mechanical Engineering 240, 350.

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

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 48 upper division units to include the following required and elective courses. Required upper division courses in the major: Civil Engineering 301 (or Mechanical Engineering 304), 302, 321, 401, 421, 444, 462, 462, 481, 495; Aerospace Engineering 340; Construction Engineering 430; Environmental Engineering 355.

Professional Electives. Elective course choices must consist of at least one course from at least four of the six areas.

- Water – Civil Engineering 445, 530
- Transportation – Civil Engineering 482, 580
- Environmental – Environmental Engineering 363, 441, 442, 556, 558
- Structural – Civil Engineering 521, 523, 525, 528
- Geotechnical – Civil Engineering 465
- Construction – Construction Engineering 401, 479, 480, 520

Master Plan. A master plan of elective courses must be approved by the undergraduate adviser and filed with the Office of Advising and Evaluations as soon as the civil engineering major is declared. Students are required to see their undergraduate adviser prior to registration each semester.
CIV E 410. Civil Engineering and Society (1)
Prerequisite: Senior standing in civil engineering.
Role of civil engineers in society. Historical, political, aesthetic, and philosophical perspectives on civil engineering. Contemporary issues involving civil engineering.

CIV E 421. Reinforced Concrete Design (3)
Prerequisite: Civil Engineering 321
Properties and characteristics of reinforced concrete; design of structural components. Introduction to plastic theory and limit design.

CIV E 444. Applied Hydraulics (3)
Two lectures and three hours of laboratory.
Prerequisite: Civil Engineering 444.
Basic hydrologic principles, hydrologic measurements, small and midsize catchment hydrology, reservoir, stream channel and catchment routing, hydrologic design.

CIV E 462. Geotechnical Engineering (3)
Prerequisite: Civil Engineering 301 (or Mechanical Engineering 304) or Aerospace Engineering 340.
Mechanics of soils as they apply to engineering problems, soil classification, compaction, swelling, consolidation, strength and permeability. Applications to geotechnical and environmental engineering problems.

CIV E 463. Geotechnical Engineering Laboratory (1)
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Civil Engineering 462. Laboratory procedures of soil testing for geotechnical and environmental engineering problems.

CIV E 465. Foundation Engineering and Earth Retaining Structures (3)
Prerequisite: Civil Engineering 462.
Soil mechanics theories applied to design of shallow and deep foundations; lateral pressure of soils, design of retaining walls.

CIV E 481. Transportation Engineering (3)
Prerequisites: Civil Engineering 160 and 218.
Physical design of transportation facilities, traffic analysis and control for different modes, planning and demand analysis, introduction to environmental impacts of transportation systems and intelligent transportation systems.

CIV E 482. Highway Engineering (3)
Two lectures and three hours of laboratory.
Prerequisite: Civil Engineering 481.
Highway design, facility sizing, geometric design, drainage, earthwork, pavement design, traffic control devices, safety and environmental considerations.

CIV E 495. Capstone Design Project (3)
One lecture and six hours of laboratory.
Prerequisites: For civil engineering majors: Credit or concurrent registration in Civil Engineering 321, 444, 462, 481, and Environmental Engineering 355. At least three of these courses must be completed prior to enrolling in this course. For environmental engineering majors: Construction Engineering 430 and credit or concurrent registration in Environmental Engineering 441, 442, 554, 556, 558. At least three of these courses must be completed prior to enrolling in this course. For construction engineering majors, credit or concurrent registration in Construction Engineering 480 and 590.
Application of engineering principles and design techniques to the design of civil engineering projects.

CIV E 496. Advanced Civil Engineering Topics (1-3)
Prerequisite: Consent of instructor.
Modern developments in civil engineering. See Class Schedule for specific content. Maximum credit six units for any combination of Civil Engineering 496, 499 and 596.

CIV E 499. Special Study (1-3) Cr/NC
Prerequisite: Consent of instructor.
Individual study in the area of civil engineering. Maximum credit six units for any combination of Civil Engineering 496, 499 and 596.
UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

CIV E 521. Structural Analysis II (3)
Prerequisite: Civil Engineering 321.

CIV E 523. Design of Light Framed Structures (3)
Prerequisite: Civil Engineering 321.
Material properties for wood and metal studs. Loads and structural forces for buildings. Design of beams, columns, bearing stud walls. Seismic forces and lateral force resisting systems. Roof, floor, and shear wall design. Composite beams. (Formerly numbered Civil Engineering 423.)

CIV E 525. Design of Steel Structures (3)
Prerequisite: Civil Engineering 321.
Mechanical behavior of structural steel. Design of steel beams, girders, columns and members subjected to combined stresses. Design of various types of connections of steel structures; plate girders, continuous beams and rigid frames.

CIV E 528. Masonry Structures Design (3)
Prerequisite: Civil Engineering 321.
Analysis and design of masonry beams, retaining walls, shear walls, bearing walls, and columns. Use of allowable stress and strength design methods. Design project, including structural system analysis and lateral design of masonry buildings.

CIV E 530. Open Channel Hydraulics (3)
Two lectures and three hours of laboratory.
Prerequisite: Civil Engineering 444.

CIV E 531. Pipe Flow and Water Distribution Systems (3)
Prerequisite: Civil Engineering 444.

CIV E 580. Traffic Engineering Design (3)
Prerequisite: Civil Engineering 481.
Sizing and configuration of highway facilities based on capacity analysis. Traffic signal design, impact and mitigation studies, parking, safety design.

CIV E 596. Advanced Civil Engineering Topics (1-3)
Prerequisite: Consent of instructor.
Modern developments in civil engineering. May be repeated with new content. See Class Schedule for specific content. Maximum credit of six units for any combination of Civil Engineering 496, 499 and 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

For additional courses which are electives in the civil engineering program, refer to “Construction Engineering” and “Environmental Engineering” in this section of the catalog.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Classics
In the College of Arts and Letters

OFFICE: Arts and Letters 662
TELEPHONE: 619-594-5186 / FAX: 619-594-1004
http://classicsandhumanities.sdsu.edu

Faculty
Emeritus: Eisner, Genovese, Hamilton, Warren
Chair: Levitt Kohn
Associate Professors: Rybakova, Smith
Assistant Professor: Starkey
Lecturer: Robbins

Offered by the Department of Classics and Humanities
Major in classics with the B.A. degree in liberal arts and sciences.
- Emphasis in classical humanities.
- Emphasis in classical language.
- Emphasis in classical languages with honors.
Minor in classics.

The Major
Classics is the study of the languages, literatures, and civilizations of ancient Greece and Rome. These are the oldest European and American traditions of the humanities and the liberal arts. Classics literally means works of the first class or rank, and their profound truths and disciplined forms have ensured their lasting relevance.

All Classics majors take two or more years of Greek or Latin. They may choose the language emphasis that allows them to study one or both languages, or they may choose the broader emphasis in classical humanities. Classics majors have at their disposal the Burnett Classics Seminar Room with its library and media resources. In addition to small language classes, close academic advising, and the fellowship of a small department with diverse interests, Classics majors culminate their studies with a senior seminar.

Although the prime purpose of the Classics major is to satisfy a quest for the original intellectual and artistic values of Western civilization, graduates enjoy a range of professional choices in addition to academic careers in Classics and various humanities disciplines. Classics majors are well prepared for law school, and with supplemental coursework in business, economics, or information systems, a Classics graduate can be very competitive in the business world. 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 supplemental coursework in business, economics, or information systems, a Classics graduate can be very competitive in the business world.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The classics major is an impacted program. To be admitted to the classics major, students must meet the following criteria:
- Complete preparation for the major;
- Complete a minimum of 60 transferable semester units;
- Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their major and to identify which General Education course will also fulfill a major preparation course requirement.

Classics Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15041)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in classics courses can apply to the degree.

During their last semester, all seniors majoring in classics shall submit to the department a portfolio of their scholarly work that includes a 300-word summary of their study of the classics and the paper submitted for Humanities 490.

A minor is not required with this major.

Emphasis in Classical Humanities
(SIMS Code: 111525)

Preparation for the Major.
Classics 101G-202G (10 unit sequence) or Classics 101L-202L (10 unit sequence) or 250L (8 unit sequence); and six units from any other lower division course offered in classics, or Comparative Literature 270A, History 105, Humanities 140. (14-16 units)

Students should note that a number of the upper division required and recommended courses listed below have lower division prerequisites, but these prerequisites do not constitute requirements per se for the completion of the major.

Language Requirement. Majors in Emphasis in Classical Humanities require completion of six upper division units in a classical language in addition to lower division prerequisites.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or English 508W or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. The department encourages international experience for its majors. A student who has completed the Preparation for the Major may apply to the Intercollegiate Center for Classical Studies in Rome (ICCS) or an equivalent, approved program in Italy or Greece for a semester abroad. Units taken during this semester abroad may apply toward the major if approved in advance by a department adviser.

Major. A minimum of 30 upper division units to include Classics 320, 330, History 502, 503, Humanities 490; a minimum of six units of upper division Greek or Latin; nine units of approved electives in art, comparative literature, history, philosophy, theatre, and religious studies appropriate to the study of the ancient Mediterranean world.

Elective Approval. Elective courses taken to fulfill the major must be approved by the classics undergraduate adviser and the approval must be filed with the Office of Advising and Evaluations.

Emphasis in Classical Language
(SIMS Code: 111526)

Preparation for the Major. Classics 101G-202G (10 unit sequence) or Classics 101L-202L (10 unit sequence) or 250L. (8 unit sequence); and six units from any other lower division course offered in classics, or Comparative Literature 270A, History 105, Humanities 140. (14-16 units)

Language Requirement. Majors in Emphasis in Classical Language require completion of six upper division units in a classical language in addition to lower division prerequisites.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or English 508W or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. The department encourages international experience for its majors. A student who has completed the Preparation for the Major may apply to the Intercollegiate Center for Classical Studies in Rome (ICCS) or an equivalent approved program in Italy or Greece for a semester abroad. Units taken during this semester abroad may apply toward the major if approved in advance by a department adviser.

Major. A minimum of 30 upper division units to include Classics 320 and Humanities 490; History 502 or 503; 12-18 units of upper division Greek or Latin; three to nine units of electives in Art 568, History 502, 503, Philosophy 401A (additional prerequisites may apply to upper division courses outside the department).

Emphasis in Classical Languages with Honors (SIMS Code: 111527)
Preparation for the Major. Classics 101G-202G (10 unit sequence), and Classics 101L-202L (10 unit sequence) or 250L (8 units). Preparation for Classics 303L or 303G (18-20 units).
Language Requirement. Majors in Classical Languages with Honors require completion of six upper division units in Greek and six upper division units in Latin in addition to lower division prerequisites in Greek and Latin.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or English 508W or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. The department requires international experience for the emphasis in classical languages with honors. A student who has completed the Preparation for the Major may apply to the Intercollegiate Center for Classical Studies in Rome (ICCS) or an equivalent approved program in Greece or Italy for a semester abroad. Units taken during this semester abroad may apply toward the major if approved in advance by a department adviser.

Major. A minimum of 30 upper division units to include Classics 320 and Humanities 490; History 502 or 503; 6-12 units of upper division Greek; 6-12 units of upper division Latin; three to nine units of electives in Arts 568, History 502, 503, Philosophy 401A (additional prerequisites may apply to upper division courses outside the department).

Classics Minor
The classics minor consists of a minimum of 17-19 units selected from one of the following:

Classical Humanities (SIMS Code: 111560). The minor in classical humanities consists of a minimum of 18 units in classics, of which 12 units must be upper division. Of these twelve upper division units, a maximum of six units of approved upper division electives, in art, comparative literature, history, philosophy, religious studies, and theatre appropriate to the study of the ancient Mediterranean world may be substituted for classics courses (additional prerequisites may apply to upper division courses outside the department).

Classical Language (SIMS Code: 111550). The minor in classical language consists of a minimum of 17-19 units to include fourteen to sixteen units in Greek or Latin language; a minimum of six upper division units in the language and three units of upper division classics must be completed.

Elective Approval. Elective courses taken to fulfill the minor must be approved by the classics undergraduate adviser and the approval must be filed with the Office of Advising and Evaluations.
Courses in the minor may not be counted toward the major, but may be used to satisfy prerequisites for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Language Requirement for the B.A. Degree in Liberal Arts and Sciences
Students electing the study of Greek or Latin to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Classics 303G or 303L or equivalent level of achievement. The usual sequence of course work is either Classics 101G, 202G, and 303G, OR Classics 101L, 202L, and 303L. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

High School Equivalents
High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.
Secondary school language courses can be used as follows:
1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

Courses (CLASS)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES
Classics includes courses in Greek and Latin as well as non-language courses. Greek course numbers have a G suffix; Latin courses have an L suffix.
No credit will be given for Classics 101G, 202G, 303G, 304G taken out of sequence.
No credit will be given for Classics 101L, 202L, 303L, 304L taken out of sequence.

CLASS 101G. Ancient Greek I (5) [GE]
Beginning classical Greek. Basic grammar, vocabulary.
CLASS 101L. Latin I (5) [GE]
Beginning classical Latin. Basic grammar, vocabulary. Not open to students with credit in Classics 250L.
CLASS 120. English Words from Latin and Greek (3) [GE]
Latin and Greek words and bases and their English derivatives. Etymology, word analysis and construction, language history, and structure.
CLASS 140. Introduction to Classics (3) [GE]
Survey of Greek and Roman art, literature, drama, sculpture, and institutions. Influence on our culture today. Contemporary relevance of epic heroes, tragic heroines, gods and goddesses. Impact of political thought.
CLASS 202G. Ancient Greek II (5) [GE]
Prerequisite: Classics 101G. Continuing classical Greek. Grammar, vocabulary, syntax. Preparation for Classics 303G.
CLASS 202L. Latin II (5) [GE]
Prerequisite: Classics 101L. Continuing classical Latin. Grammar, vocabulary, syntax. Preparation for Classics 303L. Not open to students with credit in Classics 250L.
CLASS 250L. Accelerated Latin (8)
(Offered only in the College of Extended Studies)
Intensive beginning classical Latin. Basic grammar, vocabulary, syntax. Preparation for Classics 303L. Not open to students with credit in Classics 101L and 202L.
CLASS 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.
C. Experimental Topics in Classics.
G. Experimental Topics in Greek.
L. Experimental Topics in Latin.
UPPER DIVISION COURSES
(Intended for Undergraduates)

CLASS 330G. Reading Greek Prose (3) [GE]
Prerequisites: Classics 202G; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
  Reading classical prose authors such as Xenophon or Plato in original Greek. Attention to vocabulary, syntax, style, and historical-cultural context.
CLASS 303L. Reading Latin Prose (3) [GE]
Prerequisites: Classics 202L or 250L; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
  Reading classical prose authors such as Caesar or Cicero in original Latin. Attention to vocabulary, syntax, style, and historical-cultural context.
CLASS 304G. Reading Greek Poetry (3) [GE]
Prerequisites: Classics 303G; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
  Reading classical poets such as Homer or Euripides in original Greek. Attention to vocabulary, syntax, style, and historical-cultural context.
CLASS 304L. Reading Latin Poetry (3) [GE]
Prerequisites: Classics 303L; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
  Reading classical poets such as Catullus or Ovid in original Latin. Attention to vocabulary, syntax, style, and historical-cultural context.
CLASS 310. Greek and Roman Myth and Legend (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
  Recommended: Rhetoric and Writing Studies 200.
CLASS 320. The Invention of European Literature (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
  Recommended: Rhetoric and Writing Studies 200.
  Four classic works in the genre of epic and the novel in English translation; Homer's Iliad and Odyssey, Vergil's Aeneid, and Apuleius' Golden Ass. Literary criticism in historical-cultural contexts and relevance today.
CLASS 330. The Invention of European Drama (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
  Recommended: Rhetoric and Writing Studies 200.
  Classical tragedy and comedy in English translation. Playwrights such as Aeschylus, Sophocles, Euripides, Aristophanes, Plautus. Ancient theatre, stagecraft, literary criticism, and popular attitudes.
CLASS 340. Gods, Gladiators, and Amazons (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Recommended: Rhetoric and Writing Studies 200.
  Literary, artistic, and intellectual achievements of the classic world. Temples, tragedies, and texts. Priests, prostitutes, and proconsuls. Great cultural traditions and influences.
CLASS 350. Classics and Cinema (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
  Heroes, heroines, and conflicts of ancient Greece and Rome as represented in major cinematic "sword and sandal" productions. Screenplays compared with Greek and Latin sources in English translation.
CLASS 450G. Seminar: Variable Topics in Greek Literature (3)
Prerequisite: Classics 304G.
  Reading significant Greek language texts in history, biography, religion, and other areas. Attention to vocabulary, syntax, style, and historical-cultural context. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
CLASS 450L. Seminar: Variable Topics in Latin Literature (3)
Prerequisite: Classics 304L.
  Reading significant Latin language texts in history, biography, religion, and other areas. Attention to vocabulary, syntax, style, and historical-cultural context. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
CLASS 496. Topics in Classical Studies (1-4)
Topics in classical languages, literatures, cultures, and linguistics. May be repeated with new content. See Class Schedule for specific content. Maximum credit nine units. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
  C. Topics in Classics.
  G. Topics in Greek.
  L. Topics in Latin.
CLASS 499. Special Study (1-3)
Prerequisites: Consent of instructor and department chair.
  Directed individual study. Maximum credit six units in any combination of 499C, 499G, 499L.
  C. Special Study in Classics.
  G. Special Study in Greek.
  L. Special Study in Latin.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)

CLASS 599. Special Study (1-3)
Prerequisites: Consent of instructor and department chair. For 599C: Classics 304L or 304G. For 599G: Classics 304G. For 599L: Classics 304L.
  Directed individual study. Maximum credit nine units in any combination of 599C, 599G, 599L.
  C. Special Study in Classics.
  G. Special Study in Greek.
  L. Special Study in Latin.
Communication
In the College of Professional Studies and Fine Arts

OFFICE: Communication 237
TELEPHONE: 619-594-8512 / FAX: 619-594-0704
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Faculty
Emeritus: Andersen, J., Andersen, P., Hellweg, Lustig, Samovar, Sanders
Director: Snively
Professors: Beach, Dionisopoulos, Geist-Martin, Snively, Spitzberg
Associate Professors: Lindemann, Pauley
Assistant Professors: Goehring, Winslow
Lecturers: Jarboe, McHan, Rapp

Offered by the School
Master of Arts degree in communication with a specialization in:
- Communication studies
- Major in communication with the B.A. degree in liberal arts and sciences
- Minor in communication
- Certificate in communication
- Certificate in health communication

General Information
The School of Communication, an academic unit within the College of Professional Studies and Fine Arts, emphasizes scholarly, creative, and professional aspects of communication studies. The school engages in teaching, research, and development of integrated, interactive, international, and intercultural communication for the twenty-first century. The School of Communication is committed to quality undergraduate and graduate education in the field of communication. We prepare students for civic life, professional careers, and further graduate study. We are committed to cutting edge research and instructional innovation which advances understandings of culture, health, institutions, interaction, politics, relationships, and rhetoric in everyday life. We are dedicated to serving San Diego State University, the College of Professional Studies and Fine Arts, and the diverse communities in the urban region in which we live and work.

Students majoring in communication learn different ways that communication has been conceptualized and investigated, as well as ways members of the communication discipline have used their knowledge and scholarship to engage a variety of social problems. Students will be given opportunities to study how effective communication enhances well-being, and relationships; promotes civic engagement; and allows for effective participation in a global community. Courses focus on organizing principles and patterns of social life through observation, analysis, and criticism of human interactions, communication behavior, mediated systems, and technological innovations. Communication graduates have often found positions in occupations such as sales, human resources, training, education, and consulting, or have pursued advanced academic or professional degrees in fields such as law, management, and marketing.

Students majoring in health communication learn how people individually and collectively understand and accommodate to health and illness and the role of communication in shaping professional health care messages and public acceptance of these messages. Courses include instruction in the development and analysis of health-related messages and media; the goals and strategies of health care promotion; relationships, roles, situations, and social structures in the context of health maintenance and promotion; and applications to disease prevention, health advocacy, and communication concerning treatments. Health communication graduates find positions in both profit and non-profit organizations such as public health agencies, hospitals, educational institutions, health insurance companies, and other corporations.

Both majors are firmly grounded in the liberal arts and sciences and are intended to prepare students to be effective members of society, as well as valued employees in whatever careers they may choose to pursue.

Impacted Program
The communication and health communication majors are impacted programs. To be admitted to the communication or health communication major, students must meet the following criteria:

a. Complete with a minimum grade point average of 2.75 and a grade of C or higher: six units selected from Communication 160, 201, 204, 245. These courses cannot be taken for credit/no credit (CR/NC);

b. Complete the general education oral communication requirement with a grade of C or higher. This course cannot be taken for credit/no credit (CR/NC);

c. Complete a minimum of 45 baccalaureate level semester units and a maximum of 90 semester units. (A minimum of 60 units are required for all transfer applicants.);

d. Have a cumulative grade point average of 2.75 or higher.

To complete the communication or health communication major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAP's website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Communication Major
With the B.A. Degree in Liberal Arts and Sciences OR Applied Arts and Sciences
(Major Code: 15061) (SIMS Code: Liberal 668132; Applied 668131)
All candidates for a degree in liberal arts and sciences or a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in communication courses can apply to the B.A. degree in Liberal Arts and Sciences. Selecting the B.A. degree in liberal arts and sciences requires meeting the language requirement. Selecting the B.A. degree in applied arts and sciences requires the mathematics competency requirement. Lower division preparation for the major courses may be satisfied by comparable courses in community colleges or other institutions with which the university has articulation agreements.

A minor is not required with this major but is strongly recommended. Preparation for the Major. General Education oral communication requirement and six units selected from Communication 160, 201, 204, 245. (9 units) These prerequisite courses may not be taken CR/NC and must be completed with a minimum grade point average of 2.75 and a grade of C or higher in each course. The General Education oral communication course will not be included in the computation of the required grade point average of 2.75.

Language Requirement (Liberal Arts and Sciences). Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”
Mathematics Competency Requirement (Applied Arts and Sciences). Competency in mathematics must be satisfied by three semesters of college mathematics or a statistical sequence such as Statistics 250, 350A, 350B (highly recommended); or Sociology 201*, 406*, 407*.

* Additional prerequisites required.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 30SW with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Communication 300 and 350; nine “conceptualizing communication” units selected from Communication 321, 371, 415, 450, 492; three “investigating communication” units selected from Communication 420, 441, 462, 465; 15 “communication elective” units selected from Communication 301, 307, 406, 407, 421-428, 445, 446, 452, 470, 482, 484, 485, 486, 499, 508, 555, or other upper division three unit communication courses, with no more than nine units from Communication 421-428 (health communication courses); and Communication 495 in the last semester.

Health Communication Major
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 06013) (SIMS Code: 661140)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

Lower division preparation for the major courses may be satisfied by comparable courses in community colleges or other institutions with which the university has articulation agreements.

Preparation for the Major. General Education oral communication requirement and six units selected from Communication 160, 201, 204, 245; nine units selected from Communication 201, 204, 245; 15 “communication elective” units selected from Communication 301, 307, 406, 407, 421-428, 445, 446, 452, 470, 482, 484, 485, 486, 499, 508, 555, or other upper division three unit communication courses, with no more than nine units from Communication 421-428 (health communication courses); and Communication 495 in the last semester.

Communication Minor
(Minor Code: 06011) (SIMS Code: 661119)
The minor in communication consists of a minimum of 21 units to include six units selected from Communication 160, 201, 204, 245; Communication 300; six upper division units selected from Communication 371, 406, 415, 450, 470, 491, 492; and six additional upper division units in communication. Admission to the communication minor requires completion of at least 45 units with a minimum grade point average of 2.75 overall; completion of the General Education Oral Communication requirement with a grade of C (2.0) or higher; and six units selected from Communication 160, 201, 204 with grades of C (2.0) or better. The General Education oral communication course will not be included in the computation of the required grade point average of 2.75.

Courses in the minor may not be counted toward the major but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed at San Diego State University.

Communication Certificate
(SIMS Code: 668133)
The certificate program in communication emphasizes scholarly, creative, and professional aspects of communication studies. Coursework includes instruction that provides understanding of culture, health, institutions, interaction, politics, relationship, and rhetoric in everyday life. The focus is placed on how effective communication enhances well-being and relationships; promotes civic engagement; and allows for effective participation in a global community.

To be admitted to the certificate program, students must be enrolled at San Diego State University or through the College of Extended Studies.

The certificate requires 12 units from Communication 201, 245, 300, 371. Coursework must be completed with a GPA of 2.0.

Courses in the certificate may not be counted toward the major or minor in the School of Communication.

For additional information, contact Dr. Meghan B. Moran at 619-594-0454 or mmoran@mail.sdsu.edu.

Health Communication Certificate
(SIMS Code: 661141)
The certificate program in health communication focuses on how people understand and communicate about health and illness. Coursework includes instruction in health-related and care-related messages, the goals and strategies of health care promotion, the relationships, roles, situations, and social structures in health maintenance and promotion, and the communication surrounding wellness, illness, and health care in personal and professional relationships.

To be admitted to the certificate program, students must be enrolled at San Diego State University or through the College of Extended Studies.

The certificate requires 12 units to include Communication 321 and nine units selected from Communication 421, 422, 423, 424, 425, 426, 427, 428, 429, 555; and six units selected from Gerontology 360, 370, Health and Human Services 350, Nursing 350, Philosophy 330, 331, Public Administration 340, Public Health 353, 362, Social Work 430. (Three units selected from this list, except for Public Administration 340 and Social Work 430, will satisfy three units of the General Education requirement in IV. A., B., or C.)
Courses (COMM)

COMM 103. Oral Communication (3) [GE]
One lecture and two hours of recitation. Training in fundamental processes of oral expression; method of obtaining and organizing material; outlining; principles of attention and delivery; practice in construction and delivery of various forms of speeches. Not open to students with credit in Africana Studies 140 or Chicana and Chicano Studies 111A.

COMM 160. Argumentation (3)
Argument as a form of discourse; organizing, supporting, presenting and refuting arguments in a variety of formats; evaluating argument, including common fallacies in reasoning.

COMM 201. Communication and Community (3)
Prerequisite: Communication 103.
Communication as an academic and professional discipline, its associations and journals, history and traditions, relationships to other disciplines, research methodologies, and careers for graduates.

COMM 204. Advanced Public Speaking (3)
Prerequisite: Communication 103.
Practice in extemporaneous speaking on subjects of current interest, both national and local, with stress on organization and delivery.

COMM 245. Interpersonal Communication (3) [GE]
Prerequisite: Communication 103.
Theory and practice of interpersonal communication focuses on the role of communication in initiating, developing, and transitioning through everyday relationships. Emphasis on verbal and nonverbal messages, contexts, and challenges of managing interpersonal communication.

COMM 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

COMM 300. Conceptualizing Communication (3)
Prerequisite: Admission to a major, minor, or certificate program in the School of Communication.
Communication theory, concepts, principles, and practices. Communication as art and process on micro and macro levels, integrates understanding of sources, messages, transmission, and feedback in creating meaning and culture.

COMM 301. Intercollegiate Speech and Debate Competition (1-3) Cr/NC
Two to six hours of activity.
Prerequisite: Communication 103.
Competitive intercollegiate debate and/or individual speaking events. Apply communication theory to comprehensively analyze relevant contemporary issues. Weekend travel to competitive tournaments required. Travel expectation commensurate with units. May be repeated with maximum credit three units applicable to the communication major.

COMM 307. Communication in Professional Settings (3)
Prerequisites: Admission to a major or minor in the School of Communication.
Communication principles in professional contexts including interviewing and technical and nontechnical oral presentations. Skill in meeting management.

COMM 321. Introduction to Health Communication (3) [GE]
Prerequisites: Communication 103; and completion of the General Education requirement in Foundations of Learning IIB, Social and Behavioral Sciences required for nonmajors. Open to majors and nonmajors.
Health communication topics to include patient-provider communication, health communication campaigns, supportive relationships, and public policy. Research methodologies, theories, and best practices in health communication. Required of all health communication majors prior to 400-level coursework.

COMM 350. Investigating Communication (3)
Prerequisite: Admission to a major or minor in the School of Communication.
Study of human communication, from methodological and epistemological perspectives.

COMM 371. Intercultural Communication (3) [GE]
Prerequisites: Communication 103; and completion of the General Education requirement in Foundations of Learning IIB, Social and Behavioral Sciences required for nonmajors. Open to majors and nonmajors.
Study of communication with emphasis on influence of cultural background, perception, social organization, language and nonverbal messages in the intercultural communication experience.

COMM 406. Organizational Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
The organization as a communication system; role of the organization in persuasive campaigns; communication strategies and problems within the organizational structure.

COMM 407. Communicative Perspectives on Interviewing (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Application of communicative theory to interviewing situations. Emphasis on perception, sources, resistance, and nonverbal communication, feedback. Phrasing of questions, ways to enhance respondent participation, and formulation of behavioral objectives. Classroom simulation, supplemented by out-of-class interviews.

COMM 415. Nonverbal Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Theory and research on nonverbal aspects of communication, with emphasis on codes and functions.

COMM 420. Quantitative Methods in Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Quantitative research in communication. Construction and analysis of surveys and experiments.

COMM 421. Health Communication and Community Based Service Learning (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.
How communicating about health is culturally and politically charged. Contemporary concerns in health communication to include how ethnicity, gender, disability, social class, and sexual orientation inform our understandings of health, fitness, and illness. Personal, interactional, cultural, and political complexities of health beliefs, practices, and policies in the context of community-based service learning project.

COMM 422. Politics of Health Communication (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.
How communicating about health is culturally and politically charged. Contemporary concerns in health communication to include how ethnicity, gender, disability, social class, and sexual orientation inform our understandings of health, fitness, and illness.

COMM 423. Patient-Provider Communication (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.
Primary communication activities organizing medical interviews in clinical settings to include techniques for raising and responding to concerns about life, illness, and disease; implications for quality of care, healing outcomes, and medical education.
COMM 424. Health Communication and Relationships (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.
Influences of institutional, social, and personal relationships on health. Influences of health on development of human relationships, interaction between relationships, health practices, and outcomes.

COMM 425. Theory and Research in Health Communication
Campaigns (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.
Theory and research on effective health communication campaigns in various settings to promote healthy lifestyles, nutrition, exercise, health screening, disease and injury prevention behavior.

COMM 426. Communication in Health Risk and Crises (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.
Role of communication in preventing, responding to, and coping with community health crises; principles of competent communication in health related risks and crises.

COMM 427. Health Communication and Cultural Communities (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.
Diversity of cultural perspectives on communicating health, illness, and prevention. Understanding cultural knowledge patients, families, providers, and communities bring to communicating health.

COMM 428. Communicating Health and Well-Being at Work (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.
Research and theory regarding communication topics that restrict well-being at work to include stress, bullying, sexual harassment, and injustice. Concepts and trends that alleviate or eliminate stress to include social support, spirituality, and wellness programs at work.

COMM 441. Foundations of Critical and Cultural Study (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Understanding critical and cultural perspectives and theories of communication in culture through cultural, rhetorical, and media literature and cases.

COMM 445. Relational Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Theory and application of effective relational communication principles in both intimate and nonintimate contexts. Theoretical and empirical evidence on communication strategies and behaviors in relationship initiation, development, and termination. Relationship of communication behaviors to relational goals.

COMM 446. Communication and Rhetorical Movements (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Historical perspectives of role of communication in social change in rhetorical movements and social change.

COMM 450. Rhetorical Theory (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Development of rhetorical theory as a mechanism for generating and understanding public discourse. Theories from ancient Greece to the present.

COMM 452. Interaction and Gender (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Contemporary research and theory on communication and gender. Examination of gender as ongoing interactional achievement. Gender displays and myths across diverse relationships, institutions, media, and society.

COMM 462. Ethnography and Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Naturally occurring interactions drawn from a variety of communication settings. Primary methods of gathering data include: participant observation, interviewing, document and artifact analysis, and other forms of communication.

COMM 465. Conversational Interaction (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Sequential organization of naturally occurring conversational practices. Reliance on recordings and transcriptions for detailed examinations of interactants’ methods for achieving social actions and organizing interactional occasions.

COMM 470. Argumentation Theory (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Approaches to argument and the patterns and problems in argument. Consideration of implications for society. Written and oral reports.

COMM 482. Communication and Politics (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Contemporary political communication events and processes, with a focus on speeches, debates, and campaigns. (Formerly numbered Communication 580.)

COMM 484. Language Dynamics and Human Interaction (3)
Prerequisites: Communication 300 and 350. Powerful role of language on perception, interpretation, reaction, and response to environmental stimuli. Language choices on the nature of interpersonal relationships. Language in establishing and maintaining groups, societies, and cultures.

COMM 485. Communicating Leadership (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Current theory and research in leadership and communication. Understanding yourself, role of leadership, and selection of appropriate communication strategies for leadership.

COMM 490. Internship (1) Cr/NC
Prerequisites: Communication 300 and 350; junior or senior standing. Admission to a major or minor in the School of Communication.
Students work at approved agencies off-campus under the combined supervision of agency personnel and instructors. Internship hours to be arranged. Maximum credit three units.

COMM 491. Group Interaction (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Research, theory, observation of group emergence, development, relationships, interaction, and decision making across diverse settings.

COMM 492. Persuasion (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Key variables and theories in the persuasion process; persuasive sources, messages, receiver variables, propaganda, brainwashing, cognitive, behavioral, and social theories of persuasion.

COMM 495. Communication Capstone: Conceptualizing and Investigating Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication. Must have completed at least 21 units of upper division communication coursework.
Capstone survey, analysis, and comparison of theories, methods, and discipline of communication.

COMM 496. Experimental Topics (1-4)
Experimental topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

COMM 499. Special Study (1-3)
Prerequisite: Approved special study contract required prior to enrollment.
Approved individual study, project or research under supervision of faculty member. Maximum credit three units.
COMM 508. Media Literacy (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Role played by video texts in shaping culture including information distribution, entertainment, and socio-cultural influence exercised by television. Emphasis on audience/medium relationship and to developing critical skills.

COMM 555. Conflict Management Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.
Approaches to conflict communication in international, societal, group, institutional, and interpersonal contexts.

COMM 596. Selected Topics (1-4)
Prerequisite: Senior standing or above.
Specialized study in selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

Communicative Disorders – Refer to “Speech, Language, and Hearing Sciences” in this section of the catalog.
Community Health Education – Refer to “Public Health” in this section of the catalog.
Comparative International Studies

In the College of Arts and Letters

OFFICE: Arts and Letters 613
TELEPHONE: 619-594-5028
E-MAIL: cis@mail.sdsu.edu

Faculty

Faculty assigned to teach international studies courses are drawn from the disciplinary departments and area studies centers in the College of Arts and Letters.

Program Director and Undergraduate Adviser: Eniko Csomay
(Linguistics and Asian/Middle Eastern Languages)

Committee: Blanco (Spanish and Portuguese Language and Literature), Kosta (European Studies), Gerber (Anthropology), Osman (Linguistics and Asian/Middle Eastern Languages)

Offered by Comparative International Studies

Major in comparative international studies with the B.A. degree in liberal arts and sciences.

The Major

Comparative international studies is an interdisciplinary program that offers a broad view and understanding of international and global forces in a wide range of human activities and across the disciplines included in the humanities and social sciences. The major provides students with the opportunity to engage in a comparative study of two world regions, learn a foreign language, experience international contexts through study abroad, and conduct research. Students majoring in comparative international studies are prepared for a rapidly changing, linguistically diverse, and multi-ethnic world. Students choose this major because they can learn about cultures and societies outside the United States and because it prepares them to work in a variety of social, cultural, and economic environments.

The program requires students to take three of the four thematically organized courses that aim to integrate theoretical knowledge about global processes and knowledge about comparative methods including analytical techniques used to study them. The four themes are identified as follows: human and social development, culture and society, populations and borders, institutions and change. Students are also required to take courses on two world regions, identified as a primary and a secondary area of focus, selected from the following areas: Africa, Asia (China) or Asia (General), Europe, North Africa and West Asia (Middle East), and Latin America and the Caribbean.

Knowing one or more foreign language is believed to be essential in order to effectively communicate with people of another culture, understand another culture, or conduct research. Therefore, the international studies major requires students to complete a minor in a foreign language.

Graduating majors will gain insights into complex world issues from a comparative perspective and will acquire broad knowledge, skills, and (language) tools necessary to function well in the age of globalization. Those completing the major will be prepared to meet the challenges of the new era of globalization, including careers in local, state, and national government, in national and international non-profit organizations such as social service providers, cultural organizations, or international development agencies, and in areas such as international education, commerce, tourism, and communications. Majors will also be prepared to pursue graduate level education in liberal arts and sciences, in regional studies, or in a particular discipline within the areas in the humanities and social sciences, and with a solid foundation in a foreign language.

Advising

Students are required to meet with the undergraduate adviser in order to declare the major. All students admitted to the university with a declared major in comparative international studies are urged to meet with the undergraduate adviser either prior to or during their first semester.

Impacted Program

The comparative international studies major is an impacted program. To be admitted to the comparative international studies major, students must meet the following criteria:

a. Complete preparation for the major.

b. Complete a minimum of 60 transferable semester units.

c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Comparative International Studies Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22997) (SIMS Code: 117002)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

A minor in a foreign language is required with this major. See list of foreign language minors in the General Catalog. Students are encouraged to contact their minor adviser to discuss the benefits of taking a foreign language oral proficiency test administered by the American Council on Teaching Foreign Languages (ACTFL). The program also requires at least one preapproved study abroad experience.

Courses in the major cannot be double-counted.

Preparation for the Major, (15 units)

Choose three units from each of the groups A, B, and C:

(A) Humanities: Comparative Literature 270A or 270B, History 100 or 101, Humanities 101, Religious Studies 101, Women Studies 102;

(B) Social Sciences: Anthropology 102, Geography 102 or 106, Linguistics 101; Political Science 103, Women’s Studies 101;

(C) Statistics: Economics 201, Political Science 201, Sociology 201 or equivalent.

Choose six units from any combination of regions in group D:

(D) Regions: (Asia) Asian Studies 100 or 101 or 150; (Europe) European Studies 101; (Latin America and the Caribbean) Latin American Studies 101; (North Africa and West Asia-Middle East) History 100 or 101, Religious Studies 101. (History 100, 101, and Religious Studies 101 can only be included for this group if not taken for group (A) above.)

Recommended for General Education in Foundations of Learning, Life Sciences: Anthropology 101 or Biology 101; Physical Sciences: Environmental Science 100, Geography 101, or Geological Sciences 100.
Language Requirement. Comparative international studies majors are required to complete a minor in a foreign language. The minor in a foreign language will fulfill the foreign language requirement for the major. (Contact minor adviser about the benefits of taking an ACTFL foreign language oral proficiency test.)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Study Abroad Requirement. All comparative international studies majors are required to participate in an international experience amounting to a minimum of six weeks spent abroad and completing a minimum of three units of study abroad. To meet this requirement, majors must complete one or a combination of the following with a minimum of three units of study abroad: 1. A CSU Study Abroad Program; 2. An SDSU Exchange Program; 3. An SDSU Semester Abroad Program; 4. An SDSU Study Travel Program; 5. General Studies 450. See the undergraduate adviser to make arrangements to meet the study abroad requirement.

Major. A minimum of 36 upper division units to include Comparative International Studies 300 and 400; nine units from three of the following four thematic areas selected from two or more departments:

(A) Human and Social Development: Geography 353, 573, History 441, Linguistics 551, Political Science 361, Sociology 350, 352, 433, Women’s Studies 310, 580;

(B) Culture and Society: Anthropology 303, 350, 422, 439, Geography 312, 554, Linguistics 350, Philosophy 340;

(C) Populations and Borders: Anthropology 402, Chicana and Chicano Studies 355 [or Latin American Studies 355], 554, Geography 354, Latin American Studies 430 [or Political Science 430], Political Science 380, 565, Sociology 350, Women’s Studies 581;

(D) Institutions and Change: Political Science 375, 485, 577, Sociology 457, Women’s Studies 530.

Complete 21 units from two of the six following world regions selecting 12 units from one regional area and nine units from the other regional area:

(A) Africa: Africana Studies 320, 465 [or French 465], Comparative Literature 440, Humanities 350, Political Science 364;

(B) Asia (China): Asian Studies 458 or History 420, History 421 [or Asian Studies 421], 567, 566 or Political Science 575, Philosophy 351, Political Science 365, Religious Studies 340;

(C) Asia (General): Asian Studies 300 or 320, Asian Studies 451 [or Comparative Literature 451], Asian Studies 456, 459, 460, History 570, Korean 321, Political Science 362 or 575, Philosophy 353 or Religious Studies 338 or 341 or 345, Religious Studies 315 or 339 or 342, Women’s Studies 331;

(D) Europe: Comparative Literature 513, 514, European Studies 301, 424, French 242, 501, German 320, History 408, 527, Political Science 356, Russian 310, Women’s Studies 340;

(E) Latin America and the Caribbean: Anthropology 442, Chicana and Chicano Studies 400 [or Latin American Studies 400], Comparative Literature 445, Geography 324, History 415 [or Latin American Studies 415], 416, 551, 558, Latin American Studies 307 [or Portuguese 307], Political Science 366 [or Latin American Studies 366], 370;

(F) North Africa and West Asia (Middle East): Arabic 330, History 473, 474, Political Science 363, Religious Studies 310, 320, 328, 330, Women’s Studies 560.

Courses (CINTS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSE

CINTS 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES
(Entended for Undergraduates)

CINTS 300. Introduction to Comparative International Studies (3)
Prerequisites: Upper division standing and completion of the General Education requirement in II. Foundations of Learning. Comparative international studies through the lens of comparative area studies framework. Domestic issues in global context. Comparative research and study abroad.

CINTS 400. Comparative International Studies Capstone (3)
Prerequisites: Comparative International Studies 300 and completion of minimum six weeks of study abroad. Capstone course for comparative international studies major. Completion of research project based on coursework and study abroad experience.

CINTS 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

CINTS 499. Special Study (1-6)
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.
Comparative Literature
In the College of Arts and Letters

OFFICE: Arts and Letters 226
TELEPHONE: 619-594-5307 / FAX: 619-594-4998
E-MAIL: EandCL@mail.sdsu.edu
http://literature.sdsu.edu

Faculty
Faculty assigned to teach courses in comparative literature are drawn from departments in the College of Arts and Letters.

Offered by the Department of English and Comparative Literature
Major in comparative literature with the B.A. degree in liberal arts and sciences.
Minor in comparative literature.

The Major
Comparative literature is the study of literature from around the world, transcending the restrictions of national and linguistic boundaries. Traditionally, comparative study has been based on literary movements, periods and lines of influence, as well as on genres, themes, myths, and legends. In recent years comparative literature has come to include the comparison of literature with other areas of human experience.

Comparative literature offers students the opportunity to study a broad range of literary subjects from various cultures throughout the world. Courses are offered in European literature from ancient to contemporary times; in the literature of Asia, Africa, and Latin America; in folk literature, legend, fantasy, and science fiction; in literary theory; and in special topics such as travel literature, literature and existentialism, and Japanese literature and film. All reading is done in English translation (majors choosing Plan II, however, are also required to take courses in foreign language literature).

Because the field covers so wide a range, the comparative literature student does not acquire a comprehensive knowledge of any basic list of “great works.” Such a list, for all of world literature, would be far too long. Instead, students learn various approaches to literature, along with specialized knowledge of areas which particularly interest them.

Comparative literature is an excellent major for anyone desiring a broadening and enriching liberal arts education. Its application to foreign cultures is particularly useful for careers in foreign service and international trade. Translating, editing and publishing, journalism, broadcasting, and film are other possibilities, as well as advertising and public relations, politics, writing, library work, and criticism.

Comparative literature is also, like English, an excellent foundation for careers in the professions, especially law.

The comparative literature major may also be used as preparation for the single subject (high school) teaching credential in English language arts (see department adviser for more information). Graduate study in comparative literature may lead to teaching at more advanced levels.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The comparative literature major is an impacted program. To be admitted to the comparative literature major, students must meet the following criteria:

a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

to complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Comparative Literature Major
With the B.A. Degree in Liberal Arts and Sciences (Major Code: 15031) (SIMS Code: 111701)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in comparative literature and English courses can apply to the degree.

Preparation for the Major.
Comparative Literature 270A, 270B; English 220. (9 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 8 or above before taking English 508W with a grade of C (2.0) or better, which is required. See “Graduation Requirements” section for a complete listing of requirements.

Major. (33 units)
1. Twenty-four units in 400 or 500-level comparative literature courses. May include up to six units of literature in a language other than English OR up to six units selected from the following courses:

   - Africana Studies 365A [or English 365A], 365B [or English 365B], 465 [or French 465].
   - American Indian Studies 300, 430.
   - Chicana and Chicano Studies 335 [or English 335], 380 [or Latin American Studies 380], 450.
   - Classics 310, 320, 330, 350.
   - English 450, 550.
   - Philosophy 315.
   - Russian 305A.
   - Theatre 460B.
   - Women's Studies 352.

2. Six units of 500-level English courses (no double-counting of courses).

3. Three units of English 508W.

Consult with the Comparative Literature and English honors program adviser for honors program variation.

Comparative Literature Minor
The minor in comparative literature consists of a minimum of 15 units in comparative literature, 12 units of which must be in upper division courses. The 12 units of upper division work must be selected, with adviser’s approval, from within one of the following interest areas: European Literature (SIMS Code: 111715): Comparative Literature 513, 514.

Asian, African, and Latin American Literature (SIMS Code: 111708):
Comparative Literature 440, 445, 451 [or Asian Studies 451], 530.

Comparative Literary Theory (Theory of literature, genre study, literature in relation to other arts and disciplines) (SIMS Code: 111710): Comparative Literature 561, 580, 594, 595.
In addition the following variable content courses may be used in any of the above categories when they are appropriate: Comparative Literature 577, 596.

The comparative literature minor is not available to students majoring in English. Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (C LT)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

C LT 270A-270B. World Literature (3-3) [GE]
Comparative study of selected major works from various continents and cultures, with emphasis on how literature deals with enduring human problems and values. Semester I: prior to 1500; Semester II: since 1500. Comparative Literature 270A is not a prerequisite to 270B, and either may be taken separately.

C LT 296. Topics in Comparative Literature (3)
Comparative study of selected major works from various continents and cultures, with emphasis on how literature deals with enduring human problems and values. Semester I: prior to 1500; Semester II: since 1500. Comparative Literature 270A is not a prerequisite to 270B, and either may be taken separately.

C LT 298. Seminar: Comparative Literature Honors Thesis (3) Cr/NC
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.

UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

C LT 513. Nineteenth Century European Literature (3)
Prerequisites: Six units in literature. European literature of the nineteenth century or of a more limited period within that century. May be repeated with new content. Maximum credit six units.

C LT 514. European Literature Since 1900 (3)
Prerequisites: Six units in literature. Study of a literary period such as the Age of Modernism. May be repeated with new content. Maximum credit six units.

C LT 530. Topics in Asian Literature (3)
Prerequisites: Six units in literature. Specialized study of a selected topic in Asian literature. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

C LT 561. Fiction (3)
Prerequisites: Six units in literature. A comparative approach to themes and forms in fiction (novel and short story). Focus of course will vary as the instructor selects. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

C LT 570. Ecocriticism (3)
Prerequisites: Six units in literature and/or creative writing. In-depth study of relationships between environment and literature to include ecocritical literary theory, history, and practice.

C LT 577. Major Individual Authors (3)
Prerequisites: Six units in literature. In-depth study of the works of a major author, such as Dante, Garcia Márquez, Murasaki, or Dostoyevsky. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

C LT 580. Concepts in Comparative Studies (3)
Prerequisites: Six units in literature. Basic concepts in comparative studies in literature (e.g., influence, movement, theme, figure, genre, etc.); their validity, usefulness, and limitations. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

C LT 594. Topics in Literature and the Arts (3)
Prerequisites: Six upper division units in literature or any of the other arts. Comparative study of literature and other arts such as painting, sculpture, architecture, music, dance, and film. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units applicable to a bachelor's degree. Maximum credit six units applicable to the M.F.A. degree in creative writing.

C LT 595. Literature and Aesthetics (3)
Prerequisites: Six upper division units in literature or any of the other arts. Theoretical and experiential investigation of relationships between literature and the other arts; literary works in context of an inquiry into aesthetics. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

C LT 596. Topics in Comparative Literature (3)
An intensive study of a topic to be selected by the instructor. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.
Faculty
Program Director: José E. Castillo (Mathematics and Statistics)
Associated Faculty: Bailey (Mathematics and Statistics), Baljon (Physics), Blomgren (Mathematics and Statistics), Carretero (Mathematics and Statistics), Cooksy (Chemistry and Biochemistry), Day (Geological Sciences), Demasi (Aerospace Engineering), Edwards (Computer Science), Fan (Mathematics and Statistics), Johnson (Physics), Kuznetsova (Physics), Kumar (Electrical and Computer Engineering), Levine (Mathematics and Statistics), Love (Chemistry and Biochemistry), McCarthy (Chemistry and Biochemistry), McDonald (Mathematics and Statistics), Mohler (Mathematics and Statistics), Moore (Mathematics and Statistics), Müller (Psychology), Olsen (Geological Sciences), Palacios (Mathematics and Statistics), Roch (Computer Science), Rohwer (Biology), Salamon (Mathematics and Statistics), Sandquist (Astronomy), Segall (Biology), Shen (Mathematics and Statistics), Segall (Biology), Weber (Physics), Zeller (Biology), Xie (Computer Science).

Offered by Computational Science
Doctor of Philosophy degree in computational science.
Master of Science degree in computational science.
Concentration in professional applications.
Certificate in professional computational science, advanced (refer to the Graduate Bulletin).

Courses (COMP)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

COMP 521. Introduction to Computational Science (3)
Prerequisite: Mathematics 151.
Matrices and linear equations, solving ordinary differential equations (ODEs), vector spaces, closed form solutions, qualitative theory, Eigenvalues, linear maps, linear differential equations, other techniques, nonlinear systems, higher dimensional systems.

COMP 526. Computational Methods for Scientists (3)
Prerequisites: Mathematics 252 and 254.
Translating mathematical problem descriptions to computer programs. Introduction to Unix system.

COMP 536. Computational Modeling for Scientists (3)
Prerequisite: Mathematics 151.
Models, computational tools, errors, system dynamics, growth, stability, multicompartment models, Euler's, Runge-Kutta methods, system dynamics, infectious disease, enzyme kinetics, environmental cycles, cardiovascular system, metabolism, global warming, empirical models, HIV, population distributions, diffusion, HPC.

COMP 589. Computational Imaging (3)
Prerequisites: Mathematics 150 and 254.
Mathematical techniques used for image processing and analysis. Emphasis on variational techniques which lead to PDE based image processing algorithms, most are known as diffusion filters, and interface propagation techniques for which emphasis will be implicit representation (level-set methods). Representation and properties of curves and surfaces, statistical (PCA/ICA), and multi-resolution image analysis techniques.

COMP 596. Advanced Topics in Computational Science (1-4)
Prerequisite: Consent of instructor.
Selected topics in computational science, may be repeated with the approval of the instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
In the College of Engineering

OFFICE: Engineering 426
TELEPHONE: 619-594-5718
http://electrical.sdsu.edu

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

Faculty
Emeritus: Iospoupovici, Harris, J., Panos
Chair: Tummala
Coordinator for Computer Engineering: Ozturk
Professors: Gupta, harris, J., Kumar, Lee, G., Marino, Ozturk, Tummala
Associate Professor: Sarkar
Assistant Professor: Almohammad

Offered by the Department of Electrical and Computer Engineering:
Doctor of Philosophy degree in engineering sciences:
(bioengineering), (electrical and computer engineering), (mechanical and aerospace engineering), (structural engineering).

Master of Engineering:
Master of Science degree in electrical engineering.
Major in computer engineering with the B.S. degree.
Major in electrical engineering with the B.S. degree.
Certificate in rehabilitation technology (refer to the Graduate Bulletin).

Research Laboratories
Embedded Systems Laboratory
Multimedia Communication Laboratory
Reconfigurable Computing Laboratory
VLSI Design and Testing Laboratory
Wireless Networks Laboratory

Transfer Credit
No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of work attempted at this university. At that time, and upon recommendation of the department, credit will be given for the unaccredited work.

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

I. Communication and Critical Thinking: 9 units
You may not use Credit/No Credit grades in this section.
1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)

II. Foundations of Learning: 29 units
A. Natural Sciences and Quantitative Reasoning (17 units):
1. Physical Sciences (7 units)
   Physics 195 (3 units)
   Physics 196 and 196L (4 units)
2. Life Sciences (3 units)
   Engineering students will take Biology 100 or 101.
3. Laboratory (satisfied under A.1. above)

4. Mathematics/Quantitative Reasoning
   You may not use Credit/No Credit grades.
   Mathematics 150 (3 units applicable to General Education)
   Mathematics 151 (4 units)

B. Social and Behavioral Sciences (3 units)
C. Humanities (9 units)
   Complete three courses in three different areas. One of these courses and the one under I.A. below must be taken in the same department.

III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.

IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing (60 units passed). Upper division courses in the major department may not be used to satisfy General Education.
A. Upper division Humanities (3 units)
   Three units must be taken from the same department as one of the Humanities courses selected in Foundations of Learning.
B. Upper division Social and Behavioral Sciences (3 units).
C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

The Major
Computers are machines that store and process information. Desktop computers, portables, workstations, and mainframe computers are the most readily recognized examples of such devices. Equally important, however, are the millions of tiny computers (microprocessors) that are embedded in machines, instruments, and products of all sorts. For example, there are embedded computers in VCRs, cameras, telephones, CD/DVD players, televisions, washing machines, ovens, robots, automobiles, airplanes, medical instruments, toys, and many other devices, both familiar and exotic.

Computer Engineers are involved in the design, development, manufacture, installation, and operation of general purpose and embedded computers of all sorts. They are both concerned with hardware (i.e., the electronic circuits and devices that actually store and process information) and software (i.e., the programs that control the operation of the hardware). The B.S. degree program in Computer Engineering provides a solid foundation in the fundamentals of mathematics, science, computer hardware, computer software, and engineering design that are needed to practice the profession or to pursue a graduate degree in the field.

In addition to fundamentals, the curriculum also includes training in the areas of rapid growth that are important to modern practice of computer engineering. These include: Very Large Scale Integrated Circuits design (i.e., the design of electronic circuits implemented on silicon chips); Multimedia Systems (i.e., systems that process audio and visual information as well as text and numbers); Embedded Systems; Digital Signal Processing (DSP), which plays a vital role both in processing the continuous signals that are common in embedded system applications and in compressing and processing the large volumes of information that are common in multimedia systems; Computer Networks, which have become vital for connecting multiple computers in distributed control applications, and connecting users of general purpose computers who wish to share information and computing resources (e.g., Local Area Networks, the Internet); Graphical User Interfaces (GUIs), which are rapidly replacing
text-based interfaces in nearly all applications; and Object Oriented Programming (OOP), a technique for designing more reliable and maintainable software.

The computer engineering curriculum provides a balance between theory and practice that prepares the graduate both for immediate employment and for continued study. The process of engineering design is emphasized throughout the curriculum by including open-ended problems with realistic design constraints. The design experience culminates in a capstone design course required of all students. Creativity, consideration of economic and social factors, and the application of systematic design procedures are required in major design projects during the senior year.

**Educational Objectives**

The overall objective of the undergraduate program in computer engineering is to produce the best skilled, hands-on practicing computer engineer. More specifically the objectives are:

A. To provide students with the technical knowledge and skills that will enable them to have a successful career in the computer engineering profession;
B. To provide students with a general education that will enable them to appreciate the social, ethical, economic, and environmental dimensions of problems they may face;
C. To develop in students the communication skills and social skills that are necessary to work effectively with others;
D. To develop the ability of students to solve problems by learning what is already known, and then applying logic and creativity to find a solution;
E. To provide students with the intellectual skills necessary to continue learning and to stay current with the profession as it changes.

**Impacted Program**

The computer engineering major is an impacted program. To be admitted to the computer engineering major, students must meet the following criteria:

- Complete with a grade of C or higher: Computer Engineering 160; Electrical Engineering 210; Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit (Cr/NC);
- Have an overall cumulative GPA of 2.5.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the program at SDSU (assuming continuous enrollment).

**Major Academic Plans (MAPs)**

Visit [http://www.sdsu.edu/mymap](http://www.sdsu.edu/mymap) for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

**Computer Engineering Major**

With the B.S. Degree

(Major Code: 09094) (SIMS Code: 445001)
(SIMS Code: 445002 - Georgia)

The program below describes the 129 units required for the degree.

**Preparation for the Major.** Computer Engineering 160, 260, 270, 271; Aerospace Engineering 280; Biology 100 or 101; Electrical Engineering 210; Mathematics 150, 151, 245, 254; Physics 195, 196, 196L (42 units)

Computer Engineering 160; Electrical Engineering 210; Mathematics 150, 151; Physics 195, 196 must be completed with a grade of C or higher. Computer Engineering 260, 270, 271; Aerospace Engineering 280; Mathematics 245, 254 must be completed with a grade of C- (1.7) or better. These courses cannot be taken for credit/no credit (Cr/NC).

**General Education.** Engineering students must follow the specific General Education program outlined in this section of the catalog. Other general education requirements and limitations, as well as listings of specific General Education course electives are presented in the General Education section of Graduation Requirements for the Bachelor’s Degree. (Fifty units, including 17 units from preparation for the major which count toward General Education credit, and three units of American institutions which count toward General Education credit.)

**Graduation Writing Assessment Requirement.** Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” for a complete listing of requirements.

**Major.** A minimum of 51 upper division units to include Computer Engineering 361, 375, 470, 470L, 475, 490, 560; Electrical Engineering 300, 310, 330, 330L, 410; one approved elective course in mathematics (3 units); three approved elective courses selected from computer engineering, electrical engineering, or other approved elective (9 units); two approved technical elective courses in computer engineering, computer science, or electrical engineering (6 units). After enrollment in Computer Engineering at SDSU, the Computer Engineering major must take all upper division computer science and engineering courses at SDSU unless prior approval is obtained from the department.

**Master Plan.** A master plan of elective courses must be approved by the faculty adviser and department chair and filed with the Office of Advising and Evaluations during the first semester of the junior year. Changes to the master plan are permitted at any time, with approval of the department chair.

**Courses (COMPE)**

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

**NOTE:** Prerequisites will be enforced in all undergraduate computer engineering and electrical engineering courses numbered 100 through 599. A copy of an official transcript will be accepted as proof. For corequisites, an enrollment confirmation form will be accepted.

**LOWER DIVISION COURSES**

**COMPE 160. Introduction to Computer Programming (3)**
Two lectures and three hours of laboratory. Prerequisite: Mathematics 150.

**COMPE 160. Introduction to Computer Programming (3)**

**COMPE 260. Data Structures and Object-Oriented Programming (3)**
Prerequisites: Grade of C (2.0) or better in Mathematics 245.

**COMPE 270. Digital Systems (3)**
Prerequisite: Mathematics 151.

**COMPE 271. Computer Organization (3)**
Prerequisites: Grade of C (2.0) or better in Computer Engineering 160; Grade of C- (1.7) or better in Computer Engineering 270.

**COMPE 280. Computer Architecture (3)**
Prerequisites: Grade of C (2.0) or better in Computer Engineering 160; Grade of C- (1.7) or better in Computer Engineering 270.
COMPE 361. Windows Programming (3)  
Prerequisites: Grade of C- (1.7) or better in Computer Engineering 260 and 271.  

COMPE 375. Embedded Systems Programming (3)  
Two lectures and three hours of laboratory.  
Prerequisite: Grade of C- (1.7) or better in Computer Engineering 271.  
Embedded system architecture; IO programming using parallel ports, serial ports, timers, and D/A and A/D converters; interrupts and real-time programming; program development and debugging tools; C language and assembler.

COMPE 470. Digital Circuits (3)  
Prerequisite: Computer Engineering 270.  
Design of digital electronic systems using commercially available high-speed digital devices and circuits.

COMPE 470L. Digital Logic Laboratory (1)  
Three hours of laboratory.  
Prerequisites: Computer Engineering 470 and Electrical Engineering 330L.  
Hands-on experience in characterization and application of standard digital integrated circuit devices.

COMPE 475. Microprocessors (3)  
Prerequisites: Computer Engineering 375 and 470.  
Bus design, memory design, interrupt structure, and input/output for microprocessor-based systems.

COMPE 490. Senior Design Project (4)  
Two lectures and six hours of laboratory.  
Prerequisites: Computer Engineering 375, Electrical Engineering 330L, and credit or concurrent registration in Computer Engineering 470L.  
Supervised capstone design projects to provide an integrative design experience for seniors to include ethics, professionalism, cost-effectiveness, and project management.

COMPE 496. Advanced Computer Engineering Topics (1-3)  
Prerequisite: Consent of instructor.  
Modern developments in computer engineering. See Class Schedule for specific content. Maximum credit nine units for any combination of Computer Engineering 496 and 596 applicable to a bachelor's degree.

COMPE 499. Special Study (1-3)  
Prerequisites: Approval of project adviser and department chair.  
Individual study. Maximum credit six units.

COMPE 560. Computer and Data Networks (3)  
Prerequisites: Computer Engineering 271 and Electrical Engineering 410.  
Wide area and local area networks, multi-layered protocols, telephone systems, modems, and network applications.

COMPE 561. Windows Database and Web Programming (3)  
Prerequisite: Computer Engineering 361.  
Programming applications involving file systems, relational databases, Structured Query Language (SQL), ADO.NET, client-server architecture, multithreading sockets, web servers, web browsers, web services, ASP.NET, Hypertext Markup Language (HTML), and Extensible Markup Language (XML).

COMPE 565. Multimedia Communication Systems (3)  
Prerequisite: Credit or concurrent registration in Computer Engineering 560.  

COMPE 571. Embedded Operating Systems (3)  
Prerequisites: Computer Engineering 260 and 475.  
Real-time kernel, basic kernel services, threading and synchronization, preemptive multithreading, mutexes, spin locks, critical sections, priority scheduling, interrupts, RTOS implementation, memory management, task management, intertask communications.

COMPE 572. VLSI Circuit Design (3)  
Prerequisites: Computer Engineering 271 and Electrical Engineering 330.  
Design of digital integrated circuits based on CMOS technology; characterization of field effect transistors, transistor level design and simulation of logic gates and subsystems; chip layout, design rules, introduction to processing; ALU architecture.

COMPE 596. Advanced Computer Engineering Topics (1-3)  
Prerequisite: Consent of instructor.  
Modern developments in computer engineering. May be repeated with new content. See Class Schedule for specific content. Maximum credit of nine units for any combination of Computer Engineering 496 and 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES  
Refer to the Graduate Bulletin.
Faculty
Eminent: Anantha, Baase-Mayers, Donald, Lane, Marovac, Stewart, Swiniarski, Vinge, Vuskovic
Chair: Beck
Professors: Beck, Carroll, Roch, Tarokh, Vailat
Associate Professors: Eckberg, Edwards, Whitney; Xie
Assistant Professor: Wang
Lecturers: Bajic, Kraft, Riggins
Adjunct: Root

Offered by the Department
Master of Science degree in computer science.
Major in computer science with the B.S. degree in applied arts and sciences.
Minor in computer science.
Certificate in geographic information science.
Certificate in web and mobile applications development.

The Major
Computer Science is the study of computers and their applications. It is concerned with methods for storing and retrieving information, with the design and use of languages for writing computer programs, with the hardware systems that interpret such languages, and with the theoretical principles that form the foundations of computing. Computer Science includes a wide variety of specialties and application areas such as artificial intelligence, robotics, graphics, systems programming, simulation, and computer networks.
The Bachelor of Science in Computer Science is designed to provide students with a fundamental understanding of modern computing methodology and programming practices along with a complementary knowledge of hardware. The first two years provide the basic preparation in programming, data structures and architecture. The final two years are devoted to more advanced fundamentals and specialized electives.

Computers are used to store and manage information, to analyze scientific data, and in a wide variety of other applications. Computing technology is found in an almost limitless number of settings, ranging from automobiles to household appliances to toys. Because of this, a wide range of jobs are open to people trained in Computer Science. Employment opportunities are expected to remain very strong.

Impacted Program
The computer science major is an impacted program. To be admitted to the computer science major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Computer Science Major
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 0701) (SIMS Code: 773801)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”
A minor is not required for this major.

Preparation for the Major
Computer Science 107, 108, 237; Mathematics 150, 151, 245, 254; Statistics 250; and 12 units of science courses selected with approval of computer science adviser.
The science courses must include one of the following two-semester sequences with laboratory: Physics 195, 195L, 196, 196L; or Chemistry 200, 200L, 201, 201L, 204, 204L. The remaining 12 units must be science courses or courses that enhance the student’s ability to apply the scientific method. (38 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 37 upper division units to include Computer Science 310, 320, 370, 440, 490, 530, 560, 570; at least one course selected from Mathematics 541, 579, Statistics 350A, 550, or 551A; and 12 units of computer science electives selected with the approval of the computer science major adviser. At least nine units of electives must be in computer science.

Master Plan. Students should follow the Master Plan Advising Guide to ensure completion of major requirements. Download it at http://www.cs.sdsu.edu/degree-requirements.

Computer Science Minor
(SIMS Code: 773801)
The minor in computer science consists of a minimum of 18-23 units in computer science and mathematics to include: Computer Science 107, 108; and at least 12 upper division units, or at least nine upper division units if the student completes a full calculus sequence, i.e., Mathematics 150 and 151. The courses selected are subject to the approval of the minor adviser.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Geographic Information Science Certificate*
(SIMS Code: 112949)
The purpose of the program is to prepare students to acquire, analyze, manage, visualize, and develop applications with geospatial data in public and private organizations. Students must apply for admission to the program before the completion of 12 certificate units and must complete the required units with a 2.5 grade point average.
The certificate requires 27 units distributed between the departments of Computer Science and Geography as follows: 12-15 units selected from Computer Science 107, 108, 310, 320, 503, 514, 520, 535, 537, and 12-15 units selected from Geography 104, 381, 484, 581-592. Courses with relevant content (e.g. Computer Science 596 or Geography 596) may be substituted for the computer science and geography courses with the approval of the certificate adviser. Courses in the certificate may be counted toward the major in computer science if applicable.
* Additional prerequisites required for this certificate.
Courses (CS)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES
CS 100. Computational Thinking (3) [GE]
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.

CS 107. Introduction to Computer Programming (3)
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.
Programming methodology and problem solving. Basic concepts of computer systems, algorithm design and development, data types, program structures. Extensive programming in Java.

CS 108. Intermediate Computer Programming (3)
Prerequisite: Computer Science 107.
Further training in program design and development. Object-oriented programming to include inheritance, polymorphism, and generic code. Extensive programming in Java. Introduction to data structures.

CS 237. Machine Organization and Assembly Language (3)
Prerequisite: Computer Science 108.
General concepts of machine and assembly language, data representation, looping and addressing techniques, arrays, subroutines, macros. Extensive assembly language programming.

CS 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

CS 299. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Intended for Undergraduates)
CS 301. Computers and Society (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.
Impact of computers and computing technology on society; applications, benefits, and risks. Topics include privacy, copyright, computer crime, constitutional issues, risks of computer failures, evaluating reliability of computer models, computers in the workplace, trade and communications in the global village. Not open to computer science majors or to students with credit in Computer Science 440.

CS 310. Data Structures (3)
Prerequisites: Computer Science 108 and Mathematics 245.
Representations and operations on basic data structures. Arrays, linked lists, stacks, queues, and recursion; binary search trees and balanced trees; hash tables, dynamic storage management; introduction to graphs. An object oriented programming language will be used.

CS 320. Programming Languages (3)
Prerequisite: Computer Science 108.
Principles of high-level programming languages, including formal techniques for syntax specification and implementation issues. Languages studied should include at least C++, FORTRAN, and LISP.

CS 370. Computer Architecture (3)
Prerequisite: Computer Science 237.
Logic gates, combinational circuits, sequential circuits, memory and bus system, control unit, CPU, exception processing, traps and interrupts, input/output and communication, reduced instruction set computers, use of simulators for analysis and design of computer circuits, and traps/interrupts.

CS 425. Tcl and Tk Interface Programming (3)
Prerequisite: Computer Science 303.
Presentation of Toolkit Command Language (Tcl) and Toolkit (Tk) languages, a portable programming environment for creating graphical user interfaces under X Windows, Microsoft Windows, and Macintosh. Writing scripts for Tcl, Tk, and extensions such as Expect.

CS 440. Social, Legal, and Ethical Issues in Computing (3)
Prerequisite: Computer Science 108.
Impact of computers, applications, and benefits, copyright, privacy, computer crime, constitutional issues, risks of computer failures, evaluating reliability of computer models, trade and communications in the global village, computers in the workplace, responsibilities of the computer professional. Not open to students with credit in Computer Science 301.

CS 470. UNIX System Administration (3)
Prerequisite: Computer Science 370.
Installing the UNIX operating system on a UNIX workstation, adding user accounts, backing up and restoring user files, installing windows, adding network capabilities, adding printers and other peripherals.

CS 490. Senior Seminar (1)
Prerequisite: Fifteen units of upper division computer science courses.
Preparation and delivery of oral presentations on advanced topics in computer science. General principles of organization and style appropriate for presenting such material.

CS 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

CS 497. Undergraduate Research Seminar (3)
Six hours of laboratory and one hour with adviser.
Prerequisites: Computer Science 560 or 570, minimum grade point average of 3.3, and consent of instructor.
Designing and carrying out independent research in one of the areas of computer science. Literature search, technical report writing, and oral presentation of results.

CS 498. Undergraduate Honors Thesis (3)
Prerequisites: Computer Science 497 and consent of instructor.
Directed research in computer science and completion of honors thesis. Thesis to be presented at the annual SDSU Research Symposium and/or defended before a committee of faculty. Maximum credit six units.

CS 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)
CS 503. Scientific Database Techniques (3)
Prerequisites: Computer Science 310 and Mathematics 245.
Fundamental data models for handling scientific data, including flat file, indexed compressed files, relational databases, and object-oriented databases, and their associated query technologies; e.g. file formats, input/output libraries, string searching, structured query language, object-oriented structured query language, hypertext markup language/common gateway interface, and other specialized interfaces. Designed for computational science students. Computer science majors must obtain adviser approval. See Computer Science 514.

CS 514. Database Theory and Implementation (3)
Prerequisites: Computer Science 310 and Mathematics 245.
Database systems architecture. Storage structures and access techniques. Relational model, relational algebra and calculus, normalization of relations, hierarchical and network models. Current database systems.

CS 520. Advanced Programming Languages (3)
Prerequisites: Computer Science 237, 310, and 320.
Object oriented programming, concurrent programming, logic programming. Implementation issues.
Computer Science

CS 530. Systems Programming (3)
Prerequisites: Computer Science 237 and 310.
Design and implementation of system software. Relationship between software design and machine architecture. Topics from assemblers, loaders and linkers, macro processors, compilers, debuggers, editors. Introduction to software engineering and review of programming fundamentals and object oriented concepts. Large project in object oriented programming is required. Not acceptable for the M.S. degree in computer science.

CS 532. Software Engineering (3)
Prerequisites: Computer Science 320 and 530.
Theory and methodology of programming complex computer software. Analysis, design, and implementation of programs. Team projects required.

CS 535. Object-Oriented Programming and Design (3)
Prerequisites: Computer Science 310 and 320.
Basic concepts of object-oriented programming: classes, objects, messages, data abstraction, inheritance, encapsulation. Object-oriented design methodology.

CS 537. Programming for GIS (3)
Prerequisite: Computer Science 310 or Geography 484.
Customization of Geographic Information Science application development platforms with emphasis on object oriented programming and component architecture. Prominent examples are Map Objects with Visual Basic, Map Objects with Java. Considerable programming effort required, especially in Graphical User Interface development.

CS 540. Software Internationalization (3)
Prerequisite: Computer Science 310.
Principles, techniques, and resources for design and implementation of software localizable to multiple languages and/or cultures, including detailed examination of internationalization features provided by one or more widely used modern programming languages.

CS 545. Introduction to Web Application Development (3)
(Offered only in the College of Extended Studies)
Prerequisite: Computer Science 310.

CS 546. Human Computer Interfaces (3)
Prerequisites: Computer Science 310 and 320.
Common interface idioms and support available for loose integration into aesthetically appealing and practical, efficient interaction between humans and machine. Editors, browsers, games, networking sites, posting boards, etc. Principles that are ubiquitous among tools for HCI development.

CS 547. Programming and Scripting Languages for Web Applications (3)
(Offered only in the College of Extended Studies)
Prerequisites: Computer Science 310 and 320.
Principles and practice of dynamic and scripting and functional languages used in web applications. Basic language concepts, data structures in dynamic languages, code structure, code quality, testing, string manipulation, dynamic code generation.

CS 550. Artificial Intelligence (3)
Prerequisites: Computer Science 108 and either Mathematics 245 or 523.

CS 553. Neural Networks (3)
Prerequisites: Computer Science 320 and Mathematics 254.
Principles of neural networks, their theory and applications.

CS 556. Robotics: Mathematics, Programming, and Control (3)
Prerequisites: Computer Science 320, Mathematics 254, knowledge of the C programming language.
Robotic systems including manipulators, actuators, sensors, and controllers. Kinematics of planar robots. Design and implementation of robot joint controllers. Robot programming languages and environments, and robot command interfaces.

CS 558. Computer Simulation (3)
Prerequisites: Computer Science 310 and Statistics 550.
Methodology of simulation for discrete and continuous dynamic systems. State-of-the-art programming techniques and languages. Statistical aspects of simulation. Students will design, program, execute, and document a simulation of their choice.

CS 559. Computer Vision (3)
Prerequisites: Computer Science 310 and Mathematics 254.
Algorithms and computer methods for processing of images. Visual perception as a computational problem, image formation, characterization of images, feature extraction, regional and edge detection, computer architectures for machine vision.

CS 560. Algorithms and Their Analysis (3)
Prerequisite: Computer Science 310.
Algorithms for solving frequently occurring problems. Analysis techniques and solutions to recurrence relations. Searching and sorting algorithms. Graph problems (shortest paths, minimal spanning trees, graph search, etc.). NP complete problems. Not acceptable for the M.S. degree in Computer Science.

CS 562. Automata Theory (3)
Prerequisite: Mathematics 245 or 521A.

CS 570. Operating Systems (3)
Prerequisites: Computer Science 310, 370, and knowledge of the C programming language.
File systems, processes, CPU scheduling, concurrent programming, memory management, protection. Relationship between the operating system and underlying architecture. Not acceptable for the M.S. degree in Computer Science.

CS 572. Microprocessor Architecture (3)
Prerequisites: Computer Science 370 and knowledge of the C programming language.

CS 574. Computer Security (3)
Prerequisites: Computer Science 310; Mathematics 245; Statistics 550; and credit or concurrent registration in Computer Science 570.
Principles of computer security and application of principles to operating systems, database systems, and computer networks. Topics include encryption techniques, access controls, and information flow controls.

CS 576. Computer Networks and Distributed Systems (3)
Prerequisite: Credit or concurrent registration in Computer Science 570.
Basic networking concepts to include seven-layer reference model, transmission media, addressing, subnetting and supernetting, networking devices, LANs and WANs, internetworking, distributed processing, and client-server model. Basic concepts and protocols of TCP/IP protocol suite and basic Internet services.

CS 580. Client-Server Programming (3)
Prerequisites: Computer Science 570 and knowledge of an object-oriented programming language.
Client-server model, networking protocols for client-server programs, algorithmic issues in client-server programs, client-server protocols, implementing client-server applications.
CS 581. Computational Linguistics (3)
(Same course as Linguistics 581)
Prerequisites: Computer Science 320 or Linguistics 571; Linguistics 570 or Mathematics 245.

CS 582. Introduction to Speech Processing (3)
Prerequisite: Computer Science 310.

CS 583. 3D Game Programming (3)
Prerequisite: Computer Science 310 or equivalent programming background.
Development of programming skills using software environment of a game engine and its scripting language. 3D concepts for game play, modeling, and programming. Roles needed in software development team. Contrast creation of original 3D object models for game world with incorporation of pre-created generic models.

CS 586. Advanced Topics in Computer Science (1-4)
Prerequisite: Consent of instructor.
Selected topics in computer science. May be repeated with the approval of the instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

For additional courses useful to computer scientists, see:
Mathematics 541. Introduction to Numerical Analysis and Computing
Mathematics 542. Introduction to Computational Ordinary of Differential Equations
Mathematics 579. Combinatorics

GRADUATE COURSES
Refer to the Graduate Bulletin.
The AGC Paul S. Roel Chair in Construction Engineering and Management Program is supported by an endowment established by generous gifts from William G. Leonhard, Jr. and his parents, William E. and Wyllis M. Leonhard. After Bill Leonhard graduated from San Diego State in 1964, he entered a career in the Air Force, rising to the rank of colonel. In January 1990, he retired from the Air Force, spent the next several years in private industry, and retired again in 1998. The current chair, Dr. Natalie Mladenov, promotes excellence in undergraduate education, research in environmental engineering, and conducts scholarly activities on the topic of water quality in environmental engineering.

Mission of the Department

The mission of the Department of Civil, Construction, and Environmental Engineering is to provide a high quality undergraduate and graduate education in the civil, construction, and environmental engineering areas as well as the advising and other support needed to ensure the students’ academic success and preparation for a productive engineering career. In addition, through research and continuing professional development, the faculty produce, enhance and promote new developments within their areas of expertise for the benefit of society and the furtherance of their profession.

The objective of the program is to give the student a basic knowledge of civil, construction, and environmental engineering, as well as the interdisciplinary background and skills to meaningfully participate in and contribute technical advances toward this profession. The program integrates technical aspects with studies in the social sciences and humanities to ensure appropriate sensitivity to socially related problems.

Instruction is given both at the undergraduate level, leading to the bachelor’s degree, and at the graduate level, leading to the master’s or doctoral degrees. The undergraduate program builds upon concepts of mathematics, physics, chemistry and basic engineering with specialized study in civil, construction, and environmental engineering. Engineering design is emphasized, particularly in conjunction with computer utilization and practical engineering problems. Aspects of safety and engineering ethics are woven throughout the program. Breadth and depth of social science and humanities studies is assured by department approved courses. Completion of the under-graduate degree prepares the student for an entry-level professional position in addition to informal or formal graduate studies.

Many students who complete the undergraduate programs of the department choose to continue their formal studies on a full- or part-time basis at San Diego State University or at another institution. (See the Graduate Bulletin for additional information.)

The civil, construction, and environmental engineering programs are enhanced through cooperation with the American Society of Civil Engineers, the American Public Works Association, the Associated General Contractors, the Chi Epsilon Civil Engineering Honor Society, and other national organizations who sponsor student chapters to further aid the student’s professional development. The chapters at San Diego State University have won many awards in regional and national competition with other schools throughout the country.

Educational Objectives

The construction engineering program is to reflect a collaborative effort between the construction industry and the university to provide an effective and vigorous workforce development for the continued growth of the San Diego region. The objectives of the construction engineering program are: 1) to provide graduates with the technical knowledge and skills required to practice construction engineering and manage construction projects; 2) to provide graduates with an understanding of the ethical, social, legal, and professional issues faced by the construction industry; and 3) to provide graduates with a solid foundation for graduate studies, continuing education, and life-long professional development.
Transfer Credit
No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of engineering work attempted at this university. At that time, and upon recommendation of the department, unaccredited work will be evaluated for full or partial credit.

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

I. Communication and Critical Thinking: 9 units
You may not use Credit/No Credit grades in this section.
1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)

II. Foundations of Learning: 29 units
A. Natural Sciences and Quantitative Reasoning (17 units):
   1. Physical Sciences (11 units)
      Engineering students will take Chemistry 202 (4 units) or Chemistry 200 (5 units).
      Physics 195 (3 units)
      Physics 195L (1 unit)
      Physics 196 (3 units)
   2. Life Sciences (3 units)
      Engineering students will take Biology 100 or 101.
   3. Laboratory (satisfied under A.1. above)
   4. Mathematics/Quantitative Reasoning
      Engineering students will take Mathematics 150, (3 units) applicable to General Education. You may not use Credit/No Credit grades in this section.
B. Social and Behavioral Sciences
   Construction engineering students will take Economics 102 (3 units)
C. Humanities (9 units)
   Complete three courses in three different areas. One of these courses and the one under IV.A. below must be taken in the same department.
   Construction engineering students will take Philosophy 101 (3 units), Construction Engineering 101 (3 units), and are strongly encouraged to take Spanish 101, 102, 201, 202, 211, 212, 281, or 282.

III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.

IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing (60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Total: 9 units; must include one course of cultural diversity.
A. Upper division Humanities
   Construction engineering students will take Philosophy 332 (3 units)
B. Upper division Social and Behavioral Sciences (3 units)
C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

The Major

Construction engineering is the application of engineering principles to the human endeavor of construction. The construction engineering major prepares students to undertake careers in the leadership of construction enterprises for all types of construction, including public and private sectors. It also provides an understanding of the interaction between society and the built environment and the ethical issues involved in that interaction.

Construction engineers are needed in both the private and public sectors. They are employed in a range of capacities across the industry, from construction managers, owner’s representatives, project engineers, among others. The dynamic and rapid expansion of the regional, national, and global economies and the continued need for housing and other facilities will drive demand for the degree in the foreseeable future.

Impacted Program
The construction engineering major is an impacted program. To be admitted to the construction engineering major, students must meet the following criteria:
- Complete with a grade of C or higher: Aerospace Engineering 200 or Mechanical Engineering 200; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit (Cr/NC);
- Have an overall cumulative GPA of 2.5.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Construction Engineering Major

With the B.S. Degree
(Major Code: 09254) (SIMS Code: 442010)
The program below describes 130 units required for the degree. Each course specifically listed in the program is required. In addition, the number of units specified in each elective category represents a minimum requirement.

Preparation for the Major.
Construction Engineering 101, 201, 280; Accountancy 201; Aerospace Engineering 200 or Mechanical Engineering 200; Biology 100 or 101; Chemistry 202 (or 200); Civil Engineering 121, 160 (or Statistics 250), 218, 220; Economics 102; Geological Sciences 100, 101; Mathematics 150, 151; Philosophy 101; Physics 195, 195L, 196. (59 units)
Aerospace Engineering 200 or Mechanical Engineering 200; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196 must be completed with a grade of C or higher. These courses cannot be taken for credit/no credit (Cr/NC).

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

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
Major. A minimum of 44 upper division units to include Construction Engineering 301, 310, 312, 320, 401, 430, 479, 480, 590; Civil Engineering 301, 302, 321, 462, 463, 495; and three units selected from the following:

Technical Electives. Construction Engineering 520; Civil Engineering 421, 465, 523, 525, 528.
Construction Engineering

Courses (CON E)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

NOTE: Proof of completion of prerequisites (copy of transcript) is required for all courses which list prerequisites.

LOWER DIVISION COURSES

CON E 101. Construction and Culture (3) [GE]
Cultural context of construction, emphasizing its centrality in evolution and expansion of built environments as expressions of ethical and historical value systems. Relationship between culture, geography, construction materials, and built expressions of cultural legacy. Interdependence of built environment and society.

CON E 201. Construction Concepts and Building Codes (3)
Concepts of control and information exchange in construction. Purpose and function of fundamental information flows, function, and development of construction-related codes and standards to protect public health and safety, compliance with requirements, and design using codes.

CON E 280. Construction Methods (3)
Components and methods of construction including earthwork; foundations; wood, steel, and concrete construction; roofing and cladding, interior construction. Field experience in conducting and/or observing construction operations. Concepts of production in a construction setting.

CON E 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES

(Intended for Undergraduates)

CON E 301. Construction Ethics, Law, and Contracts (3)
Prerequisites: Construction Engineering 101, 201, Philosophy 101. Legal and ethical environment of construction. Study of documents and common procedures in construction administration and their legal and ethical contexts for general contractors and subcontractors. Contract documentation, claim in various construction delivery methods.

CON E 310. Analysis and Design of Construction Operations (3)
Prerequisite: Construction Engineering 280. Properties and methods for use of construction equipment and integration of construction equipment into production system. Assessment of equipment needs and selection. Site utilization and layout planning, incorporating efficiency and safety of operations.

CON E 312. Mechanical and Electrical Principles for Construction (3)
Two lectures and three hours of laboratory. Prerequisites: Mathematics 151 and Physics 196. Engineering principles for mechanical, electrical, plumbing systems. Thermodynamics, energy principles, psychometrics. Electrical theory, circuits, motors. Static and dynamic principles for fluids, pipe flow. Mechanical and plumbing equipment.

CON E 320. Construction Estimating (3)
Two lectures and three hours of laboratory. Prerequisites: Credit or concurrent registration in Construction Engineering 310. Approved upper division engineering major, minor, or another major approved by the College of Engineering. Proof of completion of prerequisites required: Change of major form or other evidence of acceptable major code. Identifying and estimating time and cost requirements for construction operations based on drawings and specifications. Use computer applications for estimating.

CON E 401. Construction Planning and Scheduling (3)
Two lectures and three hours of laboratory. Prerequisites: Construction Engineering 320 and Civil Engineering 160 for construction engineering majors; Civil Engineering 160 and 321 for civil engineering majors. Fundamentals of scheduling logic including critical path method, deterministic and probabilistic scheduling, and impact of constraints. Development of construction plan and representation in schedule format using common computer applications used in industry.

CON E 430. Principles of Engineering Economy (3)

CON E 479. Construction Materials (3)
Two lectures and three hours of laboratory. Prerequisites: Chemistry 202 (or 200) and Civil Engineering 301 (or Mechanical Engineering 304). Selection, design and control of mixes of Portland cement and asphalt concrete. Properties of these and other materials used in construction.

CON E 480. Design of Temporary Structures (3)
Prerequisites: Civil Engineering 321 and 462. Design of structures for temporary support of constructed work, including scaffolding and formwork, bracing, and excavations. Influence of codes and standards on the design process, selection of degrees of safety, and concepts of liability.

UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

CON E 520. Environmentally Conscious Construction (3)
Two lectures and three hours of laboratory. Prerequisite: Construction Engineering 312 for construction engineering majors; Civil Engineering 444 for civil engineering majors; concurrent registration in Civil Engineering 495 for environmental engineering majors or Environmental Engineering 495. Design and design processes to target a sustainable structure. Construction practices associated with protection of environment. Application of industry standards for environmental and energy performance of buildings. Impacts on selection of methods, materials, and equipment for construction. Design of procurement and management systems to support environmentally conscious building. Commissioning and startup. (Formerly numbered Construction Engineering 420.)

CON E 590. Construction Management and Safety (3)
Prerequisites: Construction Engineering 401 and 430. Management and control of critical project processes for construction projects. Definition, planning, and execution of projects based on plan, estimate, and bid documentation. Fundamentals of construction safety planning, design, and requirements. (Formerly numbered Construction Engineering 490.)

For additional courses in the construction engineering program, refer to “Civil Engineering” in this section of the catalog.

GRADUATE COURSES

Refer to the Graduate Bulletin.
Counseling and School Psychology
In the College of Education

OFFICE: North Education 179
TELEPHONE: 619-594-6109 / FAX: 619-594-7025
http://go.sdsu.edu/education/csp/schoolpsychology.aspx

Accredited by the California Commission on Teacher Credentialing and the National Association of School Psychologists.

Faculty
Emeritus: Cummins, Feinberg, Hawley, Howard, Miller, O'Shaughnessy, Ramage, Robinson-Zaftau, Senour, Terry-Guyer, Thompson
Chair: Butler-Byrd
Professors: Ingraham, Monk
Associate Professors: Butler-Byrd, Green, Hatch, Lim, Taylor
Assistant Professors: Estrada, Lambros Ortega, Miller, Owen, Tran

Offered by the Department
Educational Specialist degree in school psychology.
Master of Arts degree in education.
Concentration in counseling.
Master of Science degree in counseling.
Concentration in school psychology.
Pupil personnel:
School counseling credential.
School psychology credential.
Minor in counseling and social change.

Counseling and Social Change Minor
(Minor Code: 08261) (SIMS Code: 331007)
The minor in counseling and social change consists of a minimum of 18 units, at least 12 units of which must be upper division selected from Counseling and School Psychology 320, 400, 401, 460, and three units selected from counseling and school psychology, child and family development, general studies, psychology, social work, sociology, or women's studies. Elective units must address central themes of the minor and be selected with consent of counseling and school psychology undergraduate adviser.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (CSP)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

UPPER DIVISION COURSES
(Intended for Undergraduates)
CSP 300. Stress Management and Life Planning (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II. B., Social and Behavioral Sciences.
Effects of stress on physical and psychological states and life choices. Stress management practices that contribute to optimal health and productive life planning.
CSP 320. Counseling Skills and Practice (3)
Basic counseling skills with focus on how they affect and may be applied within cultural interactions and for social change.
CSP 400. Counseling and the Helping Professions (3)
Serves as an introduction to the field of counseling and introduces the student to those professions considered to be helping professions.
CSP 401. Quest for Identity (3)
CSP 420. Popular Culture and Counseling (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.
Impact of popular culture on personal functioning and well-being. Meaning and salience of popular culture, social construction of popular culture in society, and convergence of popular culture and counseling.
CSP 460. Counseling and Social Change (3)
Role counselors and helping professionals play in addressing social justice issues pertaining to race and ethnicity, disability, gender and sexual orientation, socioeconomic disadvantage and research.
CSP 496. Experimental Topics (1-3)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degrees.
CSP 499. Special Study (1-3) Cr/NC
Prerequisites: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently. Individual study. Maximum credit six units.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)
CSP 596. Selected Studies (1-3)
Prerequisite: Consent of instructor.
A series of lecture and discussion sessions centering on current problems in counseling and guidance. Designed to serve the needs of any person desiring to keep informed of developments in this area. May be repeated with new content. See Class Schedule for specific content. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Criminal Justice

In the College of Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 100
TELEPHONE: 619-594-6224 / FAX: 619-594-1165

Faculty
Emeritus: Boostrom, Gazell, Gitchoff, Henderson, Rea, Sutton
Director: Henry
Professor: Henry
Associate Professors: Kaplan, McIlwain, Mobley, Nurge, Sabath
Assistant Professor: Chanzin

Offered by the School of Public Affairs
Major in criminal justice with the B.S. degree in applied arts and sciences.

The Major
The purpose of the criminal justice program is to provide current and future decision-makers in criminal justice with the foundation for critical and balanced as well as responsible and effective administrative responses to crime. As the systems designed to deliver justice services are continually asked to accomplish more with fewer resources, the need for able and professional administrators becomes more pressing. The mission of the program is to provide graduates with the background knowledge and skills to meet these challenges. Criminal justice majors with the B.S. degree have typically found employment in local, state, and federal criminal justice agencies or in private business or security positions (e.g., loss prevention). At the local level, graduates can begin service in various capacities with police, sheriff’s and marshal’s offices, probation, county supervisors, city administration, and criminal justice planning agencies. At the state level, graduates may enter the Highway Patrol, Alcohol Beverage Control, Attorney General’s Office, Department of Corrections, California Youth Authority, or related agencies. At the federal level, graduates are employed in agencies such as the FBI, Customs Service, Border Patrol, Secret Service, Drug Enforcement Agency, Naval Intelligence Service, Defense Investigative Services, Homeland Security, and Alcohol, Tobacco and Firearms (ATF).

A significant number of graduates of this program also enter law school after graduation or go on to graduate programs.

Impacted Program
The criminal justice major is an impacted program. To be admitted to the criminal justice major, students must meet the following criteria:

a. Complete with a grade of C or higher: Political Science 102; Sociology 101 and 102; and a 3-unit course in elementary statistics. These courses cannot be taken for credit/no credit (Cr/NC);

b. Complete a minimum of 60 transferable semester units;

c. Have a cumulative GPA of 2.80 or higher.

To complete the major, students must fulfill the degree requirements described in the catalog in effect at the time they are accepted into the premajor or major at SDSU and must be continuously enrolled.

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education courses will also fulfill a major preparation course requirements.

Criminal Justice Major
With the B.S. Degree in Applied Arts and Sciences

(Major Code: 21051) (SIMS Code: 666925)

All candidates for a degree in applied arts and sciences must complete the graduation requirements in the section of this catalog on “Graduation Requirements.”

A minor is not required with this major, but is allowed.

Preparation for the Major. Political Science 102, Sociology 101 and 102, and a three-unit course in elementary statistics (e.g., Sociology 201, Statistics 119, 250). (12 units)

These prerequisite courses may not be taken Cr/NC. The minimum grade in each class is C.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Criminal Justice 300, 301, 302, 303, 340, and one criminal justice practicum course selected from Criminal Justice 497, 498, 543, 550; International Security and Conflict Resolution 450. Additionally, students must complete two upper division three-unit elective courses in public administration. Students must complete 12 additional upper division units in accordance with the major academic plan, to include a minimum of six units of criminal justice electives.

Master Plan. Students should follow the Master Plan Advising Guide to ensure completion of major requirements. Contact the School for a copy of the guide or download it at http://spa.sdsu.edu/web/index.php/academic_programs/criminal_justice_undergraduate_program.

Courses (CJ)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

UPPER DIVISION COURSES
(Intended for Undergraduates)

CJ 300. Crime, Law, and Justice (3)
Prerequisite: Admission to the major or consent of instructor (nonmajors only).
Criminal justice-role of law in society, definition and explanations of criminal behavior, criminal justice system, methods of research, and policy.

CJ 301. Law in Society (3)
Prerequisite: Criminal Justice 300.
Theoretical study of law in society from classical social theorists. Major movements in legal studies during the last century. Comparative systems of law.

CJ 302. Crime and Behavior (3)
Prerequisite: Criminal Justice 300.
Major disciplinary paradigms used both to explain criminal behavior and to inform official criminal justice policy.

CJ 303. Criminal Justice and Social Control (3)
Prerequisite: Credit or concurrent registration in Criminal Justice 300.
Interrelationship of social control, social policy and administration of criminal justice in contemporary American society.
UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

CJ 510. Contemporary Issues in Law Enforcement (3)
Prerequisite: Criminal Justice 310.
Assessment of problems confronting administrators of law enforcement agencies and of recent efforts to enhance the capability of agencies to control criminal activity while guarding individual liberties.

CJ 520. Prosecutorial Function (3)
Prerequisite: Criminal Justice 300.
Prosecutor's function at local, state, and federal levels and in selected foreign nations, including appraisal of proposed national standards and goals for prosecutors.

CJ 531. Probation and Parole (3)
Prerequisite: Criminal Justice 300.
Application of planning, research, program development, and evaluation principles to field of criminal justice.

CJ 540. Applied Planning, Research, and Program Evaluation in Criminal Justice (3)
Prerequisite: Criminal Justice 300.
Interdisciplinary analysis of organized crime's impact on criminal justice and public policy on both domestic and international levels.

CJ 550. Study Abroad: Criminal Justice (3)
Prerequisites: Criminal Justice 301 and upper division standing.
Interdisciplinary social science analysis of illicit drug use, markets, and trafficking. Comparative assessment of the efforts of state and non-state actors to regulate, counter, and disrupt illicit drug use, markets, and trafficking.

CJ 570. Organized Crime: Domestic and International Perspectives (3)
Prerequisite: Criminal Justice 300.
Interdisciplinary analysis of organized crime's impact on criminal justice and public policy on both domestic and international levels.

CJ 571. Drugs: Domestic and International Perspectives (3)
Prerequisite: Upper division major or graduate standing.
Advanced interdisciplinary social science analysis of social networks engaged in criminal activity and intelligence and security policies, as well as the actors that comprise these networks. Social network and structural analysis methods.

CJ 596. Selected Topics in Criminal Justice (1-3)
Prerequisite: Criminal Justice 300.
Selected current topics in criminal justice. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Dance
In the College of Professional Studies and Fine Arts

OFFICE: Music 112
TELEPHONE: 619-594-6031 / FAX: 619-594-1692
E-MAIL: music.dance@sdsu.edu

Faculty
Emeritus: Hempel, Nunn, Sandback, Willis
Director: Friedrichs (Interim)
Division Coordinator: Alter
Associate Professors: Alter, Seitles
Lecturer: Irey

Offered by the School of Music and Dance
Major in dance with the B.F.A. degree in applied arts and sciences.
Major in dance with the B.A. degree in liberal arts and sciences.
Minor in dance.

The Major
Dance serves to enhance the lives of all peoples and provides a challenging avenue of creative expression for those who wish to pursue its serious study. This program promotes dance as a communicative and expressive medium uniquely effective in the conveyance of meaning, emotion, and cultural values. Dance is a rigorous and specialized area of the performing arts, demanding a high level of physical preparation as well as a thorough understanding of aesthetics.

The Bachelor of Fine Arts in Dance provides professional preparation for dance majors in choreography, performance, scholarship, and teaching; more specifically, as choreographers and dancers with professional companies, teachers in community and recreation programs, schools and colleges, movement educators, and candidates for graduate work in dance scholarship.

The Bachelor of Arts in Dance is a liberal arts degree for those students who seek an understanding of and an intimate orientation to the discipline of dance without professional goals. This degree enables students to obtain this broad understanding.

A dance minor is available for those students whose primary interest is in another department.

As members of the University Dance Company, students perform in faculty choreography and repertory works set by distinguished guest artists in periodic workshops and residencies. Each B.F.A. student also stages original work in a senior concert. Dance activity courses provided in the school offer experiences for the general student population in contemporary modern and ballet.

Entrance and Progression Requirements
In addition to CSU and SDSU requirements, incoming students requesting the B.F.A. program in Dance will be required to perform an audition before the faculty in order to be admitted to the program. The audition will consist of:

- A class demonstrating contemporary modern technical skills and a brief creative study involving improvisational choices.
- Students will also have the option (not required) of performing a two-minute dance in modern dance, ballet, or jazz.

The following qualities will be assessed:
- Basic technical skills in dance, and the aptitude for mastering physicality, musicality, phrasing and dynamics.
- Attention and the comprehension of instructions.
- Creativity and enthusiasm.
- Basic performance skills utilizing focus and presence.

In order to continue in the B.F.A. program in dance, students must demonstrate a continuing progress in all areas of skill development, choreography, musical assessment, etc., in the following ways:
- Successful completion of all coursework as assessed through written examination and through continuous performance evaluation each semester.
- A commitment and respect for the disciplined study of dance.
- Junior Level Review: Students must successfully pass this review to continue into the junior year. Faculty will formally review coursework and assess videotape samples of choreography and technique from the freshman and sophomore years.

Impacted Program
The dance major is an impacted program. To be admitted to the dance major, students must meet the following criteria:

- a. Complete preparation for the major;
- b. Complete a minimum of 60 transferable semester units;
- c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Dance Major
With the B.F.A. Degree in Applied Arts and Sciences
(Major Code: 10082) (SIMS Code: 666571)

All candidates for a bachelor of fine arts degree must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” The maximum number of upper division units in dance courses acceptable toward the bachelor of fine arts degree is 70.

Entrance and placement auditions are required.

A minor is not required with this major.

All dance majors are required to crew performances. Refer to the Dance Student Handbook for detailed information.

For information regarding this program contact the dance coordinator or the School of Music and Dance.

Preparation for the Major. Dance 100D, 171, 181, 183, 210, 221 (four units), 241 (12 units), 250 (six units), 289, 290 [or Music 290]; Biology 100. (40 units)

Dance 250, 290 [or Music 290] must be completed with a grade of C (2.0) or better.

To qualify for upper division study, students must pass a Junior Level Review.

Language Requirement. Competency (equivalent to that which is normally attained in two semesters of college study) in a foreign language.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 41 upper division units to include Dance 350, 356, 365 (two units), 371, 380, 385, 390 [or Music 390], 410, 421 (four units), 441 (12 units), 453, 471, 481, and one unit of upper division dance electives.
Dance Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 10081) (SIMS Code: 666517)

All candidates for a degree in liberal arts and sciences must complete the requirements listed in the section of this catalog on “Graduation Requirements.” No more than 51 units in dance courses can apply to the degree.

Entrance and placement auditions are required. A minor is not required with this major.

All dance majors are required to crew performances. Refer to the Dance Student Handbook for detailed information.

For information regarding this program contact the dance coordinator or the School of Music and Dance.

Preparation for the Major. Dance 171, 181, 221 (four units), 241 (six units), 250 (six units), 289, 290 [or Music 290]; Biology 100. (29 units)

Dance 290 [or Music 290] must be completed with a grade of C (2.0) or better.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 25 upper division units to include Dance 350, 371*, 380, 385, 390 [or Music 390], 410, 441 (six units), 481; and three units of upper division dance electives.

Dance Minor

(Minor Code: 10081) (SIMS Code: 666516)

Entrance and placement auditions are required.

For information regarding this program contact the dance coordinator or the School of Music and Dance.

The minor in dance consists of a minimum of 23 units in dance, of which nine units must be upper division, to include Dance 181, 183, 221, 241, 250, 350, 380; and four units selected from Dance 371*, 471 or 481. All minors are required to usher for an hour as per semester.

Credit earned in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

* Additional prerequisite required.

Courses (DANCE)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

DANCE 100. Dance Activity (1)

Two hours of activity.

Open to all students. Provides physically skilled instruction and knowledge of yoga and modern dance forms.

D. Yoga for Dancers

I. Beginning Modern Dance

DANCE 165. University Dance Company (1-2) Cr/NC

More than three hours of activity per week.

Prerequisites: Audition and approval by dance faculty.

Performing experience in University Dance Company including concert performances of dance repertory, production of choreographic works, presentation of master classes and workshops, and participation in major production. Maximum credit four units.

DANCE 171. Digital Production Technology for Dancers (2)

One lecture and two hours of activity.

Digital media and technical applications as applied to dance production.

DANCE 181. Introduction to Dance (3) [GE]

Foundations of dance in Western civilization. Dance as art, therapy, fitness, ritual, and social discourse. Analysis of dance in film, video, and live performance with an appreciation for artistic intent, technique, and style.

DANCE 183. Rhythmic Analysis (2)

One lecture and two hours of activity.

Exploration of music as related to movement; rhythm and simple music forms applied to all movement activities; percussion accompaniment; writing of percussion scores; music repertoire for dance.

DANCE 210. Performance Forum (2)

One lecture and two hours of activity.

Prerequisite: Consent of instructor.

Dance master classes, workshops, as related to dance performance, style, and repertoire. Maximum credit four units.

DANCE 221. Ballet I (2)

Four hours of activity.

Ballet skills for dance majors and minors emphasizing placement, coordination, ballet terminology, and technical principles. Maximum credit four units.

DANCE 241. Modern Dance I (3)

Six hours of activity.

Development of modern dance skill with emphasis on function of alignment and articulation of extremities in motion. Maximum credit 12 units.

DANCE 250. Dance Making I (3)

One lecture and four hours of activity.

Prerequisite: Dance 241.

Traditional and contemporary principles, methods and practices of choreography, and improvisational dance making. Dance activity explores practices and orchestrates all aspects of composition and dance performance. May be repeated once. Not open to students with credit in Dance 253, 255, and 256. (Formerly numbered Dance 253 and 255 or 253 and 256.)

DANCE 289. Embodied Anatomy (3)

Two lectures and two hours of activity.

Prerequisite: Biology 100.

Experiential and empirical overview of human anatomy and kinesiology. Movement and awareness practices from contemplative and somatic methodologies facilitating subjective, first-person study. Objective analyses include images, models, and physical demonstrations of basic biomechanics.

DANCE 290. Body Modalities (2)

(Same course as Music 290)

One lecture and two hours of activity.

Alternative movement theory systems including an introduction to body modalities of yoga, Pilates, ideokinesis, Alexander and Feldenkrais techniques, Laban movement analysis and authentic movement. Maximum credit four units.

DANCE 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496; 956 courses applicable to a bachelor's degree.

DANCE 299. Special Study (3)

Prerequisites: Consent of School of Music and Dance director, and instructor.

Individual study.
DANCE 350. Dance Making II (3)
One lecture and four hours of activity.
Prerequisites: Dance 250 and upper division standing in dance. Traditional and contemporary principles, methods and practices of choreography, and improvisational dance making. Dance activity explores practices and orchestrates all aspects of composition and dance performance. (Formerly numbered Dance 353 and 354.)

DANCE 356. Contact Improvisation (2)
One lecture and two hours of activity.
Prerequisite: Dance 250 with a grade of C or better.
Weight sharing, gravity, and momentum. Duet improvisational skills to include partnering work that requires trust, responsiveness, and immediacy. Maximum credit six units.

DANCE 365. University Dance Company: Major Performance (1-2) Cr/NC
More than three hours of activity per week.
Prerequisites: Open only to dance majors. Audition and approval by dance faculty.
Practical experience in University Dance Company including concert performances of dance repertory, production of choreographic works, presentation of master classes and workshops, and participation in major production. Students must enroll in a minimum of two semesters. Maximum credit six units.

DANCE 371. Video Dance Production (2)
One lecture and two hours of activity.
Prerequisite: Dance 171.
Technical applications as applied to dance and dance production. Continuation of Dance 171.

DANCE 380. Dance History: Contemporary Global Contexts (3)
Prerequisite: Dance 181.
History of dance from early twentieth century to present in a global context. Political, economic, and cultural forces that have shaped the development of contemporary dance as an art form.

DANCE 382. Dance in World Cultures (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Dance in selected cultures; geographic, historical, social, and aesthetic factors which have shaped development and function.

DANCE 385. Dance Pedagogy (2)
Four hours of activity.
Prerequisites: Upper division standing and passing junior level assessment.
Teaching theory as applied to ballet and modern dance for adult populations. (Formerly numbered Dance 285.)

DANCE 390. Somatic Practices for Performers (2)
(Same course as Music 390)
One lecture and two hours of activity.
Prerequisite: Dance 290 or Music 290 with a grade of C or better.
Analysis, investigation, and physical realization of movement theory systems to include body modalities of yoga, Pilates, Alexander technique.

DANCE 396. Dance Internship (1-3)
Prerequisites: Upper division standing and consent of dance director. Open only to dance majors and minors.
Supervised practical experience in dance studio management and instruction. Maximum credit three units.

DANCE 410. Performance Forum (2)
One lecture and two hours of activity.
Prerequisite: Consent of instructor.
Dance master classes, workshops, as related to dance performance, style, repertoire. Maximum credit four units.

DANCE 421. Ballet II (2)
Four hours of activity.
Prerequisite: Dance 221.
Ballet skills for dance majors emphasizing turns, jumps, batterie, extended sequences, and movement quality. Maximum credit four units.

DANCE 441. Modern Dance II (3)
Six hours of activity.
Prerequisite: Dance 241.
Advanced modern dance techniques based on skills developed in Dance 241 with emphasis on performance qualities in projection, vitality, and executing. Maximum credit 12 units.

DANCE 453. Senior Capstone (2)
One lecture and two hours of activity.
Prerequisite: Dance 350.
Choreography of solo and group works utilizing symbiotic relationship of movement, sound, lighting, costuming, and other interdisciplinary media. Presentation of a concert.

DANCE 471. Digital Media Dance Production (2)
One lecture and two hours of activity.
Prerequisite: Dance 371.
Lighting, set, multi-media, and design for dance. Study of concert multi-media and production for dance.

DANCE 481. Dance Aesthetics and Criticism (2)
Prerequisite: Dance 380.
Philosophy and aesthetics of dance. Historical foundations of dance criticism. Major contemporary schools of thought. Professional preparation and function of the dance critic.

DANCE 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

DANCE 499. Special Study (1-3)
Prerequisite: Consent of the dance director.
Individual study. Maximum credit six units.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Dual Language and English Learner Education
In the College of Education

OFFICE: Education and Business Administration 248
TELEPHONE: 619-594-5155 / FAX: 619-594-1183
http://go.sdsu.edu/education/dle

Accredited by the California Commission on Teacher Credentialing.

Faculty
Emeritus: Espinosa, Jones, Kuhlman, Ochoa
Chair: Alfaro
Professor: Cadiero-Kaplan
Associate Professor: Alfaro
Lecturers: Aste, Collins-Parks, Maheronnaghsh, Ramirez

Offered by the Department
Master of Arts degree in education.

Concentration in dual language and English learner education
Multiple subject bilingual teaching credential.
Single subject bilingual teaching credential.
Bilingual multiple subject and special education credential
(refer to the Graduate Bulletin).
Dual language for academic literacy certificate
(refer to the Graduate Bulletin).
English language development for academic literacy certificate
(refer to the Graduate Bulletin).

The Major
The Dual Language and English Learner Education (DLE) Department offers programs leading toward the bilingual credential for single and multiple subject (secondary and elementary).

The Dual Language and English Learner Education Department and the College of Education is committed to the preparation of teachers for bilingual authorization as the most desirable credential in California. Furthermore, the university is committed to developing leaders in cultural, economic, educational, scientific, social, and technical fields, as well as addressing the linguistic diversity of school communities. The university is primarily responsive to the people of California, as well as to the needs of the regional, national, and international communities it serves.

Bilingual Credential Global Competence Requirement:
Both single and multiple subject credential candidates must meet the global competence requirement. Refer to Dual Language and English Learner Education Department website for details.

Multiple Subject Bilingual 2042 Credential (Elementary K-6 Education): Spanish, Arabic, and Mandarin Emphasis
(Credential Code: 00200)

The Multiple Subject Bilingual 2042 Credential (Elementary K-6 Education) is available to students interested in teaching in a bilingual Spanish, Arabic, or Mandarin elementary school classroom. This credential authorizes the holder to teach in any self-contained bilingual or regular classroom in which one teacher is responsible for all the subjects commonly taught in the elementary schools. Because courses on methods of teaching subject areas are taught in Spanish, Arabic, or Mandarin, as well as English, candidates must meet the respective language of emphasis proficiency requirements as outlined below.

Candidates who will pursue this credential need to specify “Multiple Subject Credential – Bilingual” in the application for graduate admission to SDSU (Code: 00200). Students applying for admission should electronically submit the university application available at http://www.csumentor.edu along with the $55 application fee.

All applicants must submit admissions materials separately to SDSU Graduate Admissions and to the Dual Language and English Learner Education Department.

Graduate Admissions
The following materials should be submitted as a complete package directly to:
Graduate Admissions
Enrollment Services
San Diego State University
San Diego, CA 92182-7416

(1) Official transcripts (in sealed envelopes) from all postsecondary institutions attended;
Note:
• Students who attended SDSU need only submit transcripts for work completed since last attendance.
• Students with international coursework must submit both the official transcript and proof of degree. If documents are in a language other than English, they must be accompanied by a certified English translation.

(2) TOEFL score, if medium of instruction was in a language other than English (http://www.ets.org, SDSU institution code 4682)

Dual Language and English Learner Education Department

(1) Complete online program application at https://app.applyyourself.com/?id=sdso-grad;
(2) California Basic Educational Skills Test (CBEST) scores;
(3) Demonstration of Language and Cultural Proficiency:
• Spanish: Completion of DLE 415 or copies of CSET LOTE subtests III and V for Spanish language emphasis;
• Mandarin: Copy of CSET LOTE subtests III and V for language emphasis;
• Arabic: Copy of CSET LOTE subtests II and V for language emphasis;

(4) TB test results;
(5) Two letters of recommendation, one of which must be from an elementary teacher if single subject or from a secondary teacher if single subject;
(6) Verification of early field experience (30 hours for multiple subject) or completion of DLE 415;
(7) Certificate of clearance (live scan);
(8) CPR that includes infant/child/adult;
(9) Autobiography/Goals and Philosophy. Candidates must complete a 1-1/2 page essay of their goals and philosophy in education and a 1-1/2 page autobiography in language of emphasis and English.
(10) California Subject Examination for Teachers (CSET) scores.

Standards for Admission
1. CBEST. Students must pass the California Basic Educational Skills Test prior to admission to the bilingual credential program. This examination is required by the Commission on Teacher Credentialing. Booklets containing registration forms and test information are available at http://www.cbest.nesinc.com.

SDSU General Catalog 2015-2016 211
2. Subject Matter Competency. Students must verify completion of subject matter competency in diversified subjects commonly taught in self-contained classrooms prior to admission to the bilingual credential program. To be admitted to the bilingual credential program, a candidate shall have achieved a passing score on the California Subject Examination for Teachers (CSET) that is required for the credential sought. Registration information and materials for the CSET are available at http://www.cset.nesinc.com.

3. Prerequisite Courses. The following courses must be completed with a grade of "C" or better prior to admission to the program, but may be in progress at the time of application or taken in the term immediately prior to the program start date.

   Liberal Studies Majors.
   
<table>
<thead>
<tr>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DLE 515</td>
<td>Multilingual Education: Theory and Practice for Bilingual Teachers</td>
</tr>
<tr>
<td>ED 451</td>
<td>Introduction to Multicultural Education</td>
</tr>
<tr>
<td>SPED 500</td>
<td>Human Exceptionality</td>
</tr>
<tr>
<td>TE 280</td>
<td>Health Education for Teachers</td>
</tr>
</tbody>
</table>

   Non-Liberal Studies Majors (must take the above and below prerequisites).
   
<table>
<thead>
<tr>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 210**</td>
<td>Number Systems in Elementary Education</td>
</tr>
</tbody>
</table>

** With approval of the mathematics adviser, any of the following mathematics courses may be substituted for Mathematics 210: Mathematics 124, 150, 312.

4. Grade Point Average. Candidates must have cumulative grade point averages (GPAs) within the upper one-half of undergraduate students in the candidates' majors. GPAs vary according to discipline and graduating institution. GPA requirements are available in the Dual Language and English Learner Education Department (DLE), EBA-248. Candidates must have attained a grade point average of at least 2.67 overall or 2.75 in the last 60 semester or 90 quarter units attempted. Candidates are required to submit official transcripts from all colleges and universities attended and unofficial SDSU transcripts for GPA calculations.

5. Letter of Recommendation. Two professional references and one letter of recommendation must be submitted attesting to the applicants following characteristics: (a) attitude, aptitude and ability to teach children; (b) personality and character; (c) academic ability. At least one letter should be from an elementary school teacher the student has worked with and the others may be from faculty and administrators.

6. Tuberculin Clearance. Evidence of a negative tuberculin test (these tests are valid for four years and must be in effect during the time that candidates are enrolled in the credential program). Clearance statements may be secured from Health Services, private physicians or HMOs, or public health agencies.

7. Early Field Experience. Applicants must provide evidence of a minimum of 30 hours of experience with students in typical elementary classroom settings within the last three years. Evidence must be documented.

8. Written Statement of Professional Goals and Philosophy and Interview. Candidates will have an interview with the admissions and retention committee of the DLE Department.

9. California Certificate of Clearance. This certificate represents a background clearance and check conducted by the State Department of Justice and Federal Bureau of Investigation. Turnaround time for the clearance can take as long as eight months. Possessors of K-12 California credentials may satisfy this requirement by submitting copies of those certificates.

10. Credential Advising Appointment. Each applicant must meet with a faculty adviser to plan an appropriate program, which includes a minimum of 31 units as defined by the California Commission on Teacher Credentialing. A copy of the application must be provided to the DLE Department.

11. Language and Culture Proficiency. All candidates must meet Language Proficiency and Cultural Awareness requirements for the language of emphasis to meet their specific Bilingual Authorization through DLE 415 or CSET LOTE examinations III and V.

12. Reading Instruction Competence Assessment (RICA). California Education Code Section 44383 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 possession the knowledge and skills important for the provision of effective reading instruction to students. The RICA requirement applies to candidates who did not complete all credential requirements prior to October 1, 1998. Candidates must have passed the RICA in order to be able to file for the credential.

13. Appeals Process. Candidates who do not meet all the admission requirements may petition the DLE Department Admissions and Retention Committee for individual consideration; petition letters must be submitted concurrently with the application packets.

14. Application. Applicants should complete application procedures the semester prior to being in the credential program. Check the department website for current deadline information: http://go.sdstate.edu/education/dle/bilingual_credential.aspx. In addition to the minimum admissions standards identified above, the DLE Department Admissions and Retention Committee may also consider qualifications such as previous teaching experience and relevant working experience with children. Due to the number of applicants, application to the program does not ensure admission.

After admission students will meet with the program coordinator to plan an appropriate program which includes a minimum of 31 units as defined by the California Commission on Teacher Credentialing.

Multiple Subject Bilingual 2042 Program

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DLE 523</td>
<td>Psychological Foundations for Biliteracy Teachers in K-6 Classrooms</td>
</tr>
<tr>
<td>DLE 532</td>
<td>Biliteracy Teaching in Language Arts for Elementary Students</td>
</tr>
<tr>
<td>DLE 910</td>
<td>Teaching Mathematics to Bilingual Students</td>
</tr>
<tr>
<td>DLE 911</td>
<td>Teaching Social Studies to Bilingual Students</td>
</tr>
<tr>
<td>DLE 912</td>
<td>Teaching Science to Bilingual Students</td>
</tr>
<tr>
<td>DLE 915A</td>
<td>Teaching and Learning in the Content Area: English Language Development/SDAIE: Multiple Subjects</td>
</tr>
<tr>
<td>DLE 931</td>
<td>Skills in Teaching Reading to Bilingual Elementary Students</td>
</tr>
<tr>
<td>DLE 954</td>
<td>Classroom Organization for Democratic Teaching in Bilingual Classrooms</td>
</tr>
<tr>
<td>DLE 960</td>
<td>Professional Seminar for Bilingual Teacher Candidates (Cr/NC)</td>
</tr>
<tr>
<td>DLE 961</td>
<td>Practicum in Elementary Bilingual Classroom (Cr/NC)</td>
</tr>
<tr>
<td>DLE 962</td>
<td>Student Teaching for Elementary Bilingual Students II (Cr/NC)</td>
</tr>
<tr>
<td>ED 970</td>
<td>Teaching Event Assessment (Cr/NC)</td>
</tr>
</tbody>
</table>

Preliminary 2042 Credential Requirements

1. A bachelor's degree (or higher) with any major other than education.
2. Completion of an approved program of professional education. (See Department of Dual Language and English Learner Education for further information.)
3. Passage of Multiple Subject/CSET.
4. Demonstrated knowledge of principles and provisions of United States Constitution through successful completion of three-unit college level course or examination. Courses are listed in General Catalog section on "Graduation Requirements," IV. American Institutions Requirement.
5. Passage of California Basic Educational Skills Test (CBEST).
6. Passage of Reading Instruction Competence Assessment (RICA) Test.
7. Demonstrated knowledge of the needs of and methods of providing educational opportunities to individuals with exceptional needs: Special Education 500.
8. Demonstrated knowledge of computer hardware, software, and applications to educational/classroom use (computer literacy).
9. Knowledge of health education in California, including substance abuse and nutrition: Teacher Education 280 – Health Education for Teachers (1 unit) and verification of CPR competency.
10. Successful completion of a California Teacher Credentialing approved Teacher Performance Assessment (edTPA or PACT).
NOTE: Undergraduate students in their final semester prior to obtaining a baccalaureate degree may sign up for concurrent post-baccalaureate credit as explained in the section of this catalog on "General Regulations."

According to SB 2042 legislation, teachers will be able to earn Professional Clear Credentials upon successful completion of induction programs sponsored by their employers and approved by the California Commission on Teacher Credentialing.

To be recommended for the bilingual authorization, candidates must meet the language and cultural proficiency requirements.

Single Subject Bilingual 2042 Credential (Secondary Education Grades 6-12): Spanish Emphasis
(Credential Code: 00100)

The Single Subject Bilingual (Spanish) Teaching Credential (Secondary Education) is available for students interested in teaching in a bilingual classroom or secondary school classroom. This credential authorizes the holder to teach in any self-contained bilingual or regular classroom in which one teacher is responsible for teaching the given subject area.

Candidates who pursue this credential need to specify “Single Subject Bilingual” in the application for graduate admission to SDSU (Code: 00100). Students applying for admission should electronically submit the university application available at http://www.csumentor.edu along with the $55 application fee.

All applicants must submit admissions materials separately to SDSU Graduate Admissions and to the Dual Language and English Learner Education Department.

Graduate Admissions

The following materials should be submitted as a complete package directly to:

Graduate Admissions
Enrollment Services
San Diego State University
San Diego, CA 92182-7416

(1) Official transcripts (in sealed envelopes) from all postsecondary institutions attended:
Note:
• Students who attended SDSU need only submit transcripts for work completed since last attendance.
• Students with international coursework must submit both the official transcript and proof of degree. If documents are in a language other than English, they must be accompanied by a certified English translation.

(2) TOEFL score, if medium of instruction was in a language other than English (http://www.ets.org, SDSU institution code 4682).

Dual Language and English Learner Education Department

(1) Complete online program application at https://app.applyyourself.com/?id=sdsu-grad;
(2) California subject examination for teachers (CSET) scores or adviser recommendation;
(3) California Basic Educational Skills Test (CBEST) scores;
(4) Demonstration of Language and Cultural Proficiency:
• Spanish: Completion of DLE 415 or copies of CSET LOTE subtests III and V for Spanish language emphasis;
(5) TB verification;
(6) Two letters of recommendation, one of which must be from an elementary teacher if multiple subject or from a secondary teacher if single subject;
(7) Verification of early field experience;
(8) Certificate of clearance (live scan);
(9) CPR that includes infant/child/adult;
(10) Autobiography/Goals and Philosophy. Candidates must complete a 1-1/2 page essay of their goals and philosophy in education and a 1-1/2 page autobiography in Spanish and English.

Standards for Admission

1. CBEST. Students must pass the California Basic Educational Skills Test (CBEST) prior to admission to the Single Subject Bilingual Emphasis credential program. Candidates are urged to take this examination as early as possible. This examination is required by the California Commission on Teacher Credentialing. Booklets containing registration forms and test information are available at http://www.cbest.nesinc.com.

2. Subject Matter Competency. Students must verify competency in a specified single subject area through a university assessment process which consists of reviewing coursework for completion of an approved teaching major or its equivalent at San Diego State University or another approved California teacher-training institution or through California Subject Examinations for Teachers (CSET). Competency will be assessed and verified by subject matter departments at SDSU. Requirements for the various single subject majors are listed with the academic majors in the General Catalog. Test scores submitted for verification of subject matter competency are valid for five years from the date of the examination. Information and registration materials are available at http://www.cset.nesinc.com.

3. Prerequisite Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DLE 515 Multilingual Education: Theory and Practice for Teachers</td>
<td>3</td>
</tr>
<tr>
<td>ED 451 Introduction to Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 450 Classroom Adaptations for Special Populations</td>
<td>3</td>
</tr>
<tr>
<td>TE 280 Health Education for Teachers</td>
<td>1</td>
</tr>
</tbody>
</table>

4. Grade Point Average. Candidates must have cumulative grade point averages (GPAs) within the upper one-half of undergraduate students in the candidates’ majors. GPAs vary according to discipline and graduating institution. GPA requirements are available in the Dual Language and English Learner Education (DLE), EBA-248. Candidates must have attained a grade point average of at least 2.67 overall or 2.75 in the last 60 semester or 90 quarter units attempted. Candidates are required to submit official transcripts from all colleges and universities attended and unofficial SDSU transcripts for GPA calculations.

5. Letter of Recommendation. Two professional references and one letter of recommendation must be submitted attesting to the applicant’s following characteristics: (a) attitude, aptitude and ability to teach children; (b) personality and character; (c) academic ability. Letter of recommendation should be from a school teacher with whom the student has worked and the others may be from faculty and administrators.

6. Tuberculin Clearance. Evidence of a negative tuberculin test (these tests are valid for four years and must be in effect during the time that candidates are enrolled in the credential program). Clearance statements may be secured from Health Services, private physicians or HMOs, or public health agencies.

7. Early Field Experience. Applicants must provide evidence of a minimum of 30 hours of experience with adolescent students in typical classroom settings within the three years. Evidence must be documented.

8. Oral English and Written Statement of Professional Goals and Philosophy. Have an interview with the admissions and retention committee of the Dual Language and English Learner Education Department.

9. California Certificate of Clearance. This certificate represents a background clearance and check conducted by the State Department of Justice and Federal Bureau of Investigation. Turnaround time for the clearance can take as long as eight months. Possessors of K-12 California credentials may satisfy this requirement by submitting copies of those certificates. Candidates must submit the application directly to the California Commission on Teacher Credentialing. A copy of the application must be provided to the Dual Language and English Learner Education Department.
10. Credential Advising Appointment. Each applicant must meet with a faculty adviser to plan an appropriate program, which includes a minimum of 31 units as defined by the Commission on Teacher Credentialing. Appointments can be made in EBA-248, telephone 619-594-6320.

11. Language and Culture Proficiency. All candidates must meet Language Proficiency and Cultural Awareness requirements for the language of emphasis to meet their specific bilingual authorization through DLE 415 or CSET LOTE III and V.

12. Appeals Process. Candidates who do not meet all the admission requirements may petition the Dual Language and English Learner Education Department Admissions and Retention Committee for individual consideration; petition letters must be submitted concurrently with the application packets.

13. Application. Applicants should complete application procedures the semester prior to beginning the credential program. Check the department website for current deadline information: http://go.sdsu.edu/education/dle/bilingual_credential.aspx.

In addition to the minimum admissions standards identified above, the Dual Language and English Learner Education Department Admissions and Retention Committee may also consider qualifications such as previous teaching experience and relevant working experience with children. Due to the number of applicants, application to the program does not ensure admission.

After admission students will meet with the program coordinator to plan an appropriate program which includes a minimum of 31 units as defined by the California Commission on Teacher Credentialing.

**Single Subject Bilingual 2042 Program**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DLE 400</td>
<td>The Secondary School and Bilingual Education................</td>
<td>3</td>
</tr>
<tr>
<td>DLE 524</td>
<td>Psychological Foundations for Bilingual Teachers in Grades 7-12</td>
<td>1-4</td>
</tr>
<tr>
<td>DLE 653</td>
<td>Language Development in K-12 Multilingual Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>DLE 915B</td>
<td>Teaching and Learning in the Content Area: English Language Development/SDAIE: Single Subjects</td>
<td>3</td>
</tr>
<tr>
<td>DLE 933</td>
<td>Skills in Teaching Reading to Bilingual Secondary Students</td>
<td>3</td>
</tr>
<tr>
<td>DLE 954</td>
<td>Classroom Organization for Democratic Teaching in Bilingual Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>DLE 960</td>
<td>Professional Seminar for Bilingual Teacher Candidates (Cr/NC)</td>
<td>1-4</td>
</tr>
<tr>
<td>DLE 963</td>
<td>Practicum in Secondary Bilingual Classroom (Cr/NC)</td>
<td>3-4</td>
</tr>
<tr>
<td>DLE 964</td>
<td>Student Teaching for Bilingual Secondary Students II</td>
<td>8-12</td>
</tr>
<tr>
<td>ED 970</td>
<td>Teaching Event Assessment (Cr/NC)</td>
<td>3</td>
</tr>
<tr>
<td>TE 914</td>
<td>Teaching and Learning in the Content Area: Major</td>
<td>3</td>
</tr>
</tbody>
</table>

**Preliminary Credential Requirements**

1. A bachelor's degree with one of the approved single subject majors listed in the School of Teacher Education single subject teaching credential catalog section. Credentials can be granted only in the designated single subject credential areas.

2. Completion of an approved program of professional education. (See Dual Language and English Learner Education Department for further information about the approved programs.)

3. MAJOR ADVISER'S RECOMMENDATION. Passage of subject matter examination(s) or waiver thereof through completion of one of the approved single subject credential majors with a written recommendation from the Ryan major adviser.

Candidates applying for the Single Subject Credential program after August 31, 1995 who have not satisfied subject matter competency through coursework or PRAXIS examination(s), must take and pass a new set of examinations for the Single Subject Credential in seven areas: biology*, chemistry*, English language arts, geoscience#, mathematics, physics*, and social science. Candidates for the science authorizations (noted with #) must also take and pass a general science examination. Candidates should check with the Dual Language and English Learner Education Department (DLE) adviser, EBA-248, to clarify the appropriate means for satisfaction of the subject matter competency requirement.

4. Demonstrated knowledge of principles and provisions of United States Constitution through successful completion of three-unit college level course or examination. Courses are listed in General Catalog section on “Graduation Requirements,” IV. American Institutions Requirement.

5. Passage of California Basic Educational Skills Test (CBEST).

6. Completion of an approved fifth year program (a minimum of 30 upper division or graduate-level postbaccalaureate units).

7. Demonstrate knowledge of the needs of and methods of providing educational opportunities to individuals with exceptional needs: Special Education 500.

8. Demonstrated knowledge of computer hardware, software, and applications to educational/classroom use (computer literacy).

9. Knowledge of health education in California, including substance abuse and nutrition: Teacher Education 280 – Health Education for Teachers (1 units) and verification of current CPR competency.

10. Successful completion of a California Teacher Credentialing approved Teacher Performance Assessment (edTPA or PACT).

**NOTE:** Undergraduate students in their final semester prior to obtaining a baccalaureate degree may sign up for concurrent post-baccalaureate credit as explained in the section of this catalog on “General Regulations.”

According to SB 2042 legislation, teachers will be able to earn Professional Clear Credentials upon successful completion of induction programs sponsored by their employers and approved by the California Commission on Teacher Credentialing.

To be recommended for the bilingual authorization, candidates must meet the language and cultural proficiency requirements.
Courses (DLE)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

UPPER DIVISION COURSES
(Intended for Undergraduates)

DLE 400. The Secondary School and Bilingual Education (3)
Prerequisite: Upper division standing.
Bilingual education at the secondary levels, including roles, curricular models, organization, and legal justification. Must demonstrate bilingual competencies before conclusion of course and admission to program. Taught in Spanish. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 400.)

DLE 415. Biliteracy Foundations for Teaching and Learning in Diverse Communities (4)
Three lectures and two hours of activity.
Prerequisite: Upper division standing.
Oral, written, and communicative competencies in Spanish through practical experiences and study of socio-political and socio-cultural contexts impacting bilingual learners in culturally and linguistically diverse communities. Maximum credit eight units. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 415.)

DLE 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

DLE 499. Special Study (1-3)
Prerequisite: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently. Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

DLE 515. Multilingual Education: Theory and Practice for Biliteracy Teachers (3)
Pedagogical and programmatic practices for addressing linguistic and academic needs of multilingual learners. Historical and theoretical foundations of bilingual education as related to bilingual and dual language programs to include instruction, curriculum, and assessment. Taught in Spanish and English. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 515.)

DLE 523. Psychological Foundations for Biliteracy Teachers in K-6 Classrooms (3)
Major theories of learning and cognition as applied to bilingual students and their relation to child development, first and second language acquisition, and approaches to teaching in bilingual classroom. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 523 and 923.)

DLE 524. Psychological Foundations for Biliteracy Teachers in Grades 7-12 (1-4)
Bilingual learning theory as it affects adolescent growth, individualized instruction, classroom management and discipline, and methods of measuring and evaluating achievement. Taught in Spanish and English. May be repeated with new content. See Class Schedule for specific content. Maximum credit four units. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 524 and 924.)

DLE 532. Biliteracy Teaching in Language Arts for Elementary Students (3)
Prerequisites: Dual Language and English Learner Education 415 and 515.
Assessing language proficiency; selecting, designing, and evaluating learning experiences to develop biliteracy in K-6 classrooms in English language arts and Spanish, Arabic, or Mandarin. Taught bilingually in language of emphasis and English. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 532 and 932.)

DLE 553. Language Assessment and Evaluation in Multicultural Settings (3)
Theories and methods of assessment and evaluation of diverse student populations including authentic and traditional models. Procedures for identification, placement, and monitoring of linguistically diverse students. Theories, models, and methods for program evaluation, achievement, and decision making. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 553.)

DLE 596. Special Topics in Bilingual and Multicultural Education (1-3)
Prerequisite: Consent of instructor.
Selected topics in bilingual, cross-cultural education and policy studies. May be repeated with new content. See Class Schedule for specific content. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Economics
In the College of Arts and Letters

OFFICE: Nasatir Hall 329
TELEPHONE: 619-594-1675 / FAX: 619-594-5062

Faculty
Emeritus: Adler, Babilot, Barckley, Boddy, Clement, Frantz, Gifford, Green, Grossbard, Hambleton, Kartman, Leasure, Madhavan, Nam, Popp, Poroy, Sebold, Steinberg, Stewart, Thayer, Turner, Venieris
Chair: Thayer
Professors: Amuedo-Dorantes, Gerber, Hilmer, C., Hilmer, M., Imazeki, Lee
Associate Professors: Balsdon, Foad, Puttitanun, Sabia, Shahrriar
Assistant Professor: Lundberg

Offered by the Department
Master of arts degree in economics.
Major in economics with the B.A. degree in liberal arts and sciences.
Emphasis in international economics.
Emphasis in public policy.
Minor in economics.

The Major
Economics is the science which studies the production, distribution, and consumption of goods and services. Economics majors explore how producers, distributors, and consumers make their decisions. Majors also analyze the events that shape and result from these decisions. Inflation, unemployment, taxation, money and banking, efficiency, international exchange, and growth are some of the many parts of this complex system studied through the economics major at SDSU.

The Department of Economics offers two emphases which students may select to satisfy a wide range of career goals: (1) International Economics, where students can focus on worldwide economic policy and global business; and (2) Public Policy, in which students prepare for graduate study in law school, health administration, and business administration. A specialization in Quantitative Analysis is also offered which focuses on developing analytical and mathematical skills for conducting economic research. A fourth option is the comprehensive major which focuses on developing analytical and mathematical skills for conducting economic research.

Economics majors may find employment in government, financial institutions, business, and international agencies. The combination of an economics major with a business minor provides a foundation for a variety of careers. And, students interested in studying the developing nations, the environment, government policies, or population will find that economics is a useful approach.

Many entry-level positions in business and government are available to students with a bachelor’s degree in economics. A graduate may find employment as a research, statistical, data, or pricing analyst. There are management trainee positions with banks, savings and loan associations, or other lending institutions. Economics majors may also be employed as sales representatives for firms which produce both “high tech” and consumer-related goods. A student contemplating graduate study in the field of economics should consider a career as an economics consultant, or as an economist for banks, investment companies or industry.

Impacted Program
The economics major is an impacted program. To be admitted to the economics major, students must meet the following criteria:

a. Complete with a grade of C or higher: Economics 101, 102; Accountancy 201; Economics 201 or Statistics 119 or 250; one course selected from Mathematics 120, 124, or 150; Management Information Systems 180. These courses cannot be taken for credit/no credit (Cr/NC);

b. Have a cumulative GPA of 2.40 or higher;

c. To be admitted to the emphasis in international economics (major code 22042), students must, in addition to satisfying the criteria above, also satisfy the language requirement for the Bachelor of Arts degree in Liberal Arts and Sciences;

d. To be admitted to the emphasis in public policy (Major Code: 22041), students must, in addition to satisfying the criteria above, also complete Communication 160 with a grade of C or higher. Course cannot be taken for credit/no credit (Cr/NC).

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Economics Major
With the B.A. Degree in Liberal Arts and Sciences (Major Code: 22041) (SIMS Code: 111901)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in economics courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major. Economics 101, 102; Accountancy 201; Economics 201 or Statistics 119 or 250; one course selected from Mathematics 120, 124, or 150; Management Information Systems 180. (18 units)

These prerequisite courses may not be taken Cr/NC; except for courses taught as Cr/NC only. The minimum grade in each class is C or higher.

Students completing the California Community College Associate in Arts in Economics for Transfer (AA-T) will satisfy preparation for the major. If Accountancy 201 and Management Information Systems 180 were not completed as part of the AA-T, it must be completed at SDSU.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 27 upper division units to include Economics 301, 320, 321, and 18 units of electives. At least six units of electives selected from the international group: Economics 330, 360, 365, 460, 463, 464, 466, 489, 561, 565, 592. Maximum nine units of Economics 496 or 596; maximum three units of 499, and maximum three units of 495 may be applied to the major. Units of 495, 496, 499, 596 may be counted towards the international group requirement as approved by adviser.

Emphasis in International Economics
(Major Code: 22042) (SIMS Code: 111920)

Preparation for the Major. Economics 101, 102; Accounting 201; Economics 201 or Statistics 119 or 250; Mathematics 120, 124, or 150; Management Information Systems 180, (18 units)

These prerequisite courses may not be taken Cr/NC; except for courses taught as Cr/NC only. The minimum grade in each class is C or higher.

Language Requirement. Successful completion of a course in a foreign language at the fourth semester or higher level, that is, one course beyond the B.A. language requirement. Students who have graduated from high school in another country where the language of instruction is not English have met the language requirement for this major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Study/Internship Abroad Requirement. Completion of a study abroad or internship abroad of at least 12 units of coursework or six units of the internship course in another nation. Students may also choose to complete a combination of nine units of study and three units of the internship abroad. Students who have graduated from high school outside the U.S. meet this requirement by studying at SDSU.

Major. A minimum of 33 upper division units (27 units in economics and six to seven units from the College of Business Administration) to include Economics 301, 320, 321.

A. At least 12 units of electives must be selected from the international group: Economics 330, 360, 365, 460, 463, 464, 466, 489, 561, 565, 592.

B. Up to six units of electives may be selected from Economics 311, 338, 349, 380, 382, 401, 403, 406, 422, 441, 449W, 455, 456, 458, 485, 490.

C. Six to seven units selected from Business Administration 323 and Finance 329, or Business Administration 350 and Management 357, or Business Administration 370 and Marketing 376.

Maximum nine units of Economics 496 or 596 and maximum three units of 499 may be substituted into groups A or B as appropriate with approval of adviser except for Economics 360, 561, or 592. Maximum three units of 495 may be substituted into group A with appropriate international content as approved by adviser.

Emphasis in Public Policy
(Major Code: 22041) (SIMS Code: 111961)

Preparation for the Major. Economics 101, 102; Accounting 201; Economics 201 or Statistics 119 or 250; Mathematics 120, 124, or 150; Communication 160; Management Information Systems 180, (21 units)

These prerequisite courses may not be taken Cr/NC; except for courses taught as Cr/NC only. The minimum grade in each class is C or higher.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 30 upper division units in economics to include Economics 301, 320, 321, Business Administration 352, and 18 units of electives in economics.


B. Three units of electives selected from the international group: Economics 330, 360, 365, 460, 463, 464, 466, 489, 561, 565, 592.

C. Three additional units of upper division economics electives.

Maximum nine units of Economics 496 or 596 may be substituted as upper division electives with approval of adviser. Maximum three units of 495 and maximum three units of 499 may be substituted into group A with appropriate policy content as approved by adviser.

Specialization in Quantitative Analysis
(SIMS Code: 111970)

Preparation for the Major. Economics 101, 102; Economics 201 or Statistics 119 or 250; Accountancy 201; Mathematics 150; Management Information Systems 180, (19 units)

These prerequisite courses may not be taken Cr/NC; except for courses taught as Cr/NC only. The minimum grade in each class is C or higher.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 27 upper division units in economics to include Economics 301, 320, 321, 441, 507, and 12 units of upper division economics electives, with at least six units at the 400 or 500 level. Maximum nine units of Economics 496 or 596 may be substituted as upper division elective with approval of adviser. Maximum three units of 495 and maximum three units of 499 may be substituted as upper division elective with appropriate quantitative content as approved by adviser.

Economics Minor
(Minor Code: 22041) (SIMS Code: 111901)

The minor in economics consists of a minimum of 18 units in economics to include Economics 101 and 102, and 320 or 321, and at least three units of electives selected from one of the following tracks: International Economics: Economics 330, 360, 365, 460, 463, 464, 466, 489, 561, 565, 592. A maximum of three units of Economics 495, 496, and 499 may be used to satisfy the nine unit elective requirement with prior permission from the department.

Quantitative Economics: Economics 311, 338, 349, 380, 382, 401, 403, 406, 422, 441, 449W, 455, 456, 458, 485, 487, 490. A maximum of three units of Economics 495, 496, and 499 may be used to satisfy the nine unit elective requirement with prior permission from the department.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
Courses (ECON)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

ECON 101. Principles of Economics (3) [GE]
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.
Principles of economic analysis, economic institutions, and issues of public policy. Emphasis on macroanalysis including national income analysis, money and banking, business cycles, and economic stabilization.

ECON 102. Principles of Economics (3) [GE]
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.
Principles of economic analysis, economic institutions, and issues of public policy. Emphasis on direction of production, allocation of resources, and distribution of income, through the price system (microanalysis), and international economics.

ECON 201. Statistical Methods (3) [GE]
Prerequisites: Course in intermediate algebra, satisfaction of the Entry-Level Mathematics requirement, and qualification on the Mathematics Departmental Placement Examination, Part 1A.
Introduction to descriptive statistics, statistical inference, regression and correlation. Students with credit or concurrent registration in the following lower division statistics courses will be awarded credit for this course: ECON 201; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Political Science 201; Psychology 280; Sociology 201; Statistics 119 or 250.

ECON 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES
(Intended for Undergraduates)

ECON 301. Collection and Use of Data in Economics (3)
Prerequisites: Economics 101 and 102; Economics 201 or Statistics 119; and Management Information Systems 180.
Economic data gathering via Internet and other sources, data entry into spreadsheets and graphing techniques, statistics using spreadsheets, and introduction to basic regression.

ECON 311. History of Economic Thought (3)
Prerequisites: Economics 101 and 102.
The development of economics. Contributions of schools of thought and individual writers are examined with regard to their influence on economic theory and policy.

ECON 320. Intermediate Macroeconomic Theory (3)
Prerequisites: Economics 101 with approval of department. Recommended: Mathematics 120 or 124 or 150.

ECON 321. Intermediate Microeconomic Theory (3)
Prerequisite: Economics 102 with approval of department. Recommended: Mathematics 120 or 124 or 150.
Behavior of consumers, firms and industries with respect to product and input markets. Price system and other models of economic decision making. Economic efficiency and welfare; property rights and externalities.

ECON 330. Comparative Economic Systems (3) [GE]
Prerequisites: Six units of economics to include Economics 102; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. General Education prerequisite not required for Economics majors.
Current economic systems from primarily laissez-faire to state-controlled market economies with a focus on nations of Asia, Europe and Latin America; Soviet-style economic planning and transition to a market economy.

ECON 338. Economic History of the United States (3)
Prerequisite: Six units of economics to include Economics 101. American economic development and national legislation. Studies of agriculture, industry, the labor force, and national output.

ECON 349. Economics for Teachers (3)
Prerequisites: Economics 101 and 102.
Micro and macroeconomics with emphasis on developing economic literacy and economic way of thinking.

ECON 360. International Economic Problems (3)
Prerequisites: Economics 101 and 102.
International problems, economic communities, organizations, and other selected topics.

ECON 365. Economics of Underdeveloped Areas (3)
Prerequisite: Six units of economics to include Economics 101.
The nature and causes of economic underdevelopment. Problems of and policies for the economic development of underdeveloped areas of the world.

ECON 380. Labor Economics (3)
Prerequisite: Six units of economics to include Economics 102.
Labor force and mobility, human capital, labor demand, discrimination, determination of compensation and employment, productivity, impact of labor organizations, labor disputes, and social legislation.

ECON 382. Economics of Work, Marriage, and Family (3)
Prerequisite: Economics 102.
Economic analysis of marriage and labor supply; family-related changes in work behavior; gender differences in occupations and earnings; welfare, work and family policies in the U.S. and internationally; macroeconomic analysis of household structure and economy.

ECON 401. Public Finance (3)
Prerequisites: Economics 101 and 102.
Principles and practices of taxation and public expenditures. Economic effects of public spending, debts and taxation. Financing social security and other services. Fiscal policy and prosperity. Relation to inflation and deflation. Special emphasis on social problems involved.

ECON 403. Health Economics (3)
Prerequisites: Economics 101 and 102; Economics 201 or Statistics 119 or 250; Mathematics 120, 124, or 150.
Apply economic principles and statistical techniques to production of health and delivery of health services. Business structures of delivery systems and incentives for providers and patients. Compare international health insurance systems, examine U.S. reforms.

ECON 406. Economics of Sports (3)
Prerequisite: Economics 102.
Economic issues in professional and college team sports. Emphasis on monopoly and monopsony behavior by sports leagues and teams, public subsidies for sports facilities, ticket pricing, and NCAA rules and regulations.

ECON 422. Business Cycles (3)
Prerequisites: Economics 101 and 102.
Fundamental factors in economic fluctuations. Examination of business cycle theories, and various policy proposals for economic stabilization. A consideration of current economic conditions and an examination of methods employed in preparing national economic forecasts.

ECON 441. Introduction to Econometrics (3)
Prerequisites: Economics 301; Mathematics 120 or 124 or 150; Recommended: Economics 320 or 321.
Econometric techniques with emphasis on single-equation models. Applied skills learned through computer assignments.

ECON 449W. Economic Literacy (3)
Prerequisites: Twelve units in economics to include Economics 101 and 102. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in WRS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.
Economic way of thinking through writing. Effective communication of economic concepts and analysis to different audiences.
ECON 455. Environmental Economics (3)
Prerequisite: Economics 102.
Relation of environmental amenities and pollution to economic behavior and institutions. Environmental problems in externalities, public goods, and common-property resources. Environmental policy from perspective of public economics: regulation, benefit-cost analysis, valuation of non-market goods. (Formerly numbered Economics 453.)

ECON 456. Economics of Natural Resources (3)
Prerequisite: Economics 102.
Examination of efficient extraction and use of natural resources from an economic perspective. Fundamental and practical differences between renewable and nonrenewable resources. Fossil fuel extraction, mining, renewable energy, forestry, fisheries, and conservation policy. (Formerly numbered Economics 452.)

ECON 458. Urban Economics (3)
Prerequisite: Economics 102.
Major influences on economic conditions of urban areas; specific urban issues including growth and housing. Discussion of San Diego issues.

ECON 460. Economics of Financial Crises (3)
Prerequisites: Economics 101 and 102.
Economic theories of crises and economic histories in qualitative and quantitative perspective to include recent crises in US and Europe. Empirical analysis of variety, frequency, and consequences. Policies for ending crises.

ECON 463. Economic Development Before 1900 (3)
Prerequisites: Economics 101 and 102.
Emergence of market institutions in medieval Europe; comparisons with China, India, and Islamic world. Origin and evolution of market institutions, using concepts from new institutional economics, game theory, and behavioral economics.

ECON 464. Economic Problems of Latin America (3) [GE]
Prerequisites: Six units of economics to include Economics 101; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. General Education prerequisite not required for Economics majors.
Economic development, institutions, and problems of Latin America in the context of a global economy.

ECON 466. Economics of the Middle East (3)
Prerequisites: Economics 101 and 102.
Theories and practices of economic development in the Middle East to include economic history, colonial legacies, natural resource curse, migration, state capitalism, and economics of conflict.

ECON 485. Law and Economics (3)
Prerequisite: Economics 102.
Impact of legal rules on implicit prices for consumer and firm behavior, distribution of resources, economic efficiency. Background on laws regarding property, contracts, torts, the judicial process, and crime, with focus on effects of laws on consumers and producers.

ECON 487. Economics of Strategy (3)
Prerequisites: Economics 102 and Mathematics 120 or 124 or 150.
Game theory and analysis of strategic decision-making. Non-cooperative games in the context of business, bargaining among agents, political decision-making, voting, etc.

ECON 489. Economics and Population (3) [GE]
Prerequisites: Six units of economics to include Economics 102; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. General Education prerequisite not required for Economics majors.
Relation of fertility, marriage, migration, and other dimensions of population to various economic factors affecting household behavior. Demographic measures and projections, application to product markets and to policies of developed and less developed countries.

ECON 490. Money and Banking (3)
Prerequisites: Economics 101, 102, and Accountancy 201.
Money’s measurement and use; monetary theory and policy; returns on financial instruments; international payments and foreign exchange; evolution of banking institutions, and global competition.

ECON 495. Economics Internship (3) Cr/NC/RP
Prerequisite: Consent of instructor.
Internship with business firms, nonprofit organizations and government agencies. Work done under joint direction of activity supervisor and instructor. Project report and internship conferences required. Maximum credit six units.

ECON 496. Experimental Topics (1-3)
Prerequisite: Consent of instructor.
Selected topics in economics. May be repeated with approval of the instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit nine units.

ECON 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. May be repeated for a maximum of six units. Maximum credit six units.

ECON 507. Mathematical Economics (3)
Prerequisite: Mathematics 124 or 150. Recommended: Economics 320 or 321.
Mathematical concepts as tools in understanding, developing, and illustrating economic theories. Applications of calculus and linear equations to constrained optimization, macro models, elasticity, general equilibrium, and input-output analysis.

ECON 561. International Trade (3)
Prerequisites: Economics 320 and 321.

ECON 565. North American Economic Relations (3)
Prerequisites: Economics 101 and 102. Recommended: Economics 360.
Socioeconomic development of U.S., Mexico, and Canada since World War II. Issues affecting the three countries’ relations, including trade investment, technology, and international organizations and agreements.

ECON 592. International Monetary Theory and Policy (3)
Prerequisite: Economics 320 or 490.

ECON 596. Experimental Topics (3)
Prerequisite: Consent of instructor.
Intensive study in specific areas of economics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of nine units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

ECON 597. Selected Topics in Economics (1-3)
Prerequisite: Consent of instructor.
Selected topics in economics. May be repeated for a maximum of six units. Maximum credit six units.

ECON 598. Selected Topics in Economics (1-3)
Prerequisite: Consent of instructor.
Selected topics in economics. May be repeated for a maximum of six units. Maximum credit six units.

ECON 599. Selected Topics in Economics (1-3)
Prerequisite: Consent of instructor.
Selected topics in economics. May be repeated for a maximum of six units. Maximum credit six units.

ECON 600. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. May be repeated for a maximum of six units. Maximum credit six units.

ECON 601. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. May be repeated for a maximum of six units. Maximum credit six units.

ECON 602. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. May be repeated for a maximum of six units. Maximum credit six units.

ECON 604. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. May be repeated for a maximum of six units. Maximum credit six units.

ECON 606. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. May be repeated for a maximum of six units. Maximum credit six units.

ECON 607. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. May be repeated for a maximum of six units. Maximum credit six units.

ECON 608. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. May be repeated for a maximum of six units. Maximum credit six units.
Education
In the College of Education

OFFICE: Education and Business Administration 346
TELEPHONE: 619-594-6091 / FAX: 619-594-7082

Accredited by the California Commission on Teacher Credentialing and the National Council for Accreditation of Teacher Education.

Faculty
Faculty assigned to teach in education are drawn from departments in the College of Education.

Courses (ED)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES
ED 200. Teaching as a Profession (3)
Current issues, challenges in education; explores strategies that promote professional development. Critically assesses issues related to teaching in culturally and linguistically diverse school settings. Includes guided classroom observations.

ED 201. Introduction to Literacy (3)
Two lectures and four hours of laboratory. Intended for students in the liberal studies blended program for K-3 literacy tutors. Basic processes of literacy and instructional strategies in culturally relevant reading instruction for emergent readers. Requires four hours weekly tutoring in a designated K-3 setting.

UPPER DIVISION COURSES
(Intended for Undergraduates)
ED 350. Education in American Society (3) [GE]

ED 450. Study Abroad (1-3)
Prerequisite: Upper division standing.
Study abroad in Education. See Class Schedule for specific content and geographic location. May be repeated with new content and approval of major adviser for a maximum of three units applicable to a bachelor’s degree.

ED 451. Introduction to Multicultural Education (3)
Overview of cultural pluralism in education, industry, business, other institutions, and society at large.

ED 484. Valuing Human Diversity (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Human diversity that enriches societies. Race, gender, language, and spirituality. Impediments to valuing human diversity; classism, sexism, racism, and anti-Semitism. Not open to students with credit in Teacher Education 284.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)
ED 516. Foundations of Bilingual Education (1)
(Offered only at IVC)
Prerequisite: Credit or concurrent registration in Education 451. Overview of models of bilingual education programs for language minority students.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Educational Leadership
In the College of Education

OFFICE: North Education 166
TELEPHONE: 619-594-4063
E-MAIL: EDL@mail.sdsu.edu
http://go.sdsu.edu/education/edl/

Accredited by the California Commission on Teacher Credentialing and the National Council for Accreditation of Teacher Education.

Faculty
Emeritus: Basom, Cohn, Downey, Latta, Meno, Merino, Streshly, Warburton, Wetherill, Yerkes
Chair: Fisher
Professors: Chance, Fisher, Frey, Johnson, Pumpian, Uline
Associate Professor: James-Ward
Assistant Professor: Marshall

Offered by the Department
Doctor of Education degree in educational leadership.
Concentration in PreK-12 educational leadership.
Master of Arts degree in education.
Concentration in educational leadership: Specialization in PreK-12
Administrative services credentials.
Minor in leadership development.
Certificate in educational facility planning
(refer to the Graduate Bulletin).

Leadership Development Minor
(Minor Code: 08271) (SIMS Code: 331907)
The minor in leadership development consists of a minimum of 17 units to include Administration, Rehabilitation and Postsecondary Education 205, 380, 403; Educational Leadership 404, 405; and six units of electives selected from Communication 371, Political Science 375, Public Administration 330, 340, 480, Philosophy 329, 330, 332, 340.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (EDL)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

UPPER DIVISION COURSES
(Intended for Undergraduates)

EDL 404. Field Laboratory in Leadership: Public Agencies and Businesses (1)
Laboratory in public agencies and business settings to integrate academic work with experiences in the community.

EDL 405. Enacting Leadership (3)
Prerequisite: Completion of all courses in the leadership development minor with a 3.0 GPA.
Capstone course. Synthesis and integration of learning to demonstrate self-efficacy. Apply analytical reasoning in leadership scenarios. Articulate individual leadership abilities and apply leadership principles to major field and career.

EDL 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

EDL 499. Special Study (1-3)
Prerequisites: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.
Individual study. Maximum credit six units.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)

EDL 596. Topics in Educational Leadership (1-3)
Selected problems in educational leadership. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

Educational Technology
Refer to “Learning Design and Technology” in this section of the catalog.
General Education

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

I. Communication and Critical Thinking: 9 units
   You may not use Credit/No Credit grades in this section.
   1. Oral Communication (3 units)
   2. Composition (3 units)
   3. Intermediate Composition and Critical Thinking (3 units)

II. Foundations of Learning: 29 units
   A. Natural Sciences and Quantitative Reasoning (17 units):
      1. Physical Sciences (7 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
         You may not use Credit/No Credit grades.
         Mathematics 150 (3 units applicable to General Education)
         Mathematics 151 (4 units)
   B. Social and Behavioral Sciences (3 units)
   C. Humanities (9 units)
      Complete three courses in three different areas. One of these courses and the one under IV.A. below must be taken in the same department.

III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.

IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing (60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Total: 9 units; must include one course of cultural diversity.
   A. Upper division Humanities (3 units)
      Three units must be taken from the same department as one of the Humanities courses selected in Foundations of Learning.
   B. Upper division Social and Behavioral Sciences (3 units).
   C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

After enrollment in electrical engineering at SDSU, an Electrical Engineering major must take all upper division electrical engineering courses at SDSU unless prior approval is obtained from the department.
The Major

The field of Electrical Engineering involves three major activities: the generation and distribution of electric power; the collection, processing and communication of information; and the study and application of electromagnetic phenomena and materials.

The electric power industry is the oldest area of Electrical Engineering, but it remains an active area of innovation and development, as well as a major employer. Activities in the power area include the design of machines for energy conversion (motors and generators); the design of DC power supplies and other electronic circuits for the efficient delivery of electric power from various sources (e.g., solar cells, batteries, AC generators); and the design and operation of systems for the distribution of electric power, including the power grid that cover the United States with links to grids of other countries.

The most dynamic area of Electrical Engineering today is the processing and communication of information. Activities in this area include the design of machines that store, process and display information; and the design of systems for communicating information (e.g., radios, telephones, fax machines, cellular phones, computer networks, the world wide web, satellite communication systems, cable television systems, etc.). Also included in this area are consumer electronics and instrumentation for applications of all sorts (e.g., medical equipment, industrial process control, machine control, bio-engineering, traffic control, radar, sonar, speech analysis and synthesis, music, etc.).

The study of electromagnetic phenomena and materials provides the foundation for all of Electrical Engineering. Research and development at this level typically leads to new developments and improvements in other areas. Major activities today include the study of energy conversion processes, fabrication processes, imaging techniques, information storage mechanisms, environmental processes, and optoelectronics (e.g., lasers, optical fibers, optical computing).

The Bachelor of Science degree program includes a core of courses that provides an introduction to each of the major areas described above. In addition, nearly a full year of professional electives provides the opportunity for students to specialize in areas of particular interest. The process of engineering design is emphasized throughout the curriculum by including open-ended problems with realistic design constraints. The design experience culminates in a capstone design course required of all students. Creativity, consideration of economic and social factors, and the application of systematic design procedures are used to solve problems that confront engineers. The curriculum attempts to achieve a balance between theory and practice that will prepare graduates both for immediate employment and for continued study. The Master of Science program offers graduates in electrical engineering and related fields the opportunity for continued study and further specialization.

Employment opportunities within the electrical engineering profession are challenging and usually plentiful. Electrical engineering graduates are sought by a wide range of employers in government and industry for many different types of work including design, testing, production, maintenance, system operation, programming, customer support engineering, and technical marketing and sales. Graduates have the opportunity to contribute to society by helping to design and supply the high-quality products and services that are necessary for a robust economy.

Educational Objectives

The overall objective of the undergraduate program in electrical engineering is to produce the best skilled, hands on practicing electrical engineer. More specifically the objectives are:

A. To provide students with the technical knowledge and skills that will enable them to have a successful career in the electrical engineering profession;

B. To provide students with a general education that will enable them to appreciate the social, ethical, economic, and environmental dimensions of problems they may face;

C. To develop in students the communication skills and social skills that are necessary to work effectively with others;

D. To develop the ability of students to solve problems by learning what is already known, and then applying logic and creativity to find a solution;

E. To provide students with the intellectual skills necessary to continue learning and to stay current with the profession as it changes.

Impacted Program

The electrical engineering major is an impacted program. To be admitted to the electrical engineering major, students must meet the following criteria:

a. Complete with a grade of C or higher: Electrical Engineering 210; Computer Engineering 160; Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit (Cr/NC);

b. Have an overall cumulative GPA of 2.5.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors, and to identify which General Education course will also fulfill a major preparation course requirement.

Electrical Engineering Major

With the B.S. Degree

(Major Code: 09091) (SIMS Code: 443001) (SIMS Code: 443002 - Georgia)

The program below describes the 130 units required for the degree. Each course specifically listed in the program is required. In addition, the total number of units specified in each elective category represents a minimum requirement. These are General Education, American Institutions, Upper Division Engineering Elective, Professional Electives, and Electrical Engineering Laboratory Electives.

Preparation for the Major. Electrical Engineering 210; Aerospace Engineering 280; Biology 100 or 101; Computer Engineering 160, 270, 271; Mathematics 150, 151, 252, 254; Physics 195, 195L, 196L.

Electrical Engineering 210; Computer Engineering 270, 271; Mathematics 252, 254 must be completed with a grade of C or higher. Aerospace Engineering 280; Computer Engineering 271; Mathematics 252, 254 must be completed with a grade of C- (1.7) or better. These courses cannot be taken for credit/no credit (Cr/NC).

General Education. Engineering students must follow the specific General Education program outlined in this section of the catalog. Other general education requirements and limitations, as well as listings of specific General Education course electives are presented in the General Education section of Graduation Requirements for the Bachelor's Degree. (Fifty units, including 17 units from preparation for the major which count toward General Education credit, and 3 units of American institutions which count toward General Education credit.)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 53 upper division units to include the following required and professional elective courses. Required upper division courses in the major: Electrical Engineering 300, 310, 330, 330L, 340, 380, 410, 420, 430, 434, 440, 490; Computer Engineering 375. Professional electives: Twelve units selected from upper division electrical engineering courses and no more than three units from approved upper division courses from other departments. Electrical Engineering laboratory electives: Three units selected from any non-required upper division electrical engineering laboratory courses.
Master Plan. A master plan of elective courses must be approved by the faculty adviser and department chair and filed with the Office of Advising and Evaluations during the first semester of the junior year. Changes to the master plan are permitted at any time, with approval of the department chair. After enrollment in electrical engineering at SDSU, an electrical engineering major must take upper division electrical engineering courses at SDSU unless prior approval is obtained from the department.

Courses

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

NOTE: Prerequisites will be enforced in all undergraduate electrical engineering courses numbered 100 through 596. A copy of an official transcript will be accepted as proof. For corequisites, an enrollment confirmation form will be accepted.

LOWER DIVISION COURSES

E E 204. Principles of Electrical Engineering (3)
Prerequisites: Mathematics 151 and Physics 196.
Circuit analysis, phasor diagrams, single-phase and three-phase power, semiconductor devices and applications, and energy conversion devices. Not acceptable for electrical or computer engineering majors.

E E 210. Circuit Analysis I (3)
Prerequisites: Mathematics 151 and Physics 196.

UPPER DIVISION COURSES

E E 300. Computational and Statistical Methods for Electrical Engineers (3)
Prerequisite: Electrical Engineering 210.
Random signals and events in electrical engineering. Introduction to basic probability, discrete and continuous random variables, joint random variables. Application of probabilistic models and concepts to engineering; data analysis and point estimation using computer-aided engineering tools.

E E 310. Circuit Analysis II (3)
Prerequisites: Grade of C (2.0) or better in Electrical Engineering 210. Grade of C- (1.7) or better in Mathematics 252 or both Aerospace Engineering 280 and Mathematics 254.

E E 330. Fundamentals of Engineering Electronics (3)
Prerequisite: Electrical Engineering 210.
Analysis of diodes JFETs, MOSFETs, and BJTs in typical electronic circuits. Analysis and design of rectifiers, filters, and simple amplifiers using transistors and operational amplifiers.

E E 330L. Engineering Electronics Laboratory (1)
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Electrical Engineering 330.
Experimental study of laboratory instruments, diodes, rectifier circuits, filters, transistors, and operational amplifiers.

E E 340. Electric and Magnetic Fields (3)
Prerequisites: Grade of C (2.0) or better in Electrical Engineering 210. Grade of C- (1.7) or better in Aerospace Engineering 280.
Introduction to electrostatic and magnetostatic field theory using vector notation; Coulomb's Law, Gauss Law and potential theory. Solutions to Poisson's and Laplace's equations; capacitance and inductance. Time-varying fields; Maxwell's equations.

E E 380. Electrical Energy Conversion (3)
Prerequisites: Electrical Engineering 210.
Magnetic circuits, transformers and polyphase AC networks. Fundamentals of electro-mechanical energy conversion; induction motors, synchronous machines and DC machines.

Courses (E E)

E E 380L. Electrical Energy Conversion Laboratory (1)
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Electrical Engineering 380.
Experimental study of DC, single and polyphase AC circuits, transformers, and machines.

E E 397. Discussion: Electrical Engineering (1) Cr/NC
Prerequisite: Electrical Engineering 300 and 310. File an approved master plan with the Department of Electrical and Computer Engineering.

E E 410. Signals and Systems (3)
Prerequisites: Electrical Engineering 300 and 310.
Frequency response, feedback, stability, and operational amplifier circuits.

E E 420. Feedback Control Systems (3)
Prerequisite: Electrical Engineering 410.
Control systems including servomechanisms by Laplace transform method. System performance and stability; Nyquist, Bode, and root-locus diagrams; elementary synthesis techniques. Practical components and examples of typical designs.

E E 430. Analysis and Design of Electronic Circuits (3)
Prerequisites: Electrical Engineering 310, 330, and Aerospace Engineering 280.
Single and multiple transistor amplifiers, power stages. Frequency response, feedback, stability, and operational amplifier circuits.

E E 430L. Electronic Circuits Laboratory (1)
Three hours of laboratory.
Prerequisites: Electrical Engineering 330L and 430.
Analysis of single stage and multistage amplifier circuits including feedback, tuned amplifiers, voltage regulators, active filters, and A/D-D/A converters.

E E 434. Electronic Materials and Devices (3)
Prerequisites: Electrical Engineering 330 and 340.
Crystal properties and growth of semiconductors, quantum mechanics of solids, shot noise and thermal noise, energy band and charge carriers, excess carrier in semiconductors, p-n junctions, solar cells, tunnel diodes, photodetectors.

E E 440. Electromagnetic Waves (3)
Prerequisites: Electrical Engineering 310 and 340.
Time-domain form of Maxwell equations, electromagnetic wave propagation in unbounded media, Poynting vector, reflection of plane waves, transmission line theory, Smith chart, different microwave transmission lines, wave propagation in bounded media, waveguides, and introduction to antennas.

E E 455. Antenna Theory and Design (3)
Prerequisite: Electrical Engineering 440.
Wireless communication system. Fundamental antenna parameters, theory and design of different types of antennas (wire, aperture, broadband, array), and techniques for antenna analysis, fabrication and measurement.

E E 458. Analog and Pulse Communication Systems (3)
Prerequisite: Electrical Engineering 410.
Linear and digital communication systems. Amplitude and frequency modulation, pulse modulation, and PCM. Introduction to information theory.

E E 458L. Communications and Digital Signal Processing Laboratory (1)
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Electrical Engineering 458.
Experiments in modulation techniques, effects of noise on system performance, digital filters, and signal processing. (Formerly numbered Electrical Engineering 558L.)
E E 480. Power System Analysis (3)
Prerequisite: Aerospace Engineering 280, Electrical Engineering 310 and 380.
Modern power system elements; calculation of load flow, fault currents, and system stability.

E E 483. Power Distribution Systems (3)
Prerequisite: Electrical Engineering 380.
Design and operation of electric power distribution systems. Design of primary and secondary systems, application of one phase and three phase transformer banks, and metering principles and practices.

E E 484. Power Electronics (3)
Prerequisites: Electrical Engineering 380 and credit or concurrent registration in Electrical Engineering 430.
Design and analysis of power electronic devices. Power semiconductor switches, switch-mode power supplies, dc-to-ac inverters, PM and PWM ac-to-ac converters. Power electronics applications. (Formerly numbered Electrical Engineering 583.)

E E 490. Senior Design Project (4)
Two lectures and six hours of laboratory.
Prerequisites: Approval of project adviser and department chair.
Supervised capstone design projects to provide integrative design experience for seniors to include ethics, professionalism, cost-effectiveness, and project management.

E E 496. Advanced Electrical Engineering Topics (1-3)
Prerequisite: Consent of instructor.
Modern developments in electrical engineering. May be repeated for specific content. Maximum credit nine units for any combination of Electrical Engineering 496 and 596 applicable to a bachelor's degree.

E E 499. Special Study (1-3)
Prerequisites: Approval of project adviser and department chair.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

E E 502. Electronic Devices for Rehabilitation (3)
Two lectures and three hours of laboratory.
Prerequisites: Electrical Engineering 330.
Recent developments in electronic assistive devices and microcomputers for persons with various disabilities; assessment of disabled persons for suitable technological assistive devices.

E E 503. Biomedical Instrumentation (3)
Prerequisites: Aerospace Engineering 280; Electrical Engineering 410 and 430 (or for Mechanical Engineering majors, Electrical Engineering 204 and Mechanical Engineering 330).
Instrumentation systems to monitor, image, control, and record physiological functions.

E E 530. Analog Integrated Circuit Design (3)
Prerequisite: Electrical Engineering 430 with minimum grade of C.
Advanced treatment of transistor pairs, device mismatches, differential amplifiers, current mirrors, active loads, level shifting, and output stages. Parasitic and distributed device parameters. Economics of IC fabrication and impact on design.

E E 534. Solid-State Devices (3)
Prerequisite: Electrical Engineering 434.
Energy bands and charge carriers in semiconductors; generation, recombination, and transport of excess carriers; semiconductor junctions; unipolar and bipolar transistors; high-frequency, high-power, and optoelectronic devices; integrated circuits.

E E 540. Microwave Devices and Systems (3)
Prerequisite: Electrical Engineering 440. Recommended: Aerospace Engineering 515.
Applications of Maxwell’s equations to wave propagation. Microwave network parameters; guided wave transmission and reflection. Design of filters, couplers, power dividers and amplifiers. Applications in radar and telecommunications systems.

E E 540L. Microwave Design and Measurements Laboratory (1)
Three hours of laboratory.
Prerequisites: Credit or concurrent registration in Electrical Engineering 430L and 540.
Microwave measurement equipment, simulation tools for designing microwave components, vector network analyzer calibration, design and measurement of planar microwave components, and a design project.

E E 541. Electro-Optics (3)
Prerequisite: Electrical Engineering 434.
Optical/electronic devices and systems; wave beams; light-matter quantum interactions; incoherent and laser light sources; modulators and detectors. Applications in data transmission, measurement, and materials processing.

E E 556. Digital Signal Processing (3)
Prerequisite: Electrical Engineering 410.
Discrete-time signals and systems, Sampling, Z-transform, Discrete-time Fourier transform and frequency responses, DFT, FFT, and introduction to IIR and FIR digital filter design.

E E 558. Digital Communications (3)
Prerequisite: Electrical Engineering 458.
Design of baseband digital communication systems; noise characterization, sampling, quantization, matched filter receivers, bit-error performance, inter-symbol interference, link budget analysis.

E E 581. Power System Dynamics (3)
Prerequisite: Electrical Engineering 480.
Three-phase faults, symmetrical components, unsymmetrical faults, protective relay operating principles, economic dispatch of thermal power generation units, power system controls, voltage and power stability.

E E 596. Advanced Electrical Engineering Topics (1-3)
Prerequisite: Consent of instructor.
Modern developments in electrical engineering. May be repeated with new content. See Class Schedule for specific content. Maximum credit of nine units for any combination of Electrical Engineering 496 and 596 applicable to a bachelor’s degree. Maximum combined credit of six units of Electrical Engineering 596 and 696 applicable to a 30-unit master’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Engineering
In the College of Engineering

OFFICE: Engineering 203
TELEPHONE: 619-594-6061
E-MAIL: info@engineering.sdsu.edu

The College of Engineering undergraduate programs in aerospace, civil, computer, construction, electrical, environmental, and mechanical engineering are accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc., 415 North Charles Street, Baltimore, MD 21201; telephone: 410-347-7700.

Faculty
Faculty assigned to teach courses in engineering are drawn from departments in the College of Engineering.

Engineering Minor
(Minor Code: 09011) (SIMS Code: 444001)

The minor in engineering, intended for students in other academic areas of the university, consists of 15 units in engineering, 12 units of which must be in upper division courses. The courses must be approved by the dean of the College of Engineering.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (ENGR)

LOWER DIVISION COURSE

ENGR 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSE
(Intended for Undergraduates)

ENGR 496. Advanced Engineering Topics (1-3)
Prerequisite: Minimum grade point average of 2.0 in engineering. Modern developments in engineering. See Class Schedule for specific content. Maximum credit six units for any combination of 496, 499, and 596 applicable to a bachelor's degree.

GRADUATE COURSES
Refer to the Graduate Bulletin.
In the College of Arts and Letters

OFFICE: Arts and Letters 226
TELEPHONE: 619-594-5307 / FAX: 619-594-4998
E-MAIL: EandCL@mail.sdsu.edu
http://literature.sdsu.edu

Faculty
Chair: Borgstrom
Professors: Alcosser, Brooks, Champion (IVC), Edson, Herman, Hicks, Jaffe, Kaminsky, Martin, Nericio, Shumaker (IVC)
Associate Professors: Bailey, Borgstrom, Colquitt, Cummins-Lewis, Farris, Serrato, Stampfl (IVC), Thomas
Assistant Professor: Howard

Offered by the Department of English and Comparative Literature
Master of Arts degree in English.
Master of Fine Arts degree in creative writing.
Minor in creative writing.
Minor in creative editing and publishing.
Minor in English.
Minor in English Language Arts.
Minor in English honors.
Minor in English Literature.
Minor in children's literature.
Minor in creative editing and publishing.
Minor in creative writing.

The Major
The study of English today encompasses a wide range of materials and approaches to ways in which both students and established writers – past and present – may use language to express feelings, convey ideas, and give aesthetic pleasure. As one of the largest English departments in California, SDSU's can offer not only historical, analytical, sociopolitical and other approaches to literature and literary theory, but a variety of creative and expository writing classes as well.

English majors take 15 units of lower division preparatory work designed to develop writing potential and analytical reading skills. More specialized upper division study focuses on particular areas: British literature before 1800; British literature after 1800; American literature; modern literature; literary types, theory, and criticism; creative writing; or expository writing. Six units in upper division comparative literature are required.

Students preparing to obtain the single subject credential in English take a "language arts" program in which courses in communication, journalism, linguistics, and theatre supplement major concentration in English.

The English minor requires twelve units of upper division study that can be tailored to individual requirements. Teaching is one of the many career opportunities available to English graduates; English studies are also good preparation for radio and television broadcasting, editing, writing, politics, film and library work, journalism, criticism, advertising, public information, public relations, and technical writing.

A study by the Modern Language Association, "English: The Pre-Professional Major," shows that training in English and literature is valuable preparation for futures in law, medicine, business, and federal service.

SDSU Career Services has found that liberal arts graduates in general have profited both in terms of job availability and compensation in the shift from manufacturing to service in the United States economy.

English Major Honors
(Standard Major)
The English honors program offers excellent students a variation of the major designed to engage them in work commensurate with their abilities. Honors students in the standard English major will take two additional upper division courses appropriate for their field of interest, in which they must maintain an A- grade point average, and successfully complete an Honors Thesis (English 498 or Comparative Literature 498 [if offered] or English 499 or Comparative Literature 499). Generally, students will apply to this program in their junior year after they have completed at least nine units of lower division preparation for the major and nine units of upper division major requirements with an A- (3.7 GPA) and overall 3.5 GPA. Applicants must also submit an appropriate sample of their critical or creative work. Successful completion of the English honors program will be recognized at graduation.

English Major Honors
In preparation for the Single Subject Teaching Credential in English Language Arts

With the B.A. Degree in Liberal Arts and Sciences
The English honors program offers excellent students a variation of the major designed to engage them in work commensurate with their abilities. Honors students in the English major in preparation for the Single Subject Teaching Credential in English Language Arts will convert nine [of the twelve units] of electives into two honors courses, in which they must maintain an A- grade point average, and successfully complete an Honors Thesis (English 498 or Comparative Literature 498 [if offered] or English 499 or Comparative Literature 499). Generally, students will apply to this program in their junior year after they have completed at least nine units of lower division preparation for the major and nine units of upper division major requirements with an A- (3.7 GPA) and overall 3.5 GPA. Applicants must also submit an appropriate sample of their critical or creative work. Successful completion of the English honors program will be recognized at graduation.

Impacted Programs
The majors in English and English in Preparation for the Single Subject Teaching Credential in English Language Arts are impacted programs. To be admitted to the major in English or English in Preparation for the Single Subject Teaching Credential in English Language Arts, refer to the program description for specific impacted criteria.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.
Major Academic Plans (MAPs)

Visit [http://www.sdsu.edu/mymap](http://www.sdsu.edu/mymap) for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

### English Major

**With the B.A. Degree in Liberal Arts and Sciences**

**Major Code: 15011 (SIMS Code: Liberal 112101) OR**

**Applied Arts and Sciences (Open only to AA-T/TMC)**

**Major Code: 15011 (SIMS Code: Applied 112111)**

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 54 units in English, comparative literature, and rhetoric and writing courses can apply to the degree.

The Bachelor of Arts degree in Applied Arts and Sciences is open only to students who have completed the California Community College Associate in Arts in English for Transfer (AA-T) degree completing the Transfer Model Curriculum (TMC) for English. Contact department adviser.

A minor is not required with this major.

**Impacted Program.** The major in English is designated as an impacted program and specific criteria are used to admit students. To be admitted to the major in English, students must meet the following criteria:

- a. Complete with a minimum GPA of 2.50 and a grade of C or higher: English 250A or 250B; English 260A-260B; Rhetoric and Writing Studies 200; three units selected from English 220, 280, Comparative Literature 270A or 270B. These courses cannot be taken for credit/no credit (Cr/NC);
- b. Have a cumulative GPA of 2.40 or higher.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

**Preparation for the Major.** NOTE: The Applied Arts and Sciences degree is open only to students who have completed the California Community College Associate in Arts in English for Transfer (AA-T) degree completing the Transfer Model Curriculum (TMC) for English.

English 250A or 250B; English 260A-260B; Rhetoric and Writing Studies 200; three units selected from English 220, 280, Comparative Literature 270A, 270B. (15 units)

Any grade requirements and GPA requirements listed above for admission to the major in English will also be enforced in Preparation for the Major requirements.

**Language Requirement.** Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

**Language Competency Requirement (Applied Arts and Sciences).** Students who have completed the California Community College Associate in Arts in English for Transfer (AA-T) degree are required to successfully complete a second college semester or third college quarter in one foreign language. Students will also meet this requirement by successfully completing the third-year level of a high school foreign language.

**Graduation Writing Assessment Requirement.** Students must have fulfilled the Writing Placement Assessment with a score of B or above before taking English 508W and earn a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

**Major.** A minimum of 33 upper division units to include 12 units from module A, 12 units from module B, six units from module C, and three units of electives.

Courses in module A are oriented towards exploring aspects of the development of the English and American literary traditions over time. Courses in module B are oriented towards using literary and cultural studies to engage with a diversity of human societies, viewpoints, and experiences. Courses in module C develop student capacity in scholarly writing, creative writing, editing, publishing, and digital literacy content.

- b. Twelve units selected from the following: English 405 [or Comparative Literature 405], 501-503, 519, 520, 526, 549, 550, 563, Comparative Literature 440, 445, 451 [or Asian Studies 451]. 470, 513, 514, 530, 561, 570, 577, 580, 594, 595, 596. Must include at least three units of comparative literature.
- c. Six units selected from the following: English 508W, 570, 571, 573, 576A, 576B, 577, 579, 580, 581W, 584W. Must include at least three units of English 508W.
- d. Three units of upper division English or comparative literature courses.

**English Honors Variation.** Three additional units of upper division English or comparative literature electives, with consent of the undergraduate adviser; and English 498. (39 units)

**Selection of Courses**

Prospective majors of sophomore standing may, with the consent of the course instructor and subject to general university regulations (see “Credit for Upper Division Courses” in the section of this catalog on General Regulations), substitute six units of upper division electives for six units of lower division work. These courses must be in the same field as those which they replace, and must be approved by the departmental adviser.

Students of junior or senior standing may substitute for any deficiencies in lower division requirements in English (except Rhetoric and Writing Studies 100 and 200) an equivalent number of units of upper division courses selected with the approval of the departmental adviser.

### English Major

**In preparation for the Single Subject Teaching Credential in English Language Arts**

**With the B.A. Degree in Liberal Arts and Sciences**

**Major Code: 15011 (SIMS Code: 112102)**

Requirements listed here are for the fulfillment of the English major in preparation for the single subject teaching credential in English language arts. All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Dual Language and English Learner Education or Teacher Education. Completion of this major also fulfills 21 units of the General Education program.

See School of Teacher Education for information about the credential program, to include six to eight additional units required for admission: Education 451 (3), Teacher Education 280 (1), and Special Education 450 (2), 500 (3), or Child and Family Development 590 (4).

A minor is not required with this major.

**Impacted Program.** The major in English in Preparation for the Single Subject Teaching Credential in English Language Arts is designated as an impacted program and specific criteria are used to admit students. To be admitted to the major in English in Preparation for the Single Subject Teaching Credential in English Language Arts, students must meet the following criteria:

- a. Complete with a minimum GPA of 2.50 and a grade of C or higher: Rhetoric and Writing Studies 100, 200; Communication 113; English 220 or Comparative Literature 270A or 270B; Journalism and Media Studies 200; Humanities 140; Linguistics 101; six units from English 250A and 250B or English 260A and 260B; English 280. These courses cannot be taken for credit/no credit (Cr/NC);
- b. Have a cumulative GPA of 2.40 or higher.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).
Preparation for the Major. (30 units) Fulfills 21 units in General Education.
1. Rhetoric and Writing Studies 100 and 200 (General Education I. 2 and 3).
2. Communication 103 (General Education I. 1).
3. English 220 or Comparative Literature 270A or 270B (3 units General Education II. C.1).
4. Journalism and Media Studies 200 (General Education II. B).
5. Humanities 140 (General Education II. C.2).
6. Linguistics 101 (3 units General Education II. B)
7. English 250A or 250B or 260A and 260B (6 units).
8. English 280.
Any grade requirements and GPA requirements listed above for admission to the major in English in Preparation for the Single Subject Teaching Credential in English Language Arts will also be enforced in Preparation for the Major requirements.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking English 508W and earn a grade of C (2.0) or better (see #10 below). See “Graduation Requirements” section for a complete listing of requirements.

Major. (46 upper division units) Fulfills three units in General Education.
Courses in the major cannot be double-counted.
10. English 508W.
11. English 523.
14. Linguistics 430 or 530.
15. Linguistics 452*, 454, or 550*.
16. Rhetoric and Writing Studies 509 AND Teacher Education 362
must be taken concurrently.
17. Diversity Literature Course: Three units selected from Comparative Literature 440, 445, 451 [or Asian Studies 451], American Indian Studies 430, Chicana and Chicano Studies 380 [or Latin American Studies 380], 450, English 335 [or Chicana and Chicano Studies 335], 365A [or Africana Studies 365A], 365B [or Africana Studies 365B], 450, 519, 520, 550, Theatre 465, Women’s Studies 352. (English and comparative literature courses and their cross-listed equivalencies may not count toward fulfillment of General Education IV.C.)
18. One 500-level three unit elective in English or comparative literature.
19. Select one of the following specializations (12 units):
   Literature: Twelve units in any 500-level courses in English or comparative literature.
   English and American Literature: Twelve units in any 500-level courses in English.
   Comparative Literature: Twelve units of any 500-level courses in comparative literature.
   Written Expression: Twelve units selected from English 570-584W, Rhetoric and Writing Studies 500W.
   Theatre: Twelve units selected from Theatre 325*, 359*, 510, 580*.
   Journalism: Twelve units selected from Journalism and Media Studies 300, 408, 460, 480.

Additional prerequisites required.
Consult with the English and Comparative Literature honors program adviser for honors program variation.

Course Sequences
All year courses in English may be taken in either semester, and either semester may be taken singly for credit.

Student Initiated Courses
Students may petition for a course which falls within the competency of the English department but which is not among the regular course offerings for the present or following semester. Petition forms may be obtained from the department secretary.

Undergraduate Seminars
Each semester, if adequate staffing permits, the department may offer several of its courses as special, limited-enrollment seminars. These seminars are designed to give English majors (or anyone who has the consent of the instructor) the opportunity as juniors and seniors to engage in advanced work in small discussion groups.

English Minor
(SIMS Code: 112101)
The minor in English consists of a minimum of 15 units to include English 220, three units from Module A, three units from Module B, and six units from Module C. A maximum of three upper division units in creative writing courses selected from English 570, 571, 573, 576A, 577, 579, 580, 581W, 584W.


Module C. Six additional upper division units in English at the 300-, 400-, or 500-level.
The English minor is not available to students majoring in comparative literature. Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Children’s Literature Minor
(SIMS Code: 112136)
The minor in children’s literature allows students in a wide variety of fields to benefit from programming and curriculum offered by the faculty of SDSU’s National Center for the Study of Children’s Literature. Courses in the literature of young childhood and adolescence benefit students preparing for careers in education, psychology, social work, medicine, or any other field serving children.

Creative Editing and Publishing Minor
(SIMS Code: 112138)
The minor in creative editing and publishing allows students in a wide variety of fields to sharpen their skills in creative content development and prepare for careers in editing, publishing, and writing. The creative editing and publishing minor consists of a minimum of 15 units to include English 280, 499 Internship, 576A, 576B, three units selected from Rhetoric and Writing Studies 501, 503W, or 507. The creative editing and publishing minor is not available to students majoring in English or comparative literature. Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the minor and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
Creative Writing Minor
(SIMS Code: 112139)

The minor in creative writing allows students in a wide variety of fields to benefit from programming and curriculum offered by SDSU’s MFA creative writing faculty. Courses in fiction, poetry, screenwriting, creative publishing and editing allow students to sharpen their skills and pursue interests in creative writing in a supportive environment.

The creative writing minor consists of a minimum of 15 units to include English 280, an additional nine units selected from English 570, 571, 573, 576A, 576B, 577, 579, 580, 581W, 584W, and three units of English 499 (Internship).

The creative writing minor is not available to students majoring in English or comparative literature. Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (ENGL)

Refer to Courses and Curricula and University Policies sections of this catalog for description of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

ENGL 100. Rhetoric of Written Argument (3) [GE]
(Same course as Rhetoric and Writing Studies 100) (Intended for Undergraduates)

International students are advised to take Linguistics 100. Prerequisites: Satisfaction of the SDSU writing competency requirement. (See Graduation Requirements section of catalog.) If the EPT is used to satisfy the SDSU writing competency requirement, the required minimum score is 151. Students who score between 147-150 on the EPT enroll in Rhetoric and Writing Studies 101. Proof of completion of prerequisite required: Copy of EPT or competency scores or verification of exemption; proof of credit (Cr) in Rhetoric and Writing Studies 100.

Writing and reading as critical inquiry, designed to help students undertake university-level writing projects. Focus on rhetoric of written arguments. Students learn to use sources in their writing and make appropriate decisions about structure, cohesion, and rhetorical conventions. Not open to students with credit in a higher-numbered composition course or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

ENGL 102. Critical Reading (1) (Same course as Rhetoric and Writing Studies 102) (Intended for Undergraduates)

Two hours of activity. Prerequisites: Students who have met lower division writing competency through completion of either Rhetoric and Writing Studies 92; and concurrent registration in Rhetoric and Writing Studies 100.

Freshmen only. Cognitive and critical reading skills essential to academic writing at the university level.

ENGL 200. Rhetoric of Written Arguments in Context (3) [GE]
(Same course as Rhetoric and Writing Studies 200) (Intended for Undergraduates)

International students are advised to take Linguistics 200. Prerequisites: Satisfaction of the SDSU writing competency requirement and Rhetoric and Writing Studies 100 or 101 or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100. Proof of completion of prerequisite required: Test scores or verification of exemption; copy of transcript. Further practice in writing, reading, and critical thinking. Emphasis on rhetoric of written arguments in context and using multiple sources in writing. Continued attention to structure, cohesion, and rhetorical conventions. Not open to students with credit in Africana Studies 200, Chicana and Chicano Studies 200, Linguistics 200 or Rhetoric and Writing Studies 200. Completion of Rhetoric and Writing Studies 200 may require completion of the library workbook assignment.

ENGL 220. Introduction to Literature (3) [GE]
Prerequisites: A grade of C (2.0) or better in English 100, Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100 or 101. Proof of completion of prerequisite required: Copy of transcript.

Inquiry into basic nature of literature. What prompts humankind to creation of imaginative literature? What purposes does literature serve in cultural life of humanity? What are its social, philosophical, spiritual, and aesthetic values? Some consideration may be given to techniques and major critical theories, but focus will be on practical criticism for nonspecialists. Specific works studied will be representative of several genres, cultures, and periods of literature.

ENGL 250A-250B. Literature of the United States (3-3)
Prerequisites: A grade of C (2.0) or better in English 100, Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

United States literature from colonial period to present. Semester I: from beginning to Civil War. Semester II: Civil War to present. Recommended for English majors.

ENGL 260A-260B. English Literature (3-3)
Prerequisites: A grade of C (2.0) or better in English 100, Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

English literature from Anglo-Saxon period to present, with emphasis on major works in literary tradition. Semester I: Ends with neoclassical period. Semester II: Begins with Romantic writers.

ENGL 280. Introduction to Creative Writing (3)
Prerequisites: A grade of C (2.0) or better in English 100, Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

Theory and practice of poetry and fiction, with emphasis on basic concepts and techniques.

ENGL 296. Experimental Topics (1-4)
Prerequisites: A grade of C (2.0) or better in English 100, Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES
(Intended for Undergraduates)

ENGL 301. The Psychological Novel (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Psychological novel from its inception to present, including major works from a variety of cultures. Readings designed to aid students in discovering insights which great novelists have unearthed in their explorations of the human psyche.

ENGL 302. Introducing Shakespeare (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Representative tragedies, comedies, and histories. Primarily for the general student not specializing in English or comparative literature. This course does not count toward the English or comparative literature majors. Majors are required to take English 333.
ENGL 305, Literature and Environment (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.  
Environmental thought and consciousness as expressed in literature, emergence of modern and contemporary environmental thought, and impacts of literature on environmental awareness.

ENGL 306A-306W. Children's Literature and Advanced Composition (3-3)  
Prerequisites: English 200 or Rhetoric and Writing Studies 200. English 306A and 306W must be taken concurrently. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking.  
Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.  
A. Reading, analysis, and discussion of classic works of children's literature.  
W. Advanced composition; improvement of student skills through writing assignments based upon reading and work in the lecture part. Primarily designed to meet Graduation Writing Assessment and Literature requirements for Liberal Studies-Emphasis in Education.

ENGL 308W. Literary Study: Analysis, Research, and Writing (3)  
Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking.  
Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.  
Methods of literary analysis; concepts and terminology of literary study; research methods. Modes of writing about literature, with emphasis on the research paper.

ENGL 335, Chicana and Chicano Literature (3) [GE]  
(Same course as Chicana and Chicano Studies 335)  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.  
Chicana and Chicano literature of the nineteenth and twentieth centuries. Forms, themes, and trends in Chicana and Chicano literature, poetry, and other literary genres.

ENGL 365A. African American Literature to 1900 (3) [GE]  
(Same course as Africana Studies 365A)  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.  
Eighteenth and nineteenth century writing by African American authors. Issues of literary form; canon formation; and sociopolitical impact of the literature upon African American culture.

ENGL 365B. African American Literature After 1900 (3) [GE]  
(Same course as Africana Studies 365B)  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.  
Writing by African American authors after 1900. Issues of literary form, canon formation and sociopolitical impact of the literature upon African American and American culture of the twentieth and twenty-first centuries.

ENGL 401. Childhood's Literature (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.  
Influential contemporary and classic literature for children and young adults, such as Charlotte's Web and the Harry Potter series. Sample topics include construction of childhood, cultural values and ethics, role models, subversion of adult power. Not applicable to English or comparative literature majors. Majors are to take English 501.

ENGL 405. The Bible as Literature (3) [GE]  
(Same course as Comparative Literature 405)  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.  
Prose and poetry of the King James version.

ENGL 409. Science Fiction (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.  
How authors have responded to growing impact of science and technology on people's lives and imaginations. Representative works by authors such as Kobo Abe, Bradbury, Butler, Delany, Delillo, Dick, Gibson, Heinlein, Hoban, Huxley, Kapek, LeGuin, Murakami, Orwell, Poe, Russ, Shelley, Verne, Wells, Zamyatin, and others.

ENGL 450. LGBT Literature and Culture (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.  
LGBT knowledge and identities as expressed in literature and culture; changing nature of same-sex desire, sexual behavior, and same-sex relationships from antiquity to present.

ENGL 491. Contemporary Topics in Literature (3)  
Exploration of writers, works and topics in fiction, poetry, drama, and film, emphasizing the relationship between literature and current concerns. Topics include the city in fiction and film, literature and identity, literature of death, literature of contemporary myth and folklore, women in literature. Primarily for the general student not specializing in English or comparative literature. May count only as an elective course toward the English major. May be repeated with new title and content. See Class Schedule for specific content.

ENGL 493. Literature and Film (3)  
Relationships between film and genres of literature, focusing on a critical comparison of the techniques of rhetoric, fiction, and drama and those of film. Topics include literature and film, novel into film, drama and film, reading film. Primarily for the general student not specializing in English or comparative literature. May count only as an elective course toward the English major. May be repeated with new title and content. Maximum credit six units.

ENGL 494. Modern Fiction of the United States (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.  
Representative works by twentieth-century American authors such as Cather, Hemingway, Steinbeck, Faulkner, Fitzgerald, Ellison, Welty, Bellow, Vonnegut, Heller, Walker, others. Primarily for the general student not specializing in English or comparative literature. May count toward the English major only as an elective.

ENGL 496. Selected Topics in English (1-4)  
Specialized study of a selected topic in literature. May be repeated with new title and content. See Class Schedule for specific content. Limit of nine units of any combination of 496, 497, 506 courses applicable to a bachelor's degree. Maximum credit six units.

ENGL 498. Seminar: English Honors Thesis (3) Cr/NC  
Prerequisites: Six lower division units in literature and/or creative writing.  
Capstone class to prepare students who have been accepted into the department's honors program to write an undergraduate thesis by emphasizing advanced research methods and critical or creative writing skills.

ENGL 499. Special Study (1-3)  
Prerequisites: Consent of instructor and approval of department chair.  
Individual study. Maximum credit six units.

UPPER DIVISION COURSES  
(Also Acceptable for Advanced Degrees)

ENGL 501. Literature for Children (3)  
Prerequisites: Six lower division units in literature and/or creative writing.  
Critical analysis of literature intended for children. Study of texts and illustrations. This course cannot be used in place of English 401 to satisfy General Education requirements.

ENGL 502. Adolescence in Literature (3)  
Prerequisites: Six lower division units in literature and/or creative writing.  
Works centrally concerned with an adolescent protagonist. Includes both traditional novels of development (Bildungsroman) and contemporary young adult novels.
ENGL 503. Topics in Children's Literature (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Topics in children's and adolescents' literatures such as regionalism, multiculturalism, fantasy, science fiction, non-fiction, illustrated books, nineteenth-century classics, major works by twentieth-century authors, British children's literature, the noir young adult novel, and the history of genre. Maximum credit six units.

ENGL 508W. The Writing of Criticism (3)
Prerequisites: Six lower division units in literature and/or creative writing. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in WGS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.
Theory and practice of literary criticism. Emphasis on the work of important critics and on development of student's own critical writing.

ENGL 510A. Earlier Histories of British and American Literature (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Historical movements and developments in English language literature before 1800. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

ENGL 510B. Later Histories of British and American Literature (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Historical movements and developments in English language literature after 1800. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

ENGL 519. Ethnic Literatures of the United States (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Works from United States ethnic literatures, with emphasis on formerly excluded traditions as African-American, Hispanic and Chicano, Asian-American, and American Indian.

ENGL 520. African-American Literary Tradition (3)
Prerequisites: Six lower division units in literature and/or creative writing.
African-American literature from its eighteenth-century beginnings to the present. Early political and social concerns and concomitant utilitarian forms; aesthetic concerns and forms in nineteenth and twentieth centuries.

ENGL 521. Early American Literature (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Representative works by American writers from the colonial period through the Revolution; to include works by Anne Bradstreet, Phillis Wheatley, Olausdah Equiano, Cotton Mather, Jonathan Edwards, Benjamin Franklin, Thomas Jefferson, various Native American speakers and writers, and others. See Class Schedule for specific content.

ENGL 522. Literature of the United States, 1800-1860 (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Representative works by United States writers from 1800 to 1860; likely to include works by Emerson, Hawthorne, Melville, Poe, Slowe, Thoreau, Whitman, and others. See Class Schedule for specific content.

ENGL 523. Literature of the United States, 1860-1920 (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Representative works by United States writers from 1860 to 1920; likely to include works by Charles Chesnutt, Kate Chopin, Stephen Crane, Emily Dickinson, Henry James, Mark Twain, Edith Wharton, and others. See Class Schedule for specific content.

ENGL 524. Literature of the United States, 1920-1960 (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Representative works by United States writers from 1920 to 1960; likely to include works by Willa Cather, T. S. Eliot, William Faulkner, F. Scott Fitzgerald, Ernest Hemingway, Zora Neale Hurston, Eugene O'Neill, Katherine Anne Porter, Ezra Pound, John Steinbeck, and others. See Class Schedule for specific content.

ENGL 525. Literature of the United States, 1960 to Present (3)
Prerequisites: Six lower division units in literature and/or creative writing.
United States writers from 1960 to the present; likely to include works by Edward Albee, Saul Bellow, Allen Ginsberg, Joseph Heller, Maxine Hong Kingston, Norman Mailer, Toni Morrison, Sylvia Plath, Adrienne Rich, Kurt Vonnegut, Eudora Welty, and others. See Class Schedule for specific content.

ENGL 526. Topics in Literature of the United States (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Topics in United States literature to include the literature of the South, Black writers in the U.S., the frontier and U.S. literature, the outcast in U.S. literature, the immigrant experience in U.S. literature. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

ENGL 527. Genre Studies (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Study of a specific literary genre or genres, such as the novel, tragedy, epic, and lyric. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

ENGL 528. Authors (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Study of works of a major author or, if useful comparisons and juxtapositions warrant, works of two or three authors, such as Jane Austen, Melville, Emerson, and Thoreau. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

ENGL 530. Chaucer (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Chaucer's works, with emphasis on The Canterbury Tales and Troilus and Criseyde.

ENGL 533. Shakespeare (3)
Prerequisites: Six lower division units in literature and/or creative writing.
An introduction to the writings of Shakespeare. This course cannot be used in place of English 302 to satisfy General Education requirements.

ENGL 534. Study of Shakespeare (3)
Prerequisite: English 533. Advanced study of Shakespeare's achievement as poet and playwright. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

ENGL 536. British Literary Periods, Beginnings to 1660 (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Study of a literary period such as the Middle Ages or Renaissance. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

ENGL 537. Milton (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Milton's writings, with emphasis on Paradise Lost.

ENGL 540A-540B. English Fiction (3-3)
Prerequisites: Six lower division units in literature and/or creative writing.

ENGL 541A-541B. English Drama (3-3)
Prerequisites: Six lower division units in literature and/or creative writing.
English dramatic literature from its beginnings to the present. Semester I: From the beginning to 1642. Semester II: Period following reopening of the theatres in 1660. See Class Schedule for specific content.
ENGL 542. British Literary Periods, 1660-1800 (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Study of a literary period such as the Restoration or Enlightenment. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

ENGL 543. British Literary Periods, 1800-1900 (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Study of a literary period such as the Romantic or Victorian Age. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

ENGL 544. British Literary Periods, 1900-Present (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Study of a literary period such as the Postmodern Era. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

ENGL 549. Topics in English Literature (3)
Prerequisites: Six lower division units in literature and/or creative writing.
The works of Spenser, the metaphysical school of poetry, the English satirists, major movements in contemporary English fiction, and the like. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

ENGL 550. Queer Texts and Contexts (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Queer knowledge and identities as expressed in literature and culture, to include queer theory, history, and experience. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

ENGL 563. Literature and Culture (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Study of literature in relation to a specific culture idea or phenomenon, such as literature and the law, literature and technology. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

ENGL 570. Techniques of Poetry (3)
Prerequisites: Three lower division units in literature and/or creative writing and English 280.
Techniques of poetry from the writer's point of view. Introduction to critical and theoretical literature on poetry. Includes a creative writing workshop.

ENGL 571. Techniques of the Short Story (3)
Prerequisites: Three lower division units in literature and/or creative writing and English 280.
Techniques of the short story from the writer's point of view. Introduction to critical and theoretical literature on the short story. Includes a creative writing workshop.

ENGL 573. Techniques of the Novel (3)
Prerequisites: Three lower division units in literature and/or creative writing and English 280.
Techniques of the novel from the writer's point of view. Introduction to critical and theoretical literature on the novel. Includes a creative writing workshop.

ENGL 576A. Literary Publishing and Editing Workshop A (3)
Prerequisites: Six lower division units in literature and/or creative writing.
Survey of literary publishing and editing industry. Practical experience in a variety of publishing and editing skills, interaction with industry professionals, and critical writing. See Class Schedule for specific content. (Formerly numbered English 576.)

ENGL 576B. Literary Publishing and Editing Workshop B (3)
Prerequisite: English 576A.
Practical experience in small-press literary publishing. Expands on skills in creating and running a press to publish both print and digital texts. Tutorials and guest lectures. See Class Schedule for specific content.

ENGL 577. Techniques of Screenwriting (3)
Prerequisites: Six lower division units in literature and/or creative writing. English 280 or Television, Film, and New Media 110 or 510 for television, film, and new media majors.
Techniques of screenwriting. Introduction to critical and theoretical literature on screenwriting. Includes a creative writing workshop.

ENGL 579. Topics in Creative Writing (3)
Prerequisites: Three lower division units in literature and/or creative writing and English 280.
Techniques of creative writing focusing on a specialized genre such as comedy, science fiction, and biography. Study of the critical and theoretical literature on the genre. Includes a creative writing workshop. See Class Schedule for specific content. Maximum credit six units.

ENGL 580. Writing of Poetry (3)
Prerequisites: Six lower division units in literature and/or creative writing and English 280.
A creative writing workshop in poetry. Continuation of English 570. Maximum credit six units.

ENGL 581W. Writing of Fiction (3)
Prerequisites: Six lower division units in literature and/or creative writing and English 280. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.
A creative writing workshop in fiction. Continuation of English 571. Maximum credit six units.

ENGL 584W. Writing Informal Essays (3)
Prerequisites: Six lower division units in literature and/or creative writing and English 280. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.
A creative writing workshop in nonfiction, especially the essay as an art form. Maximum credit six units.

ENGL 596. Selected Topics in English (1-3)
Prerequisites: Three lower division units in literature and/or creative writing. May be repeated with new content and approval of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

Comparative Literature
(See this section of catalog under Comparative Literature.)

GRADUATE COURSES
Refer to the Graduate Bulletin.
Environmental Engineering

In the College of Engineering

OFFICE: Engineering 424
TELEPHONE: 619-594-6071
E-MAIL: ccee@sdstate.edu

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

Faculty
Emeritus: Gurol, Stratton
Chair: Supernak (Interim)
The Blasker Chair in Environmental Engineering: Buyuksonmez
The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering: Madenov
Professors: Buyuksonmez, Supernak, Walsh
Associate Professor: Garoma Ararso
Assistant Professor: Mladenov

Offered by the Department of Civil, Construction, and Environmental Engineering
Doctor of Philosophy degree in engineering sciences: (bioengineering), (electrical and computer engineering), (mechanical and aerospace engineering), (structural engineering).
Master of Engineering.
Master of Science degree in civil engineering.
Concentration in environmental engineering.
Major in civil engineering with the B.S. degree.
Major in construction engineering with the B.S. degree.
Major in environmental engineering with the B.S. degree.

Mission of the Department
The mission of the Department of Civil, Construction, and Environmental Engineering is to provide a high quality undergraduate and graduate education in the civil, construction, and environmental engineering areas as well as the advising and other support needed to ensure the students' academic success and preparation for a productive engineering career. In addition, through research and continuing professional development, the faculty produce, enhance and promote new developments within their areas of expertise for the benefit of society and the furtherance of their profession.

The objective of the program is to give the student a basic knowledge of civil, construction, and environmental engineering, as well as the interdisciplinary background and skills to meaningfully participate in and contribute technical advances toward this profession. The program integrates technical aspects with studies in the social sciences and humanities to ensure appropriate sensitivity to socially related problems.

Instruction is given both at the undergraduate level, leading to the bachelor's degree, and at the graduate level, leading to the master's or doctoral degrees. The undergraduate program builds upon concepts of mathematics, physics, chemistry and basic engineering with specialized study in civil, construction, and environmental engineering. Engineering design is emphasized, particularly in conjunction with computer utilization and practical engineering problems. Aspects of safety and engineering ethics are woven throughout the program. Breadth and depth of social science and humanities studies is assured by department approved courses. Completion of the undergraduate degree prepares the student for an entry-level professional position in addition to informal or formal graduate studies.

Many students who complete the undergraduate programs of the department choose to continue their formal studies on a full- or part-time basis at San Diego State University or at another institution. (See the Graduate Bulletin for additional information.)

The civil, construction, and environmental engineering programs are enhanced through cooperation with the American Society of Civil Engineers, the American Public Works Association, the Associated General Contractors, the Chi Epsilon Civil Engineering Honor Society, and other national organizations who sponsor student chapters to further aid the student’s professional development. The chapters at San Diego State University have won many awards in regional and national competition with other schools throughout the country.

Educational Objectives
The objectives of the environmental engineering program are: 1) to provide graduates with the technical knowledge and skills required to practice environmental engineering, 2) to provide graduates with an understanding of the ethical, social, legal, and professional issues faced in environmental engineering, and 3) to provide graduates with a solid foundation for graduate studies, continuing education, and life-long professional development.

The Blasker Chair in Environmental Engineering
The Blasker Chair in Environmental Engineering was established by an endowment from the Blasker-Rose-Miah Endowment Fund of the San Diego Foundation. The fund was created in honor of Mr. Samuel Blasker who left $8.0 million to the San Diego Foundation. Mr. Blasker was a successful aeronautical engineer and a business man with a vision to nurture and develop unique and innovative discoveries and experiences which may be of benefit to humanity.

The current appointee to the Chair, Dr. Fatih Buyuksonmez, is an accomplished scholar in the area of solid and hazardous waste management.

The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering
The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering is funded with an endowment created by generous gifts from William G. Leonhard, Jr. and his parents, William E. and Wyliss M. Leonhard. After Bill Leonhard graduated from San Diego State in 1964, he entered a career in the Air Force, rising to the rank of colonel. In January 1990, he retired from the Air Force, spent the next several years in private industry, and retired again in 1998.

The current chair, Dr. Natalie Mladenov, promotes excellence in undergraduate education, research in environmental engineering, and conducts scholarly activities on the topic of water quality in environmental engineering.

Transfer Credit
No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of engineering work attempted at this university. At that time, and upon recommendation of the department, unaccredited work will be evaluated for full or partial credit.

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

I. Communication and Critical Thinking: 9 units
You may not use Credit/No Credit grades in this section.
1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)

II. Foundations of Learning: 29 units
A. Natural Sciences and Quantitative Reasoning (17 units):
   1. Physical Sciences (11 units)
      Engineering students will take Chemistry 202 (4 units) or Chemistry 200 (5 units).
      - Physics 195 (3 units)
      - Physics 195L (1 unit)
      - Physics 196 (3 units)
   2. Life Sciences (3 units)
      Environmental engineering majors will take Biology 204.
   3. Laboratory (satisfied under A.1. above)
   4. Mathematics/Quantitative Reasoning
      Engineering students must take Mathematics 150, 3 units applicable to General Education. You may not use Credit/No Credit grades.
B. Social and Behavioral Sciences (3 units)
C. Humanities (9 units)
   Complete three courses in three different areas. One of these courses and the one under IV.A. below must be taken in the same department.

III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.

IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing (60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Total: 9 units; must include one course of cultural diversity.
A. Upper division Humanities (3 units)
   Three units must be taken from the same department as one of the Humanities courses selected in Foundations of Learning.
B. Upper division Social and Behavioral Sciences (3 units).
C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

The Major
Environmental engineering involves the identification and design of solutions for environmental problems. Society's most crucial environmental problems, such as providing safe drinking water, treatment and proper disposal of wastes, water and air pollution control, remediation of sites contaminated with spills or improper disposal of hazardous substances, are handled by environmental engineers. Environmental engineers are technical professionals who possess the scientific knowledge to identify, design, build, and operate systems that protect the environment from the impact of human activities, and as such make modern society possible.

The environmental engineering field and environmental engineering education are multidisciplinary. The B.S. degree provides a solid foundation in the fundamentals of mathematics, physics, chemistry, and engineering design that are needed to practice the profession or to pursue a graduate degree. Environmental engineering education also includes a range of other disciplines, such as biology, computer science, ecology, economics, geological sciences, and public health. To be able to address the spectrum of issues facing the environment, environmental engineers are broadly educated, as well as technically trained.

Environmental engineers are needed in both the private and public sectors. They are employed by engineering consulting firms that work in environmental pollution control, industries that need to comply with pollution emission and discharge regulations, private and municipal agencies that supply drinking water, treat and dispose wastes, government agencies that monitor and regulate waste discharges and air emissions, private and government laboratories, and universities that conduct environmental research, international agencies that transfer knowledge to the developing world, and public-interest groups that advocate environmental protection.

Impacted Program
The environmental engineering major is an impacted program. To be admitted to the environmental engineering major, students must meet the following criteria:

a. Complete with a grade of C or higher: Aerospace Engineering 200; Mechanical Engineering 200; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit (Cr/NC);

b. Have an overall cumulative GPA of 2.5.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Environmental Engineering Major
With the B.S. Degree
(Major Code: 09221) (SIMS Code: 442002)

All students in environmental engineering pursue a common program of study in basic sciences, engineering, and environmental engineering fundamentals and design. The program allows three units of “professional electives” which can be selected from available courses in environmental chemistry, environmental microbiology, water resources, and other areas.

Preparation for the Major, Environmental Engineering 101; Aerospace Engineering 280; Aerospace Engineering 200 or Mechanical Engineering 200; Aerospace Engineering 220 or Mechanical Engineering 220; Biology 204, 204L; Chemistry 130, 202 (or 200); Civil Engineering 121, 160 (or Statistics 250), 220; Mathematics 150, 151, 252; Physics 195, 195L, 196, 197. (52 units)

Aerospace Engineering 200 or Mechanical Engineering 200; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196 must be completed with a grade of C or higher. These courses cannot be taken for credit/no credit (Cr/NC).

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

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 48 upper division units to include Environmental Engineering 355, 356, 363, 441, 442, 495, 554, 556, 558; Aerospace Engineering 340; Biology 315; Civil Engineering 444, 462; Construction Engineering 430; Mechanical Engineering 350; and three units of professional electives selected from the following: Chemistry 571, Civil Engineering 445, 463, 530, Geological Sciences 553.
Courses (ENV E)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

NOTE: Proof of completion of prerequisites (copy of transcript) is required for all courses which list prerequisites.

LOWER DIVISION COURSES

ENV E 101. Environmental Engineering Seminar (1)
Breadth and depth of environmental engineering field through presentations by invited faculty, graduate students, guests and seminar enrollees; including individual library research with written and oral presentations on selected environmental topics.

ENV E 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

ENV E 320. Designing Solutions for Environmental Problems (3) [GE]
Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning, I.I.A. Natural Sciences and Quantitative Reasoning.

Human interaction with the land, water and air environment; environmental pollution; role of engineering in solving environmental problems. Not open to civil or environmental engineering majors.

ENV E 355. Environmental Engineering (3)
Prerequisites: Chemistry 202 (or 200). Approved upper division engineering major, minor, or another major approved by the College of Engineering. Proof of completion of prerequisites required: Change of major form or other evidence of acceptable major code. Causes and effects of environmental problems and engineering methods to control them.

ENV E 356. Environmental Chemistry for Engineers (3)
Prerequisites: Chemistry 130 and Environmental Engineering 355. Underlying principles of chemistry needed to solve environmental problems and covers the fundamentals of quantitative water and wastewater analysis, to include statistical analysis. Environmental applications in physical, equilibrium, organic, colloidal, and biochemistry concepts.

ENV E 363. Environmental Engineering Laboratory (3)
Two lectures and three hours of laboratory. Prerequisite: Environmental Engineering 355. Analysis of natural waters and wastewaters. Sampling and analysis of hazardous environmental pollutants. Techniques to analyze solid waste.

ENV E 441. Water Treatment Engineering (3)
Prerequisites: Environmental Engineering 296, 496, 596 courses applicable to a bachelor’s degree.

Wastewater collection, influent wastewater characteristics; effluent discharge requirements; principles of physical, biological, and chemical processes employed in wastewater treatment; design of selected wastewater treatment units; new and emerging wastewater treatment technologies; advanced treatment process; recycled water.

ENV E 495. Capstone Design Project (3)
One lecture and six hours of laboratory. Prerequisites: Construction Engineering 430 and credit or concurrent registration in Environmental Engineering 442, 554, 556, 558. At least three of these courses must be completed prior to enrolling in Environmental Engineering 495.

Engineering principles and design techniques in design of environmental engineering projects.

ENV E 496. Advanced Environmental Engineering Topics (1-3)
Prerequisite: Consent of instructor.
Modern developments in environmental engineering. See Class Schedule for specific content. Maximum credit six units for any combination of Environmental Engineering 496, 499 and 596.

ENV E 499. Special Study (1-3) Cr/NC
Prerequisite: Consent of instructor.
Individual study in the area of environmental engineering. Maximum credit six units for any combination of Environmental Engineering 496, 499 and 596.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

ENV E 554. Process Fundamentals of Environmental Systems (3)
Prerequisites: Minimum grade of C in Environmental Engineering 355, Aerospace Engineering 340, Civil Engineering 444, and Mechanical Engineering 350. Equilibrium and kinetics of chemical and biological reactions of environmental systems. Considerations of mass-transfer and fluid dynamics in water quality management and air pollution control.

ENV E 556. Air Pollution Engineering (3)
Prerequisites: Senior standing and Environmental Engineering 355.

ENV E 558. Solid and Hazardous Waste Engineering (3)
Prerequisites: Senior standing and Environmental Engineering 355.
Municipal solid and hazardous solid wastes from an environmental engineering perspective, including waste minimization and recycling. Engineered volume reduction through composting, incineration, mechanical compaction, and other methods. Ultimate disposal, landfill design and legislative regulations.

ENV E 596. Advanced Environmental Engineering Topics (1-3)
Prerequisite: Consent of instructor.
Modern developments in environmental engineering. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units for any combination of Environmental Engineering 496, 499 and 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

For additional courses which are electives in the environmental engineering program, refer to “Civil Engineering” in this section of the catalog.

GRADUATE COURSES

Refer to the Graduate Bulletin.
Environmental Sciences
In the College of Sciences

OFFICE: Physical Sciences 100 and 103
TELEPHONE: 619-594-5386
E-MAIL: envsci_info@sciences.sdsu.edu

The environmental sciences major is overseen by the College of Sciences and administered by the Environmental Sciences Program Committee. The program offers jointly, with the Department of Geography, a concentration in watershed science.

Faculty
Environmental Sciences Program Director: Sweedler (Physics/International Programs)
Undergraduate Advisers: Hope (Emphasis), Rahn (Major)
Environmental Sciences Program Committee: Atkins (Psychology), Deutschman (Biology), Ganster (Field Stations), Gersberg (Public Health), Hope (Geography), Maloy (Field Stations), Cecheil (Biology), Rahn (Field Stations), Sweedler (Physics/International Programs), Thorbjarnarson (Geological Sciences)

Offered by the College of Sciences
Major in environmental sciences with the B.S. degree in applied arts and sciences.
Emphasis in watershed science.

The Major
Environmental sciences is an interdisciplinary program leading to a Bachelor of Science degree in applied arts and sciences. The program will provide the student with a rigorous and broad foundation in those sciences most relevant to environmental issues. While the focus is on the physical environmental sciences, some coursework is required in biology, computer science, geography, and statistics. Those students wishing to concentrate more on the biological aspects of the environment, should consider the ecology emphasis offered by the Department of Biology.

Upon completion of the degree, students will be prepared to understand and contribute to a broad range of environmental problems confronting society. This major should be especially attractive to students who wish a broader background in the environmental sciences than is easily offered by individual departments. The major will prepare the student for employment in diverse situations in the dynamic and ever-changing environmental science job market. It will also be an excellent undergraduate major for students planning to go on to graduate school in any of the environmental sciences.

Advising
Students are required to meet with the undergraduate adviser in order to declare the major. Students wishing to major in environmental sciences are urged to meet with the adviser during their first semester.

Impacted Program
The environmental sciences major and emphasis are impacted programs. To be admitted to the environmental sciences major or emphasis, students must meet the following criteria:

a. Complete preparation for the major;

b. Complete a minimum of 60 transferable semester units;

c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Environmental Sciences Major
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 49011) (SIMS Code: 777001)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” Individual master plans are filed with both the environmental sciences adviser and the Office of Advising and Evaluations.

Environmental Sciences Major with the B.S. Degree in Applied Arts and Sciences
(Major Code: 49011) (SIMS Code: 777001)

Preparation for the Major. Environmental Science 100 [or Sustainability 100]; Biology 203, 203L, 204, 204L; Biology 215 or Statistics 250; Chemistry 200, Geography 101; and Mathematics 150, 151, Physics 195, 195L, 196, 196L, or Mathematics 122 or 124, Physics 180A, 180B, 182A, 182B. (33-38 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Study Abroad Requirement. All environmental sciences majors are required to participate in an international experience. Students participate in residence for two or more weeks (exceptions must be approved by the dean of the college for students who, because of serious and compelling life events or physical limitations, cannot meet this requirement). Majors must complete one of the following with the approval of the undergraduate adviser:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Semester Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450.

Major. A minimum of 36-37 upper division units to include Environmental Science 498A-498B; Biology 354; Geography 511; Geography 484 or 591 and 591L or Geological Sciences 505; Geological Sciences 305 or Environmental Engineering 355; 18 units selected from Environmental Science 301, 538 [or Biology 538], 544 [or Biology 544], Biology 350, 517, 540, Chemistry 571, Computer Science 538, Economics 455 or 456, Geography 370, 409, 570, 572, 574, Geological Sciences 530 or 551, Mathematics 336.

Emphasis in Watershed Science
(SIMS Code: 777005)

Environmental sciences has a strong geographic component. Understanding how vegetation, soils, climate, water, and human activities interact within a spatial context is the basis for watershed analysis. Students in this emphasis will a) acquire a fundamental background in the scientific fields that contribute to watershed analysis (geology, geomorphology, hydrology, ecology, and climatology) and b) develop skills and techniques that are important in applying and integrating this knowledge within a spatial context to address watershed science and management challenges at local to regional scales.

Preparation for the Major. Environmental Science 100 [or Sustainability 100]; Biology 203, 203L, 204, 204L; Biology 215 or Statistics 250; Chemistry 200, Geography 101; and Mathematics 122 or 124, Physics 180A, 180B, 182A, 182B, or Mathematics 150, 151, Physics 195, 195L, 196, 196L. (33-38 units)
Environmental Sciences

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 40-41 upper division units to include Biology 354; Geography 380 or 381, 385, 401, 483, 484 or 591 and 591L, 495, 511; Geological Sciences 305; 15 units selected from the following courses, at least 12 units must be from 500-level courses selected from Environmental Science 301, 538 [or Biology 538], 544 [or Biology 544], Biology 531, 535, 540, Geography 370, 409, 570, 584, 592 and 592L, Philosophy 332 [or Sustainability 332], Public Administration 320.

Courses (ENV S)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

ENV S 100. Environmental Sciences (3) [GE]
(Same course as Sustainability 100)
The earth as an ecosystem composed of biological, chemical, and physical systems and how these systems interact with one another and the human population.

ENV S 299. Special Study (1-3)
Prerequisites: Consent of program director and instructor. Individual Study.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

ENV S 301. Energy and the Environment (3) [GE]
Prerequisite: Completion of the General Education requirements in Communication and Critical Thinking and Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.
Fundamental physical concepts underlying energy, its conversion, and impact on the environment.

ENV S 498A-498B. Senior Seminar in Environmental Sciences (3-3) Cr/NC
Prerequisite: Senior standing in the environmental sciences major. Research projects related to an environmental issue in the San Diego and California region.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

ENV S 538. Environmental Policy and Regulations (3)
(Same course as Biology 538)
Prerequisite: Biology 354.
History of biological conservation and environmental laws; regulations governing biological resources; role of biologists; environmental impact analysis; operation of regulatory and resource agencies; biologists as expert witnesses; wetland protection and mitigation, state heritage programs, role of nongovernmental agencies.

ENV S 544. Terrestrial Ecosystems and Climate Change (3)
(Same course as Biology 544)
Prerequisite: Biology 354.
Controls on fluxes and stocks of nutrients within terrestrial ecosystems, ecosystem responses, feedbacks to climate change. Climate systems, water transport, production and decomposition, nutrient cycling, stable isotopes, spatial and temporal integration.

ENV S 544L. Global Change Science Laboratory (2)
(Same course as Biology 544L)
Six hours of laboratory.
Prerequisite: Biology 354.
Ecological methods in ecosystem and climate change science to include chemical analysis (of stable isotopes and elements) and meteorological measurements. Modeling, data interpretation, and presentations.

Environmental Studies – For Major: Refer to “Sustainability” in this section of the catalog.
For Minor: Refer to “Environment and Society” in “Interdisciplinary Programs” in this section of the catalog.
European Studies
In the College of Arts and Letters

OFFICE: Storm Hall 224A
TELEPHONE: 619-594-5111 / FAX: 619-594-8006
E-MAIL: euro-studies@mail.sdsu.edu
http://www-rohan.sdsu.edu/~euro

Faculty
Emeritus: Cornwell, Sacco
Chair: Donadey
Professors: Benkov, Donadey, Lyman-Hager, Schorr, Shapovalov
Associate Professors: Clô, Rebien, Wauchope
Assistant Professor: Matthews

Offered by the Department
Major in European studies with the B.A. degree in liberal arts and sciences.
Major in Russian and Central European studies with the B.A. degree in liberal arts and sciences.
Minor in European studies.

The Majors
European Studies. The establishment of a unified European economic community, contested borders in central and eastern Europe, gender and immigration issues in the European Union, the reconciliation of national identity with European integration for students with an interest in these or other topics of international importance, European Studies presents an opportunity to develop an individualized academic program. The European Studies major provides students with interdisciplinary study of the contemporary cultures of modern Europe and extensive preparation in a modern European language. The major requires a core of European Studies courses which address the themes and issues of modern Europe: the new political reality of a united Europe, the recent developments in Central and Eastern Europe, and the tasks of understanding how Europeans relate to themselves and to the rest of the world in today's global village. Because language proficiency plays a pivotal role in intercultural and social understanding, the study of languages is an integral part of the degree. Students will attain an advanced level of proficiency in a modern European language (to be selected from French, German, Italian, Portuguese, Russian, or Spanish) and select from courses offered in a variety of programs on campus and abroad which contribute to the interdisciplinary study of contemporary European culture. Reaching beyond traditional linguistic and historical approaches to the subject, this program challenges majors to develop critical, focused, interdisciplinary understandings of European themes and issues. The European Studies major prepares students for a variety of careers in diplomacy, with government agencies, or in European-centered commerce, communication, arts or the travel industry. Students also have the option of pursuing a double major in a second European language area study. Finally, some carefully chosen additional coursework outside the major, graduate study in any of the major's disciplines is an option.

Russian and Central European Studies. The goals of the Russian and Central European studies major are to promote the study of Russia, New States of Eurasia, and Eastern Europe within an integrated framework, and to build better understanding of the societies and cultures of this part of the world through the exchange of students, faculty and publications.

Recent revolutionary advances in transportation and communications produced by science and technology are effectively "shrinking" the world. At the present time the United States, Russia, and the New States of Eurasia are in the process of expanding their commercial and cultural ties, opening unprecedented opportunities in government service, journalism, library work, and international business.

For those who continue graduate work after completing the bachelor's degree, Russian and Central European studies is a good preparatory curriculum for graduate professional programs in international trade, international law, librarianship, education, public administration, and journalism.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The European studies and Russian and Central European studies majors are impacted programs. To be admitted to the European studies or Russian and Central European studies major, students must meet the following criteria:

- Complete preparation for the major;
- Complete a minimum of 60 transferable semester units;
- Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajors at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

European Studies Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 03101) (SIMS Code: 112501)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.

In order to satisfy degree requirements, students must complete at least one of the language emphases as described below.

Preparation for the Major.
(Complete I and II: 19-32 units.)

I. European Studies (9 units). European Studies 101; and six units selected from History 105, 106, German 150, Russian 110.

II. Foreign Language and Culture (Select one: 10-23 units.)
French 100A, 100B, 201, 210, 220, 221. (22 units)
German 100A, 100B, 202, 205A, 205B. (21 units)
Italian 100A, 100B, 201, 211, 212. (21 units)
Portuguese 101, 201. (10 units)
Russian 100A, 100B, 110, 200A, 200B. (23 units)
Spanish 101, 102, 201, 202, 211, 212. (22 units)

Language Requirement. The language requirement is automatically fulfilled through coursework for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience Requirement. All European studies majors are required to complete a study abroad program in a European country, consisting of a minimum of six units (90 hours). However, European studies majors are strongly encouraged to complete a more extensive abroad experience by participating in a semester or an academic year program. To fulfill the study abroad requirement, European studies majors must enroll in an approved program. Unapproved study abroad programs will not meet the international experience requirement for the major.
European Studies

Major. (Complete I, II, III, and IV below: 36 units.)

I. European Studies (12 units). European Studies 301, 501, and six units selected from any 400- or 500-level European studies courses.

II. National Language and Culture Emphasis (12 units). Complete one language and culture emphasis:
- French: 301, 421, 422, and one additional three unit course.
- German: 301, 400, 430, and one additional three unit course.
- Italian: 301, 422, 424, and one additional three unit course.
- Portuguese: 301, 401, and two additional three unit courses.
- Russian: 301, 311, 430, and one additional three unit course.
- Spanish: 301, 340, 405B, and Spanish 302 or 381 or 382.

III. European Studies Electives (6 units). Select six units from the following:
- European Studies 430, 435, 440, 501; Art 559; Comparative Literature 514; Geography 336; History 408, 440, 512A, 512B, 527; Humanities 408; Music 408A; Philosophy 506, 508; Political Science 302, 356; Russian 310, 435; Women’s Studies 340.

IV. National Culture Electives (6 units). Courses must be selected from an area other than courses selected for National Language and Culture Emphasis. Select six units from the following:
- English 544; French 424; German 320; History 418; Humanities 310, 320, 330; Italian 422; Political Science 359; Russian 305A, 305B.

Language Proficiency Exit Examination. Students are required to satisfy the Language Proficiency Exit Examination before graduation. To clear the language proficiency exit requirement, students must achieve a passing score on a language examination approved by the European Studies program. For further information concerning test dates, contact the European Studies office.

Russian and Central European Studies Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 03071) (SIMS Code: 116501)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

A minor is not required with this major.

Preparation for the Major. Russian 100A, 100B, 110, 200A, 200B. (23 units)

Language Requirement. The language requirement is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” for a complete listing of requirements.

International Experience Requirement. All Russian and Central European Studies majors are required to complete a study abroad program in Russia or any other Slavic-language speaking country, consisting of a minimum of six units (90 hours). However, all majors are strongly encouraged to complete a more extensive abroad experience by participating in a semester or academic year program.

To fulfill the study abroad requirement, Russian and Central European Studies majors must enroll in an approved program. Unapproved study abroad programs will not meet the international experience requirement for the major.

Major. A minimum of 27 upper division units to include Humanities 330 or Russian 430, Political Science 356, 359, Russian 301, 310, 311, 435, and six units of electives in 400- or 500-level courses in Russian.

European Studies Minor

(SIMS Code: 112501)

The minor in European studies consists of a minimum of 15 units to include European Studies 101 and 301 and nine additional upper division units from European Studies courses or Humanities 408. Students must also establish proficiency level in a European language other than English by completing one of the courses which satisfies the language graduation requirement or demonstrates equivalent proficiency.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University, including units earned abroad.

Courses (EUROP)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

EUROP 101. Introduction to European Studies (3) [GE]

Europe: The land, the people, their artistic, intellectual and cultural movements, including art, architecture, languages and literatures.

EUROP 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES

(Interested for Undergraduates)

EUROP 301. Contemporary Europe (3) [GE]

Prerequisite: European Studies 101 or completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Contemporary Europe, emphasizing artistic, intellectual, and cultural trends, as well as contemporary issues.

EUROP 424. European Cinema (3) [GE]

Two lectures and two hours of activity. Prerequisite: European Studies 101 or completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Issues and themes in European culture as seen through its films. May be repeated with new title and content. Maximum credit six units.

EUROP 430. Muslim Experience in Europe (3) [GE]

Prerequisite: European Studies 101 or completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Cross-cultural communications between the Muslim and Judeo-Christian worlds in Europe. Socio-cultural, ethnicity, race, and gender issues from the Middle Ages to the present day, using historical accounts, art works, literature, and film.

EUROP 435. Culture and Identity in Post-Communist Europe (3)

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

Social, economic, and cultural transformations in Europe after the collapse of communism. Daily life under communism and the impact of the collapse of this political system on language, individual identity, space, and community.
EUROP 440. Human Trafficking in Europe (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Human trafficking in context of migration, human rights, society, culture, and gender discourses in Europe. Historical accounts of trafficking, scholarly articles, literature, film, and primary documents from advocacy organizations and governmental institutions.

EUROP 495. European Studies Internship (3) Cr/NC
Prerequisites: Upper division standing in the major and consent of instructor.
Practical work experience in a field related to European studies. Work done under joint direction of activity sponsor and instructor. Approved international internships may count towards international experience requirement for major.

EUROP 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

EUROP 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

EUROP 501. European Life and Culture (3)
Prerequisite: Undergraduate: European Studies 301 or completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Specialized study of topics such as European union, European women, or European art. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

EUROP 596. Topics in European Studies (3)
Prerequisite: European Studies 301 for majors and minors; upper division standing for all others.
Specialized topics in contemporary European culture. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.
The uniqueness of the academic area known as kinesiology is the study of human movement. The academic foundation for the study of human movement is covered by courses that explore movement as it affects and is affected by physiological, psychological, developmental, sociocultural, and mechanical parameters. Application of movement concepts evolves from an academic foundation and is covered by courses that study how movement is quantified, how learning experiences are sequenced to modify movement behaviors, and how movement is modified for special needs.

Emphasis in Exercise Science Generalist

Students in the exercise science generalist emphasis often find employment in the private and public sectors concerned with the fitness and health of employees. This emphasis prepares students to (1) evaluate and develop exercise programming for apparently healthy persons in diverse fitness and health settings, and (2) attain certifications that reflect knowledge of the scientific principles that govern leadership in exercise and health enhancement programs. Graduates work as fitness professionals in corporate, community, clinical, and commercial fitness programs. There are also career opportunities for employment in the business sector to include fitness and wellness, and community programs. Graduates in the exercise science generalist emphasis are not as well prepared as those coming from the fitness specialist and may not be as competitive for employment or admission to graduate kinesiology programs.

Emphasis in Fitness Specialist

Students in the fitness specialist emphasis often find employment in the private and public sectors concerned with the fitness and health of employees. This emphasis prepares students to (1) evaluate and develop exercise programming for apparently healthy persons in diverse fitness and health settings, and (2) attain certifications that reflect knowledge of the scientific principles that govern leadership in exercise and health enhancement programs. Graduates work as fitness professionals in corporate, community, clinical, and commercial fitness programs. There are also career opportunities for employment in the business sector to include fitness and wellness, community programs, cardiac rehabilitation, and human efficiency research.

Emphasis in Prephysical Therapy

The prephysical therapy emphasis prepares students to meet the academic requirements necessary for entry to postgraduate education for rehabilitative professions such as physical therapy, chiropractic, occupational therapy, physician assistant, and podiatry. Students find employment in a broad range of medical environments. Students wishing to meet all requirements for postgraduate education for a professional degree should meet with the undergraduate adviser as well as contact potential postgraduate education sites to obtain specific entry requirements.

Standards for Admission

Admission to the University

Applicants must be eligible for admission to the university. See “Regulations: Admission and Registration” section of this catalog. Once accepted to the university, students interested in the athletic training major are subject to further screening by the School of Exercise and Nutritional Sciences and the athletic training professional program.

Admission to the Athletic Training or Kinesiology Major

Refer to “Impacted Programs” section of the Exercise and Nutritional Sciences section of this catalog.

Admission to the Athletic Training Professional Program

The application packet for the athletic training professional program can be obtained from the athletic training advising office or is available on the program website at: http://www-rohan.sdsu.edu/dept/athletic/athletictraining/.
Exercise and Nutritional Sciences

1. Application Deadline. Application for admission is accepted each spring for the following fall. Program applications are due February 1. There is no spring admission cycle.

2. Prerequisite Courses. The following courses, or their equivalents, are required for admission to the athletic training professional program:
   - BIOL 212 Human Anatomy
   - ENS 265 Care and Prevention of Athletic and Recreational Injuries
   - ENS 265L Care and Prevention of Athletic and Recreational Injuries Laboratory

3. Pre-Major Courses. Students are expected to have most, if not all, of the pre-major courses completed by the end of the spring semester in which they apply. This ensures transition into the major and major coursework.

4. Minimum Overall Grade Point Average. Applicants must have a minimum overall grade point average of 2.8. Please note that having the minimum grade point average does not guarantee admittance.

5. Prerequisite Grade Point Average. Applicants must have a minimum prerequisite grade point average of 3.0. Prerequisite courses include BIOL 212, ENS 265, 265L.

6. CPR and First Aid Certification. Students are required to have current CPR as a Health Care Provider through the American Red Cross or as a Professional Rescuer through the American Red Cross. In addition, they must have first aid certification at the time of application, and are expected to maintain current certifications in both CPR and First Aid throughout the time of enrollment in the program.

7. Volunteer Clinical Hours. Prior to program admission, students must obtain a minimum of 60 hours of observational experience in a traditional athletic setting under the supervision of a certified athletic trainer. These settings include athletic settings at a high school, community college, or university. A list of approved settings and locations can be obtained from the athletic training program director.

8. Technical Standards for Admission. All students upon admission to the athletic training professional program must have medical clearance by a physician, nurse practitioner, or physician assistant for the following abilities and expectations. In the event a student is unable to fulfill these technical standards, with or without reasonable accommodation, the student will not be admitted into the program. The Student Disability Services office will evaluate a student who states he/she could meet the program's technical standards with accommodation and confirm that the stated condition qualifies as a disability under applicable laws. If a student states he/she can meet the technical standards with accommodation, the university will determine whether it agrees that the student can meet the technical standards with reasonable accommodation; this includes a review of whether the accommodations requested are reasonable, taking into account whether accommodation should jeopardize clinician/patient safety, or the educational process of the student or the institution, including all coursework, clinical experiences, and internships deemed essential to graduation.

   Candidates for selection must demonstrate:
   a. The mental capacity to assimilate, analyze, synthesize, integrate concepts and problem solve to formulate assessment and therapeutic judgments and to be able to distinguish deviations from the norm.
   b. Sufficient postural and neuromuscular control, sensory function, and coordination to perform CPR, primary and secondary surveys, emergency transport and transfers, appropriate physical examinations, and manual therapeutic exercise procedures; including the safe and efficient use of equipment and materials during the assessment and treatment of patients.
   c. The ability to communicate effectively and sensitively with patients and colleagues, including individuals from different cultural and social backgrounds; this includes, but is not limited to, the ability to establish rapport with patients and communicate judgments and treatment information effectively. Students must be able to understand and speak the English language at a level consistent with the competent professional practice.
   d. The ability to write effectively as it relates to the discipline.

9. Transfer and Retention. Transfer students should check with the advising offices of the respective institutions for transfer equivalents and admission criteria. Once students are accepted into the athletic training professional program/major, there is a retention policy that requires students to maintain both academic and clinical standards for continuation in the program. Academically, students must achieve a semester GPA of 2.75 or higher each semester enrolled in the professional program and clinically they must obtain a B or better in the ENS 389, Practicum in Athletic Training, series coursework or they will be put on academic or clinical probation. Should a student have two semesters of probation, they will be dismissed from the program.

10. Appeal Policy. Should a student have special circumstances that he/she feels should be considered regarding an admission decision or retention decision, there is a formal appeal process that can be applied. Refer to the athletic training policies and procedures manual for a copy of these policies. This manual is available in the athletic training advising office or on the athletic training website.

   Athletic Training Professional Program Expectations
   If accepted to the athletic training professional program, the following expectations apply:
   1. Become a student member of the National Athletic Trainers’ Association within four months of program admittance. Student membership rate is $25 per year.
   2. Become a member of the Future Athletic Trainers Society within four months of program admittance. Membership rate is $40 per year.
   3. Obtain Student Professional Liability Insurance by the first start date of clinical placement. Student rate is $20 per year.
   4. Provide own transportation to off-campus clinical education sites.
   5. Be enrolled as a full-time student (at least 12 units), unless special circumstances are approved for part-time enrollment by the program director.
   6. Maintain current CPR certification through the American Heart Association (AHA), health care provider course, or American Red Cross (ARC) professional rescuer course.
   7. Engage in a clinical education program that averages 20 hours per week at a designated clinical site for a minimum of four semesters. Clinical exposure may commence in early August and might extend into December or January.
   8. Adhere to designated policies and procedures for program retention and progression. A copy of the policies and procedures manual is available on the program website or can be obtained from the advising office.

   Impacted Programs
   The athletic training major and the kinesiology major with emphases in exercise science generalist, fitness specialist, and prephysical therapy are impacted programs.

   To be admitted to the athletic training major or a kinesiology major emphasis, students must meet the following criteria:
   a. Complete with a grade of C or higher: Exercise and Nutritional Sciences 200 and Biology 212. These courses cannot be taken for credit/no credit (Cr/NC). Biology 212 must be completed with a grade of B or higher for students in the athletic training major.
   b. Complete a minimum of 60 semester units applicable to the lower division General Education requirements to include all Preparation for the Major requirements for kinesiology major emphasis, and electives to reach 60 units. Exercise and Nutritional Sciences 200 and Biology 212 must be completed before taking upper division major courses. Preparation for the Major courses cannot be taken for credit/no credit (Cr/NC).
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c. Have a cumulative GPA of 2.80 or higher. For the athletic training major, the GPA is also required for application submission and program consideration.
d. For the athletic training major, students must be accepted into the professional program.
e. For the athletic training major, complete with a minimum overall grade point average of 3.0: Biology 212, Exercise and Nutritional Sciences 265, 265L. These courses cannot be taken for credit/no credit (Cr/NC).

To complete the major, students must fulfill the degree requirements for the major emphasis described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Athletic Training Major

With the B.S. Degree in Applied Arts and Sciences

(Major Code: 08375) (SIMS Code: 556522)

All candidates for a degree in applied arts and sciences must complete the requirements listed in the section of this catalog on “Graduation Requirements.”

Acceptance into the athletic training professional program is required for major status. Application to the program is competitive and limited in number. Applications are due February 1. Those students interested in the athletic training program should contact the athletic training program director.

Preparation for the Major courses cannot be taken for Credit/No Credit (Cr/NC). Exercise and Nutritional Sciences 200 must be completed with a grade of C or higher. Exercise and Nutritional Sciences 265, 265L, and Biology 212 must have a minimum overall grade point average of 3.0. Biology 212 must be completed with a grade of B or higher.

Preparation for the Major, Exercise and Nutritional Sciences 200, 265, 265L; Biology 203, 203L, 212; Chemistry 200; Nutrition 201; Psychology 101, 260; Sociology 101; and one of the following: Biology 215, Economics 201, Psychology 280, Sociology 201, Statistics 119. (34 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. Athletic training majors are required to participate in an international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course and community service activity in the U.S. will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;


Kinesiology Major

With the B.S. Degree in Applied Arts and Sciences

(Major Code: 08351)

All candidates for a degree in applied arts and sciences must complete the requirements listed in the section of this catalog on “Graduation Requirements.”

Preparation for the Major courses cannot be taken for Credit/No Credit (Cr/NC). Exercise and Nutritional Sciences 200 and Biology 212 must be completed with a grade of C or higher.

Emphasis in Exercise Science Generalist

(SIMS Code: 556528)

Open only to AA-T/TMC for Kinesiology

Preparation for the Major. The emphasis in exercise science generalist is open only to students who have completed the California Community College Associate in Arts in Kinesiology for Transfer (AA-T) degree completing the Transfer Model Curriculum (TMC) for Kinesiology. Students must complete the following courses as part of the TMC or at SDSU: Exercise and Nutritional Sciences 265; Nutrition 201; Chemistry 100, 102, or 200; Statistics 119. (5-13 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. All kinesiology majors are required to participate in an international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course and community service activity in the U.S. will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;

Students must complete nine upper division units from General Education Explorations of Human Experience.

Major. A minimum of 40 upper division units to include Exercise and Nutritional Sciences 303, 304, 304L, 305, 306, 307, 332, 333, 388A (one unit) or 388B (one unit), 401B, 432, 432L, 433, 434, 439, 440; Health and Human Services 350. Health and Human Services 350 will satisfy three units of the General Education requirement in IV.B. Communication 321 is recommended, if needed, for students to complete their 60 unit requirement at SDSU.

Emphasis in Fitness Specialist

(SIMS Code: 556524)

Preparation for the Major. Exercise and Nutritional Sciences 200, 265; Biology 100, 100L, 212; Chemistry 100; Communication 103; Gerontology 101; Nutrition 201; Psychology 101; Sociology 101, and one of the following: Biology 215, Economics 201, Psychology 280, Sociology 201, Statistics 119. (36 units)
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. All kinesiology majors are required to participate in an international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course and community service activity in the U.S. will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:
1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;

Major. A minimum of 49 upper division units to include Exercise and Nutritional Sciences 303, 304, 304L, 305, 306, 307, 332, 333, 388A (one unit) or 388B (one unit), 401B, 432, 433L, 433, 434, 438, 439, 440; Biology 336; Communication 321; Gerontology 350. Biology 336 will also satisfy three units of the General Education requirement in IV.A. Recommended:
Students should take Health and Human Services 350 to satisfy the General Education requirement in IV.B.

Emphasis in Prephysical Therapy (SIMS Code: 556511)

Students interested in applying to postgraduate allied health programs are advised to follow the prephysical therapy emphasis. It should be noted that required courses attempt to prepare individuals for graduate application, however specific course requirements and admission standards may vary for each graduate school.

Preparation for the Major. Exercise and Nutritional Sciences 200, 265; Biology 203, 203L, 211, 211L, 212; Chemistry 200, 201; Communication 103; Nutrition 201; Physics 180A and 180B, 182A and 182B; Psychology 101; Sociology 101; and one of the following: Biology 215, 216, 217, 218; Economics 201, Psychology 280, Sociology 201, Statistics 119 (50 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. All kinesiology majors are required to participate in an international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course and community service activity in the U.S. will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:
1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;

Major. A minimum of 39 upper division units to include Exercise and Nutritional Sciences 303, 304, 304L, 305, 306, 307, 332, 333, 388A (one unit) or 388B (one unit), 401B, 432, 433L, 433, 434, 438, 439, 440; Biology 336; Communication 321; Psychology 350. Biology 336 will also satisfy three units of the General Education requirement in IV.A. Recommended:
Students should take Health and Human Services 350 to satisfy the General Education requirement in IV.B. Students should take Exercise and Nutritional Sciences 466 to learn more about clinical pathology of general medical conditions.

Types of Activity Courses

The department offers a wide variety of physical activity courses ranging from adapted physical education through intermediate level classes. The purpose of the physical activity program is to:
1. Provide quality physical activity skill instruction at the beginning and intermediate levels in a wide variety of sport and dance activities.
2. Provide a vehicle for vigorous physical activity in an instructional setting.
3. Provide knowledge about various sport and dance activities.
4. Provide knowledge about the value of physical activity as it relates to an improved quality of life.
5. Provide opportunity for physical activity instruction to all segments of the student population, including those with temporary or permanent disabilities.
Exercise and Nutritional Sciences

Courses (ENS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

Courses offered for one unit credit meet two hours per week or equivalent.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENS 104A-104B</td>
<td>Weight Training (1-1)</td>
<td></td>
</tr>
<tr>
<td>ENS 108</td>
<td>Basketball (1)</td>
<td></td>
</tr>
<tr>
<td>ENS 109A-109B</td>
<td>Soccer (1-1)</td>
<td></td>
</tr>
<tr>
<td>ENS 110</td>
<td>Volleyball (1)</td>
<td></td>
</tr>
<tr>
<td>ENS 116A-116B</td>
<td>Golf (1-1)</td>
<td></td>
</tr>
<tr>
<td>ENS 119A-119B</td>
<td>Bowling (1-1)</td>
<td></td>
</tr>
<tr>
<td>ENS 124</td>
<td>Sailing (1)</td>
<td></td>
</tr>
<tr>
<td>ENS 138</td>
<td>Selected Activities (1)</td>
<td>May be repeated with new activity for additional credit. See Class Schedule for specific content.</td>
</tr>
<tr>
<td>ENS 139A</td>
<td>Beginning Rock Climbing (1)</td>
<td>Two hours of activity. Rock climbing concepts and theories. Active participation using beginning techniques and training concepts.</td>
</tr>
<tr>
<td>ENS 139B</td>
<td>Intermediate Rock Climbing (1)</td>
<td>Two hours of activity. Rock climbing concepts and theories. Active participation using advanced techniques, training concepts, and lead climbing concepts expected.</td>
</tr>
<tr>
<td>ENS 145</td>
<td>Wakeboarding and Waterskiing (1)</td>
<td></td>
</tr>
<tr>
<td>ENS 146</td>
<td>Surfing (1)</td>
<td></td>
</tr>
<tr>
<td>ENS 147</td>
<td>Windsurfing (1)</td>
<td>Theory and mechanical skills of windsurfing. Proper rigging, body position, and sailing theory, right-of-way rules and boating safety for good fundamental base to confidently continue.</td>
</tr>
<tr>
<td>ENS 200</td>
<td>Introduction to Exercise and Nutritional Sciences (3)</td>
<td>Overview of disciplines of kinesiology and foods and nutrition. Current and emerging issues, ethical considerations, and professional practice. Not open to students with credit in Exercise and Nutritional Sciences 210.</td>
</tr>
<tr>
<td>ENS 241A</td>
<td>Physical Education of Children-Theory (1)</td>
<td>Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 241B. Physical education of elementary school-aged children: Theoretical and scientific bases. Not open to kinesiology majors.</td>
</tr>
<tr>
<td>ENS 241B</td>
<td>Physical Education of Children-Activities (1)</td>
<td>Two hours of activity. Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 241A. Physical education of elementary school-aged children: Activities and instruction. Not open to kinesiology majors.</td>
</tr>
<tr>
<td>ENS 265</td>
<td>Care and Prevention of Athletic and Recreational Injuries (2)</td>
<td>Prerequisites: Premajor in kinesiology. Recommended: Credit or concurrent registration in Biology 212. Mechanisms of common sports injuries, acute care of injuries, risk management and prevention of injuries, psychosocial intervention and referral, and basic health care administration.</td>
</tr>
<tr>
<td>ENS 265L</td>
<td>Care and Prevention of Athletic and Recreational Injuries Laboratory (1)</td>
<td>Three hours of laboratory. Prerequisites: Premajor in kinesiology. Concurrent registration in Exercise and Nutritional Sciences 265.</td>
</tr>
</tbody>
</table>

ENS 296, Experimental Topics (1-4) | Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. |

UPPER DIVISION COURSES (Intended for Undergraduates)

ENS 301, Physical Growth and Development (3) | Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 200. Limited to kinesiology premajors, majors, and liberal studies majors. Major Codes: 08351, 49015, 49081. Principles of human growth; performance as affected by developmental levels and individual differences in structure and function. |

ENS 302, Sociocultural History and Philosophy of Sport (3) | Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 200. Limited to kinesiology premajors and majors. Major Code: 08351. Integrated approach to understanding of historical, philosophical, and sociological forces shaping development of physical activity and sport. |

ENS 303, Applied Kinesiology (3) | Prerequisites: Grade of C or better in Biology 212; credit or concurrent registration in Exercise and Nutritional Sciences 200 or Dance 191; or completion of Associate of Arts in Kinesiology for Transfer (AA-T) degree and Transfer Model Curriculum (TMC) for Kinesiology. Limited to kinesiology majors. Prerequisites: Major Code: 08351. Analysis of the results. |

ENS 304, Physiology of Exercise (3) | Prerequisites: Grade of C or better in Biology 212; credit or concurrent registration in Exercise and Nutritional Sciences 200 or Dance 191; or completion of Associate of Arts in Kinesiology for Transfer (AA-T) degree and Transfer Model Curriculum (TMC) for Kinesiology. Limited to kinesiology majors. Major Code: 08351. Testing and measurement for assessment and understanding of physical performance and for planning and evaluation of instruction in physical activity settings. Planning, implementation, and evaluation of tests. |

ENS 305, Measurement and Evaluation in Kinesiology (3) | Prerequisites: One of the following: Biology 215, Economics 201, Psychology 280, Sociology 201, Statistics 119; or completion of Associate of Arts in Kinesiology for Transfer (AA-T) degree and Transfer Model Curriculum (TMC) for Kinesiology. Limited to kinesiology majors. Major Code: 08351. Psychological parameters related to physical performance and the acquisition of motor skills. |
ENS 300. Exercise and Wellness Across the Lifespan (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.
Role of physical activity and exercise behavior in health and wellness. Personal applications plus gender and cultural implications of physical activity from childhood through adulthood.

ENS 331. Exercise and Nutrition for Health, Fitness, and Performance (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.
Exercise, physical activity and nutrition information, guidelines, and misinformation. Effects of exercise and nutrition on disease prevention, personal health, fitness, and performance goals.

ENS 332. Pathophysiology and Exercise Programming of Disease Populations I (3)
Prerequisites: Exercise and Nutritional Sciences 304 and concurrent registration in Exercise and Nutritional Sciences 333.
Pathophysiology of musculoskeletal, neuromuscular, and cognitive/psychosocial disorders. Develop exercise programs through recommended guidelines.

ENS 333. Pathophysiology and Exercise Programming of Disease Populations II (2)
Prerequisites: Exercise and Nutritional Sciences 304 and concurrent registration in Exercise and Nutritional Sciences 332.
Pathophysiology of pulmonary, cancer, and immune-related disorders. Develop exercise programs through recommended guidelines.

ENS 335. Basic Movement Skills (2)
Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 303 or Education 200 and Exercise and Nutritional Sciences 241A, 241B. Limited to kinesiology and liberal studies majors. Major Codes: 08351 and 49015.
Terminology, performance, and analysis of elementary-level movement skill themes and concepts, educational gymnastics, rhythms, and dance.

ENS 337. Basic Manipulative Skills (2)
Four hours of activity.
Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 303 or Education 200 and Exercise and Nutritional Sciences 241A, 241B. Limited to kinesiology and liberal studies majors. Major Codes: 08351 and 49015.
Cues, progressions, and activities for propulsive, retentive, striking, and receptive skills.

ENS 347A. Leadership for Kinesiology (2)
Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 305 or Education 200 and Exercise and Nutritional Sciences 241A, 241B. Limited to kinesiology and liberal studies majors. Major Codes: 08351 and 49015.
Theory and development of leadership behavior of physical educators, emphasizing leadership qualities unique to diverse physical activity settings.

ENS 347B. Leadership for Kinesiology Activity (1)
Two hours of activity.
Prerequisite: Credit or concurrent registration in Exercise and Nutritional Sciences 347A.

ENS 360. Professional Issues (1) Cr/NC
Prerequisite: Junior standing in prephysical therapy specialization. Current issues relevant for one preparing to enter an allied health profession. (Formerly numbered Exercise and Nutritional Sciences 460.)

ENS 363. Corrective Physical Education (3)
Prerequisite: Exercise and Nutritional Sciences 303.
Etiology, characteristics, and programs for children with corrective and/or physically handicapping conditions. Includes evaluating and implementing prescribed activities for individuals with these types of conditions.

ENS 365. Scientific Management of Sports Injuries (3)
Prerequisite: Credit or concurrent registration in Exercise and Nutritional Sciences 306.
Scientific basis of injury dysfunction and tissue healing. Application of these principles to the use of therapeutic modalities for injury management.

ENS 367. Clinical Evaluation of Sports Injuries Part I (2)
Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 303 and 389A.

ENS 367L. Clinical Evaluation of Sports Injuries Part I (1)
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 367.
Practical experience in clinical evaluation of sports injuries techniques and scientific basis of techniques. Principles of systematic differential evaluation of upper extremity, cervical spine.

ENS 368. Clinical Evaluation of Sports Injury Part II (2)
Prerequisites: Exercise and Nutritional Sciences 367 and 367L. Credit or concurrent registration in Exercise and Nutritional Sciences 368L.
Theory of clinical evaluation of sports injury techniques and scientific basis of techniques. Systematic differential evaluation process applied to lower extremities, thoracic, and lumbar spine and chest and abdominal injuries.

ENS 368L. Clinical Evaluation of Sports Injury Part II (1)
Prerequisites: Exercise and Nutritional Sciences 367 and 367L. Concurrent registration in Exercise and Nutritional Sciences 368.
Practical experience in clinical evaluation of sports injuries techniques and scientific basis of techniques. Principles of systematic differential evaluation process applied to lower extremities, thoracic and lumbar spine and chest and abdominal injuries.

ENS 388A. Rehabilitation Laboratory SDSU Fitness Clinic (1-4)
Three hours of laboratory per unit.
Prerequisites: Senior standing and consent of instructor.
Hands-on experience working with individuals with a variety of physical and neurological disabilities through prescribed fitness programming at San Diego State University. Maximum credit four units.

ENS 388B. Community Rehabilitation Laboratory (1)
Three hours of laboratory.
Prerequisite: Consent of instructor.
Hands-on experience working with individuals with a variety of physical and neurological disabilities in the San Diego community.

ENS 389A-389B-389C-389D. Practicum in Athletic Training (1-1-1-1)
Prerequisites: 389A. Grade of B or better in Biology 212, Exercise and Nutritional Sciences 265, 265L, application, letters of recommendation, and interview.
389B. Grade of B or better in Exercise and Nutritional Sciences 389A.
389C. Grade of B or better in Exercise and Nutritional Sciences 389B.
389D. Grade of B or better in Exercise and Nutritional Sciences 389C.
Practical training and clinical applications of basic and advanced techniques of athletic training. Emergency, preventative procedures treatment, and rehabilitation techniques to be performed in actual athletic training settings. Practicum experience offered in conjunction with clinical internship.

ENS 397. Contemporary Topics in Kinesiology (Credit to be arranged) Cr/NC
(Offered only in the College of Extended Studies)
Prerequisites: Consent of instructor; bachelors degree.
Study of specially selected problems in physical education and sport. Does not apply to undergraduate degrees or credentials.

ENS 401A. Musculo-Skeletal Fitness (1)
Prerequisites: Exercise and Nutritional Sciences 304, 304L, 306.
Training techniques in areas of strength and flexibility. Examination of facilities and equipment, mechanics of strength and flexibility techniques, development of training program, basic physiology and review of current research in areas of strength and flexibility.

ENS 401B. Musculo-Skeletal Fitness Activity (1)
Two hours of activity.
Prerequisites: Exercise and Nutritional Sciences 304, 304L, 306.
Circulatory endurance, muscular strength and endurance, selection and care of equipment and facilities, and programs in the areas of flexibility, weight training and aerobics.

ENS 431. Administration of Exercise and Fitness Program (2)
Prerequisites: Exercise and Nutritional Sciences 303, 304, 304L.
Administration and management of corporate, private, university-based, and hospital-based exercise programs.
ENS 432. Exercise, Fitness, and Health (2)
Prerequisites: Exercise and Nutritional Sciences 303, 304, 304L, 305. Concurrent registration in Exercise and Nutritional Sciences 432L.
Exercise testing, programming and leadership for healthy persons of different ages, capacities, and needs.

ENS 432L. Exercise, Fitness, and Health (1)
Three hours of laboratory.
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 432L.
Practicum in exercise testing, programming and leadership for healthy persons of different capacities, and needs.

ENS 433. Exercise, Sport, and Aging (3)
Prerequisite: Exercise and Nutritional Sciences 304.
Relationships between exercise, sport and human aging including physiological, psychological, sociological, health and program considerations. Aging is viewed developmentally with emphasis on the middle and later years.

ENS 434. Promoting Physical Activity and Healthy Eating (3)
Prerequisite: Upper division standing.
Theoretical frameworks for integrating physical activity and nutrition in developing, implementing, and evaluating multicomponent interventions to increase these behaviors in a variety of population subgroups.

ENS 438. Psychosocial Aspects of Disease and Injury Rehabilitation (3)
Prerequisite: Exercise and Nutritional Sciences 388A or 388B.
Psychosocial factors related to disease and injury and effects on treatment and rehabilitation processes. Theoretical mechanisms through which psychosocial factors are affected by and influence disease, injury, and treatment and rehabilitation outcomes.

ENS 439. Instructional Leadership in Clinical Settings (2)
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 440.
Androgogical and pedagogical theories, concepts, and techniques for enhancing instructional effectiveness and learning in exercise, physical activity, and rehabilitation settings.

ENS 440. Fitness Practitioner Internship (3)
Six hours of activity.
Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 432, 432L, 433. Concurrent registration in Exercise and Nutritional Sciences 493.
Supervised practical experience in developing and applying exercise programs and/or physical activity for apparently healthy persons and persons with clinical conditions in community, corporate, commercial, or medically supervised exercise settings.

ENS 441. Practicum: Physical Education Activities (2)
Four hours of activity.
Prerequisites: Exercise and Nutritional Sciences 306, 347A, 347B.
Selection and care of equipment and facilities; analysis of skill; progression for skills, drills and the game; lead-up activities; safety; performance cues; terminologies; skill evaluations; tactics and strategies.
A. Sport Applications I
B. Sport Applications II

ENS 442A. Physical Education for Elementary Schools (2)
Prerequisites: Exercise and Nutritional Sciences 305, 335, 337, 347A, 347B.
Objectives, curricula, activities, and application of basic scientific principles for the conduct of physical education in elementary schools.

ENS 442B. Physical Education for Elementary Schools Activity (1)
Two hours of activity.
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 442A.

ENS 445. Current Issues in Physical Education (2)
Prerequisite: Exercise and Nutritional Sciences 441A or 441B.
Current issues relevant to physical education. Includes assessment, liability, curriculum standards, appropriate physical activity levels, and safety.

ENS 446A. Physical Education with Adolescents (2)
Prerequisites: Exercise and Nutritional Sciences 441A or 441B; and 442A, 442B.
Basic requirements, principles, and concepts for conducting physical education with adolescents.

ENS 446B. Physical Education with Adolescents (1)
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 446A.
Application of basic requirements, principles, and concepts for conducting physical education with adolescents.

ENS 463. Principles and Techniques in Therapeutic Exercise (2)
Prerequisites: Exercise and Nutritional Sciences 365 and 389A.
Design and application of therapeutic exercise programs for athletic injuries.

ENS 463L. Principles and Techniques in Therapeutic Exercise Laboratory (1)
Three hours of laboratory.
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 463.

ENS 465. Seminar in Organization and Administration in Athletic Training (2)
Prerequisite: Exercise and Nutritional Sciences 389A.
Professional issues in athletic training discipline, including topics in organization and administration.

ENS 476. Clinical Pathology of General Medical Conditions (3)
Clinical pathology associated with body systems, clinical recognition, management, and referral of non-orthopedic pathologies associated with physically active persons.

ENS 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

ENS 499. Special Study (1-3)
Prerequisites: Consent of department chair. Limited to kinesiology majors. Major Code: 08351.
Individual study. Maximum credit six units.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)

ENS 596. Selected Topics in Exercise and Nutritional Sciences (1-3)
Selected topics in exercise and nutritional sciences. May be repeated with new content and approval of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Filipino
In the Department of Linguistics and Asian/Middle Eastern Languages
In the College of Arts and Letters

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
http://www-rohan.sdsu.edu/dept/linguist/index.html

Faculty
Chair: Osman
Lecturer: Alicio

Offered by the Department of Linguistics and Asian/Middle Eastern Languages

Courses in Filipino.
Major or minor work in Filipino is not offered.

Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Filipino to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Filipino 201 or the equivalent level of achievement. The usual sequence of coursework is Filipino 101, 102, and 201. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:
1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters, thus fulfilling the language requirement.

Courses (FILIP)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

Native speakers of Filipino will not receive credit for taking lower division courses in Filipino except with advance approval from the department.
No credit will be given for Filipino 101, 102, 201 taken out of sequence.

FILIP 101. Elementary Filipino I (4) [GE]
Introduction to Filipino (Tagalog), with emphasis on everyday conversation. Focus on essentials of grammar and sufficient vocabulary for speaking and reading Filipino.

FILIP 102. Elementary Filipino II (4) [GE]
Prerequisite: Filipino 101.
Continuation of Filipino 101 with focus on grammar and oral proficiency. Emphasis on grammatical accuracy by responding orally to spoken and written inquiries. Not open to students with credit in Filipino 201.

FILIP 201. Intermediate Filipino (4) [GE]
Prerequisite: Filipino 102.
Extensive review of all structures learned in Filipino 101 and 102. Integrated approach to learning Filipino by offering opportunities to acquire communicative skills while developing awareness and appreciation of the Filipino culture.
Finance
In the College of Business Administration

OFFICE: Student Services East 3356
TELEPHONE: 619-594-5323 / FAX: 619-594-3272

A member of AACSB International—The Association to Advance Collegiate Schools of Business.
The Personal Financial Planning Certificate is registered with the Certified Financial Planner Board of Standards, Inc.

Faculty
Emeritus: Block, Bost, Cherin, Gitman, Graf, Hippaka, Houston, 
Nye, Omberg, Reints, Sachdeva, Short, Sterk, Vandenberg, 
Warschauer, Wilbur
Chair: Salehizadeh
Professors: Badrinath, Do, Ely, Haddad, Salehizadeh, Song, Varaiya 
Associate Professors: An, Gubellini, Kim, Lachance 
Assistant Professors: Juneja, Lotfalei, Tang

Offered by the Department
Master of Science degree in business administration.
Master of Business Administration.
Major in finance with the B.S. degree in business administration.
Major in financial services with the B.S. degree in business administration.
Major in real estate with the B.S. degree in business administration.
Major in general business with the B.S. degree in business administration. See Business Administration.
Minor in finance.
Minor in real estate.
Certificate in executive financial planner, advanced (refer to the Graduate Bulletin).
Certificate in personal financial planning.

The Majors
The Department of Finance offers three majors: Finance, Financial Services, and Real Estate.

Finance. All forms of human endeavor involve finance to some degree. Within our economic system, finance is concerned with capital, which is money or property owned or used in business. Finance majors study both the sources and the uses of capital. The finance curriculum revolves around the valuation process in a free market system. Once an individual or company can value various alternatives, the allocation of resources and the decision process in business becomes much simpler.

Students who are interested in business should have a thorough understanding of the financial process. Upon graduation, students accept a wide variety of positions with business in general. The curriculum of the finance major is designed to give the student breadth in a variety of fields in addition to finance and business.

Employment prospects for graduates with finance majors are very good and forecasts remain encouraging. Graduates are typically found in six types of employment: large and small industrial firms (manufacturers of automobiles, steel, household appliances, and electronic equipment); service oriented firms (electric power, real estate and retail firms); financial institutions (banks, state and federally chartered savings and loan associations, and insurance companies); nonprofit enterprises (universities, labor unions, and foundations); and private businesses.

The diversity of entry level positions obtained by finance majors makes it difficult to describe a typical position. A major in finance does not limit career potential to banking or to any single area of business. A large number of individuals go to work for industrial companies in a variety of entry level positions that allow them to develop into top decision-making positions with those companies. A significant number of chief executive officers and other top officers of corporations have followed the “finance path” to the top.

Financial Services. Although the financial services major is based on many of the same analytical skills and theoretical foundations as the finance major, it is designed specifically to prepare students for careers in one of the segments of the financial services industry: securities, banking, insurance, real estate finance and personal financial planning. It is very common for single firms to own subsidiaries in each of these areas, so it is important for graduates entering these fields to be familiar with all aspects of these important financial sectors.

Graduates can look forward to analytical, managerial or sales careers in the financial services industry. Sales careers include insurance and securities sales. Analytical careers include loan and security analysis and personal financial planning. Managerial careers include management in each of the component industries.

Real Estate. The vision of the real estate program at SDSU is to create a ready-day-one educational program for students who aspire to become future leaders and professionals within the multi-faceted real estate industry. This vision and the changing nature of today’s real estate market require that graduates receive a complete education that provides both breadth and depth in this field. Majors in real estate receive a solid foundation in business and real estate through required courses and depth in a particular sub-profession through one of three specialty tracks: real estate development, mortgage banking, and real estate investment advising. Graduates will also be prepared to continue learning, develop leadership, and contribute to communities as a result of their total degree program experience.

SDSU’s program in real estate provides students with analytical skills, technical competence to perform market analyses, and an understanding of the tools necessary to perform in today’s complex real estate industry. This means each graduate from the real estate program should be able to join any real estate organization and make an impact/contribution from their first day of employment. Graduates should be capable of making a wide variety of management decisions concerning real estate including the ability to apply new economic concepts and up-to-date analytical tools to the process of real estate decision making. This is in addition to the conventional knowledge required for a license.

Real estate is one of the most dynamic business sectors and largest asset classes in the economy. It is in the midst of a transition from being primarily locally based to being integrated into the national and global economies. Important public and private decisions must be made every day about the use, management, and disposition of vast real estate resources. This, and the changing nature of the financial environment in which real estate markets operate, has created demand for new real estate experts, people not only with basic real estate training, but also with good general business and financial skills. This means that job opportunities for the real estate major are available in a wide variety of areas even in times of economic uncertainty. Jobs are found in areas such as development, financing, brokerage, property and asset management, valuation, market analysis, and corporate real estate. SDSU’s real estate program recognizes this changing real estate environment and prepares majors for these diverse opportunities. It is the goal of the real estate program at SDSU to provide a high level of education, and thus prepare its graduates for job opportunities in a variety of organizations, large and small, public and private.

Business Honors Program
The Business Honors Program offers excellent upper division business students the opportunity to explore issues in our local, regional, and global business environments focusing on the social and ethical responsibility that business has to the community and society. Honors students will enroll in a one unit business honors seminar each semester. During their enrollment they will participate in activities to promote their academic and personal growth, documenting their work in a written portfolio.
Generally, students should apply to this program at the time of application to upper division business. Applicants must submit an essay with their application. Applicants must have a 3.6 cumulative GPA or good standing in the Weber Honors College. Students not meeting these requirements may petition for admission to the program. Successful completion of the Business Honors Program will be recognized at graduation. Contact Dr. Robert A. Judge, Department of Management Information Systems, for more information about this program.

Statement on Computers

Before enrolling in upper division courses in the College of Business Administration, students must be competent in the operation of personal computers, including word processing and spreadsheets. Business students are strongly encouraged to have their own computers capable of running word processing, spreadsheet, presentation, e-mail, and Internet applications such as those found in packages sold by major software publishers. Availability of on-campus computing resources can be limited due to increasing demand across packages sold by major software publishers. Availability of on-campus computing resources can be limited due to increasing demand across computing resources can be limited due to increasing demand across computing resources can be limited due to increasing demand across computing resources can be limited due to increasing demand across computing resources can be limited due to increasing demand across

Retention Policy

The College of Business Administration expects that all business students will make reasonable academic progress towards the degree. Business premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.3 may be removed from the premajors and placed in undeclared. Upper division business majors earning less than a 2.0 average in their major GPA for two consecutive semesters may be removed from business and placed in undeclared.

Business Passport

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

Transfer Credit

Lower Division: Courses clearly equivalent in scope and content to San Diego State University courses required for minors or as preparation for all business majors will be accepted from regionally accredited United States institutions and from foreign institutions recognized by San Diego State University and the College of Business Administration.

Upper Division: It is the policy of the San Diego State University College of Business Administration to accept upper division transfer credits where (a) the course content, requirements, and level are equivalent to San Diego State University courses and (b) where the course was taught in an AACSB International—The Association to Advance Collegiate Schools of Business accredited program. Exceptions require thorough documentation evidencing the above standards.

Impacted Program

The majors in the Department of Finance are impacted. Before enrolling in any upper division courses in business administration, students must advance to an upper division business major and obtain a business major code. To be admitted to an upper division business major (accounting, finance, financial services, real estate, information systems, management, or marketing), students must meet the following criteria:

a. Complete with a grade of C or higher: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (CR/NCR).

b. Complete a minimum of 60 transferable semester units;

c. Have a cumulative GPA of 2.9.

Students who meet all requirements except the GPA may request to be placed on the waiting list. Students on the waiting list will be admitted on space-availability basis only. Contact the Business Advising Center (EBA-448), 619-594-5828, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Finance Major

With the B.S. Degree in Business Administration (Major Code: 05041) (SIMS Code: 222119)

A minor is not required with this major.

Preparation for the Major: Complete with a grade of C or higher: Finance 240 (or an approved business law course); Accountancy 201, 202; Economics 101, 102; Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201. (27 units)

These prerequisite courses may not be taken CR/NCR; the minimum grade in each class is C. Additional progress requirements must be met before a student is admitted to an upper division major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. Forty-six upper division units consisting of Finance 321, 325, 327, 329, 423; Accountancy 325, 326; Business Administration 300, 310, 323, 350, 360, 370; Business Administration 404, 405, or 458 (three units); and six units of 300-500 level finance courses. A "C" (2.0) average or better is required in the courses stipulated here for the major.

Financial Services Major

With the B.S. Degree in Business Administration (Major Code: 05043) (SIMS Code: 222122)

The Financial Services major is open to all students, including students who have completed the California Community College Associate in Science in Business for Transfer (AS-T) degree completing the Transfer Model Curriculum (TMC) for business.

A minor is not required with this major.

Preparation for the Major: Complete with a grade of C or higher: Finance 240 (or an approved business law course); Accountancy 201, 202; Economics 101, 102; Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201. (27 units)

These prerequisite courses may not be taken CR/NCR; the minimum grade in each class is C. Additional progress requirements must be met before a student is admitted to an upper division major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. Forty-one to 42 upper division units consisting of Finance 326, 327, 331, 522, 589; Accountancy 503; Business Administration 300, 310, 323, 350, 360, 370; Business Administration 404, 405, or 458 (three units); and six to seven units selected from Finance 421, 427, 431, 435*, 585, 590; Accountancy 326; Economics 320 or 422, 490; and Marketing 377. A "C" (2.0) average or better is required in the courses stipulated here for the major.

* Prerequisite waived for this course.
Real Estate Major
With the B.S. Degree in Business Administration
(Major Code: 05111) (SIMS Code: 222192)

A minor is not required with this major.

Preparation for the Major: Complete with a grade of C or higher: Finance 240 (or an approved business law course); Accountancy 201, 202; Economics 101, 102; Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 200; and either Statistics 119 or Economics 201 (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.

Graduation Writing Assessment Requirement: Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major: Forty-seven upper division units consisting of Finance 331, 333, 431, 433, 435, 437; Accountancy 326; Business Administration 300, 310, 323, 350, 360, 370; Business Administration 404, 405, or 458 (three units); and nine additional units selected from Economics 458, Finance 421, 428, Management Information Systems 301. A “C” (2.0) average or better is required in the courses stipulated here for the major.

Finance Minor
(Minor Code: 05041) (SIMS Code: 222116)

The minor in finance consists of a minimum of 18-21 units to include Finance 321, 326, 327, 329; Accountancy 201; Business Administration 323*; and Statistics 119 or Economics 201.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. Students with a major in the College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Business Advising Center (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Business Advising Center (EBA-448) for admissions criteria and procedures.

* Business Administration 323 waived for College of Business Administration, Hospitality and Tourism Management, and International Business majors. Finance minor is not open to Finance, Financial Services, or Real Estate majors.

Personal Financial Planning Certificate
(SIMS Code: 226601)

The purpose of this program is to provide a strong educational basis for persons desiring careers in the field of personal financial planning. Two categories of students are admitted: Matriculated students who have been admitted to an upper division College of Business Administration major and nonmatriculated students who work in the financial services industry, who may take the courses on a space-available basis.

This certificate is a program registered with the Certified Financial Planner Board of Standards, Inc.

Prerequisites to the program include Finance 240; Accountancy 201; Economics 101, 102; and Statistics 119 or Economics 201. (15 units.)

The certificate requires 24 units to include Finance 327, 522, 585, 589, 590, and either Finance 421 or 427; Accountancy 503; and Business Administration 323. In order to qualify for this certificate, a “B” (2.7) average in the upper division certificate courses is required. The adviser for this certificate is Dr. Thomas M.D. Warschauer, Department of Finance. All course units may be used for business majors where applicable. Courses in the certificate may not be counted toward the minor.

Courses (FIN)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

FIN 240. Legal Environment of Business (3)
Business legal environment system, sources of law, procedures and ethics associated with implementation of law. Law of torts and intellectual property; contracts and sales; agency and employment; negotiable instruments and banking; business organizations.

FIN 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

FIN 321. Managerial Economics (3)
Prerequisites: Accountancy 202; Finance 240; Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisites required: Copy of transcript.

Role of economic analysis in management decisions. Study of demand, cost, supply theories from a business viewpoint. Emphasis on managerial decision making.

FIN 325. Intermediate Finance (4)
Prerequisite: Business Administration 323 with a minimum grade of C. Proof of completion of prerequisite required: Copy of transcript.


FIN 326. Financial Institutions Management (3)
Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.

Principles of financial management techniques related to the management of financial institutions. Impact of the economic, regulatory, and technological environments on management of financial institutions. Interaction of institutions within the financial services sector.

FIN 327. Investments (3)
Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.

Measures of risk and return. Methods of security analysis, valuation, and capital asset pricing model. Portfolio theory and management; stocks, bonds, options, and futures; hedging; mutual funds and partnerships; and investment taxation.
FIN 328. Entrepreneurial Finance (3)  
Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.  
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, development process. Fundamental real estate market behavior. Project level proforma and master schedule development. Project financing. Shifting priorities and perspectives in due diligence, entitlement, construction, closeout, leasing and occupancy phases. Case studies for multiple property types.

FIN 330. Real Estate Principles (3)  
Prerequisites: Finance 331. Proof of completion of prerequisite required: Copy of transcript.  
Fundamental operations of the real estate market; principles of real property valuation, financing, law, investment, brokerage, management, and development.

FIN 332. Real Estate Development (3)  
Prerequisites: Finance 331; or Finance 325 and 327. Proof of completion of prerequisite required: Copy of transcript.  
Real estate project development process. Development opportunities and due diligence. Development team and legal and financial considerations. Case studies for multiple property types.

FIN 333. Law of Real Property (3)  
Prerequisite: Finance 331. Proof of completion of prerequisite required: Copy of transcript.  
Introduction to various aspects of finance, application of financial theory. Financial decision making in the firm. Case study.

FIN 329. International Business Finance (3)  
Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.  
Foreign exchange markets and instruments; international financial institutions; trade and balance of payments; exchange rate behavior and currency-risk hedging; cross-border investment; applications to management of international business.

FIN 331. Real Estate Principles (3)  
Prerequisites: Accountancy 202; Finance 240; Management Information Systems 180. Completion of lower division course requirements in business major or minor. Proof of completion of prerequisite required: Copy of transcript.  
Fundamental operations of the real estate market; principles of real property valuation, financing, law, investment, brokerage, management, and development.

FIN 332. Real Estate Development (3)  
Prerequisites: Finance 331; or Finance 325 and 327. Proof of completion of prerequisite required: Copy of transcript.  
Real estate project development process. Development opportunities and due diligence. Development team and legal and financial considerations. Case studies for multiple property types.

FIN 333. Law of Real Property (3)  
Prerequisite: Finance 331. Proof of completion of prerequisite required: Copy of transcript.  
Introduction to various aspects of finance, application of financial theory. Financial decision making in the firm. Case study.

FIN 342. Derivatives and Financial Risk Management (3)  
Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.  
Introduction to derivative instruments such as futures, options and swaps, nature of their markets and pricing methods. Applications of these instruments for hedging risks in equities, commodities, and exchange rates.

FIN 343. Theory of Real Property Value (3)  
Prerequisite: Finance 331. Proof of completion of prerequisite required: Copy of transcript.  
Introduction to theories of real property value. Techniques of value determination. Data analysis techniques.

FIN 343. Theory of Real Property Value (3)  
Prerequisite: Finance 331. Proof of completion of prerequisite required: Copy of transcript.  
Introduction to theories of real property value. Techniques of value determination. Data analysis techniques.

FIN 343. Theory of Real Property Value (3)  
Prerequisite: Finance 331. Proof of completion of prerequisite required: Copy of transcript.  
Introduction to theories of real property value. Techniques of value determination. Data analysis techniques.

FIN 347. Real Estate Development (3)  
Prerequisites: Finance 343; or Finance 325 and 327. Proof of completion of prerequisite required: Copy of transcript.  

FIN 421. Portfolio Management and Security Analysis (3)  
Prerequisite: Finance 327. Proof of completion of prerequisite required: Copy of transcript.  

FIN 431. Real Estate Finance (3)  
Prerequisite: Finance 331. Proof of completion of prerequisite required: Copy of transcript.  
Methods of financing real estate, sources of funds; governmental financial agencies; feasibility analysis for various types of properties.

FIN 437. Real Estate Investment Analysis (3)  
Prerequisite: Finance 327. Proof of completion of prerequisite required: Copy of transcript.  
Theories and methods of investment analysis applied to real estate. Integration of various aspects of real estate from the investors perspective. Use of computer models for investment decision making,

FIN 438. Investment and Report (1-3)  
Prerequisites: Consent of instructor and senior standing.  
A comprehensive and original study of a problem connected with finance under the direction of one or more members of the finance staff. May be repeated with new content. Maximum credit six units.

FIN 499. Special Study (1-3)  
Prerequisite: Consent of instructor.  
Individual study. Maximum credit six units.

UPPER DIVISION COURSES  
(Also Acceptable for Advanced Degrees)

FIN 522. Individual Insurance Management (3)  
Prerequisites: Undergraduate: Completion of lower division requirements for the major. Graduate: Completion of prerequisite core. Proof of completion of prerequisite required: Copy of transcript.  
Introduction to insurance. Legal, social, and ethical considerations of individual, business and group insurance including life, health, property, and liability insurance. Risk exposure and policy analysis.

FIN 557. Estate Planning Issues and Practice (3)  
Prerequisite: Undergraduate: Completion of lower division requirements for the major. Graduate: Completion of prerequisite core. Proof of completion of prerequisite required: Copy of transcript.  
Tax and non-tax issues in establishment of a personal estate plan. Financial and non-financial goals and objectives. Not open to students with credit in Finance 445 or 705. (Formerly numbered Finance 485.)

FIN 589. Personal Financial Planning (3)  
Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.  
Financial planning process including data gathering, cash flow and debt considerations. Retirement planning including social security. Education funding. Practice management considerations including establishment of ethical and legal client relationships.

FIN 590. Personal Financial Planning Practicum (3)  
Prerequisite: Consent of instructor.  
Individual study. Maximum credit six units.

FIN 596. Contemporary Topics in Finance (1-3)  
Prerequisites: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.  
Contemporary topics in modern finance. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

FIN 599. Individual Insurance Management (3)  
Prerequisites: Undergraduate: Completion of lower division requirements for the major. Graduate: Completion of prerequisite core. Proof of completion of prerequisite required: Copy of transcript.  
Introduction to insurance. Legal, social, and ethical considerations of individual, business and group insurance including life, health, property, and liability insurance. Risk exposure and policy analysis.

FIN 657. Estate Planning Issues and Practice (3)  
Prerequisite: Undergraduate: Completion of lower division requirements for the major. Graduate: Completion of prerequisite core. Proof of completion of prerequisite required: Copy of transcript.  
Tax and non-tax issues in establishment of a personal estate plan. Financial and non-financial goals and objectives. Not open to students with credit in Finance 445 or 705. (Formerly numbered Finance 485.)

FIN 589. Personal Financial Planning (3)  
Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.  
Financial planning process including data gathering, cash flow and debt considerations. Retirement planning including social security. Education funding. Practice management considerations including establishment of ethical and legal client relationships.

FIN 590. Personal Financial Planning Practicum (3)  
Prerequisite: Consent of instructor.  
Individual study. Maximum credit six units.

FIN 596. Contemporary Topics in Finance (1-3)  
Prerequisites: Business Administration and consent of instructor.  
Contemporary topics in modern finance. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES  
Refer to the Graduate Bulletin.
French
In the Department of European Studies
In the College of Arts and Letters

OFFICE: Storm Hall 224A
TELEPHONE: 619-594-5111 / FAX: 619-594-8006
E-MAIL: french.coord@sdsu.edu
http://www-rohan.sdsu.edu/~frenital/

Faculty
Emeritus: Cornwell, Cox, Gilbert, Jackson, Nelson, Palmer, Sacco
Chair: Donadey
Professors: Benkov, Donadey, Lyman-Hager, Schorr
Lecturers: Ransom, Wilson

Offered by the Department of European Studies
Master of Arts degree in French.
Major in French with the B.A. degree in liberal arts and sciences.
Major in European studies, with emphasis in French.
See European Studies.
Minor in French.

Offered by International Business
Major in international business, with emphasis in French.

The Major
A student who majors in French learns to speak the language, to read literature and cultural materials in their original form, and to interact with members of an important worldwide cultural community. With more than 120 million speakers on five continents, French is one of the five official languages of the United Nations and is an official language in over 40 countries in Africa, Europe, and the Americas. The French major provides a global perspective and can help prepare students for careers in the arts, business, education, international business, public service, tourism, and translation.

Students generally choose to major in French in order to enrich their lives rather than to train for a specific career, but many employers recognize the value of a well-rounded liberal arts education that includes critical thinking and communication skills. The increasing involvement of the United States in international business has created new opportunities for people interested in international management. Employers look for knowledge of a foreign country’s culture and language together with training in economics or business. A major in French combines effectively with a second major or minor in business, economics, political science, the humanities, or another language area study.

A significant number of French majors choose a career in teaching. With a secondary teaching credential, one can teach at the high school level or pursue more advanced study in preparation for a university career, either in French or in related subjects such as linguistics or comparative literature.

Students majoring in French are strongly encouraged to participate in either the SDSU spring semester in Paris or the CSU-IP (California State University International Programs) study abroad programs in France.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The French major is an impacted program. To be admitted to the French major, students must meet the following criteria:
- Complete preparation for the major;
- Complete a minimum of 60 transferable semester units;
- Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/umymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

French Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 11021) (SIMS Code: 112701)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 49 units in French courses can apply to the degree.

Students majoring in French must complete a minor in another field to be approved by the departmental adviser in French.

Preparation for the Major.
French 100A, 100B, 201, 210, 220, and 221 (22 units) Recommended: History 105, 106.

Language Requirement.
The language requirement is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience Requirement. All French majors are required to complete an approved study abroad program in a French-speaking country consisting of a minimum of six units (90 hours). However, French majors are strongly encouraged to complete a more extensive abroad experience by participating in a semester or an academic year program. To fulfill the International Experience Requirement, French majors must enroll in a study abroad program approved by the department. Unapproved study abroad programs will not meet the international experience requirement for the major.

Major. A minimum of 27 upper division units in French to include 102, 201, 221, and 225A (26 units) Recommended: History 105, 106.

French Minor
(Minor Code: 11021) (SIMS Code: 112701)
The minor in French consists of a minimum of 15 units taught in French, nine units of which must be in upper division French courses. One course taught in English may apply to the minor.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Interdisciplinary Studies in Three Departments
Students selecting French as one of their departments in this major must complete all lower division preparation for the major or equivalent competency, and choose from among French 301, 305A, 305B, 421 and 422.
Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of French to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete French 201 or 210 or the equivalent level of competency. The usual sequence of coursework is French 100A, 100B, 201, 210, 220, and 221. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school language count as the equivalent of the first semester of a college level course.
2. The first three years of high school language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

Courses (FRENC)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

Native speakers of French will not receive credit for taking lower division courses except with advance approval from the department.

All lower division courses in French are taught in French. No credit will be given for lower division courses taken after successfully completing any upper division French course taught in French.

French courses must be completed in the following sequence: French 100A, 100B, 210, 220 and/or 221. No credit will be awarded for any of these courses completed out of sequence. French 200 and 201 may only be taken after completing French 100B, but may be taken in any order with the other 200-level courses.

FRENC 100A. Elementary French I (5) [GE]
Interactive introduction to speaking, reading, and writing French in a cultural context. Essential language structures for communication at the novice level.

FRENC 100B. Elementary French II (5) [GE]
Prerequisite: French 100A or two years of high school French. Continuation of French 100A.

FRENC 200. Intermediate French in Paris (3)
Four hours per week in a 12 week period in the Paris Semester. Prerequisite: French 100B or three years of high school French. Development of intermediate level proficiency skills through lecture and work in small groups. Offered only through the Paris Semester study abroad program. This course satisfies the language graduation requirement.

FRENC 201. Readings in French (3) [GE]
Prerequisite: French 100B or three years of high school French. Emphasis on reading. See Class Schedule for emphasis offered: Readings in French Culture, Readings in Francophone Culture, or Readings in Business French. Note: French majors, minors, and International Business majors are encouraged to enroll concurrently in French 210.

FRENC 210. French Grammar (3) [GE]
Prerequisite: French 100B with a grade of C or better or three years of high school French. Comprehensive survey of French grammar at the intermediate level. Analysis and use of typical French structures. Note: French majors, minors, and International Business majors are encouraged to enroll concurrently in French 201.

FRENC 220. Grammar of Spoken French (3) [GE]
Prerequisite: French 210. Analysis of grammar and use of modern French through study of cultural materials, for proficiency in oral communication. Note: French majors, minors, and International Business majors are encouraged to enroll concurrently in French 221.

FRENC 221. Writing French (3) [GE]
Prerequisite: French 210 with a grade of C or better. Emphasis on written composition: study of a variety of prose models and practice in writing. Note: French majors, minors, and International Business majors are encouraged to enroll concurrently in French 220.

FRENC 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES
(Intended for Undergraduates)

All upper division courses in French are taught in French unless otherwise stated.

FRENC 301. Advanced Grammar and Composition (3) [GE]
Prerequisites: Minimum 12 units of 200-level French, to include French 221 with a grade of C or better, and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Advanced grammar and stylistics, intensive writing practice focused on a theme in French culture. Not open to students with eight or more years of schooling in institutions where French was the sole or primary medium of instruction. French 301 and 302 may not be taken concurrently or out of sequence.

FRENC 302. Advanced Grammar and Translation (3) [GE]
Prerequisites: French 301 with a grade of C or better, and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Advanced grammar and comparative stylistics of French and English, taught through translation. French 301 and 302 may not be taken concurrently or out of sequence.

FRENC 304. Phonetics and Oral Proficiency (3)
Two lectures and two hours of activity. Prerequisite: Upper division standing in French. Phonetic theory, listening, intonation and transcription practice, corrective phonetic and intonation exercises. Study of varieties of Francophone oral expression.

FRENC 305A. Survey of French Literature (3) [GE]
Prerequisites: Twelve units of 200-level French, and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Important movements, authors, and works in French literature from the Middle Ages to the Revolution.

FRENC 305B. Survey of French Literature (3) [GE]
Prerequisites: Twelve units of 200-level French, and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Important movements, authors, and works in French literature from the Revolution to present.

FRENC 400. Advanced French in Paris (3)
Prerequisite: Twelve units of 200-level French. Development of advanced level proficiency skills through writing and speaking. Offered only through the Paris Semester study abroad program.

FRENC 421. French Civilization (3) [GE]
Prerequisites: Twelve units of 200-level French, and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

French civilization from Middle Ages to the present. Artistic, intellectual achievements and cultural movements.
FREN 422. Contemporary France (3) [GE]
Prerequisites: Twelve units of 200-level French, and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.
Contemporary France, emphasizing political, economic and social structures as well as artistic, intellectual, and cultural trends.

FREN 423. Commercial French (3)
Prerequisite: French 301. Proof of completion of prerequisite required: Copy of transcript.
French commercial practices and language, the enterprise, correspondence, advertising, telecommunications, banking, transportation, import-export, insurance, accounting, stock market, preparation for the Certificat offered by the Paris Chamber of Commerce.

FREN 424. French Cinema and Theory (3) [GE]
Two lectures and two hours of activity.
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.
French cinema emphasizing social, political, and cultural changes in modern France. Topics include film theory, the new wave, history in cinema, influence of feminism, French colonialism, race, class, and gender in modern culture. Taught in English.

FREN 465. Africa in Literature and Film (3) [GE]
(Same course as Africana Studies 465)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.
African cultural history through literature and film. Consistency/variety of African cultural expressions and conventions in literature and film. Taught in English.

FREN 495. French Internship (3) Cr/NC
Prerequisites: Upper division standing in major and consent of instructor.
Practical work experience in a field related to French and Francophone studies. Work done under joint direction of activity sponsor and instructor. Approved international internships may count towards international requirement for major.

FREN 496. Topics in French Studies (1-4)
Topics in French literature, culture and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit nine units. May be taught in English.

FREN 499. Special Study (1-3)
Prerequisites: French 302, 305A, 305B.
Individual study. Maximum credit six units. This course is intended only for students who are currently enrolled in or who already have credit for all upper division courses in French available in any given semester.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

FREN 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.

FREN 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.

FREN 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.

FREN 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.

GRADUATE COURSES
Refer to the Graduate Bulletin.
General Mathematics Studies

In the College of Arts and Letters

OFFICE: Storm Hall West 141
TELEPHONE: 619-594-2225 / FAX: 619-594-6530

Faculty
Chair: McClish
Lecturers: Morgan, Quan

Offered by the Department of Rhetoric and Writing Studies
Courses in general mathematics studies.
Major or minor work in general mathematics studies is not offered.

General Information
The principal role of the General Mathematics Studies program is to prepare students to satisfy the CSU Entry Level Mathematics requirement and to prepare students to succeed in their GE entry level Mathematics course. Receiving a credit in General Mathematics Studies 91 satisfies the ELM requirement*. For more information on these mathematics requirements, refer to the “Graduation Requirements” section of this catalog.

The General Mathematics Studies program offers one unit workshops in geometry and other selected topics in mathematics.

The units awarded to a student who earns a grade of “Credit” in a General Mathematics Studies course are not applicable to the baccalaureate degree.

* The ELM requirement is satisfied by this course only if the student has already attempted and failed the ELM.

Courses (GMS)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

EARLY START PROGRAM
(Non-Baccalaureate Credit)

Beginning with the class of 2012, the California State University (CSU) has enacted a systemwide mandatory Early Start Program for entering resident CSU freshmen who need remediation in mathematics. Students attending another CSU campus may enroll in the Early Start Program at SDSU. The following course is being offered for service students needing remediation who are enrolling in another CSU campus in the fall semester.

ESM 96. Algebra Review (1) Cr/NC
Prequisite: A score of 49 and below on the ELM.
A mini-course reviewing basic number sense, data analysis, geometry, and topics from algebra. Meets CSU Early Start Program requirement for CSU students (not continuing at SDSU).

LOWER DIVISION COURSES
(Non-Baccalaureate Credit)

General mathematics studies courses numbered below 100 may not be used to satisfy general education or graduation requirements.

GMS 90. Fundamentals of Mathematics (3) Cr/NC
Prequisite: A score below 41 on the CSU Entry-Level Mathematics Examination (ELM), the General Mathematics Studies diagnostic test, or other standardized mathematics examination.
Review of pre-algebra and elementary algebra in fall and spring semesters, topics from geometry covered in adjunct workshops (General Mathematics Studies 98A). Students earning “Cr” (credit) should enroll in General Mathematics Studies 91. Students earning “NC” (no credit) should repeat General Mathematics Studies 90. May be repeated with consent of instructor. Maximum credit six units.

*GMS 91. Intermediate Algebra (3) Cr/NC
Prequisite: Credit in General Mathematics Studies 90 or a score of 41-49 on the ELM.
A review of intermediate algebra skills. Topics include polynomials, rational and radical expressions, complex numbers, linear and quadratic equations (and graphs), systems of equations, set and function notation, conic sections, exponential and logarithmic functions, and sequences and series. Credit in General Mathematics Studies 91 satisfies the Entry Level Mathematics Examination requirements.

GMS 98. Mini-Course: Selected Topics (1) Cr/NC
Assorted short courses which will cover a variety of general mathematics skills through intensive lectures and laboratory work. Suggested topics: Communication skills, research tools, and learning skills. See Class Schedule for specific content. Credit earned in courses from this series is not applicable to a bachelor’s degree.
A. Geometry Workshop
B. Selected Mathematics Topics

* The ELM requirement is satisfied by this course only if the student has already attempted and failed the ELM.
Courses (GEN S)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

GEN S 100. University Seminar (1) Cr/NC
Prerequisite: Open only to freshmen.
Provides opportunities to interact with faculty and staff in a small group setting. Students acquire study and interpersonal skills for academic and personal success. Special sessions are offered featuring campus resources including library, advising, career, health and wellness services.
A. University Seminar
B. Learning in Communities
C. Living/Learning Community

GEN S 200. Professional Experience and Community Service (1-3) Cr/NC
Prerequisites: Twelve units of college credit, minimum grade point average of 2.0, concurrent participation in professional or community service activity, and approval of course contract.
Academic work designed with faculty approval to complement concurrent paid or unpaid professional or community service experience. Information and course contract forms available in Division of Undergraduate Studies, AD-220. Applications must be submitted to the division prior to the end of the first week of classes. May be used to satisfy major or minor requirements only upon written approval of department chair. No combination of General Studies 200 and 400 in excess of six units may be counted for credit toward a bachelor’s degree.

GEN S 250. Interdisciplinary Topics (1-4)
Interdisciplinary selected topics course. To enroll contact the faculty adviser of the department offering the course. May be repeated with new content. Maximum credit four units.

GEN S 255. Bounce Back Retention Seminar (1) Cr/NC
Prerequisites: Academic probation students only. All participants sign Institutional Review Board (IRB) consent form.
In a highly interactive, small group setting, students learn a variety of skills, such as time management, test taking, class preparedness, and study skills, in order to strengthen performance. Students learn what personal attributes contribute to academic success and learn how to recognize and expand on these characteristics.

GEN S 280. Introduction to Civic Engagement (3) [GE]
Prerequisite: Minimum grade point average of 2.0.
Civic engagement through service learning. Collective action and global citizenship. Civic dimensions supporting democratic engagement. Civic capacities and literacies for social responsibility. One to two hours of weekly community service required.

UPPER DIVISION COURSES (Intended for Undergraduates)

GEN S 330. Plagues Through the Ages (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.
Examines the AIDS epidemic from historical, epidemiological, political, economic, religious, and cultural effects of disease. Significant role epidemics and disease have played in development of civilizations from beginning of recorded history to present.

GEN S 340. Confronting AIDS (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A. Natural Sciences and Quantitative Reasoning.
Examines the AIDS epidemic from historical, epidemiological, biological, medical, psychological, political, legal, and ethical perspectives.
The Stephen and Mary Birch Foundation Chair in Geographical Studies

The Stephen and Mary Birch Foundation Chair in Geographical Studies was created through the Birch Foundation’s grant to the Department of Geography to endow a chair and create a Center for Earth Systems Analysis Research. Professor George Christakos, internationally recognized for his expertise in theory and methodology of spatial analysis and mathematical modeling applied to environmental, ecological, health, and geographical systems, is the third holder of the chair.

The June Burnett Chair in Children’s and Family Geographies

The June Burnett Chair in Children’s and Family Geographies was created in 2013 as part of the Department of Geography’s June Burnett Endowment. The chair is in support of the Center for Interdisciplinary Studies of Youth and Space (ISYS), and focuses on spatial research and therapeutic/ethnographic practices related to the well-being of children and young people. Professor Stuart C. Aitken, internationally recognized for his research on children’s geographies, youth activism, critical theory, and qualitative methodologies is the first holder of the chair.

The Major

Geography is the study of spatial aspects of the physical environment, human activities and landscapes, and the nature of their interactions. Geographers draw upon and develop theories in both the physical and social sciences. As physical scientists, geographers study the processes and resulting features of the earth’s surface, such as vegetation, climate, hydrology, soils, and landforms. As social scientists, geographers explore such topics as the arrangement of societies on the earth’s surface, water and land use patterns, urbanization and urban life, migration, resource and energy usage, environmental conservation, globalization, development and social justice.

Through classroom and laboratory experience, field work, and community involvement students are provided with the knowledge and skills required to appreciate the diversity of landscapes, people and places, the interdependence of places on the surface of the earth, and the spatial processes and relationships that affect contemporary society.

A variety of career opportunities exist for geography majors in business, nonprofit, government and education. In recent years many graduates with bachelor degrees have entered a wide range of analytical and planning careers, with job titles such as environmental policy analyst urban/ regional planner, cartographer, geographic information system (GIS) analyst/specialist, energy planner, water resources planner/ manager, natural resource manager/planner, park specialist/planner, National Park Service ranger/administrator, habitat restoration manager, and non-profit organization planner/administrator. Some students go on to graduate programs in geography, public health, urban and regional planning and other related disciplines.

The Department of Geography offers a broad range of fields from which to select an emphasis. These include the following:

Foundations of Geography

This program provides students with an overview of the diverse fields of geography and exposes them to its breadth of methods. It is primarily designed for students transferring from a California Community College with an Associate Degree in Geography (AA-T) under the Transfer Model Curricula (TMC), which allows them to graduate with no more than 60 additional units. It is open to all students.

Environment and Society

This emphasis is concerned with human-environmental interactions, including the impacts of human activity on the earth and the consequences of environmental change on social life. Students will learn concepts and tools that help them understand and address contemporary environmental issues such as loss of biodiversity, pollution and natural resource degradation, water shortages, food and energy crises, resource conflicts, climate change, deforestation and many other compelling challenges facing society today and in the future. Through their coursework, they will investigate the cultural practices, social structures, and political-economic forces that shape the relationships between society and nature.

Human Geography and Global Studies

This emphasis deals with the spatial aspects of human existence: how people and their activities are distributed in space, how they use and perceive space, and how they create and sustain the places that make up the earth’s surface. It focuses on the connections between global and local scales and teaches students how to think geographically about global issues such as poverty, migration, environment and development, and changing technology. Human geography includes urban geography, political geography, demography, economic geography, political ecology, social and cultural geography, feminist geography and many other emerging fields, such as children’s geographies. It encompasses a variety of theoretical approaches and methods.
Integrative Geography
This is a comprehensive program in geography, which integrates topics from all of the emphases and requires students to minor in a related discipline. Students in this emphasis will learn about the various fields of geography, including human and physical geography, and its diversity of methods, such as mapping, spatial statistics, modeling, and qualitative data analysis. It allows students to specialize in a given area of interest through electives and to make connections with other disciplines with a minor.

Methods of Geographic Analysis
This emphasis focuses on the various methods used by geographers to represent and analyze geographic information about the natural and social world. These methods include cartography, geographic information systems, remote sensing, spatial statistics, and qualitative analysis. Students in this emphasis will learn how to apply skills and use contemporary technologies to solve problems and conduct research. Students interested in the development of new geographic methods may consider the Bachelor of Science degree in geographic information science, which requires additional courses in computer science.

Environmental and Physical Geography
This emphasis is focused on scientific explanations of the earth's physical features and processes and the human impacts on them. Students engage in classroom, laboratory, and field activities in geomorphology, hydrology, watershed analysis, biogeography, climate, and landscape ecology. Students in this emphasis will incorporate fundamental training in the physical and biological sciences with methodological techniques in spatial analysis, including the use of satellite imagery and geographic information systems, to study processes and resulting features of earth's physical environment.

Geographic Information Science
This emphasis addresses the theory and practice of information science from a distinctly geographic perspective, with a focus on principles, methods, and technology. Students become familiar with how to generate, manage, and evaluate information about processes, relationships, and patterns in various application domains. This program is for students interested in analytical approaches to mapping, visualization, and problem solving using contemporary methods of GIS, remote sensing, computer science, and statistics.

Minor in Geography
The minor is designed to build on the interdisciplinary nature of geography and allow students to incorporate a geographic approach to their discipline of interest. The geography minor is an attractive option to students who major in anthropology, biology, computer science, economics, engineering, environmental sciences, political science, sociology, and sustainability.

Certificate in Geographic Information Science
The certificate program is for current students or graduates interested in gaining knowledge and skills in creating, processing, and analyzing geoinformation with methods and techniques of geographic information systems, remote sensing, and software engineering.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The geography major and emphases are impacted programs. To be admitted to the geography major or an emphasis, students must meet the following criteria:

a. Complete preparation for the major;

b. Complete a minimum of 60 transferable semester units;

c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymaps for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Geography Major
With the B.A. Degree in Applied Arts and Sciences
(Major Code: 22061)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

Graduation with Distinction. A student desiring to graduate with Distinction in Geography must meet the university requirements listed in the section of this catalog on "Graduation Requirements" and be recommended by the geography faculty.

Emphasis in Foundations of Geography
(SIMS Code: 112911)
Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102 or 106, 104. (10 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, 581W, 584W, Rhetoric and Writing Studies 305W, 500W, 503W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 32 upper division units in geography to include:

1. Geography 395 to be taken in the student's first fall semester as a geography major (one unit) and Geography 495 to be taken during the spring semester of the calendar year in which the student expects to graduate (one unit);

2. Fifteen units of core courses, with at least three units from each of the following groups: (a) Regional Geography: Geography 320, 321, 324, 536, 426; (b) Human Geography: Geography 312, 340, 353, 354, 440 [or Political Science 440], 454, 554, 556, 558, 573; (c) Environmental and Physical Geography: Geography 403, 340, 370, 375, 401, 409, 440 [or Political Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575; (d) Methods: Geography 380, 381, 385, 454, 581, 583-586, 589-592L;

3. Fifteen units from Geography 300 to 599 (if not taken above). Field and research experience (Geography 426, 590) and internships (Geography 595) are encouraged. International units can be used to meet this requirement when appropriate and preapproved by the undergraduate adviser.

Geography Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22061)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in geography courses can apply to the degree for students with an emphasis in human geography and global studies or the emphasis in methods of geographic analysis, no more than 51 units in geography courses can apply to the degree for students with an emphasis in human geography and global studies or the emphasis in methods of geographic analysis, no more than 51 units in geography courses can apply to the degree for students with an emphasis in human geography and global studies or the emphasis in methods of geographic analysis, no more than 51 units in geography courses can apply to the degree.

Graduation with Distinction. A student desiring to graduate with Distinction in Geography must meet the university requirements listed in the section of this catalog on "Graduation Requirements" and be recommended by the geography faculty.

Emphasis in Environment and Society
(SIMS Code: 112916)
Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102 or 106, 104, 170; Biology 100 and 100L; Political Science 102; Statistics 250 or comparable statistics course. (23 units)

Language Requirement. Competency (successfully completing the third college semester of a foreign language) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units in geography to include:

1. Geography 395 to be taken in the student’s first fall semester as a geography major (one unit) and Geography 495 to be taken during the spring semester of the calendar year in which the student expects to graduate (one unit);

2. Fifteen units of core courses, with at least three units from each of the following groups:
   (a) Regional Geography: Geography 320, 321, 324, 336, 426;
   (b) Human Geography: Geography 312, 340, 353, 354, 440 [or Political Science 440], 454, 554, 556, 558, 573;
   (c) Environmental and Physical Geography: Geography 303, 340, 370, 375, 401, 409, 440 [or Political Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575;
   (d) Methods: Geography 380, 381, 385, 484, 581, 583-586, 589-592L;

3. Fifteen units of core courses listed above in group (c), if not already taken.

4. Three units from core courses listed above in (a), (b), or (d), if not already taken. Field and research experience (Geography 426, 590) and internships (Geography 595) are encouraged. International units can be used to meet this requirement when appropriate and preapproved by the undergraduate adviser.

Emphasis in Human Geography and Global Studies
(SIMS Code: 112917)

Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102 or 106, 104, 170; Statistics 250 or comparable statistics course. (16 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. Students are encouraged to pursue an international experience to increase their awareness of cross-cultural and global issues, which are critical to their development as professional geographers and citizens in a complex and rapidly changing world. A variety of options, including short term and semester formats are available to meet the needs of different students, including those with family and work responsibilities. These options should be discussed with and preapproved by the undergraduate adviser.

Emphasis in Integrative Geography
(SIMS Code: 112915)

A minor in another department approved by the undergraduate adviser in geography is required for this degree.

Preparation for the Major. Geography 101, 101L, 102 or 106, 104, 170. (13 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. Students are encouraged to pursue an international experience to increase their awareness of cross-cultural and global issues, which are critical to their development as professional geographers and citizens in a complex and rapidly changing world. A variety of options, including short term and semester formats are available to meet the needs of different students, including those with family and work responsibilities. These options should be discussed with and preapproved by the undergraduate adviser.

Emphasis in Methods of Geographic Analysis
(SIMS Code: 112964)

Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101L, 102 or 106, 104; Computer Science 107; Statistics 250 or comparable statistics course. (16 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 41 upper division units in geography to include:

1. Geography 395 to be taken in the student’s first fall semester as a geography major (one unit) and Geography 495 to be taken during the spring semester of the calendar year in which the student expects to graduate (one unit);

2. Fifteen units of core courses, with at least three units from each of the following groups:
   (a) Regional Geography: Geography 320, 321, 324, 336, 426;
   (b) Human Geography: Geography 312, 340, 353, 354, 440 [or Political Science 440], 454, 554, 556, 558, 573;
   (c) Environmental and Physical Geography: Geography 303, 340, 370, 375, 401, 409, 440 [or Political Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575;
   (d) Methods: Geography 380, 381, 385, 484, 581, 583-586, 589-592L;

3. Nine units from Geography 300 to 599 (if not taken above).

4. Six units from core courses listed above in groups (a), (c), or (d), if not already taken. Field and research experience (Geography 426, 590) and internships (Geography 595) are encouraged. It is recommended that students seek units from international experience to meet this requirement when appropriate and preapproved by the undergraduate adviser.

Emphasis in Integrative Geography
(SIMS Code: 112915)

A minor in another department approved by the undergraduate adviser in geography is required for this degree.

Preparation for the Major. Geography 101, 101L, 102 or 106, 104, 170. (13 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. Students are encouraged to pursue an international experience to increase their awareness of cross-cultural and global issues, which are critical to their development as professional geographers and citizens in a complex and rapidly changing world. A variety of options, including short term and semester formats are available to meet the needs of different students, including those with family and work responsibilities. These options should be discussed with and preapproved by the undergraduate adviser.

Emphasis in Methods of Geographic Analysis
(SIMS Code: 112964)

Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101L, 102 or 106, 104; Computer Science 107; Statistics 250 or comparable statistics course. (16 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 41 upper division units in geography to include:

1. Geography 395 to be taken in the student’s first fall semester as a geography major (one unit) and Geography 495 to be taken during the spring semester of the calendar year in which the student expects to graduate (one unit);

2. Fifteen units of core courses, with at least three units from each of the following groups:
   (a) Regional Geography: Geography 320, 321, 324, 336, 426;
   (b) Human Geography: Geography 312, 340, 353, 354, 440 [or Political Science 440], 454, 554, 556, 558, 573;
   (c) Environmental and Physical Geography: Geography 303, 340, 370, 375, 401, 409, 440 [or Political Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575;
   (d) Methods: Geography 380, 381, 385, 484, 581, 583-586, 589-592L;

3. Nine units from Geography 300 to 599 (if not taken above).

4. Six units from core courses listed above in groups (a), (c), or (d), if not already taken. Field and research experience (Geography 426, 590) and internships (Geography 595) are encouraged. It is recommended that students seek units from international experience to meet this requirement when appropriate and preapproved by the undergraduate adviser.
2. Fifteen units of core courses, with at least three units from each of the following groups: (a) Regional Geography: Geography 320, 321, 324, 336, 426; (b) Human Geography: Geography 312, 340, 353, 354, 440 [or Political Science 440], 454, 554, 556, 558, 573; (c) Environmental and Physical Geography: Geography 303, 340, 370, 375, 401, 409, 440 [or Political Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575; (d) Methods: Geography 380, 381, 385, 484, 581, 583-586, 589-592L.
3. Eighteen units of core courses listed above in group (d), if not already taken;
4. Six units from core courses listed above in groups (a), (b), or (c), if not already taken. Field and research experience (Geography 426, 590) and internships (Geography 595) are encouraged. International units can be used to meet this requirement when appropriate and preapproved by the undergraduate adviser.

Geography Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 22061)

Emphasis in Environmental and Physical Geography
(SIMS Code: 112989)

Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102 or 106, 109, 170; Mathematics 122, 124, or 150; Biology 100, 100L; Chemistry 200; Physics 180A, 182A; Statistics 250 or comparable statistics course. (32 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 38 upper division units in geography to include:
1. Geography 395 to be taken in the student’s first fall semester as a geography major (one unit) and Geography 495 to be taken during the spring semester of the calendar year in which the student expects to graduate (one unit);
2. Fifteen units of core courses, with at least three units from each of the following groups: (a) Regional Geography: Geography 320, 321, 324, 336, 426; (b) Human Geography: Geography 312, 340, 353, 354, 440 [or Political Science 440], 454, 554, 556, 558, 573; (c) Environmental and Physical Geography: Geography 303, 340, 370, 375, 401, 409, 440 [or Political Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575; (d) Methods: Geography 380, 381, 385, 484, 581, 583-586, 589-592L;
3. Fifteen units of core courses listed above in group (d), if not already taken;
4. Three units from core courses listed above in groups (a), (b), or (c), if not already taken. Geography 496, 498, 499, 590, 595, 596 or qualifying international experience may be used to satisfy units within this category when appropriate and approved by the adviser;
5. Three units from Computer Science 310 or 320 (or comparable course approved by the adviser).

Geography Minor

The minor in geography consists of a minimum of 21-22 units of geography to include Geography 101, 102, 104, 108, 170, and one of the following areas:

Cultural (SIMS Code: 112937): Six units from Geography 312, 340, 354, 454, 554, and six units selected from regional courses Geography 320-336, 426.

Methods of Geographic Analysis (SIMS Code: 112954): Nine units selected from Geography 380-385, 484, 581-589, 591, 591L, and three units selected from any other upper division geography course.


Physical (SIMS Code: 112961): Nine units selected from Geography 303, 375, 401, 409, 506-512, and three or four units selected from methods courses Geography 380-385, 484, 581-589.

Urban and Regional Analysis (SIMS Code: 112981): Nine units selected from Geography 340, 353, 354, 440 [or Political Science 440], 454, 554-558, 572, and three or four units from either methods or regional courses Geography 320-336, 380-385, 426, 484, 581-589.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Geographic Information Science Certificate

(SIMS Code: 112949)

The purpose of the program is to prepare students to acquire, analyze, manage, visualize, and develop applications with geospatial data in public and private organizations. Students must apply for admission to the program before the completion of 12 certificate units and must complete the required units with a 2.5 grade point average.

The certificate requires 27 units distributed between the departments of Geography and Computer Science as follows: 12-15 units selected from Geography 104, 381, 484, 581-592, and 12-15 units selected from Computer Science 107, 108, 109, 310, 320, 503, 514, 520, 535, 537. Courses with relevant content (e.g. Geography 596 or Computer Science 596) may be substituted for the geography and computer science courses with the approval of the certificate adviser. Courses in the certificate may be counted toward the major in geography but may not be counted toward the minor.

* Additional prerequisites required for this certificate.
COURSES (GEOG)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

GEOG 101. Earth's Physical Environment (3) [GE]
Earth systems and the global environment to include weather and climate, water, landforms, soils, and ecosystems. Distribution of physical features on Earth's surface and interactions between humans and environment, especially those involving global change. Note: Cannot be used for General Education in combination with Anthropology 101.

GEOG 101L. Earth's Physical Environment Laboratory (1) [GE]
Three hours of laboratory. Prerequisite: Credit or concurrent registration in Geography 101. Observations, hands-on experiments, and practical exercises involving weather, climate, soils, running water, landforms, and vegetation. Includes map fundamentals and interpretation, analysis of airborne and satellite imagery. Designed to supplement Geography 101.

GEOG 102. People, Places, and Environments (3) [GE]
Introduction to human geography. Global and local issues to include culture, development, migration, urbanization, population growth, identity, globalization, geopolitics, and environmental change. Field trips may be arranged.

GEOG 103. Weather and Climate (3) [GE]
The composition, structure, and circulation of the atmosphere, including elementary theory of storms and other weather disturbances. Note: Cannot be used for General Education in combination with Anthropology 101.

GEOG 104. Geographic Information Science and Spatial Reasoning (3) [GE]
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement. Fundamental concepts in geographic information systems, cartography, remote sensing, spatial statistics, and global positioning systems. Use of critical technologies in addressing human and environmental problems.

GEOG 106. World Regional Geography (3) [GE]
Regional approaches to social, political, economic, environmental, and cultural interactions. Colonialism, globalization, development, environmental issues, and geopolitics.

GEOG 170. Sustainable Places and Practices (3) [GE]
Sustainability from a geographic perspective, focusing on role of everyday practices in creating sustainable places. Case studies illustrate geographic variations in the social organization of people/nature relationships and emphasize connections across global, local, and individual scales.

GEOG 296. Experimental Topics (1-4)
Selected topics. May be repeated with new context. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

GEOG 303. Severe Weather (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning required for nonmajors. Recommended: Geography 101 or 103.

GEOG 312. Culture Worlds (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. Geographical characteristics and development of major cultural realms of the world. Spatial components of contemporary conflict within and between these regions.

GEOG 320. California (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. Recommended: Geography 101 or 102.

GEOG 321. United States (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. Recommended: Geography 101 or 102.

GEOG 324. Latin America (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. Recommended: Geography 101 or 102.

GEOG 336. Europe (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. Recommended: Geography 101 or 102.

GEOG 340. Geography of Food (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. Production, distribution, sale, consumption, and preparation of food from a geographic perspective. Key concepts in human and physical geography by exploring the environmental, political, economic, social, and cultural aspects of food.

GEOG 353. Economic Geography (3)
Prerequisite recommended: Geography 101 or 102.

GEOG 370. Conservation Science and Policy (3) [GE]
Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. Scientific understanding of human-environment systems; sustainable management of natural resources under changing global conditions; role of science in addressing environmental issues and development of environmental and conservation policy.

GEOG 375. Environmental Hydrology (3)
Prerequisite: Geography 101 or 103 or Environmental Science 100 or Geological Sciences 104.

GEOG 380. Map Investigation (3)
Two lectures and three hours of laboratory. Prerequisite: Geography 101 or 102 or 104. Use of the map as an analytical tool in geography. History of developments in cartography.
GEOG 381. Computerized Map Design (3)
Two lectures and three hours of laboratory.
Prerequisite: Geography 101 or 102 or 104.
Art and science of creating digital maps as media for describing and analyzing geographic phenomena. Computer laboratory instruction and practice in cartographic techniques with emphasis on thematic maps and geographic information systems.

GEOG 385. Spatial Data Analysis (3)
Prerequisites: Geography 101 or 102, Statistics 250 or comparable course in statistics.
Analysis of spatially distributed data including computer applications. Spatial sampling, descriptive statistics for areal data, inferential statistics, use of maps in data analysis.

GEOG 395. Introduction to the Major (1)
Introduction to the dimensions of the field of geography, to the courses and faculty, and to the learning objectives by which course and student outcomes are assessed.

GEOG 401. Geomorphology (3)
Prerequisite: Geography 101.
How surface processes to include wind, water, ice, and gravity shape the Earth's landforms. May include field trips, ranging from investigation of local beaches and deserts to exploration of geomorphic forces shaping Yosemite National Park.

GEOG 409. Global Climate Change (3)
Prerequisite: Geography 101 or 103.
Global climate system and feedbacks with biosphere. Past climates and potential future changes, including changes in greenhouse gases, ozone depletion and acid rain. Predictions and uncertainty regarding changes including natural and anthropogenic causes.

GEOG 426. Regional Field Studies (3)
Prerequisite: Geography 101 or 102 or Environmental Science 100.
Regional analysis to include physical, cultural, environmental, economic geography at the field level. Specific field techniques/topics taught in lecture and applied in the field. Required field trip of one week to 10 days.

GEOG 440. Food Justice (3)
(Same course as Political Science 440)
Prerequisite: Geography 102 or Political Science 102.
Food justice from perspectives of theory, institutions, markets, law, ethics, social mobilization, politics, and ecology. Political strategies, capabilities of food justice organizations; movements aimed at creating fair, healthy, sustainable food systems locally and globally.

GEOG 454. Sustainable Cities (3)
Prerequisite: Geography 354.
Political and economic forces shaping the structure and organization of cities; physical and human consequences of urbanization; environmental, economic and social sustainability of cities. Housing, transportation, land use, urban services, employment, segregation, and social inequality.

GEOG 483. Watershed Analysis (3)
Prerequisite: Geography 101.
Watershed analysis is an organizing framework for collecting and analyzing scientific information to facilitate environmental management. Framework examined from both an ecological process and an environmental management perspective.

GEOG 484. Geographic Information Systems (3)
Two lectures and three hours of laboratory.
Prerequisite: Three units from Geography 380, 381, 591, or from computer programming.
Procedures for encoding, storage, management, and display of spatial data; theory and use of computer-assisted map analysis; examination of important geographic information systems.

GEOG 495. Geography Capstone (1)
Prerequisite: Geography 395 with a grade of C or higher for Geography majors.
Synthesis of knowledge gained by students in upper division geography courses at SDSU, based on in-class essays and creation of a portfolio outlining learning experiences in geography. Practical information to prepare for professional employment.

GEOG 496. Selected Studies in Geography (3)
Prerequisite: Six units in geography.
Critical analysis of problems within a specific field of the discipline. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units. Field trips may be arranged.

GEOG 498. Senior Thesis (3)
Prerequisites: An overall grade point average of 3.0 and consent of department.
A written thesis based on an individual research project.

GEOG 499. Special Study (1-3)
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

GEOG 506. Landscape Ecology (3)
Prerequisite: Geography 101. Recommended: Geography 370 or 385.
Links between landscape patterns and ecological processes at a variety of spatial scales to include causes and measures of landscape patterns, effects of landscape patterns on organisms, landscape models, landscape planning and management.

GEOG 507. Geography of Natural Vegetation (3)
Prerequisite: Geography 101.
The natural vegetation associations of the world, their distribution, classification and development, including relationship to human activities. Field trips may be arranged.

GEOG 509. Regional Climatology (3)
The causes of climatic types as they occur throughout the world. Principles of several climatic classifications.

GEOG 511. Hydrology and Global Environmental Change (3)
Prerequisites: Geography 101 or 103.
Hydrologic processes and regimes, how these are affected by environmental change and how hydrologic process and regimes affect patterns of environmental change. Processes operating at global, regional, and local scales are examined, including land-use/land-cover change and climate change.

GEOG 512. World on Fire (3)
Prerequisite: Geography 101 or 103 or Biology 100 or Environmental Science 100 or Geological Sciences 100 or 104.
Wild-land fire processes, controls, and effect on soils, water resources, and vegetation in contrasting ecosystems. Fire regimes and mitigation strategies. Fire research.

GEOG 554. World Cities: Comparative Approaches to Urbanization (3)
Prerequisite: Geography 354.
Worldwide trends in urbanization. Case studies of selected cities from various culture areas with focus on international variations in city structure and urban problems.

GEOG 556. Cultures of Cities (3)
Prerequisite: Geography 354 or three units of upper division coursework in a related field.
Character and internal structure of North American cities with a focus on cultures (political, social ethnic, business, architectural) that shape them. Topics include immigrant neighborhoods, gentrification, gated communities, and processes of decline and revitalization. Field trips may be arranged.

GEOG 558. Geographies of Poverty (3)
Prerequisite: Geography 354.
Geographic analysis of poverty in the United States: definitions and representations of poverty; spatial distribution and concentration; causes of poverty to include class, race, ethnicity, and gender; spaces of poverty (re)production such as neighborhoods, homes, schools, and workplaces; anti-poverty policies and responses.

GEOG 570. Environmental Conservation Practice (3)
Prerequisite: Geography 370.
Management of environmental and natural resources. Effective programs and the institutional frameworks in which they occur.
GEOG 572. Land Use Analysis (3)
Prerequisite: Geography 370.
Theoretical and practical approaches to land use management. Current and relevant techniques and policies at local, state and federal levels, aimed toward providing healthy and environmentally sound communities that provide positive benefits to society and the economy. Field trips may be arranged.

GEOG 573. Population and the Environment (3)
Prerequisite: Geography 101 or 102.
Population distribution, growth, and characteristics as they relate to environmental degradation, both as causes and consequences. Roles of women, sustainable development, carrying capacity, optimum population and policy initiatives in relationships between population and environment.

GEOG 574. Water Resources (3)
Prerequisites: Geography 370 and 375.
Occurrence and utilization of water resources and the problems of water resource development. Field trips may be arranged.

GEOG 575. Geography of Recreational Land Use (3)
Prerequisite: Geography 101 or 102.
Importance of society, environment, and location in the use, management, and quality of recreation areas. Direct observation of practices and policies with field trips to local (San Diego) areas and an optional four-day trip to Yosemite National Park.

GEOG 581. Cartographic Design (3)
Two lectures and three hours of laboratory.
Prerequisite: Geography 381.
Computer-assisted map production techniques with emphasis on map design and color use.

GEOG 583. Internet Mapping and Distributed GIServices (3)
Two lectures and three hours of laboratory.
Prerequisite: Geography 381.
Current development of Internet mapping and cartographic skills for web-based maps (multimedia, animation, and interactive design). Fundamental theories of distributed GIS to support Internet mapping with focus on distributed component technologies, Internet map servers, and web services.

GEOG 584. Geographic Information Systems Applications (3)
Two lectures and three hours of laboratory.
Prerequisite: Geography 484.
Spatial analysis methods in GIS, to include terrain, raster, and network analysis. Feature distributions and patterns. GIS data processing techniques to include spatial interpolation, geocoding, and dynamic segmentation. Designing and executing analytical procedures.

GEOG 585. Quantitative Methods in Geographic Research (3)
Prerequisite: Geography 385.
Application of statistical techniques to geographic research to include simple regression and correlation, multiple regression, geographically weighted regression, classification, factor analysis, and computer applications.

GEOG 586. Qualitative Methods in Geographic Research (3)
Prerequisite: Geography 102.
Application of qualitative techniques to geographic research including reflexive survey design and in-depth interviews, non-obtrusive methods, landscape interpretation, textual methods and discourse analysis, feminist criticism, and humanistic and historical materialist perspectives on measurement.

GEOG 589. GIS-Based Decision Support Methods (3)
Prerequisite: Geography 484.
Integration of Geographic Information Systems (GIS) with decision support techniques for problem-solving and decision-making. Optimization and multiple criteria evaluation. Collaborative use of GIS for location-based planning and resource management.

GEOG 590. Community-Based Geographic Research (3)
One lecture and four hours of activity or fieldwork.
Prerequisite: Consent of instructor. Recommended: Statistics 119. Local social and/or environmental issues. Research design, data collection and analysis, collaboration with community-based organizations, reflection on research and social responsibility, communication of findings. Maximum credit six units.

GEOG 591. Remote Sensing of Environment (3)
Prerequisites: Geography 101, Environmental Science 100, or Sustainability 100. Recommended: Physics 180A-180B. Undergraduate students must be concurrently registered in Geography 591 and 591L. Graduate students may take Geography 591L concurrently or after Geography 591.
Acquiring and interpreting remotely sensed data of environment. Electromagnetic radiation processes, aerial and satellite imaging systems and imagery. Geographic analysis of selected human, terrestrial, trial, and marine processes and resources. (Geography 591 and 591L formerly numbered Geography 587.)

GEOG 591L. Remote Sensing of Environment Laboratory (1)
Three hours of laboratory.
Prerequisites: Geography 101, Environmental Science 100 or Sustainability 100. Recommended: Physics 180A-180B. Undergraduate students must be concurrently registered in Geography 591 and 591L. Graduate students may take Geography 591L concurrently or after Geography 591.
Practical exercises, introductory processing, visual interpretation and mapping of remotely sensed imagery. (Geography 591 and 591L formerly numbered Geography 587.)

GEOG 592. Intermediate Remote Sensing of Environment (3)
Prerequisites: Geography 385, 591, 591L. Undergraduate students must be concurrently registered in Geography 592 and 592L. Graduate students may take Geography 592L concurrently or after Geography 592.
Digital image processing. Thermal infrared and microwave imaging systems and image interpretation principles. Geographic analysis of selected human, terrestrial, oceanographic, and atmospheric processes and resources. (Geography 592 and 592L formerly numbered Geography 588.)

GEOG 592L. Intermediate Remote Sensing of Environment Laboratory (1)
Three hours of laboratory.
Prerequisites: Geography 385, 591, 591L. Undergraduate students must be concurrently registered in Geography 592 and 592L. Graduate students may take Geography 592L concurrently or after Geography 592.
Digital image processing, visual interpretation, mapping of thermal infrared, and microwave imagery. (Geography 592 and 592L formerly numbered Geography 588.)

GEOG 595. Geographic Internship (3)
Prerequisites: Six upper division units in geography and consent of instructor.
Students will be assigned to various government agencies and industry and will work under the joint supervision of agency heads and the course instructor.

GEOG 596. Advanced Topics in Geography (1-3)
Prerequisite: Six upper division units in geography. Advanced special topics in geography. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin
The Rollin and Caroline Eckis Chair in Seismology

A gift from Rollin and Caroline Eckis, combined with matching funds from the Atlantic Richfield Company and contributions from SDSU faculty and staff, established The Rollin and Caroline Eckis Chair in Seismology at SDSU. The late Rollin Eckis was former president of Richfield Oil Company and vice chairman of the board of Atlantic Richfield Company.

The first appointee to the chair, Dr. Steven M. Day, conducts research on the mechanics of earthquakes and earthquake hazards. The current appointee, Dr. Kim B. Olsen, conducts research on seismic wave propagation as well as earthquake source description and hazards.

The Major

Geological sciences is the study of the earth, its past, present, and future. Geoscientists apply basic physical, chemical, and biological principles to understand how the earth was formed, how it evolved, and how it may change in the future. In addition to understanding the origin and evolution of our planet, geologists seek to discover, use, and manage earth's resources in clean and environmentally responsible ways, and manage our water resources in a renewable way. The challenges will grow as geoscientists address major societal issues including dwindling energy resources, climate change, environmental pollution, and natural disasters from earthquakes, volcanic eruptions, and coastal subsidence.

Students who are curious about the planet on which we live, challenged by environmental problems facing humankind, and intrigued by a subject which combines both the arts and applied science, should consider the geological sciences as a major. Job prospects are good. Employment of geoscientists is projected to grow by 16 percent from 2012 to 2022, faster than the average for all occupations according to the U.S. Bureau of Labor Statistics. Many openings are expected in consulting firms and the oil and gas industry. Job opportunities should be excellent for geoscientists who graduate with a master's degree. Most new jobs will be in management, scientific, and geotechnical consulting services. Many government agencies, including the U.S. Geological Survey, the U.S. Bureau of Reclamation, the California Department of Conservation, and regional planning offices hire geoscientists.

The department offers two undergraduate degree options:

- The Bachelor of Science degree is designed for students who intend to become professional geologists and/or those who plan to attend graduate school in geosciences. The program includes courses normally expected of graduate school applicants and prepares students for the examination for professional geologic registration licensing.
- The Bachelor of Arts degree is designed for students who seek a degree in the geological sciences as a foundation for careers in a variety of areas. This option leverages a strongly interdisciplinary socially relevant aspects of the science. The B.A. program includes a broad spectrum of courses, and focuses both on information about the earth and how society makes decisions that affect the earth system. The Bachelor of Arts degree in Applied Arts and Sciences meets the requirements of the California Community College Associate in Science (AS-T) in Geology for Transfer degree students completing the Transfer Model Curriculum (TMC).

### Impact Program

The geological sciences major and emphases are impacted programs. To be admitted to the geological sciences major or an emphasis, students must meet the following criteria:

- a. Complete preparation for the major;
- b. Complete a minimum of 60 transferable semester units;
- c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

### Major Academic Plans (MAPs)

Visit [http://www.sdsu.edu/mymap](http://www.sdsu.edu/mymap) for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

### Geological Sciences Major

**With the B.S. Degree in Applied Arts and Sciences (Major Code: 19141)**

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” All required upper division courses must be taken for letter grades only, not credit/no credit.

Courses to satisfy the requirement of 36 or more upper division courses, and focuses both on information about the earth and how society makes decisions that affect the earth system. The B.A. program includes a broad spectrum of courses, and focuses both on information about the earth and how society makes decisions that affect the earth system. The Bachelor of Arts degree in Applied Arts and Sciences meets the requirements of the California Community College Associate in Science (AS-T) in Geology for Transfer degree students completing the Transfer Model Curriculum (TMC).

- A minor is not required with this major.

### Emphasis in General Geology

(SIMS Code: 775324)

**Preparation for the Major, Oceanography 100, or Geological Sciences 100 and 101, or Geological Sciences 101 and 104; Geological Sciences 200, 205, 221; Biology 100, 100L; Chemistry 200, 201; Mathematics 150, 151; Physics 195, 195L, 196, 196L (44 units). Recommended: Physics 197, 197L; Mathematics 252.
Emphasis in Engineering Geology

(SIMS Code: 775313)
Preparation for the Major. Oceanography 100, or Geological Sciences 100 and 101, or Geological Sciences 104; Geological Sciences 205, 221; Biology 100; Chemistry 200; Aerospace Engineering 200 or Mechanical Engineering 200; Mathematics 150, 151, 252; Physics 195, 196, 197. (43 units)
Recommended: Civil Engineering 218; Physics 195L, 196L, 197L.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 38 upper division units in approved courses to include Geological Sciences 300, 306, 307, 324, 336, 498A, 498B, 508, 530, 537, and six additional upper division units from geological sciences (upper division courses from outside department by approval).

Emphasis in Environmental Geosciences

(SIMS Code: 775318)
Preparation for the Major. Oceanography 100, or Geological Sciences 100 and 101; or Geological Sciences 104 or Environmental Science 100 (or Sustainability 100); Geological Sciences 200, 221; Biology 100, 100L, Chemistry 200, 201, 232, 232L; Mathematics 124 or 150; Physics 180A, 180B, 182A, 182B. (40 units)
Recommended: Geological Sciences 205, Chemistry 251, Statistics 250.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 39 upper division units in approved courses to include Geological Sciences 306, 307, 324, 336, 498A, 498B, 505, 514, 530, 537; and nine upper division units selected from Geological Sciences 300, 303, 305, 499, 508 (4 units), 520, 521, Environmental Science 301, Geography 370, Philosophy 332 [or Sustainability 332], Political Science 334 [or Sustainability 334].

Emphasis in Geophysics

(SIMS Code: 775346)
Preparation for the Major. Oceanography 100, or Geological Sciences 100 and 101; or Geological Sciences 104; Geological Sciences 200, 221; Biology 100 or 101; Chemistry 200; Mathematics 150, 151, 252; Physics 183, 195L, 196, 197L, 197L. Aerospace Engineering 280 must be taken if student selects Aerospace Engineering 515 and/or Electrical Engineering 340 in the major. (42 units)
Recommended: Geological Sciences 205, Statistics 250.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36-39 upper division units in approved courses to include Geological Sciences 300, 306, 307, 324, 498A, 498B, and 560; Mathematics 342A and 342B, or Aerospace Engineering 515; two courses selected from Geological Sciences 336, 350; 508, 530, 537; Physics 400A* (or Electrical Engineering 340); and six upper division units of approved courses in geological sciences at the 500 level.

* Additional prerequisites required.
Geological Sciences

Geological Sciences Minor
(SIMS Code: 775301)
The minor in geological sciences consists of a minimum of 17 units in geological sciences, nine of which must be in upper division courses. Courses include Oceanography 100 or Geological Sciences 100 or 104, and 101, 205; and nine units selected from Geological Sciences 301, 303, 305; Oceanography 320.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Oceanography Minor
For a listing of requirements refer to the section of this catalog on Oceanography.

Courses (GEOS)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

GEOL 100. Planet Earth (3) [GE]
Earth’s global systems. Plate tectonics, earthquakes, and volcanoes; evolution of our planet and life through geologic time; economic resources including fossil fuels and precious minerals; agents of erosion that shape the land.
Prerequisites: Credit or concurrent registration in Geological Sciences 100, 104, or Environmental Science 100 [or Sustainability 100].
Hands-on experience with land forms, rocks, minerals, topographic maps, and aerial photographs. Includes demonstrations and field trips. Designed to accompany and augment Geological Sciences 100 or 104.

GEOL 101. Dynamics of the Earth Laboratory (1) [GE]
Earth’s global systems. Plate tectonics, earthquakes, and volcanoes; evolution of our planet and life through geologic time; economic resources including fossil fuels and precious minerals; agents of erosion that shape the land.
Prerequisites: Credit or concurrent registration in Geological Sciences 100, 104, or Environmental Science 100 [or Sustainability 100].
Three hours of laboratory.

GEOL 104. Earth Science (3) [GE]
Earth’s four principal reservoirs and their interconnectedness: solid earth, ocean, atmosphere, and biosphere. How humanity affects and is affected by these reservoirs. Most appropriate for liberal studies majors.
Prerequisites: Oceanography 100; or Geological Sciences 100 and 101; or Geological Sciences 101 and either Geological Sciences 104 or Environmental Science 100 [or Sustainability 100].
Three lectures and three hours of laboratory. Arrangement for field study during the semester.
Prerequisites: Oceanography 100 or Geological Sciences 100 and 101 or Geological Sciences 101 and 104.

GEOL 200. Geologic Inquiry and Problem Solving (3)
Two lectures and three hours of laboratory.
Prerequisites: Oceanography 100; or Geological Sciences 100 and 101; or Geological Sciences 101 and either Geological Sciences 104 or Environmental Science 100 [or Sustainability 100].
Guided inquiry field and laboratory approach to solution of geologic problems. Written reports and oral presentations. Required weekend field trips.

GEOL 205. Historical Geology (4)
Three lectures and three hours of laboratory. Study of the sedimentary, diamicton, and metamorphic rocks. Identification of rocks and fossils in hand specimen; petrographic analysis of rocks in thin section; correlating geologic environments, ages and economic significance. Introduction to techniques in mineral identification.
Prerequisites: Oceanography 100; or Geological Sciences 100 and 101; or Geological Sciences 101 and either Geological Sciences 104 or Environmental Science 100 [or Sustainability 100]. Credit or concurrent registration in Chemistry 200. Recommended: Geological Sciences 200.

GEOL 296. Experimental Topics (1-4)
Three lectures and two hours of activity.
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning. Recommended: Geological Sciences 100.
Geologic problems. Written reports and oral presentations. Required weekend field trips.

GEOL 221. Mineralogy (3)
Two lectures and three hours of laboratory.
Prerequisites: Oceanography 100; or Geological Sciences 100 and 101; or Geological Sciences 101 and either Geological Sciences 104 or Environmental Science 100 [or Sustainability 100]. Credit or concurrent registration in Chemistry 200. Recommended: Geological Sciences 200.
Practice in determination of common minerals; their geologic environment, utilization, and economic significance. Introduction to optical techniques in mineral identification.

GEOL 300. Geological Data Analysis (3)
Two lectures and three hours of laboratory.
Prerequisites: Credit or concurrent registration in Mathematics 150. Theory and techniques of geological data analysis. Elementary programming to model statistical processes. Statistical inference, error propagation, plotting, and curve fitting using geological examples.

GEOL 301. Geology of National Parks and Monuments (3) [GE]
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning. Recommended: Geological Sciences 100.
Geology of a group of national parks and monuments, selected for their geological significance, scenic beauty, and visitor popularity. Not acceptable to the B.S. degree in geological sciences.

GEOL 303. Natural Disasters (3) [GE]
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning. Recommended: Geological Sciences 100.
Geologic processes that have dramatically affected the human race; earthquakes, volcanoes, landslides, and floods. Not acceptable to the B.S. degree in geological sciences.

GEOL 305. Water and the Environment (3) [GE]
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning. Recommended: Geological Sciences 100 or Geography 101.
Movement of fresh water on earth. Hydrologic cycling of water from precipitation, runoff, infiltration, stream and groundwater flow to the ocean. Problems caused by over-use of water resources, urbanization, and water pollution examined with case studies. Not acceptable to the B.S. degree in geological sciences.

GEOL 306. Structural Geology and Field Methods (5)
Two lectures and three hours of laboratory and six weekends in the field.
Prerequisites: Geological Sciences 324; algebra, trigonometry, and at least high school physics. Highly recommended: First semester college physics.
Integrates structural and introductory field geology. Principles, causes, and mechanisms of rock deformation combined with field study. Through computer and analytic techniques for working with folds and faults are applied in the field. Field observations are presented in geologic maps, cross sections, and reports.

GEOL 307. Geophysics and Field Methods (4)
Two lectures and three hours of laboratory and a minimum of three weekends in field during semester.
Prerequisites: Geological Sciences 306; Mathematics 124 or 150; Physics 180A or 180B.
Principles and field studies of gravity, magnetic, and seismic techniques applied to structure, dynamics, and shallow environment of the earth. Computer-aided data reduction and interpretation.

GEOL 324. Petrology (3)
Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 221.
Composition, classification, occurrence, and origin of igneous, sedimentary, and metamorphic rocks. Identification of rocks in hand specimen; petrographic analysis of rocks in thin section; modeling and interpretation of petrologic data.

GEOL 330. Sedimentology and Lithostratigraphy (3)
Two lectures and three hours of laboratory.
Prerequisites: Geological Sciences 200 [not required but recommended for emphases in engineering geology and hydrogeology] and Geological Sciences 205 [not required but recommended for emphases in environmental geosciences and geophysics].
Sedimentologic description and interpretation of the textures and structures of sediments and sedimentary rocks. Stratigraphic analysis of stratal succession, age relationships, and correlation on local and global scales.

GEOL 412. Processes and Inquiry in the Earth Sciences (4)
Three lectures and two hours of activity.
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.
Investigation of processes of inquiry and rational thinking skills characteristic of the earth sciences.

UPPER DIVISION COURSES
(Intended for Undergraduates)

GEOL 300. Geological Data Analysis (3)
Two lectures and three hours of laboratory.
Prerequisites: Credit or concurrent registration in Mathematics 150. Theory and techniques of geological data analysis. Elementary programming to model statistical processes. Statistical inference, error propagation, plotting, and curve fitting using geological examples.

GEOL 301. Geology of National Parks and Monuments (3) [GE]
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning. Recommended: Geological Sciences 100.
Geology of a group of national parks and monuments, selected for their geological significance, scenic beauty, and visitor popularity. Not acceptable to the B.S. degree in geological sciences.

GEOL 303. Natural Disasters (3) [GE]
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning. Recommended: Geological Sciences 100.
Geologic processes that have dramatically affected the human race; earthquakes, volcanoes, landslides, and floods. Not acceptable to the B.S. degree in geological sciences.

GEOL 305. Water and the Environment (3) [GE]
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning. Recommended: Geological Sciences 100 or Geography 101.
Movement of fresh water on earth. Hydrologic cycling of water from precipitation, runoff, infiltration, stream and groundwater flow to the ocean. Problems caused by over-use of water resources, urbanization, and water pollution examined with case studies. Not acceptable to the B.S. degree in geological sciences.

GEOL 306. Structural Geology and Field Methods (5)
Two lectures and three hours of laboratory and six weekends in the field.
Prerequisites: Geological Sciences 324; algebra, trigonometry, and at least high school physics. Highly recommended: First semester college physics.
Integrates structural and introductory field geology. Principles, causes, and mechanisms of rock deformation combined with field study. Through computer and analytic techniques for working with folds and faults are applied in the field. Field observations are presented in geologic maps, cross sections, and reports.

GEOL 307. Geophysics and Field Methods (4)
Two lectures and three hours of laboratory and a minimum of three weekends in field during semester.
Prerequisites: Geological Sciences 306; Mathematics 124 or 150; Physics 180A or 180B.
Principles and field studies of gravity, magnetic, and seismic techniques applied to structure, dynamics, and shallow environment of the earth. Computer-aided data reduction and interpretation.

GEOL 324. Petrology (3)
Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 221.
Composition, classification, occurrence, and origin of igneous, sedimentary, and metamorphic rocks. Identification of rocks in hand specimen; petrographic analysis of rocks in thin section; modeling and interpretation of petrologic data.

GEOL 330. Sedimentology and Lithostratigraphy (3)
Two lectures and three hours of laboratory.
Prerequisites: Geological Sciences 200 [not required but recommended for emphases in engineering geology and hydrogeology] and Geological Sciences 205 [not required but recommended for emphases in environmental geosciences and geophysics].
Sedimentologic description and interpretation of the textures and structures of sediments and sedimentary rocks. Stratigraphic analysis of stratal succession, age relationships, and correlation on local and global scales.

GEOL 412. Processes and Inquiry in the Earth Sciences (4)
Three lectures and two hours of activity.
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.
Investigation of processes of inquiry and rational thinking skills characteristic of the earth sciences.
**GEOL 496. Selected Topics in Geology (1-4)**
Prerequisite: Consent of instructor.
Selected topics in geology and related earth sciences. May be repeated with new content. See Class Schedule for specific content.

**GEOL 498A. Research Methods and Communication (1) Cr/NC**
Prerequisite: Nine upper division units in geological sciences. Development and testing of scientific hypotheses and their effective communication through oral, written, and visual modes. To be taken in fall semester of senior year prior to registration in Geological Sciences 498B, Senior Thesis.

**GEOL 498B. Senior Thesis (2)**
Prerequisite: Consent of instructor. Individual research project, written thesis, and oral presentation done under supervision of professor chosen by student.

**GEOL 499. Special Study (1-4)**
Prerequisites: Acceptable grade average in at least 12 upper division units within the major and consent of staff. Individual study in field, library, laboratory, or museum work. Maximum credit four units.

**UPPER DIVISION COURSES**
*Also Acceptable for Advanced Degrees*

**GEOL 505. Imaging and GIS in Disaster Response (3)**
Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 200 or enrollment in homeland security program. Imaging and Geographic Information Systems applications in disaster management.

**GEOL 508. Advanced Field Geology (4 or 6)**
One lecture and three hours of laboratory plus 28 days in the field. For the option with six units: two additional weeks of field or laboratory work.
Prerequisite: Geological Sciences 306. Investigation of individually assigned areas, preparation of geologic maps, geologic sections, and gathering other types of data, e.g., petrologic, geophysical, or paleontologic, as appropriate. Students are responsible for cost of food and transportation. Students must demonstrate the physical ability to adequately and safely perform fieldwork under varying weather conditions; in steep, uneven or rocky terrain; for long periods of time.

**GEOL 514. Process Geomorphology (3)**
Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 306. Processes shaping and affecting the earth’s surface, and application of resultant land forms in interpretation of geologic structure, stratigraphy, and neotectonics.

**GEOL 520. Economic Geology (3)**
Prerequisite: Geological Sciences 200. Origin and distribution of mineral deposits, economic considerations involved in their recovery, and assessment of available reserves.

**GEOL 521. Petroleum Geology (3)**
Prerequisite: Geological Sciences 336. History of petroleum exploration; statistics of energy use; principles of well logging; theories of petroleum generation, migration, and accumulation; exploration and production techniques; case studies of important oil fields.

**GEOL 530. Geochemistry (3)**
Two lectures and three hours of laboratory.
Prerequisites: Geological Sciences 324; Credit or concurrent registration in Chemistry 201; Mathematics 124 or 150. Fundamental principles of low- and high-temperature geochemistry. Origin of the elements; formation of the solar system; differentiation of the earth; weathering at the earth’s surface; chemistry of natural waters. Laboratory methods applied to geological problems.

**GEOL 537. Geobiology (3)**
Two lectures and three hours of laboratory.
Prerequisites: Geological Sciences 205 and either Biology 100-100L, 101-101L or 203-203L, and Geological Sciences 336. Principles of paleontology, including ecology and evolution. Tools of paleontology, including biomechanics, shape analysis, phylogeny, population analysis, study of biogeographic, temporal, and environmental distribution. Focus on using biology to solve geologic problems and vice versa.

**GEOL 538. Notable Historic Earthquakes (3)**
Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 300. Earthquake magnitude, fault source physics and rupture mechanisms, earthquake location and ground motion estimation, geotechnical aspects, earthquake triggering and geodesy.

**GEOL 550. Engineering Geology (3)**
Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 306. Relationships between geologic processes and works of humans. Topics include rock and soil mechanics, ground water flow, slope stability, seismicity, land subsidence, and evaluation of geologic materials with respect to dam sites, tunnel alignments, and building foundations.

**GEOL 551. Hydrogeology (3)**
Two lectures and three hours of laboratory.
Prerequisites: Geological Sciences 306 and Mathematics 124 or 150. Theory of ground water flow. Exploration for and development of the ground water resource. Aquifer tests, water quality, and water resource management. Occurrence of water in alluvial, sedimentary, volcanic, plutonic, and metamorphic terrains.

**GEOL 560. Earthquake Seismology (3)**
Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 306. Computer-based seismic interpretation, mapping, and modeling in both 2D and 3D. Overview of basic seismic processing. Emphasis on industrial applications, both petroleum and shallow geotechnical.

**GEOL 580. Seismic Interpretation and 3D Visualization (3)**
Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 306. Theory of seismic wave excitation, propagation, and recording. Methods of seismogram interpretation and analysis. Applications to tectonics and earthquake hazard analysis.

**GEOL 587. Volcanology (3)**
Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 324. Magma and magma chamber properties. Eruptive mechanisms, volcano types, and a variety of volcanic phenomena associated with Hawaiian, Strombolian, Plinian, Vulcanian, and hydrovolcanic eruptions. Volcanic phenomena applied to classic and historic eruptions. (Formerly numbered Geological Sciences 687.)

**GEOL 596. Advanced Topics in Geology (1-4)**
Prerequisite: Consent of instructor. Advanced special topics in the geological sciences. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

**GRADUATE COURSES**
Refer to the Graduate Bulletin.
German
In the Department of European Studies
In the College of Arts and Letters

OFFICE: Storm Hall 224A
TELEPHONE: 619-594-6313 / FAX: 619-594-8006
E-MAIL: german.coord@sdsu.edu
http://www-rohan.sdsu.edu/~berlin

Faculty
Emeritus: Skwara
Chair: Donadey
Associate Professors: Rebien, Wauchope
Lecturers: Guzman, Sadegholvad

Offered by the Department of European Studies
Major in German with the B.A. degree in liberal arts and sciences.
Emphasis in German studies.
Major in European studies with emphasis in German.
See European Studies.
Minor in German.

Offered by International Business
Major in international business, with emphasis in German.

The Major
The German language is widely spoken in many countries today. It is also a primary language of scholarship in such diverse fields as chemistry, medicine, military science, history, linguistics, art, physics, electronics, photography, and the natural sciences.

Students who major in German will gain proficiency in German language skills, and the department offers a broad variety of courses designed to prepare majors for a number of careers after graduation. A major in German is also a good preparatory curriculum for graduate programs in such areas as international trade, international law, librarianship, public administration, and journalism.

A knowledge of German is a valuable asset in finding positions as interpreters and translators employed by the federal government, the United Nations, international conferences, trade councils, and publishers, as well as with internationally oriented companies, government agencies, the press corps, and the tourism industry.

The German major with an emphasis in German studies offers extensive preparation in the German language while providing students with a broad, interdisciplinary understanding of the history, culture, and society of the countries of Central Europe where German is spoken. This emphasis provides excellent preparation for careers as area specialists for private businesses and agencies or for positions at international organizations, with the federal government, or in cultural institutions.

Students majoring in German are strongly encouraged to participate in California State University International Programs (CSU-IP) and other approved study abroad programs in German-speaking countries. Students also have the option of pursuing a double major in another area of study.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The German major and emphasis are impacted programs. To be admitted to the German major or emphasis, students must meet the following criteria:

A. Complete preparation for the major;
B. Complete a minimum of 60 transferable semester units;
C. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

German Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 11031) (SIMS Code: 113101)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in German courses can apply to the degree.

Students majoring in German must complete a minor in another field to be approved by the departmental adviser in German.

Preparation for the Major. German 100A, 100B, 202, 205A, 205B (21 units)

Language Requirement. The language requirement is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience Requirement. All German majors are required to complete an approved study abroad program in a German-speaking country consisting of a minimum of six units (90 hours). However, German majors are strongly encouraged to complete a more extensive abroad experience by participating in a semester or an academic year program. To fulfill the International Experience Requirement, German majors must enroll in a study abroad program approved by the department. Unapproved study abroad programs will not meet the international experience requirement for the major.

Major. A minimum of 27 upper division units to include German 300, 301, 304, 400, 430, and 12 units in upper division German. No more than one German course taught in English can apply to the major.
Emphasis in German Studies  
(SIMS Code: 113120)  
No minor is required with this emphasis.  
Preparation for the Major. German 100A, 100B, 150, 202, 205A and 205B. (24 units)  
Language Requirement. The language requirement is automatically fulfilled through coursework for preparation for the major.  
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.  
Major. A minimum of 30 upper division units to include German 300, 301, and 410 or 411; six units of electives in German; 12 units (no more than six units in any one department) selected from Economics 330, Geography 336, History 440, 527, Humanities 320, 408, Philosophy 505, Political Science 356, and three units of electives selected with approval of department adviser.

German Minor  
(SIMS Code: 113101)  
The minor in German consists of a minimum of 15 units taught in German, nine units of which must be in upper division German courses. Any course taught in English needs department approval to apply to the minor requirements (German 320 is acceptable for the German minor).  
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Language Requirement for the B.A. Degree in Liberal Arts and Sciences  
Students electing the study of German to fulfill the language requirement for the bachelor of arts degree in liberal arts and sciences must successfully complete German 202 or 205A or 205B or the equivalent level of achievement. The usual sequence of coursework is German 100A, 100B, 202, 205A, and 205B. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

High School Equivalents  
High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.  
Secondary school language courses can be used as follows:  
1. The first two years of high school level language count as the equivalent of the first semester of a college level course.  
2. The first three years of high school level language count as the equivalent of the first two college semesters.  
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

Courses (GERMN)  
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.  

LOWER DIVISION COURSES  
Native speakers of German will not receive credit for taking lower division courses in German except with advance approval from the department.  
All lower division courses in German are taught in German unless otherwise stated.  
No credit will be given for lower division courses taken after successfully completing any upper division German course taught in German.  
No credit will be given for German 100A, 100B, 205A, 205B taken out of sequence. German 202 may be taken concurrently with German 205A or 205B.

GERMN 100A. First Course in German (5) [GE]  
Prerequisite: German 100B or three years of high school German.  
Continuation of German 100A.

GERMN 150. Introduction to German Studies (3) [GE]  
Prerequisite: German 100A or 150.  
Continuation of German 100A.

GERMN 202. Readings in German (3) [GE]  
Prerequisite: German 100B.  
Reading comprehension through intermediate-level cultural materials. May be taken concurrently with German 205A or 205B.

GERMN 205A. Third Course in German (4) [GE]  
Four lectures and one hour of laboratory.  
Prerequisite: German 205A or three years of high school German.  
Continuation of German 205A.

GERMN 205B. Fourth Course in German (4) [GE]  
Four lectures and one hour of laboratory.  
Prerequisite: German 205A.

GERMN 296. Experimental Topics (1-4)  
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.
**UPPER DIVISION COURSES**
(Intended for Undergraduates)

All upper division courses in German are taught in German unless otherwise stated.

**GERMN 300. Readings in Contemporary German Culture (3) [GE]**
Prerequisites: German 202, 205B, and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Development of advanced proficiency in reading comprehension and oral communication through use of cultural materials. Not open to students who hold a degree from a secondary or post-secondary school in which the primary language of instruction is German.

**GERMN 301. Grammar and Composition (3) [GE]**
Prerequisites: German 202, 205B, and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Proof of completion of prerequisites required: Copy of transcript.

Grammar and stylistics; intensive writing practice; reports based on outside reading. Not open to students who hold a degree from a secondary or post-secondary school in which the primary language of instruction is German.

**GERMN 304. Phonetics of Spoken German (3)**
Three lectures and one hour of laboratory.
Prerequisites: German 202 and 205B.

Sounds and intonation of German.

**GERMN 320. German Film (3) [GE]**
Prerequisites: German 202, 205B, and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Proof of completion of prerequisites required: Copy of transcript.

Masterpieces of German film. Emphasis on social, political, and cultural changes in modern Germany. Taught in English.

**GERMN 400. German Studies Through the Media (3)**
Prerequisite: German 300 or 301.

Society and institutions of German-speaking regions through spoken and written texts from the media. Emphasis on topics of importance for business, communications, and German area studies.

**GERMN 410. German Studies I (3)**
Prerequisites: German 202 and 205B.

Methods of German studies as applied to study of culture of German-speaking communities from Middle Ages to beginning of second German empire, while building on advanced German language skills.

**GERMN 411. German Studies II (3)**
Prerequisites: German 202 and 205B.

Methods of German studies as applied to study of culture of German-speaking communities from second German empire through German reunification, while building on advanced language skills.

**GERMN 430. German Civilization (3)**
Prerequisites: German 202 and 205B.

Artistic, intellectual, and cultural movements of the German-speaking regions, while building on advanced language skills. May be repeated with new title and content. Maximum credit six units.

**GERMN 495. German Internship (3) Cr/NC**
Prerequisites: Upper division standing in major and consent of instructor.

Practical work experience in a field related to German studies. Work done under joint direction of activity sponsor and instructor. Approved international internships may count towards international experience requirement for major.

**GERMN 496. Experimental Topics (1-4)**
Prerequisite: German 300 (for literary topics) or 301 (for linguistics topics).

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

**GERMN 499. Special Study (1-3)**
Prerequisites: Fifteen upper division units in the major with an average of B (3.0) or better and consent of instructor. Proof of completion of prerequisites required: Copy of transcript.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES**
(Also Acceptable for Advanced Degrees)

**GERMN 501. Translation (3)**
Prerequisites: German 300 and 301.

Translation of a variety of texts from German to English and English to German.

**GERMN 520. Modern German Literature (3)**
Prerequisites: German 300 and 301.

Major authors and genres since Enlightenment.

**GERMN 575. Seminar in German Studies (3)**
Prerequisite: Two upper division German courses.

Directed research on topics in German studies. See Class Schedule for specific content. May be repeated with new title and content. Maximum credit six units.

**GERMN 596. Topics in German Studies (3)**
Prerequisites: German 300 and 301. Proof of completion of prerequisites required: Copy of transcript.

Topics in German language, literature, or linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

**GRADUATE COURSES**
Refer to the Graduate Bulletin.
Gerontology
In the School of Social Work
In the College of Health and Human Services

OFFICE: Hepner Hall 119
TELEPHONE: 619-594-6865 / FAX: 619-594-5991
Director of School: Melinda M. Hohman

Faculty
Emeritus: DuBois, Harbert, Stanford
Professor: Garrett
Associate Professors: Ko, Min
Assistant Professor: Li

Offered by the School of Social Work
Master of Science degree in gerontology.
Major in gerontology with the B.A degree in liberal arts and sciences.
Minor in gerontology.
Certificate in applied gerontology (offered only in the College of Extended Studies).

The Major
Gerontology concerns itself with the study and application of knowledge about the physical, social, and economic conditions of older people. Since the process of aging touches all aspects of human activity, gerontology is interdisciplinary in nature. Gerontology is becoming a major area of research in the biological, behavioral, and social sciences. With a rapid increase of older people, there is 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 from the personal understanding of their own aging process. Those wishing to pursue careers in aging will find many exciting opportunities for serving the elderly in a variety of settings.

It is through research, teaching, and community involvement that faculty members from numerous disciplines provide for the intellectual development of students, the enhancement of community programs, and the assurance of a better quality of life for older Americans.

Program Goals
- Provide academic programs and experiences through courses and field experiences, leading to an undergraduate degree in a major and minor in gerontology.
- Provide interdisciplinary education and training that meet the diverse needs of older people in California and in the U.S.
- Prepare students as generalist gerontologists for careers in a variety of gerontological settings such as senior centers, senior service organizations, area and state agencies on aging, supportive senior housing, public, non-profit and corporate settings, health and long term care facilities.
- Provide students with knowledge of aging network and programs on the local, state, and federal level.
- Provide students with knowledge and skills to identify and understand stereotypes and attitudes toward older adults, and emphasize their places and contributions in society.
- Prepare students with knowledge needed in describing, assessing, and critiquing various programs, intervention and services designed for older adults.
- Prepare students to meet the needs of older adults with cultural competence regarding age, gender, race and ethnicity, and/ or diverse abilities.
- Prepare students for evidence-based practice with older adults with appropriate research methods to develop, implement, and evaluate the aging programs and services.

Program Outcomes
- Demonstrate knowledge and understanding necessary to advocate for the aging network consisting of programs and policies for the aging population.
- Demonstrate knowledge of the aging network consisting of programs and policies for the aging population.
- Demonstrate knowledge and understanding necessary to describe, assess, and critique various programs, intervention and services to meet the needs of the growing aging population.
- Demonstrate knowledge and skills necessary to advocate for the needs of older adults and their families by engaging in policy formation, implementation, and analysis.
- Understand the ethical complexities that surround issues with respect to aging.

Advising
All College of Health and Human Services majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The gerontology major is an impacted program. To be admitted to the gerontology major, students must meet the following criteria:
- Complete preparation for the major.
- Complete a minimum of 60 transferable semester units; or
- Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Gerontology Major
With the B.A Degree in Liberal Arts and Sciences
(Major Code: 21043) (SIMS Code: 951902)
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.

Preparation for the Major
Gerontology 101, 250; Biology 100; Child and Family Development 135; Psychology 101; Public Health 101; and Social Work 110. (21 units)
Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in a foreign language to fulfill the graduation requirement. Refer to the section of the catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. All gerontology majors are required to participate in an international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course and community service activity in the U.S. will be substituted). Specific details can be found at http://chhs.sdsu.edu/international/.

To meet the international experience requirement, majors must complete one of the following:
1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;

Major. A minimum of 36 upper division units to include Gerontology 360, 370, 400A, 402, 520, Social Work 381, 391, and 12 units selected with approval of the advisor from Gerontology 400B, 496, 499, and 596 (when appropriate); Exercise and Nutritional Sciences 433; General Studies 420; Psychology 380; Social Work 382*, 483A*.

* Prerequisites waived.

Gerontology Minor
(SIMS Code: 551901)
The minor in gerontology consists of a minimum of 18 units selected from Gerontology 101, 360, 370, 400A, 402, 499, 520, 596; Exercise and Nutritional Sciences 433; General Studies 420; Psychology 380; Social Work 120, 381.

Additional prerequisites may be required for the courses in the minor.
Courses in the minor may not be counted toward the major or the certificate, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Applied Gerontology Certificate
(Offered only in the College of Extended Studies)
(SIMS Code: 551903)
This program is designed for persons working in the field of aging as well as those interested in obtaining employment in the aging field. Completion of the certificate program will enable participants to assume greater responsibility by broadening their knowledge of and skill in this specialty area. More specifically, the program is designed to provide the following:
1. A broad knowledge base in the bio-psycho-social aspects of aging.
2. Practical knowledge and skills in the application of this information towards services for older people.
3. Knowledge of government programs and program planning and evaluation techniques.
4. Knowledge of programs and services operating in local areas as well as gaps which exist in local programming.
5. Knowledge and skills needed to function in an advocacy capacity to improve services to the elderly.

Certificate Requirements:
1. Complete 18 semester units of coursework with a grade point average of 2.0 or better.
2. Complete coursework within four years after admission to the program.
3. Petition the College of Extended Studies for the certificate upon completion of 18 semester units.

To be admitted to the program, students are expected to show by previous coursework and/or experience some evidence of potential for completing the academic program. Previous courses in gerontology taken at SDSU or at other universities will be considered for credit toward certification on an individual basis, but not to exceed nine units. The School of Social Work is responsible for the coordination of the certificate program in conjunction with the College of Extended Studies. Admission applications may be obtained from the College of Extended Studies. Applications may be submitted prior to entering the program or before the completion of nine semester units of coursework. Students are required to submit an Open University Registration Form each semester to the College of Extended Studies.

Students accepted into the program will be assigned an adviser by the School of Social Work.

Required Courses for the Certificate Program
A minimum of 12 semester units must be selected from the following areas inclusive of the practicum:

I. Introduction to Gerontology
   Gerontology 101. Introduction to Human Aging (3)

II. Psychological Aspects of Aging
   Psychology 250. Abnormal Psychology (3)

III. Sociological Aspects of Aging
   Gerontology 250. Intergenerational Issues and the Elderly (3)
   Gerontology 350. Social Policy and Aging (3)

IV. Practicum
   Gerontology 400A or 400B. Practicum in Gerontology (3) (Cr/NC)

Elective Courses
A minimum of six semester units selected from the following:
   Gerontology 360. Diversity and Aging (3)
   Gerontology 370. Images of Aging in Contemporary Society (3)
   Gerontology 402. Aging Network (3)
   Gerontology 499. Special Study (1-3)
   Gerontology 520. Analysis of Programs for the Aging (3)
   Gerontology 596. Advanced Special Topics in Gerontology (1-4)
   Women's Studies 310. Global Cultures and Women's Lives (3)

Courses (GERO)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES
GERO 101. Introduction to Human Aging (3) [GE]
Overview of field of gerontology, including demographic trends, basic theories, concepts and philosophic ideas, social policies, planning issues, and services available to meet needs and problems of older adults.

GERO 250. Intergenerational Issues and the Elderly (3)
Controversial issues surrounding interpersonal relations between older adults and other age groups.

GERO 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296 courses applicable to a bachelor's degree.
UPPER DIVISION COURSES
(Intended for Undergraduates)

**GERO 350. Social Policy and Aging (3)**
Prerequisite: Gerontology 101.

**GERO 360. Diversity and Aging (3) [GE]**
Prerequisite: Gerontology 101 or completion of the General Education requirement in Foundations of Learning IIB, Social and Behavioral Sciences required for nonmajors.
Attitudes and cultural values related to aging members of ethnic and minority groups. Influences of class, gender, sexual orientation, economic resources and health on aging process.

**GERO 370. Images of Aging in Contemporary Society (3) [GE]**
Prerequisite: Gerontology 101 or completion of the General Education requirement in Foundations of Learning IIB, Social and Behavioral Sciences required for nonmajors.
Impact of current cultural attitudes and values on images of older persons. Influence of media and advertising in creating views and perceptions of aging. Major myths and stereotypes.

**GERO 400A-400B. Practicum in Gerontology (3-3) Cr/NC**
Two hundred hours of internship.
Prerequisites: Gerontology 350, 360, 370.
Integration of theoretical background and practical experience in providing services to elderly. Fieldwork and observation in settings providing services to the elderly. Direct experience in aging projects relevant to their field of interest.

**GERO 402. Aging Network (3)**
Prerequisite: Three units in gerontology.
Networks, programs, and services available to older adults in communities. Effectiveness of programs that assist older adults to age successfully.

**GERO 496. Experimental Topics (1-4)**
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

**GERO 499. Special Study (1-3)**
Prerequisite: Consent of department chair.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

**GERO 520. Analysis of Programs for the Aging (3)**
Prerequisite: One upper division course in gerontology.
Major programs in aging that support daily functioning of elderly. Effectiveness of programs in serving today's elderly with attention to ethnic and cross-cultural variations.

**GERO 596. Advanced Special Topics in Gerontology (1-4)**
Advanced selected topics in gerontology. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

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Greek – Refer to “Classics” in this section of the catalog.
Health Science – Refer to “Public Health” in this section of the catalog.
International Experience

In recognition of the SDSU Shared Vision goal of a global university and increasing globalization in all sectors of the world and within societies, the College of Health and Human Services international experience for undergraduate students has been established. All College of Health and Human Services majors are required to participate in an international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course and community service activity in the U.S. will be substituted). Specific details can be found at http://chhs.sdsu.edu/international/.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;

Courses (HHS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSE

HHS 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSE

(Attended for Undergraduates)

HHS 350. Applied International Health and Human Services (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B. Social and Behavioral Sciences. See Class Schedule for additional prerequisites.

Examine economic, political, cultural, environmental, health and human services challenges, and variations with respect to disease, mental health, and poverty in a designated non-Western region or country in Asia, Africa, Central and South America.
Hebrew
In the Department of Linguistics and Asian/Middle Eastern Languages
In the College of Arts and Letters

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
http://www-rohan.sdsu.edu/dept/linguist/index.html

Faculty
Emeritus: Bar-Lev
Chair: Osman
Program Coordinator: Shuster
Lecturer: Shuster

Offered by the Department of Linguistics and Asian/Middle Eastern Languages
Courses in Hebrew.
Major or minor work in Hebrew is not offered.

Language Requirement for the B.A. Degree in Liberal Arts and Sciences
Students electing the study of Hebrew to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Hebrew 201 or the equivalent level of achievement. The usual sequence of coursework is Hebrew 101 (with 100), 102, 200, and 201. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

Students who speak a little Hebrew (whether from formal studies or from other sources, such as parents or residence in Israel) should consult faculty for correct placement before classes begin.

High School Equivalents
High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows: 1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

Courses (HEBRW)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES
All lower division courses in Hebrew are taught in Hebrew.
No credit will be given for Hebrew 101, 102, 201 taken out of sequence.

HEBRW 100. Hebrew Alphabet (1)
Study of Hebrew alphabet, practice with reading and comprehending whole texts (without vowels), as well as pronouncing. Intended for students of Hebrew 101 who have not previously studied the alphabet. May also be taken without Hebrew 101. Does not satisfy language requirement.

HEBRW 101. Elementary Hebrew I (4) [GE]
Four lectures and one hour of laboratory. Beginning reading, writing, and conversational skills. Essentials of grammar. First course in Hebrew, intended for those without prior knowledge of Hebrew. Students who speak some Hebrew should consult with the faculty for correct placement before classes begin.

HEBRW 102. Elementary Hebrew II (4) [GE]
Four lectures and one hour of laboratory. Prerequisite: Hebrew 101. Continuation of Hebrew 101.

HEBRW 200. Reading Classical Hebrew (1)
Prerequisite: Knowledge of the Hebrew alphabet. Continuation of Hebrew 100. Reading in Hebrew of short selections from Hebrew Bible and Prayerbook, study of songs, reading of simple stories. Focus on learning Hebrew roots and affixes through readings.

HEBRW 201. Intermediate Hebrew (4) [GE]
Four lectures and one hour of laboratory. Prerequisites: Hebrew 102 and 200. Continuation of Hebrew 102. Applications of grammar and reading skills. Additional practice in conversation.

HEBRW 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES
(Intended for Undergraduates)
All upper division courses in Hebrew are taught in Hebrew unless otherwise stated.

HEBRW 496. Topics in Hebraic Studies (1-4)
Topics in Hebraic language, literature, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit eight units. May be taught in English.

HEBRW 499. Special Study (1-3)
Prerequisite: Consent of instructor. Individual study. Maximum credit six units. May be taught in English.
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toward peoples whose way of life may be different from one's own. Present decision making, and cultivates a more compassionate spirit. Past sharpens a person’s own sense of values, provides a context for apply historical understanding to self-transformation and civic partic-

lation of information on particular events, regions, or cultures, but constitute the subject of history. Technology, economics, politics, war, ideology, and social attitudes all almost all aspects of human activity and behavior. The arts, sciences, history. A gift from alumnus Dwight E. Stanford, who earned a bachelor's degree in American history in 1936 from San Diego State College (now, SDSU), established The Dwight E. Stanford Chair in American Foreign Relations. The holder of the Chair is Dr. Elizabeth A. Cobbs, a distinguished scholar-teacher who is an expert on economic and political relations between the United States and the Third World, and on the history of the Cold War. The Nasatir Professorship was established in honor of the late Professor Abraham Nasatir, a specialist in European colonial history in North America. Nasatir taught history at SDSU for 46 years and was active in the community as an advocate of Jewish education. The Professorship was held by Dr. Lawrence Baron, Professor Emeritus, and a distinguished scholar of European intellectual history and Holocaust studies, from 1988 until 2012. The Nasatir Professor of Modern Jewish History The Nasatir Professorship was established in honor of the late Professor Abraham Nasatir, a specialist in European colonial history in North America. Nasatir taught history at SDSU for 46 years and was active in the community as an advocate of Jewish education. The Professorship was held by Dr. Lawrence Baron, Professor Emeritus, and a distinguished scholar of European intellectual history and Holocaust studies, from 1988 until 2012.

The Major

History is the study of humanity's recorded past, encompassing almost all aspects of human activity and behavior. The arts, sciences, technology, economics, politics, war, ideology, and social attitudes all constitute the subject of history. The purpose of history education is not primarily the accumu-

lation of information on particular events, regions, or cultures, but rather the development of knowledge and skills to collect and sift historical evidence, analyze and interpret historical behavior, and apply historical understanding to self-transformation and civic particip-

ation. Study of the ideas, attitudes, and actions of people in the past sharpens a person’s own sense of values, provides a context for present decision making, and cultivates a more compassionate spirit toward peoples whose way of life may be different from one's own. The training in basic skills and the broad range of knowledge students receive in history courses prepare history majors for a wide variety of careers in law, government, politics, journalism, publishing, private charities and foundations, public history, business, and science. Teaching at the primary to university levels also offers opportunity for history majors who continue their education at the graduate level.

Impacted Program

The history major is an impacted program. To be admitted to the history major, students must meet the following criteria:

- Complete with a minimum GPA of 2.20 and a grade of C or higher: History 100, 101, and six units selected from History 105, 106, 109, or 110. These courses cannot be taken for credit/no credit (Cr/NC);
- Complete a minimum of 60 transferable semester units;
- Have a cumulative GPA of 2.40 or higher.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/umypath for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

History Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 22051) (SIMS Code: 113301) All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in history courses can apply to the degree. A minor is not required with this major. Preparation for the Major: History 100, 101, and six units selected from History 105, 106, 109, 110. (12 units) These prerequisite courses may not be taken Cr/NC and must be completed with a minimum GPA of 2.20 and a grade of C or higher in each class. Language Requirement. Students will be required to successfully complete the third college semester or fifth college quarter or four years of high school in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements." Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or completing History 390W or another approved upper division writing course (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements. Major. A minimum of 30 upper division units in history to include History 400; three units from History 450, 451, or 452. In addition, 24 upper division units in history must be completed from the following fields:


Field (C). The Modern World: Six units selected from History 100, 101, 105, 106, 109, or 110. These courses cannot be taken for credit/no credit (Cr/NC);
At least three upper division units selected from History 420, 421, 473, 474, 501, 566, 567, 570. Students may also fulfill this requirement by taking the following topics courses with the approval of the undergraduate adviser: History 500, 580, 583, 586. Courses completed to satisfy this requirement may also be counted towards Field (A), Field (B), or Field (C) requirements.

An additional six units must be selected from any combination of courses in Field (A), Field (B), or Field (C).

At least 15 upper division units must be at the 500-level. Up to six units from other departments may be applied to the history major upon written approval of the undergraduate adviser. Up to six units of study abroad history courses may be applied to the history major upon prior written approval of the undergraduate adviser. It is the student’s obligation to determine which courses fulfill his/her field requirements.

NOTE: Courses for Field (A), Field (B), or Field (C) are identified in the course title as (A), (B), or (C).

### History Minor

**SIMS Code: 113031**

The minor in history consists of a minimum of 18 units in history to include six sequential units in the lower division. Twelve units must be in upper division history, including three units at the 500-level, distributed in no more than two of the fields listed under the history major.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

### History Honors Thesis

The department offers undergraduates of superior achievement the opportunity to write a history honors thesis leading to special recognition upon graduation. History 490, Senior Honors Thesis, is open to students who rank in the top 20 percent of senior history majors and who have successfully completed History 400. Interested students should consult the honors thesis adviser in the Department of History.

### Courses (HIST)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

#### LOWER DIVISION COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Requirements</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>HIST 100. World History (3) [GE]</td>
<td>World History</td>
<td>Growth of civilizations and interrelationships of peoples of Europe, Asia, Africa, and the Americas to 1500.</td>
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<tr>
<td>HIST 101. World History (3) [GE]</td>
<td>World History</td>
<td>Modern history from a global perspective, 1500 to present.</td>
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<tr>
<td>HIST 105. Western Civilization to the Seventeenth Century (3) [GE]</td>
<td>Western Civilization</td>
<td>Development of Mediterranean and European cultures, thought, and institutions from ancient times to the seventeenth century.</td>
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<tr>
<td>HIST 106. Western Civilization Since the Sixteenth Century (3) [GE]</td>
<td>Western Civilization</td>
<td>Development of European cultures, thought, and institutions from sixteenth century to present.</td>
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<tr>
<td>HIST 109. American History to Reconstruction (3) [AI]</td>
<td>American History</td>
<td>United States history from pre-colonial societies to Reconstruction. Contact of cultures, patterns of settlement, contests over racial, ethnic, religious, class, gender, regional, and national identities and institutions. Satisfies the American Institutions requirement in American history and United States Constitution.</td>
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<tr>
<td>HIST 110. American History Since the Civil War (3) [AI]</td>
<td>American History</td>
<td>United States history since the Civil War. Development of U.S. economy, urbanization, social and cultural change, emergence of U.S. as a world power, struggles over American identities and institutions. Satisfies the American Institutions requirement in American history and California government.</td>
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### UPPER DIVISION COURSES

(Intended for Undergraduates)

#### HIST 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

#### HIST 299. Special Study (3)

Prerequisites: Consent of department chair and instructor. Individual study.

#### HIST 390W. Writing in History (3)

Satisfies the American Institutions requirement in American history as a world power, struggles over American identities and institutions. Satisfies the American Institutions requirement in ethnic, religious, class, gender, regional, and national identities. Historical perspectives on body parts, sexual practices, the body, regulation of sexual practices, and emergence of sexual identities. Historical perspectives on body parts, sexual practices; adolescence; education; play; work in slavery, servitude, apprenticeship, and families; immigration and migration; domestic violence and family law; and construction of gender and identity.

#### HIST 400. Junior Seminar in Methods and Historiography (3)

Prerequisites: History 100, 101, and six units selected from History 105, 106, 109, 110. Limited to history majors. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in Rhetoric and Writing Studies 280, 281, or Linguistics 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript. Practice of different genres of historical writing in one field of history (chosen by instructor), mastery of library skills, citations, academic integrity, source evaluation, pre-writing, and drafting, critiquing, and revising.

#### HIST 401. History of Childhood (A) (3) [GE]

Prerequisites: Upper division standing and completion of General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Comparative perspective on the history of infancy and early childhood; childrearing theories and practices; adolescence; education; play; work in slavery, servitude, apprenticeship, and families; immigration and migration; domestic violence and family law; and construction of gender and identity.

#### HIST 402. History of Sexuality (A) (3) [GE]

Prerequisites: Upper division standing and completion of General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Comparative and historical approach to changing conceptions of the body, regulation of sexual practices, and emergence of sexual identities. Historical perspectives on body parts, sexual practices, and sexual celebrities invested with social and political significance.

#### HIST 403. Early Modern Europe (B) (3) [GE]

Prerequisites: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Early modern Europe from Renaissance to French Revolution. Social, cultural, economic, political, and intellectual trends, development of nation-states, and sources of continental conflict.

#### HIST 404. Modern Europe (C) (3) [GE]

Prerequisites: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Modern Europe from French Revolution to present. Social, cultural, economic, political, and intellectual trends, development of nation-states, and sources of continental conflict.
HIST 410. United States History for Teachers (C) (3) [AI]
Prerequisites: Upper division standing and Writing Placement Assessment with a score of B or above or grade of C or better in Linguistics 281 or Rhetoric and Writing Studies 280 or 281. United States history from colonial period to present with emphasis on historiography, bibliography, and relationship between philosophy of history and teaching. Satisfies the American Institutions requirement in American history and California government.

HIST 411. World History for Teachers (B) (3)
Prerequisites: Upper division standing, Writing Placement Assessment with a score of B or above or grade of C or better in Linguistics 281 or Rhetoric and Writing Studies 280 or 281, and at least three units selected from History 100, 101, 105, 106.
Topics in world history from paleolithic times to sixteenth century emphasizing comparative analysis, interrelations among societies, and large-scale patterns of change. Various approaches to conceptualizing and teaching world history. Intended primarily for students in teacher preparation programs.

HIST 412. Modern World History for Teachers (C) (3)
Prerequisites: Upper division standing, Writing Placement Assessment with a score of B or above, or grade of C or better in Linguistics 281 or Rhetoric and Writing Studies 280 or 281, and at least three units selected from History 100, 101, 105, 106.
Topics in world history from the beginning of the sixteenth century to the present emphasizing world-scale patterns of change and cross-cultural interactions. Various approaches to conceptualizing and teaching world history. Intended primarily for students preparing to teach history in secondary schools.

HIST 413. United States History for Teachers for Liberal Studies Majors (3)
Prerequisites: Upper division standing and Writing Placement Assessment with a score of B or above or grade of C or better in Linguistics 281 or Rhetoric and Writing Studies 280 or 281. Limited to liberal studies majors.
United States history from pre-colonial period to World War I, incorporating California with emphasis on historiography and relationship between philosophy of history and teaching. Satisfies the American Institutions requirement in American history and United States Constitution. Required of liberal studies majors. Not open to students with credit in History 409.

HIST 415. Pre-Contact and Colonial Latin America (B) (3) [GE]
(Same course as Latin American Studies 415)
Prerequisites: Upper division standing and Writing Placement Assessment with a score of B or above or grade of C or better in Linguistics 281 or Rhetoric and Writing Studies 280 or 281. Limited to liberal studies majors.
Indigenous and colonial history of Latin America, pre-contact through early national period.

HIST 416. Modern Latin America (C) (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
History of Latin America, early national period to present.

HIST 418. History of Modern Britain (C) (3)
Prerequisite: Upper division standing.
History of Britain from seventeenth century to contemporary age. Emphasis on political institutions, religion, society, economy, the arts.

HIST 420. Asian History to 1600 (B) (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
History of Asia from pre-colonial period to contemporary period. Emphasis on political institutions, religion, society, economy, the arts.

HIST 421. Asian History Since 1600 (C) (3) [GE]
(Same course as Asian Studies 421)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
History of Asia from pre-colonial period to contemporary period. Emphasis on political institutions, religion, society, economy, the arts.

HIST 422. Asian American Experiences (A) (3) [GE]
(Same course as Asian Studies 422)
Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Experiences of Asian/Pacific Islander Americans to include immigration, colonialism, imperialism, exclusion, citizenship, race, gender, and California's place in popular culture. Not open to students with credit in History 444 and 445 if both courses were taken prior to fall 2004.

HIST 423. History Through Film (A) (3)
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Critical analysis of selected historical problems, eras, and events, using film as the principal historical document. See Class Schedule for specific content. Maximum credit six units.

HIST 424. Modern Jewish History in Feature Films (A) (3) [GE]
Two lectures and two hours of activity.
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Representations of twentieth-century Jewish history in feature films. Includes a major research paper based on primary sources.

HIST 425. Unnatural Disasters: History of Current Environmental Problems (A) (3) [GE]
Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Biographical approach to history through lives of prominent and ordinary individuals. Topics may include war, community, dissent, individualism, leadership, politics, culture, religion, gender, race, and ethnic identities. Specific content may vary.

HIST 426. California History (C) (3)
California history from pre-colonial societies to present. Emphasis on early colonial societies, economy, environment, politics, race, gender, and California's place in popular culture. Not open to students with credit in History 444 and 445 if both courses were taken prior to fall 2004.

HIST 441. Senior Seminar in Historical Research (3)
Prerequisites: History 400 with a Grade of C (2.0) or better and a minimum of 15 upper division units in history. Proof of completion of prerequisites required: Copy of transcript.
Capstone seminar on historical research. Application of historical theory and methods to original research in a selected field of history. Includes a major research paper based on primary sources.

HIST 450. Senior Seminar in Historical Research (3)
Prerequisites: History 400 with a Grade of C (2.0) or better and a minimum of 15 upper division units in history. Analysis and practice of ways historians preserve, research, and interpret the past for public audiences. Topics include historic preservation projects, parks, museums, archives, and living history programs. Includes a major analytical essay or public history project.
HIST 452. Advanced Internship in Applied History (3)
Prerequisites: History 400 with a Grade of C (2.0) or better and a minimum of 15 upper division units in history. 
Campus and community archives, museums, government, and other historical agencies. Emphasis on critical analysis, writing, and historiography.

HIST 473. Middle Eastern History from the Advent of Islam to 1500 (B) (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. 
Middle Eastern history, 600 C.E. to 1500 C.E.; spread of Islam through rise of Ottoman Empire.

HIST 474. The Middle East Since 1500 (C) (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. 
Middle Eastern history since 1500 C.E.; Islamic empires, European colonialism, nationalism, and modernization.

HIST 486. World War II (A) (3)
Causes of World War II, its course, and its legacy for today's world.

HIST 488. Modern Jewish History (A) (3) [GE]
Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. 
Social, religious, and intellectual life of European Jewry from Middle Ages to present; political struggle for emancipation; anti-Semitism, the Holocaust, and establishment of state of Israel.

HIST 490. Senior Honors Thesis (3)
Prerequisites: History 400; open to history majors with senior standing and permission of the honors thesis adviser. 
Directed research on a historical topic chosen in consultation with the honors thesis adviser, and completion of a senior honors thesis. Required of students wishing to graduate with a certificate of recognition in history.

HIST 495. Internship in Applied History (A) (3)
Prerequisite: Nine units in history. History 451 for some students (see instructor). 
Supervised field placement of students in campus and community archives, historical museums, and other historical agencies. Practical experiences related to studies within history curriculum.

HIST 496. Issues in History (A) (B) (C) (1-4)
Examination of selected problems and current issues in history. May be repeated with change of content. Maximum credit six units with change of content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Refer to Class Schedule for specific content. 
A. Thematic, Comparative, and Interdisciplinary History 
B. The Ancient Through Early Modern World 
C. The Modern World

HIST 499. Special Study (A) (B) (C) (1-3)
Prerequisites: Consent of department chair and instructor. Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

NOTE: Courses for Field (A) Thematic, Comparative, and Interdisciplinary History; or Field (B) The Ancient Through Early Modern World; or Field (C) The Modern World, are identified in the course title as (A), (B), or (C).

HIST 500. Topics in Ancient History (A) (3)
Prerequisite: Upper division or graduate standing. 
Variable topics in ancient history throughout the world may include: Women in Greek and Roman societies, magic in the Greco-Roman World, Silk Roads, and pre-contact Mexico. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

HIST 501. History of Ancient Near Eastern Civilizations (B) (3)
Major civilizations of Near East from the origin of civilization to Roman Conquest, including Egyptians, Babylonians, Hebrews, and Persians. Social, political, and religious problems.

HIST 502. Ancient Greece (B) (3)
Greek history from prehistoric period through Age of Alexander the Great. Emphasis on political, social, cultural, and institutional developments, and historiography. Secondary attention to military, economic, and religious topics.

HIST 503. Ancient Rome (B) (3)
Roman history from origins of Rome to fall of the Empire. Emphasis on political, social, cultural and institutional developments, and historiography. Secondary attention to military, economic, and religious topics.

HIST 504. The Dark Ages (B) (3)
(Same course as Humanities 504)
Europe and the Mediterranean, sixth to eleventh centuries C.E. through various approaches: political, economic, social, and cultural. Topics include the barbarians and Vikings, the Byzantine, Arab, and Holy Roman Empires, the Norman Conquest, Charlemagne, Beowulf, feudalism, and serfdom.

HIST 505. The Later Middle Ages (B) (3)
Europe and the Mediterranean 1100-1450 C.E. through various approaches: political, economic, social, and cultural. Development of kingdoms of western Europe and relationship to Byzantine empire and other states.

HIST 506. The Renaissance (B) (3)
(Same course as Humanities 506)
Intellecual, artistic, social, and economic transformation in Europe from fourteenth to seventeenth centuries.

HIST 507. The Reformation (B) (3)
(Same course as Religious Studies 507)
Continental Europe, 1500-1648. Split of Christendom; political and intellectual dissent; social fabric of family life; relationship between gender, class, and power; cultural stratification of European society.

HIST 508. The Fall of the Roman Empire (B) (3)
Prerequisite: Upper division or graduate standing. 
History of Mediterranean region between third and sixth centuries C.E. Changes in society, politics, economics, military, gender, sexuality, religion, literature, art, archaeology, and law. Competing perceptions of the period as one of "fall" versus one of "transformation."

HIST 509. British Century: Waterloo to World War I (C) (3)
Prerequisite: Upper division or graduate standing. 
History of Mediterranean region between third and sixth centuries C.E. Changes in society, politics, economics, military, gender, sexuality, religion, literature, art, archaeology, and law. Competing perceptions of the period as one of "fall" versus one of "transformation."

HIST 512A. The Great War: A Turning Point in European History (C) (3)
Forces and events that shaped Europe in period prior to and during World War I, 1890-1919.

HIST 512B. The Age of Dictators and Contemporary Europe (C) (3)
Europe in the age of dictatorship, world war, decline, and recovery.

HIST 514. History of Science: From Revolution to Evolution (A) (3)
Prerequisite: Upper division or graduate standing. 
Development of early modern European science. Origins of Western concept of "science," Greek-Roman and Arabic roots of science, impact of Renaissance humanism and voyages of exploration on Scientific Revolution, and imperial context of evolutionary theories and scientific racism.

HIST 516. Imperialism and the Colonial Experience (A) (3)
Prerequisite: Upper division or graduate standing. 
Imperialism and colonialism as these transformed both colonizing and colonized peoples, e.g., modernization, racism, Orientalism, multi-ethnic, Great Power competition, anti-colonial resistance, and nationalism.

HIST 527. The Holocaust in Feature Films (A) (3)
Two lectures and two hours of activity. 
Prerequisite: Upper division or graduate standing. 
Depiction of the Nazi policy of destroying European Jewry and its impact on the perpetrators, bystanders, victims, and the post-war world in feature films.
HIST 528. Social History of Early Modern Europe (B) (3)
Historical survey of European society emphasizing changes in the family, health, diet, standard of living, urbanism, crime, migration, and literacy, from 1350 to beginning of Industrial Revolution.

HIST 532. Topics in Early American History (B) (3)
Prerequisites: Upper division or graduate standing and three units in history at the college level.
Variable topics in history of colonial America and the early republic. Possible topics include: Women and the Family; Race, Class and Labor; American Revolution; Religion and Politics; Immigrants' Experiences. See Class Schedule for topic. May be repeated with new content. Maximum credit six units.

HIST 535. The Age of Roosevelt (C) (3)
The United States in Depression, War, and Cold War. (Formerly numbered History 535B.)

HIST 536. The United States Since World War II (C) (3)
Major foreign and domestic issues confronting the United States, and the government policies and popular movements generated in response.

HIST 537. Star Trek, Culture, and History (C) (3)
Prerequisite: Upper division or graduate standing. Explores relationship between Star Trek's several television series, movies, novels, and the larger historical and cultural context of post-World War II America. Themes include race, gender, sexuality, foreign policy, terrorism, religion, and politics.

HIST 538. American Religious History (A) (3)
Religious ideas, leaders, movements, institutions, and ideologies throughout United States history. Religious change over time and connections between religion and colonialism, nationalism, politics, race, class, gender, sexuality, war, diversity, justice, and material culture.

HIST 539. Topics in the History of the American West (C) (3)
Prerequisites: Upper division or graduate standing. Selected topics in history of American West such as Western migration; Southwest borderlands; gender and the frontier; new western history. May be repeated with new content. Maximum credit six units.

HIST 540. Environmental History of the United States (C) (3)
(Offered only at IVC)
The relationship of Americans to their environment from colonial times to the present with emphasis on how attitudes and values have affected personal behavior and public policy toward the land.

HIST 544A. Early American Foreign Relations (C) (3)
Development of American foreign relations from Colonial Period to the Spanish-American-Filipino War.

HIST 544B. Modern American Foreign Relations (C) (3)
Development of American foreign relations since 1900.

HIST 545. Constitutional History of the United States (C) (3)
Development of American constitutional ideals and institutions from colonial period to the present. Examines historical context of significant legal issues and constitutional cases.

HIST 548. Race and Ethnicity in United States History (A) (3)
(Same course as Chicana and Chicano Studies 548)
Prerequisite: Upper division or graduate standing. Race and ethnicity in America from colonial period through twentieth century to include historical construction of identity; colonization, slavery, state formation; labor, immigration, politics of whiteness; applicability of black/white binary of a multiethnic society.

HIST 550. Colonial Mexico (B) (3)
Social history of Mexico from pre-contact through early national period using primary and secondary sources. Processes of social and cultural negotiation involving gender, religion, environment, medicine, and urban experience.

HIST 551. Modern Mexico (C) (3)
Social history of Mexico since early national period using primary and secondary sources. Processes of social and cultural negotiation involving gender, religion, environment, medicine, and urban experience.

HIST 555. Dictatorships and Human Rights in Latin America (C) (3)
Prerequisite: Upper division or graduate standing. Cold War tensions; United States-Latin American relations; Cuban Revolution; rise of totalitarian rule in Argentina, Brazil, Chile, Guatemala; transition to democracy since the 1980s.

HIST 556. Latin America in World Affairs (C) (3)
History of Latin America's political and economic relations with Europe, the Soviet Union, the United States, and the Third World.

HIST 566. Ancient and Imperial China (B) (3)
Prerequisite: Upper division or graduate standing. Chinese history before 1600 CE. Confucianism, Daoism, Legalism; emperors and evolution of Chinese state; gender and sexuality; Buddhism and daily life along Silk Route; Song technological and commercial revolution; Mongol invasions; Ming voyages; China's role in pre-modern world history.

HIST 567. China in Revolution (C) (3)
China's history during the tumultuous nineteenth and twentieth centuries. China's forced encounter with Western imperialism, rural, and urban social movements. Impact of Mao's Revolution on everyday life in China, successes, limitations of China's recent reform policies.

HIST 570. Modern Japan: From Samurai to Sony (C) (3)
Prerequisite: Upper division or graduate standing. Japanese history from 1600 to present, Late-samurai period; nineteenth century industrialization and imperialism; Japan in World War II: Nanjing, Pearl Harbor, Hiroshima; foundations of postwar "economic miracle," gender relations, anime, and identity in contemporary Japan; Japan's role in twenty-first century world.

HIST 574. Arab-Israeli Relations, Past and Present (C) (3)
Arab-Israeli conflict and diplomacy over Palestine from perspectives of Zionism, Arab nationalism, and Great Power relations from nineteenth century to present. May be repeated with new content. Maximum credit six units.

HIST 580. Topics in the History of War and Violence (A) (3)
Prerequisite: Upper division or graduate standing. History of war and violence may include: Violence in Africa, modern genocide, trauma and modern East Asia, social suffering in historical perspective. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

HIST 581. Topics in Urban History (A) (3)
Prerequisite: Upper division or graduate standing. Variable topics in urban history may include: The city in United States history; Chinatowns, suburbs and suburbanization, urban politics. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

HIST 582. Topics in Social and Cultural History (A) (3)
Prerequisite: Upper division or graduate standing. Variable topics in social and cultural history may include: Ritual in early modern Europe, radicals ad revolutionaries, intellectuals and society, families in former times, and American popular culture. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

HIST 583. Topics in History of Gender and Sexuality (A) (3)
Prerequisite: Upper division or graduate standing. Variable topics in history of gender and sexuality may include: Gay and Lesbian history, Asian American gender and sexuality, genders in Latin America. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

HIST 584. Topics in Environmental History (A) (3)
Prerequisite: Upper division or graduate standing. Variable topics in environmental history may include: Press, politics, environment, world environmental history, water and society. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.
HIST 585. History of the Sixties (C) (3)
Prerequisite: Upper division or graduate standing.
Variable topics in the history of the 1960s may include: America in the 1960s, Africa in the 1960s, politics and protests in 1960s, Europe in the 1960s. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

HIST 586. Topics in World History (A) (3)
Prerequisite: Upper division or graduate standing.
Major historical problems, themes, or topics from global, chronological, and geographical perspectives of world history to include frontiers, food and famine, violence and warfare, science, religion and magic, the Atlantic world, medieval era. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units. (Formerly numbered History 470.)

HIST 596. Selected Studies in History (A) (B) (C) (1-4)
Topics in various fields of history, such as biography, war, science, technology, urbanization, minority groups, immigration, and capitalism. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Key Features of the Curriculum

Study Abroad. All Weber Honors College students are required to complete a credit-bearing study abroad experience. The Weber Honors College recognizes that students may have limited time and/or resources to engage in study abroad. To accommodate students’ needs, a combination of short-term and long-term options is available to students. To meet the study abroad requirement, students may choose either short-term study tours, summer abroad programs, semester-long, or year-long exchanges. See the Honors Adviser to make arrangements to meet this requirement.

Honors Senior Capstone. The Weber Honors College is committed to helping students understand what, how, when, and why they learn. All Weber Honors College students are required to integrate their academic, professional, and community involvement, including major and honors-specific coursework and high impact educational experiences beyond the classroom, and formulate an action plan for post-baccalaureate personal and professional aspirations in a culminating capstone.

Honors Minor in Interdisciplinary Studies (Minor Code: 49993) (SIMS Code: 888001)

The Honors Minor in Interdisciplinary Studies consists of 15 units of honors interdisciplinary seminars and honors sections of general education courses, of which three units are lower division and 12 units are upper division. A maximum of three units of honors sections of general education courses may be counted to satisfy the requirements of the minor. Students must complete a study abroad experience. Students must be admitted to the Weber Honors College at the time they declare the minor.

Preparation for the Honors Minor (3 units). Honors College 113.

Upper Division for the Honors Minor (12 units). Honors College 313, 480, 495 and three units selected from Honors College 413 or honors sections of general education courses (Anthropology 402; Humanities 370; Psychology 340; Religious Studies 356, 363; Sociology 320).

Courses in the major department or required for the major may not be used to satisfy requirements for the minor. A minimum of six upper division units must be completed in residence at San Diego State University.

Study Abroad Requirement. All Honors Minor in Interdisciplinary Studies students are required to complete a credit-bearing study abroad experience.

To meet the study abroad requirement, minors must complete one of the following:

1. An SDSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Travel Program;
4. A CSU Study Abroad Program;
5. General Studies 450.
Courses (HONOR)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

HONOR 113. Seminar in Honors Connection and Commitment (3)
Prerequisite: Admission to the Weber Honors College. Interdisciplinary education and the theoretical and practical integration of knowledge. Coursework beyond the classroom in areas of research, creative activity, leadership, community service, and study abroad.

HONOR 296. Honors Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

HONOR 299. Special Study (1-3)
Prerequisite: Consent of instructor. Individual study. Maximum combined credit of nine units of 299, 499 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

HONOR 313. Seminar in Interdisciplinary Studies (3)
Prerequisite: Credit or concurrent registration in Honors College 113. Idea, philosophy, and method of interdisciplinary studies. Various disciplines and topics from interdisciplinary perspectives, workplaces, and societal settings. Integration of a variety of schools of thought and the value of an interdisciplinary outlook. See Class Schedule for specific content.

HONOR 413. Interdisciplinary Perspectives on Social Problems (3) [GE]
Prerequisite: Completion of General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Various social problems from interdisciplinary perspectives. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units of which three units may be applicable to General Education.

HONOR 450. Honors Study Abroad (3)
Prerequisite: Upper division standing. Life and culture in a selected international setting through an approved study abroad program sponsored by the Weber Honors College. Maximum credit six units.

HONOR 480. Seminar in High Impact Activities (3)
Prerequisite: Credit or concurrent registration in Honors College 313. High impact activities completed in research, leadership, service, and/or creative arts performance. Impact of engagement outside the classroom on specific goals.

HONOR 495. Seminar in Integrative Capstone (3)
Prerequisite: Admission to the Weber Honors College. Honors culminating capstone experience. Synthesis and integration of academic, professional, and community involvement, including major and honors-specific coursework and high impact practices. Formulation of action plan for post-baccalaureate personal and professional aspirations. (Formerly numbered Honors Program 490C.)

HONOR 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

HONOR 499. Special Study (1-3)
Prerequisite: Consent of instructor. Individual study. Maximum combined credit of nine units of 299, 499 courses applicable to a bachelor's degree. Maximum credit of six units of 499 applicable to a bachelor's degree.
Hospitality and Tourism Management

In the L. Robert Payne School of Hospitality and Tourism Management
In the College of Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 436
TELEPHONE: 619-594-4964 / FAX: 619-594-4443
http://www.sdsu.edu/htm

Faculty
Director: Winston
Sycuan Institute on Tribal Gaming Chair: Spilde
Professor: Testa
Associate Professors: Ponting, Spilde
Assistant Professor: Sipe
Lecturers: Blake, Campbell, Corr, Dathe, DeFino, Sayer
Director of The J. Willard and Alice S. Marriott Foundation Student Center for Professional Development: Blake

Offered by the L. Robert Payne School of Hospitality and Tourism Management

Major in hospitality and tourism management with the B.S. degree in applied arts and sciences.

- Emphasis in hotel operations and management.
- Emphasis in meetings and events operations and management.
- Emphasis in restaurant operations and management.
- Emphasis in tribal gaming operations and management.

The Major

Hospitality and tourism management is an interdisciplinary major which culminates in a Bachelor of Science degree offered by the College of Professional Studies and Fine Arts. This program provides students with a solid undergraduate program emphasizing basic business management principles and their specific application to the hospitality and tourism industry and its components that make up the industry. The program integrates a significant number of courses from diverse disciplines into a comprehensive theoretical and applied program necessary for success in the hospitality and tourism professions. The program is directed at management positions in the industry, positions that require a broad understanding of management and its application to the businesses and organizations that flourish in this sector of the international, national, state, and local economies.

Students select one of the following emphasis areas for in-depth study: Hotel Operations and Management; Meetings and Events Operations and Management; Restaurant Operations and Management; or Tribal Gaming Operations and Management. With a solid core of business management courses and theoretical and applied study of the broad hospitality and tourism industry, students are educated to move readily into management positions in one of the state's, nation's, and world's fastest growing economic sectors. The hotel and restaurant emphases will prepare managers to effectively administer businesses that provide lodging and food services to business and leisure travelers and tourists. The emphasis in meetings and events operations and management is aimed at preparing individuals to successfully manage destination based agencies that attract and entertain guests in a host region (convention centers, bureaus, festivals, sporting events, etc.). The tribal gaming emphasis prepares students to maximize the economic and social outcomes of tribal gaming facilities, which operate in a unique tribal government-owned business environment.

Impacted Program

The hospitality and tourism management (HTM) major is an impacted program. To be admitted to an HTM major emphasis, students must meet the following criteria:

a. Complete with a grade of C or higher: Hospitality and Tourism Management 201, 223, 250; Accountancy 201; Economics 101 and 102; Management Information Systems 180; Mathematics 120 or 150; Rhetoric and Writing Studies 290, and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (Cr/NC);

b. Complete a minimum of 60 transferable semester units;

c. Have a cumulative GPA of 3.0;

d. Students who meet all requirements except the GPA may request to be placed on the waiting list. Students on the waiting list will be admitted on a case-by-case basis formulated around the program's exception policy. Contact the School of Hospitality and Tourism Management (PSFA-436), 619-594-4964, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Internships

A significant portion of the student's educational program is dedicated to community-based learning components termed internships. Prior to the first internship, students must complete 400 hours of work experience (see school adviser for details). Each student must complete two, 300+ hour internships in hospitality and tourism businesses. These experiential learning components enable students to apply their classroom education to real world experiences in actual businesses. The HTM program has purposely entered into partnerships with San Diego's finest hospitality and tourism enterprises to provide students with specialized facilities and experiences that complete a well-rounded and comprehensive educational experience for graduation and entry into this rewarding profession.

Advising (Mandatory)

All students admitted to the university with a declared major in hospitality and tourism management are required to attend an advising meeting with the undergraduate advisers in the school every semester.

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to meet your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.
Hospitality and Tourism Management Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 05081)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

A major in hospitality and tourism management must be planned with an emphasis in hotel operations and management, or meetings and events operations and management, or restaurant operations and management, or tribal gaming operations and management.

A minor is not required with this major. Preparation for the major courses may not be taken Cr/NC; the minimum grade in each course must be a C.

Emphasis in Hotel Operations and Management
(SIMS Code: 663102)

Preparation for the Major. Hospitality and Tourism Management 201, 223, 250; Accountancy 201; Economics 101, 102; Management Information Systems 180; Mathematics 120 or 150; Rhetoric and Writing Studies 290, and Statistics 119 or Economics 201. (30-31 units)

These prerequisite courses may not be taken Cr/NC. The minimum grade in each class is C or higher.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. All students in the Hotel Operations and Management Emphasis are required to complete an international experience requirement. To meet this requirement, students must complete one of the following with the approval and written consent of the undergraduate adviser. Scholarships are available. The international experience should meet the student learning outcomes of the emphasis.

1. International field trip;
2. International internship;
3. International student exchange;
4. CSU Study Abroad Program;
5. International professional engagement.

Major. A minimum of 47 upper division units to include Hospitality and Tourism Management 301, 320, 380, 398, 455, 480, 490, 491, 498; and three units of electives selected from Hospitality and Tourism Management 425, 450, 455, 456, 455; Business Administration 323, 350, 360, 370; Management 352; Recreation and Tourism Management 404, 470.

Emphasis in Restaurant Operations and Management
(SIMS Code: 663103)

Preparation for the Major. Hospitality and Tourism Management 201, 223, 250; Accountancy 201; Economics 101, 102; Management Information Systems 180; Mathematics 120 or 150; Rhetoric and Writing Studies 290, and Statistics 119 or Economics 201. (30-31 units)

These prerequisite courses may not be taken Cr/NC. The minimum grade in each class is C or higher.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 46 upper division units to include Hospitality and Tourism Management 301, 330, 380, 398, 431, 480, 490, 491, 498; and three units of electives selected from Hospitality and Tourism Management 333, 430, 433, 435; Business Administration 323, 350, 360, 370; Management 352; Recreation and Tourism Management 404, 470.

Emphasis in Meetings and Events Operations and Management
(SIMS Code: 663106)

Preparation for the Major. Hospitality and Tourism Management 201, 223, 250; Accountancy 201; Economics 101, 102; Management Information Systems 180; Mathematics 120 or 150; Rhetoric and Writing Studies 290, and Statistics 119 or Economics 201. (30-31 units)

These prerequisite courses may not be taken Cr/NC. The minimum grade in each class is C or higher.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 45 upper division units to include Hospitality and Tourism Management 301, 370, 371, 372, 373, 380, 398, 480, 490, 498; Business Administration 323, 350, 360, 370; Management 352; Recreation and Tourism Management 404, 470.
Courses (HTM)

LOWER DIVISION COURSES

HTM 201. Introduction to Hospitality and Tourism Management (3)
Hospitality and tourism industry with focus on basic management theories and principles as they apply to hospitality and tourism; basic structure, organization, and management of industry components and the services/products they deliver.

HTM 223. Hospitality Managerial Accounting and Controls (3)
Prerequisites: Hospitality and Tourism Management 201 or Recreation and Tourism Management 101 and Accountancy 201. Utilization of accounting information in decision-making, planning, directing, and controlling in hospitality and tourism management. Integrates areas of managerial accounting and controls with applications in hospitality industry. Not open to students with credit in Accountancy 202.

HTM 250. Hospitality Law (3)
Prerequisite: Hospitality and Tourism Management 201. Hospitality law, legal, and policy areas arranged according to specific entities hospitality managers have primary relationships: guests, employees, third parties, and government.

HTM 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES

(Intended for Undergraduates)

HTM 301. Service Leadership Development (2)
One lecture and two hours of activity.
Prerequisites: Hospitality and Tourism Management 201 and upper division major in hospitality and tourism management.
Service leadership theory and development in hospitality and tourism industry. Application of business models and industry metrics with focus on individual assessment and development of leadership competencies.

HTM 320. Hotel Management (3)
Two lectures and two hours of activity.
Prerequisite: Upper division major in hospitality and tourism management.
Hotel management and operations to include room reservations, housekeeping, front desk management, concierge, sanitation, safety, security, and bellstand. Revenue management, forecasting, measuring performance, transient versus group displacement, service quality, pricing and inventory management, ethics.

HTM 330. Event and Meeting Industry (3)
Prerequisites: Upper division standing in hospitality and tourism management or another major approved by the school and consent of instructor.
History and motivation behind meetings, elements of events, event operations and project management, types of meetings and events and industry and economic models.

HTM 333. Weddings and Social Events (1)
Prerequisite: Hospitality and Tourism Management 330. Cultural, social, economic, and other factors affecting planning and execution of weddings and other social events.

HTM 340. Restaurant Management (3)
Two lectures and three hours of laboratory.
Prerequisite: Hospitality and Tourism Management 301.
Restaurant and food service principles to operations of casual and fine dining restaurants with emphasis on cost/volume/profit relationships, forecasting demand and market share, market niche/positioning, sanitation and safety, scheduling, quality management, customer service, technology, and ambiance/environment.

HTM 342. Restaurant Marketing and Menu Management (3)
Prerequisites: Hospitality and Tourism Management 340 and Business Administration 370.
Restaurant marketing and menu design, menu research and development, and other marketing-related management functions.

HTM 344. Restaurant Multi-Unit Operations (3)
Prerequisite: Hospitality and Tourism Management 340.
Multi-unit management of restaurants, examining structure and principles for providing superior technical and expressive service on a sustainable basis.

HTM 370. Tribal Gaming: Cultural and Political Context (3)
Prerequisites: Upper division standing.
Social and political context of American Indian tribal gaming, political relationships between federal and tribal governments, contemporary examples of tribal gaming, sociocultural and economic forces leading to gaming as strategy for economic development, and responses by non-Indian communities to tribal gaming.

HTM 371. Tribal Gaming: Casino Operations (3)
Prerequisite: Hospitality and Tourism Management 301.
Functional units of a casino and how they work together to create a viable business model. Economic and management issues in gaming industry, with emphasis on tribal applications.

HTM 372. Tribal Gaming: Legal and Regulatory Issues (1)
Prerequisite: Upper division standing.
Legal and regulatory structure of tribal gaming including Federal Indian Gaming Regulatory Act and California compacting process.

HTM 373. Tribal Gaming: Marketing and Public Relations (2)
Prerequisite: Upper division standing.
Key strategies, tactics, and techniques used by marketing and public relations professionals to fuel demand for tribal casino gaming. Customer relationship marketing (CRM), radio/TV/print advertising, promotions, and guest incentives.

HTM 380. Hospitality Leadership Theory (1)
Prerequisite: Upper division major in hospitality and tourism management.
Key components of leadership behavior and practice.

HTM 398. Internship I in Hospitality and Tourism (3) Cr/NC
Prerequisite: Hospitality and Tourism Management 301 and consent of internship coordinator. A minimum of 400 hours of prior documented hospitality work experience. Entry level experience in a hotel, restaurant, or related position at a university approved site. Minimum 300 hours of quality work at site required during semester and completion of project. Note: Only students who have been approved for placement by internship coordinator may enroll in this course.

HTM 425. Property Management in Hospitality and Tourism (3)
Prerequisite: Hospitality and Tourism Management 301.
Development, planning, and maintenance of hospitality facilities. Real estate economics, income generation, lease and management contracts, building operations, project development sequencing, conceptual and space planning, financing, asset management, industry practices, renovation, and public relations.

HTM 430. Specialty Event Management (2)
One lecture and two hours of activity.
Prerequisite: Hospitality and Tourism Management 330.
Special events planning and execution.

HTM 433. Destination Management Services (2)
Prerequisite: Hospitality and Tourism Management 301.
Destination management companies including incentive travel and meeting techniques, structure, governance, business, and services operations.

HTM 435. Sporting Events and Festival Management (3)
Prerequisite: Hospitality and Tourism Management 301.
Organization and administration of attraction-based events focusing on scheduling, financing, budgeting and revenue distribution, logistics, planning principles, marketing, contracts, and staging considerations.

HTM 444. Sport Event Management (3)
Prerequisite: Hospitality and Tourism Management 340.
Multi-unit management of restaurants, examining structure and principles for providing superior technical and expressive service on a sustainable basis.
HTM 450. Venture and Entrepreneurial Management in Hospitality and Tourism (3)
Prerequisites: Hospitality and Tourism Management 301, Business Administration 323, 350, 360, and 370.
Initiating, expanding, purchasing, and consolidating hospitality and tourism businesses; examination of entrepreneurial approach including concepts, theories, techniques, and practices of managerial innovation/implementation; analysis of entrepreneurial skills.

HTM 453. Hospitality Sales and Marketing (2)
Prerequisites: Hospitality and Tourism Management 201, 320; Business Administration 370.
Sales functions and management skills required of hospitality companies. Tactics and techniques used to reach target audiences.

HTM 455. Hospitality Financial Management (3)
Prerequisite: Business Administration 323.
Managerial insights and techniques for understanding, evaluating, and managing hospitality industry financial information and making sound decisions.

HTM 456. Hotel Revenue Management (2)
Prerequisite: Hospitality and Tourism Management 320.
Revenue management in hotel industry including marketplace intelligence, forecasting, pricing, and revenue optimization techniques.

HTM 465. Hospitality Technology (1)
Prerequisite: Hospitality and Tourism Management 490.
Operative characteristics of extant hospitality industry technology; techniques for evaluating investments in new technology solutions.

HTM 474. Tribal Gaming: Slot and Table Games Management (3)
Prerequisites: Hospitality and Tourism Management 201 and 371.
Games of chance played in a casino, mathematics and technology involved, and management techniques required to support operations.

HTM 480. Leadership and Coaching in Hospitality (3)
Prerequisites: Hospitality and Tourism Management 301 and 380.
Development of interpersonal communication, coaching, and training skills to maximize employee performance in a service setting.

HTM 490. Strategic Management in Hospitality and Tourism (3)
Prerequisites: Hospitality and Tourism Management 398 and Business Administration 370.
Problems and issues of strategic planning in hospitality and tourism businesses including methods, techniques, and models used to identify strategic issues and generate future-oriented action plans to implement change.

HTM 491. Leadership and Self Development in Hospitality (2)
Prerequisites: Hospitality and Tourism Management 301, 480, and upper division standing in hospitality and tourism management. Capstone leadership course. Advanced leadership topics and completion of student leadership portfolios.

HTM 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

HTM 498. Internship II in Hospitality and Tourism (3) Cr/NC
Prerequisites: Hospitality and Tourism Management 398 and Business Administration 350, Management 352. Food handler certification required for restaurant majors.
Experience in a hotel, restaurant, tribal casino, or tourism site in student's chosen emphasis at a university approved site. Minimum of 300 hours of quality work at site required during semester in addition to completion of site project.

HTM 499. Special Study (1-3)
Prerequisite: Consent of special study adviser. Individual study. Maximum credit six units.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)

HTM 596. Selected Topics in Hospitality and Tourism Management (1-3)
Prerequisite: Upper division or graduate standing. Selected topics in hospitality, tourism, and/or tribal gaming management. May be repeated with new content and approval of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Humanities
In the College of Arts and Letters

OFFICE: Arts and Letters 662
TELEPHONE: 619-594-5186 / FAX: 619-594-1004
http://classicsandhumanities.sdsu.edu

Faculty
Emeritus: Eisner, Genovese, Skwara
Associate Professors: Rybakova, Smith
Lecturers: Caldwell, Kuhiken, Quntanilla

Offered by the Department of Classics and Humanities
Major in humanities with the B.A. degree in liberal arts and sciences.
Emphasis in European humanities.
Minor in humanities.

The Major
The humanities comprise all uniquely human accomplishments. Founded in history, they are the artistic and intellectual traditions of civilized peoples, namely: language, literature, philosophy, religion, and the arts. The goal of the humanities major is an interdisciplinary understanding of peoples and their times through accomplishments that convey best what they value most. In short, humanities shows us what being civilized amounts to, and by directing us to the meaning and worth of life, it helps us to create and enjoy a life of our own.

Majors in humanities may choose a general course of studies that allows for a balance between Western and non-Western civilization or they may emphasize European civilization, which takes its start with the Greeks. They all have at their disposal the Burnett Classics Seminar Room with its library and media resources. In addition to close academic advising and fellowship in a small department with diverse interests, they culminate their studies with a senior seminar.

With a background in critical analysis and with an appreciation of history, ideas, and the arts, a graduate in humanities might find opportunities in communication, diplomacy, or commerce, as a cultural consultant, an editor or writer, an arts critic, a travel consultant, or a museum curator. Some of these careers, as well as teaching or research, will require study beyond the bachelor’s degree, but the broad, integrated humanities program is designed for success in many fields.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The humanities major and emphasis are impacted programs. To be admitted to the humanities major or emphasis, students must meet the following criteria:

a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Humanities Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15991)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

During their last semester, all seniors majoring in humanities shall submit to the department a portfolio of their scholarly work that includes a 300-word summary of their study of the humanities and the paper submitted for Humanities 490.

A minor is not required with this major.

Global Humanities Program
(MSIM Code: 113001)

Preparation for the Major. Humanities 101; History 100-101; and three units from Classics 140, Comparative Literature 270A, 270B, English 220, Humanities 140, Religious Studies 101, or Women’s Studies 102. (12 units)

Language Requirement. Majors in global humanities program require completion of additional courses beyond the third college semester or fifth quarter taught in a language other than English. Refer to selections below. (14-25 units)

Arabic
French
German
Greek
Italian
Japanese
Korean
Latin
Persian
Portuguese
Russian
Spanish

Refer to selections below. (14-25 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or English 508W or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. The department encourages international experience for students in the global humanities program. It will facilitate the transfer of humanities credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive humanities credit if approved in advance by a department adviser.

Major. A minimum of 30 upper division units to include Humanities 490; 12 units selected from Classics 340, Humanities 350, 405, 406, 407, 408, 409; 15 units from Africana Studies, Art (art history), Asian Studies, Classics, Comparative Literature, History, Humanities, Latin American Studies, Music, Philosophy, Religious Studies, Theatre, or Women’s Studies (at least nine units must be taken in non-European content, e.g., Asia, Africa, Latin America).

Elective Approval. Elective courses taken to fulfill the major must be approved by the humanities undergraduate adviser and the approval must be filed with the Office of Advising and Evaluations.

SDSU General Catalog 2015-2016
Emphasis in European Humanities
(SIMS Code: 113505)
Preparation for the Major. Humanities 101: History 105-106; and three units from Comparative Literature 270A, 270B, Humanities 140, Religious Studies 101, or Women's Studies 102. (12 units)
Language Requirement. Majors in emphasis in European humanities require completion of additional courses beyond the third college semester or fifth quarter taught in a language other than English. Refer to selections below. (14-25 units)
French 100A, 100B, 201, 210, 220, 221; and one three-unit upper division course taught in the language. (25 units)
German 100A, 100B, 202, 205A, 205B; and one three-unit upper division course taught in the language. (24 units)
Greek 100A, 100B, 204A, 204B; and one three-unit upper division course taught in the language. (24 units)
Italian 100A, 100B, 201, 211, 212; and one three-unit upper division course taught in the language. (24 units)
Latin 101L-202L, or 250L; and Classics 303L-304L. (14-16 units)
Portuguese 101, 201, 301, 401. (16 units)
Russian 100A, 100B, 200A, 200B; and one three-unit upper division course taught in the language. (22 units)
Spanish 101, 102, 201, 202, 211, 212; and Spanish 301 or 302. (25 units)
See foreign language departments for equivalents. This fulfills language degree requirement for the B.A. degree in Liberal Arts and Sciences.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or English 508W or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
International Experience. The department encourages international experience for students in the emphasis in European humanities. It will facilitate the transfer of humanities credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive humanities credit if approved in advance by a department adviser.
Major. A minimum of 33 upper division units to include Classics 340, Humanities 405, 406, 407, 408, 409, 490; three units from Geography 336, Political Science 301A, 301B, 302; nine units from English (art history), Comparative Literature, English, History, Humanities, Music, Philosophy, Religious Studies, Theatre, or Women's Studies.
Elective Approval. Elective courses taken to fulfill the major must be approved by the humanities undergraduate adviser and the approval must be filed with the Office of Advising and Evaluations.

Humanities Minor
(SIMS Code: 113501)
The minor in humanities consists of a minimum of 18 units, of which at least 12 units must be upper division and at least 12 units must be in Humanities; three to six units must be selected from Humanities 350 and Asian Studies 458; three units may be selected from Classics 140 or Comparative Literature 270A.
International Experience. The department encourages international experience for students in the humanities minor. It will facilitate the transfer of humanities credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive humanities credit if approved in advance by a department adviser.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (HUM)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

HUM 101. Introduction to Humanities (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Preliminary investigation: how values and ideals are expressed in literary, artistic, and intellectual achievements of individuals and civilizations throughout the world.

HUM 130. The Jewish Heritage (3) [GE]
(Formerly numbered Humanities 460.)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Hebraic and Jewish influences on the arts, literature, philosophy, and religion of Western civilization.

HUM 140. World Mythology (3) [GE]
Comparative themes and figures from various mythologies of the world. Interpretation of myths; their influence on art, culture, and history.

HUM 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES
(Intended for Undergraduates)

HUM 310. French Culture (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Literature and culture stemming from France. Literary, artistic, and intellectual achievements. Traditions and influences to include contributions of the Francophone world.

HUM 320. German Culture (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Literary, artistic, and intellectual achievements of Germany and the German-speaking world. Great cultural traditions and influences historically and in the present.

HUM 330. Russian Culture (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Religion, literature, philosophy, music, and art of Russia. From the patriarchs of the past to the people of the present. Russia's influence on European humanities and world culture.

HUM 340. Italian Culture (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Hispanic and Latin American studies. Literary, artistic, and intellectual achievements. Great cultural traditions and influences in history and today.

HUM 350. African Cultures (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Interdisciplinary survey of sub-Saharan African civilizations and cultures. Religion, literature, and the arts from ancient times to present. (Formerly numbered Humanities 460.)

HUM 370. American Culture (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Literary, artistic, and intellectual achievements of the United States from colonial times to the present day. Great cultural traditions and influences represented in the contributions of Americans of diverse gender, ethnic, geographic, and political identity.
HUM 405. Faith and Hope (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.  
Humanities as expressed in religion. Acquisition and/or loss of faith. Questioning of theological systems. Confrontation with death. Nature of hope. Use of signs, symbols, and narratives to generate social structures. Symbolic and mystical systems of meaning. Influence of religion upon culture. (Formerly numbered Humanities 401.)

HUM 406. Renaissance and Self (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.  
Rebirth broadly defined, up to the present. The idea of progress. Humanities and cult of antiquity. Innovation in arts and letters. Traversing the globe. Quest for virtue, fame, glory. Questioning the past. The nature of genius. (Formerly numbered Humanities 402.)

HUM 407. Rationalists and Romantics (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.  
Eighteenth century Enlightenment and its descendants. Rational interaction with the world. Literature, philosophy, music, art, and poetry representing rationalist and romantic ideologies. Conquest of nature and retreat to nature. Reason versus passion. Romantic responses to rationalists. (Formerly numbered Humanities 403.)

HUM 408. The Modern (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.  
Conceptualizing past and present. Valorization of the new and improved. Cultural products of imperialism, monopoly, consumerism, mass media, and corporate identity. The culture of the “Other.” Literary, artistic, and intellectual breakthroughs of the nineteenth and twentieth centuries and their influences. (Formerly numbered Humanities 404.)

HUM 409. The Future (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.  
Conceiving of time and visions for tomorrow in an ever-changing world. Being human in an age of artificial intelligence and cloning. Utopian and dystopian visions. Thinkers, artists, and scientists from past and present contemplate the unknown. Breakthroughs and possibilities.

HUM 490. Senior Seminar in Classics and Humanities (3)  
Prerequisite: Classics or humanities major with more than 90 units; others with consent of department chair.  
Senior capstone seminar in major. Discussion and research on topic in classics and humanities. Formal research paper.

HUM 496. Topics in Humanities (3)  
Prerequisite: Consent of instructor and department chair.  
Directed individual study. Maximum credit six units.

UPPER DIVISION COURSES  
(Also Acceptable for Advanced Degrees)

HUM 504. The Dark Ages (3)  
(Same course as History 504)  
Europe and the Mediterranean, sixth to eleventh centuries C.E. through various approaches: political, economic, social, and cultural. Topics include: barbarians and Vikings, the Byzantine, Arab, and Holy Roman Empires, the Norman Conquest, Charlemagne, Beowulf, feudalism, and serfdom. (Formerly numbered History 404.)

HUM 506. The Renaissance (3)  
(Same course as History 506)  
Intellectual, artistic, social, and economic transformation in Europe from fourteenth to seventeenth centuries.

HUM 596. Topics in Humanities (1-3)  
Prerequisites: Upper division standing and consent of instructor.  
Interdisciplinary topics in literature and the arts. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

HUM 599. Special Study (1-3)  
Prerequisites: Consent of major or graduate adviser, to be arranged by department chair and instructor.  
Directed individual study. Maximum credit six units.

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Information and Decision Systems  
Refer to “Management Information Systems” in this section of the catalog.
Interdisciplinary Programs

Interdisciplinary Programs Offered
Major in interdisciplinary studies in three departments with the B.A. degree in liberal arts and sciences.
Major in urban studies with the B.A. degree in liberal arts and sciences.
Minor in African studies.
Minor in energy studies.
Minor in interdisciplinary studies, honors.
Certificate in environmental studies.

Interdisciplinary Studies in Three Departments

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 49993) (SIMS Code: 880204)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” The student master plan must be approved (AD-101) before this major may be declared.

A minor is not required with this major.

Preparation for the Major. A minimum of two courses (normally defined as six semester units) in each of the three departments selected in the major must be completed in the lower division as foundation for upper division courses. In departments where lower division offerings are insufficient to meet this requirement, the total minimum upper division requirement may be extended.

For students electing biology as one of the three departments for the Interdisciplinary Studies in Three Departments, the minimum requirement for the lower division preparation for the major is Biology 204, 204L, and either Biology 100 or 203 and 203L (7-8 units). The minimum requirement for the upper division major is an organismal biology course as described for the biology major, either both Biology 352 and 354 or both Chemistry 365 and Biology 366L, and a 500-level biology course (minimum 10 units). Other biology courses numbered 350 and above may be included as electives.

For students electing French as one of their departments, all lower division preparation for the major or equivalent competency must be completed in addition to French 301, 305A or 305B, and 421 or 422. Students electing Italian must fulfill lower division competency requirements, Italian 301, and two other upper division Italian courses.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C(2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units selected from three departments: (a) with no fewer than nine units from each of the three departments; and (b) with no fewer than six units from each of the three departments completed at San Diego State University; and (c) with minimum overall and San Diego State University grade point averages of 2.0 in each of the three departments.

Urban Studies

In the College of Arts and Letters
Office: Department of Geography, Storm Hall 314
Telephone: 619-594-5437

Faculty
Urban studies is administered by the Urban Studies Committee. The program draws upon courses offered by faculty in the Departments of Anthropology, Chicana and Chicano Studies, Economics, Geography, Latin American Studies, Political Science, Public Affairs, and Sociology.

Co-Chairs: Bosco (Geography) and Marcelli, P. (Geography)

Undergraduate Advisers: Bosco (Geography), Marcelli, P. (Geography), Pérez (Anthropology), Putitanun (Economics)
Advising
All urban studies majors must meet at least once each semester with the urban studies undergraduate adviser for advice on meeting general program requirements.

Impacted Program
The urban studies major is an impacted program. To be admitted to the urban studies major, students must meet the following criteria:
- Complete preparation for the major;
- Complete a minimum of 60 transferable semester units;
- Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

The Major
The major in urban studies is designed to prepare students for career opportunities in the urban milieu by providing an interdisciplinary major focused on the urban community, its environment and problems. The major combines the study of broad issues and theoretical concerns with specialized training in urban analytical research methodologies.

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Urban Studies Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22141)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements in the section of this catalog on "Graduation Requirements." Students are cautioned that several of the required and elective courses have prerequisites.

A minor is not required with this major.

Preparation for the Major.
Anthropology 102 or Public Administration 230; Economics 101 or 102; Geography 102; Political Science 101 or 102; Sociology 101; and Economics 201 or Political Science 201 or Sociology 201 or Statistics 250. (18 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements." Graduate Writing Assessment Requiremt. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 33 upper division units to include nine units from each of the following groups: (a) Urban Theory: Chicana and Chicano Studies 353 (or Latin American Studies 352); Economics 458; Geography 354; Political Science 422; Public Administration 320; and (b) Urban Methods: Economics 301, Geography 380, 381, 385, 484, 584, 586, 589, Public Administration 420, Sociology 406, 407, 408; and 15 units in an area of specialization:


Urban Political Economy and Public Policy (SIMS Code: 117013). Chicana and Chicano Studies 301, 306, 355 (if not taken as a requirement), Economics 401, 458 (if not taken as a requirement), 489, 565, Geography 353, 354 (if not taken as a requirement), 558, Latin American Studies 430 (or Political Science 430), Political Science 355, 422 (if not taken as a requirement).

Urban Sustainability (SIMS Code: 117014). Anthropology 353 (or Sustainability 353), 352, Economics 455, Geography 340, 354 (if not taken as a requirement), 370, 375, 454, 572, 591 and 591L, 592 and 592L, Political Science 334 (or Sustainability 334).

Interdisciplinary Minors

African Studies Minor
(Minor Code: 22149) (SIMS Code: 110101)
Dr. Charles P. Toombs, Department of Africana Studies, is adviser for this minor.
The minor in African Studies consists of a minimum of 15 upper division units selected from Africana Studies 465 (or French 465), 470, 572; Humanities 350; Political Science 364; Religious Studies 328. Courses in the minor may not be counted toward the major in Africana studies, humanities, political science, or religious studies, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Energy Studies Minor
(Minor Code: 19021) (SIMS Code: 777716)
Dr. Alan R. Sweedler, Department of Physics, is adviser for this minor.
The interdisciplinary minor in energy studies consists of a minimum of 15 units, at least 12 units of which must be upper division, to include Economics 456*, Environmental Science 391, Mechanical Engineering 350*; and six units selected from Art 247 or 347, Economics 455, Electrical Engineering 380*, 480*, Mechanical Engineering 552*, 556*, Geography 370*, Political Science 334 (or Sustainability 334), or three units of 499 with the approval of the adviser.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Environment and Society Minor*
(Minor Code: 22039) (SIMS Code: 112301)
Dr. David Carruthers (Department of Political Science) and Dr. Matthew Lauer (Department of Anthropology), are the advisers for this minor.
The minor in environment and society consists of 15 units to include three units from Environmental Science 100, Geography 101, 370, Biology 315; three units from Anthropology 353 [or Sustainability 353], History 441, Philosophy 332 [or Sustainability 332], Political Science 334 [or Sustainability 334]; and nine units selected from American Indian Studies 420, Anthropology 353 [or Sustainability 353], Asian Studies 320, Biology 324, 327, Economics 455, 456, 458; Environmental Engineering 320; Geography 354, 409, 426, 573, Geological Sciences 303, 305, History 564, International Security and Conflict Resolution 310, Latin American Studies 540, Oceanography 320, Philosophy 332 [or Sustainability 332], Physics 499 (History of Science and Technology), Political Science 334 [or Sustainability 334], 564, Public Health 302, Recreation and Tourism Management 305, 485, Religious Studies 376, Sociology 350, Women’s Studies 540, 580, 582.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

*Additional prerequisites may be required

Environment and Society Minor*
(Minor Code: 22039) (SIMS Code: 112301)
Dr. David Carruthers (Department of Political Science) and Dr. Matthew Lauer (Department of Anthropology), are the advisers for this minor.
The minor in environment and society consists of three units from Environmental Science 100, Geography 101, 370, Biology 315; three units from Anthropology 353 [or Sustainability 353], History 441, Philosophy 332 (or Sustainability 332), Political Science 334 (or Sustainability 334); and nine units selected from American Indian Studies 420, Anthropology 353 (or Sustainability 353), Asian Studies 320, Biology 324, 327, Economics 455, 456, 458; Environmental Engineering 320; Geography 354, 409, 426, 573, Geological Sciences 303, 305, History 564, International Security and Conflict Resolution 310, Latin American Studies 540, Oceanography 320, Philosophy 332 (or Sustainability 332), Physics 499 (History of Science and Technology), Political Science 334 (or Sustainability 334), 564, Public Health 302, Recreation and Tourism Management 305, 485, Religious Studies 376, Sociology 350, Women’s Studies 540, 580, 582.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

*Additional prerequisites may be required for courses in the minor.
Honors Minor in Interdisciplinary Studies  
(Minor Code: 49993) (SIMS Code: 888001)

The Honors Minor in Interdisciplinary Studies consists of 15 units of honors interdisciplinary seminars and honors sections of general education courses, of which three units are lower division and 12 units are upper division. A maximum of three units of honors sections of general education courses may be counted to satisfy the requirements of the minor. Students must complete a study abroad experience. Students must be admitted to the Weber Honors College at the time they declare the minor.

**Preparation for the Honors Minor (3 units).** Honors College 113.

**Upper Division for the Honors Minor (12 units).** Honors College 313, 480, 495 and three units selected from Honors College 413 or honors sections of general education courses (Anthropology 402; Humanities 370; Psychology 340; Religious Studies 356, 363; Sociology 320).

Courses in the major department or required for the major may not be used to satisfy requirements for the minor. A minimum of six upper division units must be completed in residence at San Diego State University.

**Study Abroad Requirement.** All Honors Minor in Interdisciplinary Studies students are required to complete a credit-bearing study abroad experience.

To meet the study abroad requirement, minors must complete one of the following:

1. An SDSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Travel Program;
4. A CSU Study Abroad Program;
5. General Studies 450.

Environmental Studies Certificate

(SIMS Code: 112999)

The Environmental Studies Certificate is designed for students already holding a bachelor’s degree (in any field) who desire to increase their understanding of the theoretical and applied approaches to environmental problems and issues. This is not a certificate program in the hard sciences, but rather is intended to provide diverse ways for students to develop knowledge of the causes and consequences of the human impact on the environment and the impact on humans of philosophical, political, economic, spatial, and natural science perspectives. This professional development program offers a multi-disciplinary approach to environmental studies for natural resource managers, teachers, community activists, and others who are concerned about the interaction of people and the environment.

Students must complete the required units with a 2.5 grade point average. A bachelor’s degree from a university is also required.

The certificate requires 15 units to include nine units selected from Economics 455, Geography 370, 573, International Security and Conflict Resolution 300, Oceanography 320, Political Science 334 [or Sustainability 334]; and six units selected from Biology 315, 324, 327, Economics 456, 489, Geography 409, 570, 572, 574, Geological Sciences 301, 303, History 441, International Security and Conflict Resolution 301, Philosophy 332 [or Sustainability 332], Public Health 304, Recreation and Tourism Management 487. Core courses can be counted in only one category; 500-numbered courses may have substantial prerequisites, but may be counted later for graduate credit toward an M.A. degree.

Students interested in the Environmental Studies Certificate will normally enroll in courses through Open University. Prior to enrollment, contact Dr. Donna L. Ross, School of Teacher Education, to develop an approved program of coursework.
Semester Abroad Requirement

All International Business majors are required to complete a semester abroad. Students may satisfy the requirement by studying abroad through one of our approved exchange programs. Students must complete 12 units of coursework in the target language. At least two out of the four courses must be upper division business courses. Students must successfully complete all four courses with a passing grade otherwise the study abroad requirement will not have been met. Students must be upper division in the major at least one semester prior to going abroad. Exceptions may be made in Arabic, Chinese, Japanese, Korean, and Russian. Unapproved study abroad programs will not meet the requirement.

As an alternative to studying abroad at an approved exchange program, students may choose to complete an internship abroad in the region and language of emphasis. In order to meet this requirement, students must complete a minimum of 250 hours of work abroad with approval from the internship coordinator. International students emphasizing in English/North America track meet this requirement by studying at SDSU.

Study Abroad Programs

The international business program currently has exchange agreements with universities in the following countries: Argentina, Brazil, Canada, Chile, China, Costa Rica, Ecuador, France, Germany, Italy, Japan, Mexico, Peru, Portugal, Russia, Spain, and Taiwan. Please see the international business website for the names of the specific universities and study abroad eligibility criteria. Qualified international business majors participating in an exchange program make normal progress toward the degree while generally paying only SDSU tuition and fees. Students are required to attend a study abroad information session and apply to study abroad at least one year prior to their intended study abroad semester.

Internship Requirement

All students in the major must complete an internship in international business by enrolling in the International Business 495 course and interning for a minimum of 150 hours. Students have to be upper division in the major prior to beginning their internship. Students may choose to complete an internship abroad, though this is not required. Students who choose to complete an internship abroad may also meet the Semester Abroad Requirement by completing 250 hours in their region and language of emphasis, but pre-approval must be obtained from the International Business office. Students are required to attend an orientation meeting prior to enrolling in International Business 495.

Impacted Program

The international business major is an impacted program. To be admitted to the international business major, students must meet the following criteria:

a. Complete with a grade of C or higher: Accountancy 201 and 202; Economics 101 and 102; Economics 201 or Statistics 119; Finance 240; and Management Information Systems 180. These courses cannot be taken for credit/no credit (Cr/NC);

b. Complete or test out of one language sequence: Arabic 101, 102, 201, 202 (16 units); Chinese 101, 102, 201, 202 (20 units); English (Communication 103, 245; Linguistics 100 or Rhetoric and Writing Studies 100); Linguistics 200 or Rhetoric and Writing Studies 200 (12 units); French 100A, 100B, 201, 210, 220, 221 (22 units); German 100A, 100B, 202, 205A, 205B (21 units); Italian 100A, 100B, 201, 211, 212 (21 units); Japanese 111, 112, 211, 212 (20 units); Korean 101, 102, 201, 202 (20 units); Portuguese 101, 201 (10 units); Russian 100A, 100B, 200A, 200B (20 units); or Spanish 101, 102, 201, 202, 211, 212 (22 units);

c. Complete with a grade of C or higher, the regional/cultural studies emphasis from one of the following regions: Africa, Middle East, and North Africa; History 100 and 101; Asia; Asian Studies 100, 101, or 150; Latin America; Latin American Studies 101; North America: Six units (one pair) selected from History 109, 110; or Political Science 101, 102; Central Europe: Six units selected from Classics 140; European Studies 101; History 105, 106 (recommended); Western Europe: Six units selected from Classics 140; European Studies 101; History 105, 106 (recommended). These courses cannot be taken for credit/no credit (Cr/NC);
International Business

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 0513)

Language | Region | SIMS Code
--- | --- | ---
Arabic | Middle East and North Africa | 113688
Chinese | Asia | 113602
English | North America | 113630
French | North America | 113622
German | Western Europe | 113613
Italian | Western Europe | 113614
Japanese | Asia | 113603
Korean | Asia | 113639
Portuguese | Latin America | 113610
Spanish | Western Europe | 113617
Russian | Central Europe | 113608

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” A minor is not required with this major but students are encouraged to pursue a minor offered through the College of Business Administration in one of the following areas: Accounting, Entrepreneurship, Finance, Information Systems, Management, Marketing, or Real Estate. Students may opt to pursue a minor in Economics through the College of Arts and Letters. International business majors may not double major in the College of Business Administration or in the language of instruction was taught in a language other than English may not take that language as their emphasis in the major (contact the international business office for further explanation). Exceptions can be made for students enrolled in a dual degree program through international business. English is not open to native speakers of English nor to students who graduated from a secondary school where English was the principal language of instruction nor to students with near-native fluency as evidenced through an ACTFL rating of Distinguished Level.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. (Complete I, II, and III below: 46-48 units) A minimum grade point average of 2.0 in each of the three areas is required for graduation. No course in the major may be taken for Cr/NC unless the course is only offered Cr/NC.

I. Business (All preparation for the major in the business and language portions of this major must be completed, plus additional supplementary admissions criteria must be met, before enrolling in any upper division courses in Business Administration): A minimum of 23 upper division units to include Business Administration 300, 323, 350, 360, 370, 405; Finance 329; Marketing 376. It is highly recommended that a minor be obtained through either the College of Business Administration in Accounting, Entrepreneurship, Finance, Information Systems, Management, Marketing, or Real Estate, or in Economics through the College of Arts and Letters.

II. Language Emphasis (choose one language): Arabic 301, 302, and 496; Chinese 301, 302, 431, 434; (12 units)

III. Regional/Cultural Studies Emphasis (choose one region): Africa, Middle East, and North Africa: History 100 and 101. Asia: Three units selected from Asian Studies 100, 101, or 150. Latin America: Latin American Studies 101. North America: Six units (one pair) selected from History 109, 110, or Political Science 101, 102. Central Europe: Six units selected from Classics 140; European Studies 101; History 105, 106 (recommended). Western Europe: Six units selected from Classics 140; European Studies 101; History 105, 106 (recommended).

Language Requirement. The language requirement is automatically fulfilled through coursework for preparation for the major.
III. Regional/Cultural Studies Emphasis (Choose one region/language combination). All international business majors are required to complete a study abroad or internship abroad experience of at least one semester in length. See the international business study abroad advisor to arrange for the study abroad and the internship advisor to contract for the internship. Students who choose the study abroad option are still required to complete an internship (International Business 495). Students who choose the internship abroad option may earn credit for International Business 496 and 498. In addition, all students must complete nine units, with no more than six units from one department, selected from the following groups of courses. Three units from the listed courses below, that are also listed in Section IV Explorations from General Education, can be used toward the major.

Asia/Chinese: Art 564; Asian Studies 300, 421 [or History 421]; Chinese 433; Comparative Literature 451 [or Asian Studies 451]; History 420, 566, 567; Philosophy 351; Religious Studies 338, 340, 345.

Asian/Japanese: Art 565, 566; Asian Studies 300, 421 [or History 421], 458, 459; Comparative Literature 451 [or Asian Studies 451]; History 420, 570; Japanese 321, 322, 412, 421, 422, 480; Philosophy 353; Political Science 362, 575; Religious Studies 338, 341.

Asia/Korean: Korean 321 and six units selected from Asian Studies 300, 421 [or History 421], 458, 459; Comparative Literature 451 [or Asian Studies 451]; History 420; Philosophy 353; Political Science 362, 575; Religious Studies 338, 345.

Latin America/Portuguese: Anthropology 442; Economics 464; Geography 324; History 415 [or Latin American Studies 415], 416, 558; Latin American Studies 307, 366 [or Political Science 366], 420; Political Science 566, 567; Portuguese 307, 535.

Latin America/Spanish: Anthropology 440, 442, 540; Art 563; Comparative Literature 445; Economics 464; Geography 324; History 415 [or Latin American Studies 415], 416, 550, 551, 558; Latin American Studies 379, 566 [or Political Science 366], 379; Political Science 565, 566, 568; Spanish 341, 342, 405A, 406B, Women's Studies 512.

Middle East and North Africa/Arabic: Arabic 330; Economics 456; History 436, 473, 474, 488, 501, 574; Political Science 365; Religious Studies 310, 328, 330.


Central Europe/Russian: Geography 336; History 408; Humanities 330; Political Science 359, Russian 305A, 310, 435.

Western Europe/French: Art 557; European Studies 301, 424, 501; French 305A, 305B, 421, 422, 424; Geography 336; History 407, 408; Humanities 310, 408; Political Science 356.

Western Europe/German: Art 557; European Studies 301, 424, 501; Geography 336; German 320, 400, 410, 436, 520; History 407, 408, 512B; Humanities 320, 408; Political Science 356.

Western Europe/Italian: Art 557; European Studies 301, 424, 501; Geography 336; History 407, 408; Humanities 340, 408; Italian 305A, 305B, 421, 422, 424; Political Science 356.

Western Europe/Portuguese: Art 557; European Studies 301, 424, 501; Geography 336; History 407, 408; Humanities 408; Political Science 356; Spanish 340, 405A, 405B, 501.

A maximum of six units of courses numbered 496 and 596 may be applied to the major with the approval of the International Business adviser.
International Security and Conflict Resolution

In the College of Arts and Letters, the College of Professional Studies and Fine Arts, and the College of Sciences

OFFICE: Storm Hall 223B
TELEPHONE: 619-594-3768 / FAX: 619-594-7302
E-MAIL: iscor@mail.sdsu.edu

The international security and conflict resolution (ISCOR) major at San Diego State University is an innovative interdisciplinary program designed to provide students with a sophisticated understanding of the political, moral, socioeconomic, and cultural dimensions to global conflict. Its interests extend well beyond conventional international security issues to encompass the broader analysis of global affairs. ISCOR exposes students to a multiplicity of ideological, regional, and cultural perspectives. Students will attain a comprehensive and multifaceted understanding of global affairs and the challenges to building a more peaceful, just, and ecologically sustainable global order. ISCOR students will develop a rich appreciation of both increased global interconnections (sometimes known as globalization) and enduring diversity in cultural practices, political systems, and economic systems. Students will also sharpen their skills in research and critical reasoning and develop expertise in specific global issues. Upon graduation, ISCOR students will be well positioned for advanced studies or for embarking upon careers in positions related to global affairs.

The ISCOR program features three specializations: cooperation, conflict, and conflict resolution; environment and security; and justice in the global system. All students are expected to study abroad and given the option of doing an internship or senior thesis.

Faculty
ISCOR Program Director and Undergraduate Advisers:
Graubart (Political Science), Greb (International Security and Conflict Resolution)

ISCOR Curriculum Committee: Ghosh (Women's Studies), Graubart (Political Science), Greb (ISCOR), Sinclair (Weber Honors College), Spitzberg (Communication), Varadarajan (Political Science)

Offered by International Security and Conflict Resolution
Major in international security and conflict resolution with the B.A. degree in liberal arts and sciences. Minor in international security and conflict resolution.

The Hansen Chair in Peace Studies

International Security and Conflict Resolution plays a central role in the administration of the Hansen Chair in Peace Studies, an endowed chair responsible for organizing and coordinating activities that focus more broadly on global justice, peace, and world affairs. Appointment to the chair also serves as a member of the Advisory Board of the Fred J. Hansen Institute for World Peace.

The Major

International security and conflict resolution is an interdisciplinary program leading to a Bachelor of Arts degree in liberal arts and sciences. The program integrates coursework from natural sciences, social and behavioral sciences, and humanities.

In order to provide breadth and depth for the courses of study, all students are required to complete a set of core courses addressing the major themes of the development of global systems and the nature of conflict and conflict resolution. In addition, all students must select an integrated set of courses from different disciplines focused on an area of specialization in cooperation, conflict, and conflict resolution; environment and security; or in justice in the global system.

Advising

Students are required to meet with the undergraduate adviser in order to declare the major. All students admitted to the university with a declared major in international security and conflict resolution are urged to meet with the undergraduate adviser during their first semester.

Impacted Program

The international security and conflict resolution (ISCOR) major is an impacted program. To be admitted to the international security and conflict resolution (ISCOR) major, students must meet the following criteria:

a. Complete preparation for the major
b. Complete a minimum of 60 transferable semester units
c. Have a minimum cumulative GPA of 2.0

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

International Security and Conflict Resolution Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 22103)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” Individual major plans for each student are filed with the ISCOR undergraduate adviser. A minor is not required with this major.

It is strongly recommended that international security and conflict resolution majors consider either a minor or a second major in a foreign language. In addition, international security and conflict resolution majors may wish to obtain language certification in a foreign language. Many career positions related to an international security and conflict resolution major will require demonstrated competency in a foreign language. It is also recommended that international security and conflict resolution majors consider a minor in an area studies program, e.g., African Studies, Asian Studies, European Studies, Islamic and Arabic Studies, or Latin American Studies. Many career positions related to an international security and conflict resolution major will require a strong background in a particular region and/or culture. The program also requires at least one preapproved study abroad experience.

Study Abroad Requirement. All international security and conflict resolution majors are required to complete a study abroad experience.

To meet this requirement, majors must complete one of the following with the preapproved and written consent of the undergraduate adviser:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Semester Abroad Program;
4. An SDSU Study Travel Program;
5. An international security and conflict resolution internship abroad, independent study abroad, or thesis abroad;

See the undergraduate adviser to make arrangements to meet the study abroad requirement.
Preparation for the Major. (27 units) International Security and Conflict Resolution 300, Economics 101, 102; History 101; Political Science 103; Religious Studies 101; and three units from each of the following groups:

1. Anthropology 102 or Geography 102;
2. Comparative Literature 270B, History 100, or Philosophy 101;
3. Economics 201, Political Science 201, Psychology 280, Sociology 201, Statistics 119 or 250.

Recommended for General Education in Foundations of Learning, Life Sciences: Biology 100 or 101; Physical Sciences: Chemistry 100 or Geography 101.

Language Requirement. A minimum competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement (excluding American Sign Language). Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include 15 units in International Security and Conflict Resolution 300, 301, 310, either 495 or 497, Political Science 375; six units selected from International Security and Conflict Resolution 320, 324, 421 (students specializing in justice in the global system must select International Security and Conflict Resolution 324); and 15 units from one of the three specializations: cooperation, conflict, and conflict resolution; environment and security; or justice in the global system.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the undergraduate adviser.

Specialization in Cooperation, Conflict, and Conflict Resolution
(SIMS Code: 113803)

This specialization is concerned with exploring the causes, nature, consequences, management, and resolution of conflict. It will consider the psychology, sociology, economics, politics and history of cooperation, conflict and conflict resolution. It will address issues of war and peace, nationalism, civil war, terrorism, human rights, and ethnic hostility as they impact international security.

Requirements for specialization. A minimum of 15 units to include six units selected from International Security and Conflict Resolution 421, Communication 371++, Philosophy 340, Political Science 370; and nine units selected from courses listed above or from Anthropology 350++, 533++; Chicana and Chicano Studies 355 [or Latin American Studies 355], Communication 555++; Economics 360, 561++; History 486, 516, 567, 574, Political Science 361, 363, 364, 380, 393, 430 [or Latin American Studies 430], 478, 479, 485, 555, 577, Religious Studies 379, Sociology 433++, 457++, Women's Studies 310, 375. International Security and Conflict Resolution 450++ can be substituted for a maximum of one three unit course in this specialization with the approval and written consent of the undergraduate adviser.

Specialization in Environment and Security
(SIMS Code: 113804)

Issues related to the environment and the utilization of energy and natural resources are important aspects of international security and often are related to cooperation and conflict between nations and groups within states. The purpose of this specialization is to provide the student with the necessary background to better understand and this aspect of international security and the management and resolution of conflict.

Requirements for specialization. A minimum of 15 units to include nine units selected from Biology 135, Environmental Science 301; Geography 370, Political Science 334 [or Sustainability 334], 564; Public Health 362, Sociology 350++; and six units selected from courses listed above or from Biology 324, 354++; Economics 455, 489, Geography 570++, 574++; History 441; Philosophy 329, 332 [or Sustainability 332]; Public Health 304++. International Security and Conflict Resolution 450++ can be substituted for a maximum of one three unit course in this specialization with the approval and written consent of the undergraduate adviser.

Specialization in Justice in the Global System
(SIMS Code: 113805)

This specialization explores political, economic, and social issues relating to global justice. It includes the study of international organizations and law, human rights, North-South relations, and controversies over distribution of resources. This specialization enables students to have a richer understanding of the dynamics concerning international security and conflict resolution.

Requirements for specialization. A minimum of 15 units to include nine units selected from History 440, Philosophy 340, 344, Political Science 302, 380, 485, Sociology 450++; and six units selected from courses listed above or from Africana Studies 472, Economics 360, 365, 561++, Health and Human Services 350, History 516, Political Science 334 [or Sustainability 334], 408, 450 [or Latin American Studies 430], 507, 565, 577, Public Health 362, Religious Studies 379, Sociology 433++, 457++, Women's Studies 310, 530, 580, 581. International Security and Conflict Resolution 450++ can be substituted for a maximum of one three unit course in this specialization with the approval and written consent of the undergraduate adviser.

+ Course requires prerequisites other than those listed above.
++ Additional prerequisites other than those listed above may be required depending upon lower division courses taken for preparation for major (and/or General Education).

International Security and Conflict Resolution Minor
(SIMS Code: 113801)

The minor in international security and conflict resolution consists of a minimum of 18 units, with 15 units selected from International Security and Conflict Resolution 300, 301, 310, 320, 324, Political Science 375, and three units selected from Anthropology 102, Economics 101, Geography 102, History 101, Political Science 103, or Religious Studies 101.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Study Abroad Requirement. All international security and conflict resolution minors are required to complete a study abroad experience.

To meet the study abroad requirement, minors must complete one of the following with the preapproved and written consent of the undergraduate adviser:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

See the undergraduate adviser to make arrangements to meet the study abroad requirement.
Courses (ISCOR)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSE

ISCOR 200. International Security and Conflict Resolution (3)
Comprehensive picture of multidisciplinary international and conflict resolution (ISCOR) program.

UPPER DIVISION COURSES
(Intended for Undergraduates)

ISCOR 300. Global Systems (3) [GE]
Prerequisite: Nine units of General Education requirements in Foundations of Learning, to include three units each in Natural Sciences and Quantitative Reasoning, in Social and Behavioral Sciences, and in Humanities.
Evolution and development of global systems, characteristics of contemporary and global systems and formulation of criteria for projecting the future of the systems.

ISCOR 301. Conflict and Conflict Resolution (3) [GE]
Prerequisite: Nine units of General Education requirements in Foundations of Learning, to include three units each in Natural Sciences and Quantitative Reasoning, in Social and Behavioral Sciences, and in Humanities.
Conflict resolution as an emerging field; theories of conflict; methods and implications of conflict management including group, institutional, and international level analysis.

ISCOR 310. Our Global Future: Values for Survival (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.
Identifies resource and social crises toward which contemporary American values are leading, examines the nature of human action; contrasts other value systems with ours; considers origins of our values and the individual’s potential for changing them. Interdisciplinary.

ISCOR 320. International Security in the Nuclear Age (3) [GE]
Prerequisites: Upper division standing. Nine units of General Education requirements in Foundations of Learning, to include three units each in Natural Sciences and Quantitative Reasoning, in Social and Behavioral Sciences, and in Humanities.
International security issues from historical, ethical, economic and sociopsychological perspectives, including the security environment after the Cold War and current sources of conflict. The proliferation of weapons of mass destruction, including nuclear weapons is discussed.

ISCOR 324. Politics of Global Resistance and Solidarity (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.
Global resistance movements that appreciate diversity in thought, experiences, and motivations. Theories of transnational activism, radical political thought, and international relations.

ISCOR 421. Alternative Dispute Resolution: Theory and International Applications (3)
Prerequisite: Upper division standing.
Theory of collaborative negotiation and mediation, practice of negotiation and mediation skills and techniques, and focus on personal styles of mediation and collaborative negotiating. Emphasis on resolving conflicts on the international level.

ISCOR 450. Study Abroad in International Security and Conflict Resolution (3)
Prerequisite: Upper division standing. Class Schedule may have other prerequisites.
Selected topics in international security and conflict resolution. Course taught abroad. Potential additional prerequisites and location of course and organizational meetings. May be repeated once with new content. See Class Schedule for specific content. Maximum credit six units.

ISCOR 495. Internship in International Security and Conflict Resolution (3)
Prerequisites: Senior standing. Nine units of international security and conflict resolution core courses and nine units in selected specialization. Consent of instructor.
Supervised internship of 150 hours in government or nongovernmental agency, office or business in an area directly related to international security and conflict resolution.

ISCOR 496. Selected Topics in International Security and Conflict Resolution (1-3)
Selected topics in international security and conflict resolution. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

ISCOR 497. Thesis in International Security and Conflict Resolution (3)
Prerequisites: Senior standing. Nine units of international security and conflict resolution core courses and nine units in selected specialization. Consent of instructor.
An original and comprehensive written description and analysis of a problem or problem area in international security and conflict resolution.

ISCOR 499. Special Study (1-3)
Prerequisites: Consent of instructor. Six units of international security and conflict resolution core courses and six units in specialization.
Individual study. Maximum credit six units.
Italian

In the Department of European Studies
In the College of Arts and Letters

OFFICE: Storm Hall 224A
TELEPHONE: 619-594-5111 / FAX: 619-594-8006
E-MAIL: italian.coord@sdsu.edu
http://italian.sdsu.edu/

Faculty
Chair: Donadey
Associate Professor: Clò
Lecturers: Ruggeri, Sylvers

Offered by the Department of European Studies
Major in European studies, with emphasis in Italian.
See European Studies.
Minor in Italian.

Offered by International Business
Major in international business, with emphasis in Italian.

Italian Minor
(Minor Code: 11049) (SIMS Code: 113701)
The minor in Italian consists of a minimum of 15 units taught in Italian, nine units of which must be in upper division Italian courses. Any course taught in English needs department approval to apply to the minor requirements.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Students who minor in Italian are strongly encouraged to participate in the California State University International Programs (CSU-IP) and other approved study abroad programs in Italian-speaking countries.

Interdisciplinary Studies in Three Departments

Students selecting Italian as one of their departments in this major must complete Italian 301, all lower division competency requirements, and at least two upper division Italian courses.

Language Requirement for the B.A. Degree in Liberal Arts and Sciences
Students electing the study of Italian to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Italian 201 or 211 or the equivalent level of achievement. The usual sequence of coursework is Italian 100A, 100B, and 201 or 211. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

High School Equivalents
High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:
1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

Courses (ITAL)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

Native speakers of Italian will not receive credit for taking lower division courses in Italian except with advance approval from the department.

All lower division courses in Italian are taught in Italian.
No credit will be given for lower division courses taken after successfully completing any upper division Italian course taught in Italian.
No credit will be given when Italian 100A, 100B, 211, 212, and 301 are taken concurrently or out of sequence. Italian 201 may only be taken after completing Italian 100B, but may be taken concurrently with Italian 211 or 212.

ITAL 100A. Elementary Italian I (3) [GE]
Prerequisite: Italian 100A or two years of high school Italian. Continuation of Italian 100A.

ITAL 201. Reading and Speaking Italian (3) [GE]
Prerequisite: Italian 100B or three years of high school Italian. Italian minors and international business majors are encouraged to enroll concurrently in Italian 212 when available. Recommended for students wanting to satisfy the language graduation requirement. Emphasis on spoken language with readings of cultural material serving as a basis for discussion.

ITAL 211. Intermediate Italian I (4) [GE]
Four lectures and one hour of laboratory. Prerequisite: Italian 100B or three years of high school Italian. Comprehensive review of Italian grammar and practice of all language skills at intermediate level within context of Italian culture.

ITAL 212. Intermediate Italian II (4) [GE]
Four lectures and one hour of laboratory. Prerequisite: Italian 211. Continuation of Italian 211. Comprehensive review of Italian grammar and practice of all language skills at intermediate level within context of Italian culture. Italian minors and international business majors are encouraged to concurrently register in Italian 201.

ITAL 296. Topics in Italian Studies (1-4)
Prerequisite: Italian 100B or three years of high school Italian. Topics in Italian language and culture. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Taught in Italian.

UPPER DIVISION COURSES
(Intended for Undergraduates)

All upper division courses in Italian are taught in Italian unless otherwise stated.

ITAL 301. Advanced Oral and Written Composition (3) [GE]
Prerequisites: Eleven units of 200-level Italian and completion of the General Education requirement in Foundations of Learning II, C., Humanities.

Grammar review. Reading of modern Italian prose, with written reports and oral discussions in Italian. Italian 301 is not open to students who hold the Italian secondary school diploma.
ITAL 305A. Italian Literature (3) [GE]
Prerequisites: Eleven units of 200-level Italian and completion of the General Education requirement in Foundations of Learning II. C., Humanities.
Important movements, authors and works in Italian literature from Middle Ages to the Renaissance.

ITAL 305B. Italian Literature (3) [GE]
Prerequisites: Eleven units of 200-level Italian and completion of the General Education requirement in Foundations of Learning II. C., Humanities.
Continuation of Italian 305A from the Renaissance to the present.

ITAL 421. Italian Civilization (3) [GE]
Prerequisites: Eleven units of 200-level Italian and completion of the General Education requirement in Foundations of Learning II. C., Humanities.
Major aspects of Italian civilization with emphasis on art, music, history, and cinema.

ITAL 422. Issues in Italian Studies (3)
Interdisciplinary approach to major themes and figures of Italian culture. Emphasis on social, literary, artistic, and political movements underlying development of contemporary Italy.

ITAL 424. Italian Cinema (3) [GE]
Two lectures and two hours of activity.
Prerequisites: Italian 212 and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Development of Italian cinema. Pre-viewing lectures enhance cultural comprehension. Post-viewing discussions stimulate ideas for written work and final projects. Lectures and discussions in Italian.

ITAL 426. Italian American Culture (3) [GE]
Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Italian American experience of migration, identity formation, ethnic conflict, integration and assimilation, in a variety of genres and media, from literature to film, music and theatre, fiction and non-fiction. Taught in English.

ITAL 495. Internship (3) Cr/NC
Prerequisites: Upper division standing and consent of instructor. Practical work experience in a field related to Italian studies. Work done under joint direction of activity sponsor and instructor. Approved international internships may count toward international experience requirement for certain majors.

ITAL 496. Selected Topics (1-4)
Topics in Italian language, literature, culture and linguistics. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit eight units. Conducted in English or in Italian.

ITAL 499. Special Study (1-3)
Prerequisites: Italian 301 and 305A or 305B.
Individual study. Maximum credit six units. This course is intended only for students who are currently enrolled in or who already have credit for all upper division courses in Italian available in any given semester.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)

ITAL 510. Italian and Italophone Cultural Studies (3)
Prerequisites: Italian 301 and 421.
Artistic, intellectual, literary, social and political trends in Italy and in diaspora. May be repeated with new title and content. Maximum credit six units.
In the Department of Linguistics and Asian/Middle Eastern Languages
In the College of Arts and Letters

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
http://www-rohan.sdsu.edu/dept/linguist/index.html

Faculty
Chair: Osman
Professor: Higurashi
Associate Professor: Kitajima
Assistant Professor: Hansen
Lecturer: Kuratani

Offered by the Department of
Linguistics and Asian/Middle Eastern Languages
Major in Japanese.
Minor in Japanese.

Offered by Asian and Pacific Studies
Minor in Japanese studies.

Offered by International Business
Major in international business, with emphasis in Japanese.

The Major
Japanese experienced the fastest growth rate of all languages in U.S. higher education during the 1980s, and still maintains its popularity, because of the interdependence between the U.S. and Japan, Japan’s role in the world economy, and the popularity of anime and Japanese film and music.

Students who major in Japanese will gain proficiency in Japanese language skills, a deep understanding of how cultural heritage shapes the people and society of modern Japan, and a keen sensitivity to intercultural differences.

The Japanese language program offers a broad variety of courses designed to prepare majors for a number of careers after graduation. A major in Japanese is also a good preparatory curriculum for graduate programs in such areas as international business, international law, public administration, linguistics, and journalism.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration of change of major.

Impacted Program
The Japanese major is an impacted program. To be admitted to the Japanese major, students must meet the following criteria:

a. Complete preparation for the major;

b. Complete a minimum of 60 transferable semester units;

c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Japanese Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 11081) (SIMS Code: 113902)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in Japanese courses can apply to the degree.

Students majoring in Japanese must complete a minor or a certificate in another field to be approved by the departmental adviser in Japanese.

All students with transfer credits must take a placement test at the Testing Services office at SDSU.

Note: Speakers of Japanese who have completed compulsory education through junior high school in Japan, or those who pass level one of the Japanese Language Proficiency Test, created and edited by The Association of International Education and the Japan Foundation, or students whose placement test results demonstrate educated native or near-native fluency are not eligible to enroll in Japanese language courses or major in Japanese. These students will not receive credit for Japanese 311, 312, 321, 322, 411, 412, 421, 422, and 480.

Preparation for the Major. Japanese 111, 112, 211, 212 (20 units)

Language Requirement. The language requirement is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 24 upper division units in Japanese to include 12 units from Japanese 311, 312, 411, 412, and four courses selected from Japanese 321, 322, 421, 422, 480, or a Japan content course approved by the major adviser. No more than one upper division Japanese course taught in English may be applied to the major.

Japanese Minor
(SIMS Code: 113901)

The minor in Japanese consists of a minimum of 15 units taught in Japanese, at least 12 units of which must be in upper division Japanese courses. Any course taught in English needs department approval to apply to the minor requirements.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Language Requirement for the
B.A. Degree in Liberal Arts and Sciences

Students electing the study of Japanese to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Japanese 211 or the equivalent level of achievement. The usual sequence of coursework is Japanese 111, 112, and 211. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

High School Equivalents
High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.
Secondary school language courses can be used as follows:
1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

**Japanese Language Proficiency Test**

The Japanese language proficiency test is taken to assess the proficiency level and to place students at the most appropriate level in the curriculum of the Japanese language program at San Diego State University. Students who have special backgrounds, and those SDSU students who took Japanese elsewhere, including SDSU students who participated in exchange programs, are required to meet with the program adviser and to take this examination.

Test dates and times are listed in the “Special Tests” section of the Class Schedule.

**Courses (JAPAN)**

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

**LOWER DIVISION COURSES**

Native speakers of Japanese or students whose placement test results demonstrate educated native or near-native fluency will not receive credit for taking lower division courses.

All lower division courses in Japanese are taught in Japanese. No credit will be given for lower division courses taken after successfully completing any upper division Japanese course taught in Japanese.

No credit will be given for Japanese 111, 112, 211, 212 taken out of sequence.

**JAPAN 111. Elementary Japanese I (5) [GE]**

Five lectures and one hour of laboratory.

Elementary language skills: fundamental grammar, idiomatic expressions, hiragana, katakana, and basic kanji characters. Reading, writing, speaking, oral-aural drills, and relationship between language and culture. (Formerly numbered Japanese 101.)

**JAPAN 112. Elementary Japanese II (5) [GE]**

Five lectures and one hour of laboratory.

Prerequisite: Japanese 111.

Continuation of Japanese 111. Preparation for Japanese 211. (Formerly numbered Japanese 102 and 202.)

**JAPAN 211. Intermediate Japanese I (5) [GE]**

Five lectures and one hour of laboratory.

Prerequisite: Japanese 112.


**JAPAN 212. Intermediate Japanese II (5) [GE]**

Five lectures and one hour of laboratory.

Prerequisite: Japanese 211.

Strengthening communication skills in Japanese; various literary styles; additional kyoiku kanji. Cultural values shaping modern Japanese society; intercultural communication. Preparation for Japanese 311.

**JAPAN 296. Experimental Topics (1-4)**

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

**JAPAN 299. Special Study (1-3)**

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES**

(Intended for Undergraduates)

All upper division courses in Japanese are taught in Japanese unless otherwise stated.

No credit will be given for Japanese 311, 312, 411, 412 taken out of sequence. Native speakers of Japanese or students whose placement test results demonstrate educated native or near-native fluency will not receive credit for Japanese 311, 312, 321, 322, 411, 412, 421, 422, and 480.

**JAPAN 311. Third Year Japanese I (3) [GE]**

Three lectures and one hour of laboratory.


Continuation of Japanese 212. Strengthening of communication skills in Japanese; various literary styles; cultural values shaping modern Japanese society; intercultural communication. Preparation for Japanese 312.

**JAPAN 312. Third Year Japanese II (3) [GE]**

Three lectures and one hour of laboratory.


Further strengthening of communication skills in Japanese; various literary styles; introduction of chugaku kanji. Social and economic issues in Japan and the U.S.; cultural values shaping business conduct in Japan; characteristics of Japanese management; intercultural communication. Preparation for Japanese 411.

**JAPAN 321. Advanced Japanese Discourse (3)**

Prerequisite: Japanese 212.

Development of advanced communication skills through Japanese media such as Japanese news broadcasts and television drama. Focus on listening comprehension.

**JAPAN 322. Advanced Conversation Through Media (3)**

Prerequisite: Japanese 312.

Development of advanced communication skills through Japanese media such as Japanese news broadcasts and television drama. Focus on oral communication.

**JAPAN 332. Narratives of Japanese Popular Culture (3) [GE]**

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities. Popular Japanese narrative traditions from 1600 to present in mainstream cultural products to include written and pictorial texts, performing arts, film, animation, and graphic novels. Class, gender, nationalism, and identity. Taught in English.

**JAPAN 411. Fourth Year Japanese I (3)**

Prerequisite: Japanese 411.

Continuation of Japanese 312. Further strengthening of communication skills in Japanese; various literary styles; more chugaku kanji. Social and economic issues in Japan and in the U.S.; cultural values shaping business conduct in Japan; characteristics of Japanese management; intercultural communication. Preparation for Japanese 412.

**JAPAN 412. Fourth Year Japanese II (3)**

Prerequisite: Japanese 411.

Continuation of Japanese 411. Further strengthening of communication skills in Japanese; various literary styles; most joyo kanji. Social and economic issues in Japan and the U.S.; cultural values shaping business conduct in Japan; characteristics of Japanese management; intercultural communication.

**JAPAN 421. Japanese Literature Through Text and Film (3)**

Prerequisite: Japanese 312.

Japanese literature from earliest times to present. Major works of modern Japanese fiction as a literary genre and their cinematic interpretation.

**JAPAN 422. Newspaper Reading and Advanced Composition (3)**

Prerequisite: Japanese 411.

Development of reading and writing skills through texts taken from current Japanese newspapers and broadcast news.
JAPAN 480. Business Japanese (3)
Prerequisite: Japanese 411.

JAPAN 495. Japanese Internship (1-3)
Prerequisites: Upper division standing in the major and approval of instructor.
Practical work experience in a field related to Japanese studies. Work done under joint direction of activity sponsor and instructor.

JAPAN 496. Topics in Japanese Studies (1-4)
Topics in Japanese language, literature, culture and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit eight units.

JAPAN 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.
Jewish Studies
In the College of Arts and Letters

OFFICE: Arts and Letters 662A
TELEPHONE: 619-594-5327 / FAX: 619-594-8696
EMAIL: jewishstudiesprogram@mail.sdsu.edu
http://jewishstudies.sdsu.edu

Faculty
Jewish studies is administered by the Modern Jewish Studies Executive Board of San Diego State University. Faculty assigned to teach courses in modern Jewish studies are drawn from the Departments of English and Comparative Literature; European Studies; History; Linguistics and Asian/Middle Eastern Languages; and Religious Studies.
Director and Undergraduate Adviser: Risa Levitt Kohn (Religious Studies)
Offered by Jewish Studies
Major in modern Jewish studies with the B.A. degree in Liberal Arts and Sciences. Minor in Jewish studies.

The Major
Modern Jewish studies is a multidisciplinary major which provides an understanding of Jewish civilizations as the result of the interactions of Jewish culture, history, politics, and religion with other civilizations in societies where Jews have been the dominant majority population (the first two Jewish commonwealths and the modern state of Israel) and in those of the diaspora Jewish communities where Jews have been a minority group.

Students will be expected to obtain proficiency in Hebrew. They will develop an understanding of the major events in Jewish history starting with the biblical period through the centuries of diaspora to the Holocaust and the creation of the modern state of Israel. Students will be exposed to main Jewish beliefs, ideas, and traditions which have arisen in these different historical contexts. They will also become familiar with Jewish visual and literary expressions of culture. It is hoped that the study of Jewish civilizations will foster an awareness of how the Jewish experience reflects the universal dynamic of how ethnic, religious, or racial minorities interact with majority societies (i.e., discrimination and persecution, acculturation, integration, syncretism, and resistance to assimilation).

Those completing the major will be prepared for careers or further graduate training in the foreign service, overseas business, education, social services, multi-media productions, visual and literary arts, advocacy organizations, museum work, and the ministry.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible. Students must receive major advising in the first semester they declare Modern Jewish Studies as their major and must do so no later than the first semester of their junior year.

Impacted Program
The modern Jewish studies major is an impacted program. To be admitted to the modern Jewish studies major, students must meet the following criteria:

- Complete preparation for the major;
- Complete a minimum of 60 transferable semester units;
- Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Modern Jewish Studies Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15102) (SIMS Code: 114102)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

Preparation for the Major.
Jewish Studies 130 [or Humanities 130] and either Religious Studies 100 or 101 or 103. (6 units)

Language Requirement.
Hebrew 101, 102, 200, and 201.

Graduation Writing Assessment Requirement.
Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major.
A minimum of 30 upper division units.

Culture and Society Area (9 units)
Comparative Literature 405 [or English 406], The Bible as Literature (3)
English 526, Topics in Literature of the United States: Jewish American Literature (3)
History 436, Modern Jewish History in Feature Films (3)
History 527, The Holocaust in Feature Films (3)
Russian 435, Russian and East European Jewish Culture (3)

History Area (9 units)
History 440, The Holocaust and Western Civilization (3)
History 474, The Middle East Since 1500 (3)
History 488, Modern Jewish History (3)
History 574, Arab-Israeli Relations, Past and Present (3)

Religion and Thought Area (9 units)
Religious Studies 301, Hebrew Bible (3)
Religious Studies 320, Judaism (3)
Religious Studies 330, Abrahamic Faiths: Shared Stories (3)
Religious Studies 373, Women and the Bible (3)
Religious Studies 581, Major Theme: Jewish and Christian Origins (3)

Electives (3 units)
Jewish Studies 495, Jewish Studies Internship (3) Cr/NC
Jewish Studies 496, Topics in Jewish Studies (1-3) (May be repeated with new content)
Hebrew 499, Special Study (1-3) (Maximum credit eight units)

A maximum of six units outside of Jewish Studies may be counted toward the major with the approval of the adviser. Students may not double count courses taken for the required and core areas for elective use and vice versa.
Jewish Studies Minor
(SIMS Code: 114103)

Dr. Risa Levitt Kohn, Department of Religious Studies, is adviser for this minor.

The Jewish studies minor provides a balanced interdisciplinary study of Jewish contributions to world culture and history. It serves the needs of students who plan to (1) specialize in disciplines in which an understanding of Jewish contributions is essential, or (2) follow careers in teaching, community service, foreign service, or the ministry. Students seeking a minor in Jewish studies may want to consider combining it with a major in Social Science with an emphasis in Islamic and Arabic Studies. Many courses relevant to this major are available in anthropology, economics, geography, history, political science, and sociology.

The minor consists of a minimum of 19-20 units to include seven to eight units selected from Jewish Studies 130 [or Humanities 130] or Religious Studies 100, 101, or 103; and Hebrew 101, 102, 200, or 201; and 12 upper division units selected from Jewish Studies 495, 496; Comparative Literature 405 [or English 405]; Hebrew 496; History 436, 440, 488, 527, 574; Religious Studies 301, 320, 330, 581; and other relevant courses may be counted as part of the 12 upper division units taken with the approval of the adviser for Jewish Studies.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (JS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

JS 130. The Jewish Heritage (3) [GE]
(Same course as Humanities 130)
Hebraic and Jewish influences on the arts, literature, philosophy, and religion of Western civilization.

JS 296. Topics in Jewish Studies (1-3)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES
(Intended for Undergraduates)

JS 495. Jewish Studies Internship (3) Cr/NC
Six hours per week at agency and one hour every other week with SDSU supervising faculty member.
Prerequisites: Upper division status and consent of supervising instructor.
Internship with local Jewish service agencies and non-profit organizations. Work to be done under direction of activity supervisor and SDSU instructor. Written project report and internship conferences required every other week with SDSU faculty adviser. Maximum credit six units.

JS 496. Topics in Jewish Studies (1-3)
Prerequisite: Upper division status.
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.
The School of Journalism and Media Studies also prepares students for careers in advertising, journalism, public relations, and complement their in-class work with internships and service-learning and research methods for professional communicators. They also take a set of core classes in digital and social media, ethics and law, curricula reflect these very important themes. Students are required to from all backgrounds think critically about the media. The school's embrace technology to serve the public good; and where people media professionals are ethical and committed to social justice, and society where citizens are engaged in their communities; where more than 40 major communications companies contributed to establish The Lionel Van Deerlin Professor of Communication and Public Policy. More than 40 major communications companies contributed to establish The Lionel Van Deerlin Professor of Communication and Public Policy. The professorship serves as the center for the study of public policy and issues affecting the communications/information field, about which Lionel Van Deerlin was vitally concerned during his 18 years in Congress. The current holder of the professorship is John M. Eger. General Information

The School of Journalism and Media Studies envisions a global society where citizens are engaged in their communities; where media professionals are ethical and committed to social justice, and embrace technology to serve the public good; and where people from all backgrounds think critically about the media. The school's curricula reflect these very important themes. Students are required to take a set of core classes in digital and social media, ethics and law, and research methods for professional communicators. They also complement their in-class work with internships and service-learning projects in the community. Programs within the school prepare students for careers in advertising, journalism, public relations, and other media industries, as well as for jobs in a technologically driven workforce landscape whose future media forms cannot be predicted. The School of Journalism and Media Studies also prepares students to enter careers as analysts, producers, and editors of media content in government and private industry, as well as for graduate education in a variety of disciplines.

Impact Programs

Programs in the School of Journalism and Media Studies are impacted. Students must enter the university under the designated major code for the selected program. To be admitted to the selected program, refer to the program description for specific impaction criteria.

Journalism and Media Studies Assessment

All students majoring in advertising, journalism, media studies, and public relations must complete a journalism and media studies assessment in their first semester of enrolling in Journalism and Media Studies courses and during their final semester prior to graduation. See the School of Journalism and Media Studies advising office for more information.

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education courses will also fulfill a major preparation course requirement.

Journalism Major

With the B.A. Degree in Liberal Arts and Sciences

(Major Code: 06021) (SIMS Code: 664101)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

Journalism education emphasizes the training of writers, reporters, and editors for the mass media. It also seeks to prepare and guide students interested in pursuing careers in a wide range of informational and interpretive multimedia environments, including in digital and social media. The courses offered in the journalism major are designed to give students a working knowledge of the skills, concepts, values, and ethics needed to succeed as professional communicators. Courses focus on the basic elements of factual and analytical writing, editing, producing, designing, history, communication law and theory, and social responsibility of the mass media. Career opportunities for journalism graduates are diverse, including book editing and publishing, freelance writing, industrial journalism, magazines, communication research, news agencies, newspapers, radio, television, teaching, and digital and social media.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment). No more than 48 units in journalism and media studies courses can be applied to the B.A. degree in Liberal Arts and Sciences. Lower division activity/production courses in newspaper, magazine, yearbook, or broadcasting may not be applied toward the B.A. in journalism. Accreditation standards require that all advertising, journalism, media studies, and public relations majors at SDSU complete at least 72 units of coursework outside the major and meet the liberal arts and sciences general education requirements of SDSU. Students must follow their major requirements and complete 15 additional units within an Auxiliary Discipline (within one academic unit outside journalism and media studies).

Impacted Program. The journalism major is designated as an impacted program. To be admitted to the journalism major, students must meet the following criteria:

a. Complete with a minimum grade point average of 3.0 and a grade of C or higher: Journalism and Media Studies 200, 210, 220; Economics 101. These courses cannot be taken for Credit/No Credit (Cr/NC).
b. Achieve a passing score on the Grammar, Spelling and Punctuation test by the third attempt.

c. Complete a minimum of 45 baccalaureate level semester units.
   A maximum of 90 semester units is recommended. (A minimum of 60 units is required for all transfer applicants.)

d. Have a cumulative grade point average of 3.0 or higher.

Applicants not meeting the above minimum requirements may petition for admission to the advertising emphasis. See the School of Journalism and Media Studies advising office for further information.

Preparation for the Major. Journalism and Media Studies 200, 210, 220; Economics 101. Some of these courses may also be used to fulfill lower division general education requirements. (12 units)

These prerequisite courses may not be taken Cr/NC and must be completed with a minimum GPA of 3.0 and a grade of C or higher in each class.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Journalism and Media Studies 310W and earn a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Journalism and Media Studies 300, 310W, 315, 420, 430, 489, 494, 550; six units selected from Journalism and Media Studies 445, 470, 490, 495, 529; and six units of upper division coursework in journalism and media studies.

Auxiliary Discipline. Students selecting the journalism major are required to complete 15 additional units, six units of which must be at the upper division level, within one academic unit outside journalism and media studies.

Emphasis in Advertising (Major Code: 06041) (SIMS Code: 661108)

Students in the advertising emphasis learn to understand the basic principles and theories of advertising; write copy and design messages for distribution through multiple media channels; apply appropriate research methods to plan, monitor, and evaluate advertising; develop strategic thinking skills applied to targeting audiences; create and implement advertising campaigns that are responsible to both consumers’ as well as corporate needs; critically analyze issues related to advertising; communicate effectively with diverse audiences; and practice ethical communication.

Advertising graduates are employed in advertising agencies and marketing departments in the areas of media ad sales, sales promotions, research, creative development, account services, sales management, and digital and social media.

To complete the advertising emphasis, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Accreditation standards require that all advertising, journalism, media studies, and public relations majors at SDSU complete at least 72 units of coursework outside the major and meet the liberal arts and sciences general education requirements of SDSU. Students must follow their major requirements and complete 15 additional units within an Auxiliary Discipline (within one academic unit outside journalism and media studies).

Impacted Program. The advertising emphasis is designated as an impacted program. To be admitted to the advertising emphasis, students must meet the following criteria:

a. Complete with a minimum grade point average of 3.0 and a grade of C or higher: Journalism and Media Studies 200, 210, 220; Economics 101. These courses cannot be taken for Credit/No Credit (Cr/NC);

b. Achieve a passing score on the Grammar, Spelling and Punctuation test by the third attempt;

c. Complete a minimum of 45 baccalaureate level semester units. A maximum of 90 semester units is recommended. (A minimum of 60 units is required for all transfer applicants.)

d. Have a cumulative grade point average of 3.0 or higher.

Applicants not meeting the above minimum requirements may petition for admission to the advertising emphasis. See the School of Journalism and Media Studies advising office for further information.

Preparation for the Major. Journalism and Media Studies 200, 210, 220; Economics 101; and three units selected from Accountancy 201, Art 101, Economics 102, Psychology 101, Public Health 101, Sociology 101. (12 units)

Emphasis in Media Studies (Major Code: 15060) (SIMS Code: 661110)

Students in the media studies emphasis learn established and emerging theories of mass communication effects; structure and concentration of media ownership; tools required to become a sophisticated and critical consumer of media content; processes and effects of mediated communication across nations and cultures; convergence of traditional media organizations/industries into hybrid structures; and emerging media industries and job opportunities.

The media studies emphasis is ideally suited for entrepreneurial individuals comfortable with the ambiguity of rapidly changing technologies, industries, and career paths. Graduates of the media studies emphasis will likely pursue several distinct career paths in the course of their professional lives, sometimes “inventing” new jobs for themselves as technologies and industries change.

To complete the media studies emphasis, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Impacted Program. The media studies emphasis is an impacted program. To be admitted to the media studies emphasis, students must meet the following criteria:

a. Complete with a minimum grade point average of 3.0 and a grade of C or higher: Journalism and Media Studies 200, 210, 220; Economics 101; and three units selected from Accountancy 201, Art 101, Economics 102, Psychology 101, Public Health 101, Sociology 101. These courses cannot be taken for Credit/No Credit (Cr/NC);

b. Complete a minimum of 45 baccalaureate level semester units. A maximum of 90 semester units is recommended. (A minimum of 60 units is required for all transfer applicants.)

c. Have a cumulative grade point average of 3.0 or higher.

Applicants not meeting the above minimum requirements may petition for admission to the media studies emphasis. See the School of Journalism and Media Studies advising office for further information.

Preparation for the Major. Journalism and Media Studies 200, 210, 220; Economics 101; and three units selected from Accountancy 201, Art 101, Economics 102, Psychology 101, Public Health 101, Sociology 101. (12 units)
These prerequisite courses may not be taken Cr/NC and must be completed with a minimum grade point average of 3.0 and a grade of C or higher in each class.

**Language Requirement.** Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on “Graduation Requirements.”

**Graduation Writing Assessment Requirement.** Passing the Writing Placement Assessment with a score of 10 or completion of an approved upper division writing course with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

**Major.** A minimum of 33 upper division units to include Journalism and Media Studies 408, 412, 450, 489, 492, 494; 15 units selected from media studies topics courses: Journalism and Media Studies courses numbered 300-599, Learning Design and Technology 540, 541; Television, Film and New Media 430.

**Auxiliary Discipline.** Students selecting the media studies emphasis are required to complete 15 additional units, six units of which must be at the upper division level, within one academic unit outside journalism and media studies.

**Emphasis in Public Relations (Major Code: 05992) (SIMS Code: 661109)**

Public relations students learn the theories and skills necessary to help them execute each stage of the strategic planning process. Specifically, students learn mass communication and public relations theories and principles; research methods; journalistic writing; public relations techniques and tactics; and strategic planning. A selective internship program also gives students the opportunity to try out their skills in the workplace, under the supervision of faculty and on-the-job mentors.

Public relations graduates work as media relations specialists and strategic planners in public relations departments and firms, as internal and external communication specialists in corporations, as public information specialists in government agencies and the military, and in fundraising and membership development for not-for-profit organizations.

To complete the public relations emphasis, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Accreditation standards require that all advertising, journalism, media studies, and public relations majors at SDSU complete at least 72 units of coursework outside the major and meet the liberal arts and sciences general education requirements of SDSU. Students must follow their major requirements and complete 15 additional units within an Auxiliary Discipline (within one academic unit outside journalism and media studies).

**Impacted Program.** The public relations emphasis is designated as an impacted program. To be admitted to the public relations emphasis, students must meet the following criteria:

a. Complete with a minimum grade point average of 3.0 and a grade of C or higher: Journalism and Media Studies 200, 210, 220; Economics 101. These courses cannot be taken for Credit/No Credit (Cr/NC);

b. Achieve a passing score on the Grammar, Spelling and Punctuation test by the third attempt;

c. Complete a minimum of 45 baccalaureate level semester units. A maximum of 90 semester units is recommended. (A minimum of 60 units is required for all transfer applicants.);

d. Have a cumulative grade point average of 3.0 or higher.

Applicants not meeting the above minimum requirements may petition for admission to the public relations emphasis. See the School of Journalism and Media Studies advising office for further information.

**Preparation for the Major.** Journalism and Media Studies 200, 210, 220; Economics 101. Some of these courses may also be used to fulfill lower division general education requirements. (12 units)

These prerequisite courses may not be taken Cr/NC and must be completed with a minimum GPA of 3.0 and a grade of C or higher in each class.

**Language Requirement.** Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on “Graduation Requirements.”

**Graduation Writing Assessment Requirement.** Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Journalism and Media Studies 310W and earn a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

**Major.** A minimum of 36 upper division units to include Journalism and Media Studies 310W, 480, 481, 489, 494, 581, 585; three units selected from Journalism and Media Studies 300, 440, 460; and 12 units of upper division coursework in journalism and media studies.

**Auxiliary Discipline.** Students selecting the public relations emphasis are required to complete 15 additional units, six units of which must be at the upper division level, within one academic unit outside journalism and media studies.

**Digital and Social Media Studies Minor (Minor Code: 15060) (SIMS Code: 661117)**

The minor in digital and social media studies consists of 18 units to include Journalism and Media Studies 200, 210, 494, and nine units selected from Journalism and Media Studies 300, 375, 408, 440, 460, 462, 480, 489. Admission to the minor requires a minimum cumulative GPA of 2.0 and completion of Journalism and Media Studies 200 and 210 with grades of C (2.0) or better in each course.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed at San Diego State University.

**International Media Certificate (SIMS Code: 661131)**

The basic certificate in international media offers a theoretical grounding in media and in a specific, applied media field, as well as enhancing foundational knowledge with courses on global aspects of media use, media technologies, and media industries. Students take a course in contemporary media or in social media in the digital age, then augment foundational coursework with a course in advertising, journalism, media studies, or public relations. Students also apply theoretical knowledge to specific, global media contexts.

The certificate program is open to students enrolled at San Diego State University or in the College of Extended Studies, excluding major and minor students in the School of Journalism and Media Studies.

Students will enhance major area studies with an understanding of international media. International students studying advertising, journalism, media, or public relations at their home universities augment their knowledge with international aspects of media. The certificate is appropriate for Open University students in international media as a career-enhancement option or as an academic foundation. For more information, contact Dr. Bey-Ling Sha, bsha@mail.sdsu.edu.

The certificate requires 12 units to include Journalism and Media Studies 200 or 210; three units selected from Journalism and Media Studies 300, 406, 460 or 480; and six units selected from Journalism and Media Studies 375, 450, 475, 506, 574, 591, Television, Film and New Media 563.

All courses in the certificate program must be completed with a grade point average of 2.0.
Courses (JMS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

JMS 200. Introduction to Contemporary Media (3) [GE]
Mass media and emerging forms of niche media in the global community. Theories, structures, functions, practices, problems, interrelationships, economics, critical analyses, history, and ethics.

JMS 210. Social Media in the Digital Age (3) [GE]
Two lectures and one hour of discussion. Social networking, virtual worlds, and digital media literacy. Creating and communicating arguments and consuming information via digital, social, and mobile technologies in a global environment.

JMS 220. Writing for the Mass Media (3)
Two lectures and two hours of activity.
Prerequisites: Sophomore standing; ability to type; premajor in journalism, advertising, public relations. Proof of completion of prerequisites required: Copy of transcript.
Introduction to writing techniques for mass media. Laboratory practice in informational and persuasive writing, evaluation, and judgment. In some semesters, specially designated sections require bilingual fluency in English and Spanish, to be determined by a stamp of Spanish/English bilingualism on high school transcript, or a score of 5 on AP Spanish test, or passing the SDSU Spanish Language Proficiency Test. See footnotes in Class Schedule.

JMS 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

JMS 300. Principles of Journalism (3)

JMS 309. Workshop (1-3) Cr/NC
Prerequisite: Consent of instructor.
Practical experience in an area of study within the School of Journalism and Media Studies. Maximum credit three units.

JMS 310W. Media Writing and Reporting (3)
Two lectures and two hours of activity.
Prerequisites: Journalism and Media Studies 220 with a grade of C (2.0) or better. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisites required: Copy of transcript. Admission to majors in advertising, journalism, and public relations.
Writing for advertising, journalism, and public relations products in various media platforms. Gathering information, interviewing, conducting observations, and using online databases. Laboratory and field work.

JMS 315. Digital Media Principles and Design (3)
Prerequisites: Upper division standing and admission to a major in the School of Journalism and Media Studies.
Preparing and editing content for multimedia, web, and mobile platforms in journalism and other media professions. Digital media layout and design, usability, accessibility, segmentation, and scalability.

JMS 375. Media Technology in the Global Environment (3)
Prerequisites: Upper division standing and Journalism and Media Studies 210 with grade of C (2.0) or better.
Technology's crucial role in shaping the knowledge economy and communication policies affecting life and work in the global age. Digital communication, media convergence, media regulation, and economic development.

JMS 408. Principles of Media Studies (3)
Prerequisite: Upper division standing. Media theories, models, and research exploring media effects, and audience uses of media.

JMS 409. Women and Media (3)
Prerequisites: Upper division standing. Admission to a major in the School of Journalism and Media Studies. Proof of completion of prerequisites required: Copy of transcript.
Role of women in media, including messages about women and employment status of women.

JMS 410. Media and Sexuality (3)
Prerequisite: Admission to a major in the School of Journalism and Media Studies. Proof of completion of prerequisite required: Copy of transcript.
Sexuality and sex-related issues in mass mediated news, entertainment, and advertising content. Sexuality in media and its effects on interpersonal relations, sexual identity, sexual politics, social discourse, and public policy. Portrayals of conventional sexuality and of sexual minorities.

JMS 412. Media Industries and Their Audiences (3)
Prerequisites: Journalism and Media Studies 408 with grade of C (2.0) or better. An approved upper division writing course with grade of C (2.0) or better, or passing the Writing Placement Assessment with a score of 10. Admission to media studies emphasis, Major Code: 15060.
Proof of completion of prerequisites required: Copy of transcript.
Methods used by media industries to determine size and demographics of audience. Theories and models that explain audience behavior. Individual and group-action effects on media institutions and content.

JMS 420. Public Affairs News Reporting (3)
One lecture and four hours of activity.
Prerequisites: Journalism and Media Studies 300, 310W, and 315 with grades of C (2.0) or better in each course. Admission to journalism major. Proof of completion of prerequisite required: Copy of transcript.
Field and laboratory practice in news gathering and writing, covering news beats including courts, local governments, and other news sources. Emphasis on accuracy, clarity, comprehensiveness and interpretation.

JMS 425. Writing Opinion, Reviews, and Criticism (3)
Prerequisites: Journalism and Media Studies 300, 310W with grades of C (2.0) or better in each course. Admission to journalism major. Proof of completion of prerequisites required: Copy of transcript.
Copy of transcript.
Principles and practices of writing editorials and opinion essays for media outlets (print, broadcast, and online) to include writing reviews of theatre, music, books, and film.

JMS 430. Digital Journalism (3)
Prerequisites: Journalism and Media Studies 300, 310W, and 315 with grades of C (2.0) or better in each course. Admission to journalism major. Proof of completion of prerequisites required: Copy of transcript.
Using digital and mobile platforms to publish news content and how to use such platforms for news reporting and gathering purposes. Data-driven journalism, online writing styles, web programming, social media strategies, and digital design principles.

JMS 440. Management of Media Organizations (3)
Prerequisite: Upper division standing. Proof of completion of prerequisite required: Copy of transcript.
Revenue generation, marketing, distribution, production, personnel, social responsibilities, and current developments in media organizations. Planning, organizing, implementing organizational plans.
JMS 441. Magazine and Feature Writing (3)
Prerequisites: Journalism and Media Studies 300, 310W with grades of C (2.0) or better in each course. Prerequisite: Upper division standing and Journalism and Media Studies 200 with grade of C (2.0) or better. Proof of completion of prerequisites required: Copy of transcript. Planning, gathering material, writing and marketing articles for specialized and general publications. Production of expository articles and marketing of at least one article.

JMS 445. Television News Reporting and Producing (3)
Prerequisites: Journalism and Media Studies 300, 310W, and 315 with grades of C (2.0) or better in each course. Admission to journalism major. Proof of completion of prerequisites required: Copy of transcript. Electronic news, focusing on reporting and producing newscasts. Shooting, writing, editing, and presenting news. Roles and responsibilities in electronic newsgroups to include role of producer.

JMS 450. Using Media to Understand Cultures (3)
Prerequisites: Journalism and Media Studies 408, 489 with grades of C (2.0) or better in each course. Admission to media studies emphasis, Major Code: 15060. Proof of completion of prerequisites required: Copy of transcript. Cultural phenomena through media products to include films, television programs, print media. Appreciation of various cultures and practices through analysis of media products.

JMS 460. Principles of Advertising (3)
Prerequisite: Upper division standing. Advertising practices. Historical perspectives, changing role of advertising. Shift from impression to engagement and from traditional to emerging media, evolving agency structure, audience targeting, creative strategy, regulation, social responsibility and ethics, globalization, and current trends and developments.

JMS 462. Advertising Strategy and Social Media (3)

JMS 470. Multimedia and Mobile Reporting (3)
Prerequisites: Journalism and Media Studies 430 with a grade of C (2.0) or better. Admission to journalism major. Proof of completion of prerequisites required: Copy of transcript. Principles and techniques of writing news for print, online, radio-television, and emerging media platforms. Field and laboratory experience.

JMS 475. Mediated Communication in Intercultural Contexts (3)
Prerequisite: Admission to a major in the School of Journalism and Media Studies. Role of culture in professional fields such as advertising, journalism, media studies, and public relations. Cultural values and practices as applied to various mediated communication products and contexts.

JMS 480. Principles of Public Relations (3)
Prerequisite: Upper division standing and Journalism and Media Studies 200 with grade of C (2.0) or better. Proof of completion of prerequisites required: Copy of transcript. Concepts, history, theory, social responsibility, ethics, and management of public relations. Public relations strategic planning process. Survey of problems and practices in corporations, government and politics, health care, education, associations, and not-for-profit organizations.

JMS 481. Public Relations Media and Messaging (3)
Prerequisites: Journalism and Media Studies 310W and 480 with grades of C (2.0) or better in each course. Admission to public relations emphasis, Major Code: 05992. Proof of completion of prerequisites required: Copy of transcript. Practical applications of public relations techniques with emphasis on writing, messaging, and selecting media channels. Production of materials for all forms of media. Special events, crisis management, and strategic planning. Field and laboratory practice.

JMS 489. Research Methods in Mediated Communication (3)
Prerequisites: Upper division standing and Journalism and Media Studies 200 with grade of C (2.0) or better. Surveys and critically analyzing media reports of public opinion polls and other scientific research. Sampling and inferences to populations. Basic design and measurement issues. Margin of error. Levels of measure.

JMS 490. Internship (1-3) Cr/NC
Prerequisite: Journalism and Media Studies 412, 420, 481, or 562 with a grade of C (2.0) or better. Supervised work at organizations engaged in media-related professional activities under combined direction of practitioners and professors. Maximum credit three units. Not open to students who have previously received three units of credit in Journalism and Media Studies 490A, 490B, 490C.

JMS 492. Creative Uses of Emerging Media (3)
Prerequisite: Journalism and Media Studies 412 with grade of C (2.0) or better. Proof of completion of prerequisite required: Copy of transcript. New and often unexpected convergence of media institutions, technology, and content. New economic and social alliances, entrepreneurial opportunities, uses, and effects. Capstone course for media studies majors. Completion of course with grade of C or better required for majors.

JMS 494. Media Law and Ethics (3)
Prerequisites: Upper division standing and Journalism and Media Studies 200 with grade of C (2.0) or better. Proof of completion of prerequisites required: Copy of transcript. Important legal, ethical, and business issues related to advertising, journalism, and public relations. Ethical dilemmas encountered by media professionals and communication specialists, including challenges posed by global technologies.

JMS 495. Advanced Topics in Media Writing and Skills (3)
One lecture and four hours of activity. Prerequisite: Journalism and Media Studies 310W with a grade of C (2.0) or better. Proof of completion of prerequisite required: Copy of transcript. Specialized topics in media writing and skills. May be repeated with new content. Maximum credit six units.

JMS 496. Experimental Topics (1-3)
Prerequisites: Upper division standing and consent of instructor. Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

JMS 499. Special Study (1-3)
Prerequisites: Upper division standing and consent of instructor. Individual study or project, normally in a research area selected by the student. Maximum credit three units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

JMS 506. Advertising and Society (3)
Prerequisite: Admission to a major in the School of Journalism and Media Studies. Proof of completion of prerequisites required: Copy of transcript. Theoretical and philosophical analysis of advertising in modern society.

JMS 527. Advanced Topics in Journalism (3)
Prerequisites: Journalism and Media Studies 300 with a grade of C (2.0) or better. Admission to journalism major. Reading, investigation, and research in a specialized topic in journalism. May be repeated with new content. Maximum credit six units.

JMS 529. Data-Driven Investigative Journalism (3)
Prerequisite: Journalism and Media Studies 420 with a grade of C (2.0) or better. Proof of completion of prerequisite required: Copy of transcript. History and role of investigative journalism in the U.S. Use of the Internet, public records, spreadsheets, and databases to develop stories in the public interest. Finding patterns and leads in electronic data. Field and laboratory experience.
JMS 547. Advanced Topics in Media Studies (3)
Prerequisites: Journalism and Media Studies 408 with a grade of C (2.0) or better. Admission to media studies emphasis, Major Code: 05060.
Reading, investigation, and research in a specialized topic in media studies. May be repeated with new content. Maximum credit six units.

JMS 550. Multimedia News Laboratory (3)
One lecture and four hours of activity.
Prerequisites: Journalism and Media Studies 420, 430 with grades of C (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript. Teams prepare multimedia news content. Field and laboratory experience. Completion of course with grade of C or better is required for majors and minors.

JMS 560. Advertising Research (3)
Prerequisites: Journalism and Media Studies 310W, 460, 462 with grades of C (2.0) or better in each course. Admission to advertising emphasis, Major Code: 06041. Proof of completion of prerequisites required: Copy of transcript.
Planning, evaluation, analysis of qualitative and quantitative research across traditional, digital, and social platforms. Ethics, sampling, experimentation, data analysis, segmentation, brand mapping, advertising testing and optimization, social media metrics.

JMS 562. Advertising Creative (3)
One lecture and four hours of activity.
Prerequisites: Journalism and Media Studies 310W, 460, 462 with grades of C (2.0) or better in each course. Admission to advertising emphasis, Major Code: 06041. Proof of completion of prerequisites required: Copy of transcript.
Advertising, applying consumer insights, developing creative strategies, drafting creative briefs. Writing and design of advertising for traditional, digital, social, emerging media platforms. Multimedia laboratory experience. (Formerly numbered Journalism and Media Studies 461.)

JMS 565. Advertising Campaigns (3)
Prerequisites: Journalism and Media Studies 560, 562 with grades of C (2.0) or better in each course.

JMS 566. Advertising Strategy and Digital Analytics Platforms (3)
Prerequisites: Journalism and Media Studies 460 or 480, and Journalism and Media Studies 560 or 581.
Strategy creation, implementation, and evaluation using digital analytics platforms. Digital analytics administration, monitoring, analysis, and reporting. Application of digital analytics to consumer advertising optimization.

JMS 567. Advanced Topics in Advertising (3)
Prerequisites: Journalism and Media Studies 460 with a grade of C (2.0) or better. Admission to advertising emphasis, Major Code: 06041.
Reading, investigation, and research in a specialized topic in advertising. May be repeated with new content. Maximum credit six units.

JMS 574. International Advertising (3)
Prerequisite: Admission to a major in the School of Journalism and Media Studies.
Comparative cultural, economic, legal, political, and social conditions relevant to international advertising.

JMS 581. Applied Research in Public Relations (3)
Two lectures and two hours of activity.
Prerequisites: Journalism and Media Studies 310W and 480 with grades of C (2.0) or better in each course. Admission to public relations emphasis, Major Code: 05992. Proof of completion of prerequisites required: Copy of transcript.
Qualitative and quantitative methods used in research to plan, track, evaluate public relations and communication practices. Computerized statistical analysis.

JMS 585. Professional Practices in Public Relations (3)
Prerequisites: Journalism and Media Studies 481 and 581 with grades of C (2.0) or better in each course.
Cases in public relations management. Theory and practice of issues management. Integration of public relations function in strategic management of corporate, governmental, nonprofit, social, and cultural organizations. Completion of course with grade of C or better is required for majors and minors.

JMS 587. Advanced Topics in Public Relations (3)
Prerequisites: Journalism and Media Studies 480 with a grade of C (2.0) or better. Admission to public relations emphasis, Major Code: 05992.
Reading, investigation, and research in a specialized topic in public relations. May be repeated with new content. Maximum credit six units.

JMS 590. Seminar in Crisis Communication in PR Management (3)
Prerequisite: Upper division standing or graduate standing.
Theory, research, practice of crisis communication in public relations; development of crisis management plans; critical examination of classic/contemporary crisis management cases, both domestic and international.

JMS 591. Global Technology: Creativity and Innovation in the Digital Age (3)
Prerequisite: Admission to a major in the School of Journalism and Media Studies. Proof of completion of prerequisite required: Copy of transcript.
Economic, social, and political shifts in the global economy as a result of digital communication. Emergence of new national and international media policies to stimulate creativity and innovation as central factors in development.

JMS 595. Seminar in Theoretical Approaches to Public Relations (3)
Prerequisite: Journalism and Media Studies 585 with grade of C (2.0) or better, or graduate standing.
Diverse theoretical approaches to public relations, including management, rhetorical, critical, relational and marketing approaches. Preparation for independent scholarly research project or master's thesis.

JMS 596. Selected Topics (1-3)
Prerequisite: Senior standing or above.
Specialized study in selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Korean
In the Department of Linguistics and Asian/Middle Eastern Languages
In the College of Arts and Letters

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
http://www-rohan.sdsu.edu/dept/linguist/index.html

Faculty
Chair: Osman

Offered by the Department of
Linguistics and Asian/Middle Eastern Languages
Certificate in Korean studies.

Offered by International Business
Major in international business, with emphasis in Korean.

Korean Studies Certificate
(SIMS Code: 114201)

The Department of Linguistics and Asian/Middle Eastern Languages offers a basic certificate in Korean studies. The certificate requires 12-13 units to include Korean 321; six to seven units selected from Korean 301, 302, 331; and three units selected from Korean 430, Political Science 362, or Religious Studies 345.

Students must obtain a grade of C or better in each of the certificate courses. Under certain circumstances, comparable courses taken at other institutions may count toward the certificate. Such courses must be evaluated and approved by the certificate adviser. To register in the certificate program, contact the certificate adviser in the Department of Linguistics and Asian/Middle Eastern Languages.

Language Requirement for the
B.A. Degree in Liberal Arts and Sciences

Students electing the study of Korean to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Korean 201 or the equivalent level of achievement. The usual sequence of coursework is Korean 101, 102, and 201. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:
1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

Courses (KOR)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

Native speakers of Korean will not receive credit for taking lower division courses except with advance approval from the department.

All lower division courses in Korean are taught in Korean.

No credit will be given for lower division courses taken after successfully completing any upper division Korean course taught in Korean.

No credit will be given for Korean 101, 102, 201, 202, 301, and 302 taken out of sequence.

KOR 101. Elementary Korean I (5) [GE]

Language skills to include reading, writing, listening, speaking Korean at elementary level. Basic sentence patterns, useful expressions, basic communication strategies, relationship between language and culture. Not open to students with credit in Korean 102, 201, 202, 301, or a higher-numbered Korean course.

KOR 102. Elementary Korean II (5) [GE]

Prerequisite: Korean 101 or two years of high school Korean. Continuation of Korean 101. Elementary-level reading, writing, listening, speaking Korean. Language competence to include sentence patterns, useful expressions, communication strategies. Not open to students with credit in Korean 201, 202, 301, or a higher-numbered Korean course.

KOR 201. Intermediate Korean I (5) [GE]

Prerequisite: Korean 102 or completion of the third year of high school Korean. Acquisition of grammatical patterns of complex sentences. Expansion of vocabulary and phrases in expressing ideas in various settings. All four language skills emphasized with cultural competency. Not open to students with credit in Korean 202, 301, or a higher-numbered Korean course.

KOR 202. Intermediate Korean II (5) [GE]

Prerequisite: Korean 201 or completion of the fourth year of high school Korean. Continuation of Korean 201. Further development of four language skills with emphasis on cultural competency. Complex sentence structures and ability to write short essays. Reading of contemporary work. Not open to students with credit in Korean 301 or a higher-numbered Korean course.

KOR 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.
All upper division courses in Korean are taught in Korean unless otherwise stated.

No credit will be given for Korean 301 and 302 taken out of sequence.

KOR 301. Advanced Korean I (3) [GE]
Prerequisites: Korean 202; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Spoken and written modern Korean. Acquisition of complex sentences with advanced grammatical patterns. Development of fluency in conversing on a variety of topics in everyday situations. Not open to students with credit in Korean 302.

KOR 302. Advanced Korean II (3) [GE]
Prerequisites: Korean 301; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Continuation of Korean 301. Spoken and written modern Korean. Acquisition of complex sentences with advanced grammatical patterns. Build competency in communicating on a variety of topics in everyday situations.

KOR 321. Korean Civilization (3) [GE]
Prerequisites: Upper division standing; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Development of art, religion, philosophy, political, social institutions through different periods in Korean history. Humanistic dimensions of the Korean mind, traditions, heritage. Taught in English.

KOR 331. Business Korean I (4)
Prerequisite: Korean 202.
Language skills to perform basic business in Korean business environment. Learn business etiquette and attain broad understanding of business culture in Korea.

KOR 430. Contemporary Korean Culture Through Media (3)
Prerequisite: Upper division standing.
Contemporary Korean culture and society as reflected in various modes of media (news, drama, film, instructional technology). Korean culture in neighboring countries and beyond. Historical perspective to modern Korean culture. Taught in English.

KOR 490. Practicum in Teaching Korean as a Second Language (3) Cr/NC
Six hours of activity.
Prerequisites: Native or native-like fluency in Korean (through proficiency test) and consent of instructor.
Supervised experience and practicum in basic methods of teaching Korean, culminating in a written report. Students will be assigned to appropriate class sections within selected Korean language classes as tutors under staff supervision. Maximum credit six units.

KOR 495. Korean Internship (1-3) Cr/NC
Two to six hours of activity.
Prerequisites: Korean 202. Upper division standing and consent of instructor.
Practical work experience in a field related to Korean studies under direction of activity sponsor and instructor.

KOR 496. Topics in Korean Studies (1-4)
Topics in Korean language, literature, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit eight units. May be taught in English.

KOR 499. Special Study (1-3)
Prerequisite: Korean 202.
Individual study. Maximum credit six units.
Latin American Studies
In the College of Arts and Letters

OFFICE: Arts and Letters 377
TELEPHONE: 619-594-1104
http://latinamericanstudies.sdsu.edu

Faculty
Latin American studies is administered by the Latin American Studies Committee. Faculty assigned to teach courses in Latin American studies are drawn from Anthropology, Art and Design, Chicana and Chicano Studies, Communication, Comparative Literature, Economics, Geography, History, Political Science, Public Affairs, Sociology, Spanish and Portuguese Languages and Literatures, Women's Studies; and the College of Business Administration.
Chair: Ramona L. Pérez (Anthropology)
Undergraduate Adviser: David Carruthers (Political Science)
Graduate Adviser: Anthony R. Jerry (Latin American Studies)
Committee: Amuedo-Dorantes (Economics), Ball (Anthropology), Baer (Political Science), Ben (History), Blanco (Portuguese), Bosco (Geography), Carruthers (Political Science), Colston (History), Conway (Anthropology), Delfiebach (Art and Design), De Vos (History), Estebenrade (Sociology), Ewalt. (Spanish), Farley (Geography), Ganster (Institute for Regional Studies of the Californias), Godoy Marquet (Spanish), González-Rivera (Chicana and Chicano Studies), Graubart (Political Science), Herzog (Public Affairs), Ibarra (Chicana and Chicano Studies), Iglesias Prieto (Chicana and Chicano Studies), Jerry (Latin American Studies), Lara (Women's Studies), Lauer (Anthropology), McIlwain (Public Affairs), Nericcio (English and Comparative Literature), O'Brien (Political Science), Ojeda (Sociology and Chicana and Chicano Studies), Ortiz (Chicana and Chicano Studies), Passamonti (History), Pérez (Anthropology), Schmitz Weiss (Journalism and Media Studies), Sobo (Anthropology), Swanson (Geography), Talaver (Public Health)

Offered by Latin American Studies
Master of Arts degree in Latin American studies.
Master of Business Administration and Master of Arts in Latin American studies degrees (concurrent program).
Master of Public Administration and Master of Arts in Latin American studies degrees (concurrent program).
Bachelor of Arts degree in Latin American studies.

Minor in Latin American studies.

The Major

The major in Latin American studies is a multidisciplinary program designed to provide an effective understanding of the cultures, histories, societies, economies, and governments of Latin America, offering basic education and training for business or professional careers that require specialized knowledge of this exciting and diverse area of the world.

A major in Latin American studies provides a multitude of career opportunities. Employment possibilities exist not only in Latin America, but throughout the world. Graduates can apply their specialization to service in international organizations and government positions at the federal or state level. Numerous employment situations can be found in the private sector. Private agencies and corporations have significant interests in Latin America and are looking for area specialists.

Those students who wish to continue in their studies will find opportunities in teaching at all levels. A major in Latin American studies opens many avenues in the choice of a career.

High school students preparing to enter this program should include in the high school course of study not less than three years of study in one foreign language, preferably Spanish or Portuguese. Proficiency in either of these languages is indispensable to a successful career in this area of study.

Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible. Students are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program

The Latin American studies major is an impacted program. To be admitted to the Latin American studies major, students must meet the following criteria:

- Complete preparation for the major;
- Complete a minimum of 60 transferable semester units;
- Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Latin American Studies Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 03081) (SIMS Code: 114301)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." A minor is required with this major.

Preparation for the Major. Latin American Studies 101. Three units of statistics or logic selected from Economics 201; Philosophy 120; Political Science 201; Psychology 280; Sociology 201; Statistics 119, 250. Six units of electives selected from Anthropology 102; Chicana and Chicano Studies 100; Geography 102, 106; Political Science 103. (12 units)

Language Requirement. Competency equivalent to that normally attained through four college semesters of Spanish or three college semesters of Portuguese. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All students must earn a minimum of three units by participating in a Latin American international experience such as study abroad, student exchange, internship, coursework in Tijuana, summer program, or other activities approved by the adviser.
Major. A minimum of 27 upper division units to include three units of international experience and nine upper division core units selected from three different departments: Latin American Studies 366, 415 (or History 415), 498; Anthropology 440, 442; Economics 464; Geography 324, History 416, 580*; Political Science 366, 482. The remaining 15 upper division elective units must be selected from courses listed below with no more than nine of the 15 units from any one department. Groups A, B, and C below are for guidance only; it is recommended that students avoid taking too many unrelated courses by concentrating their studies in one or two of the groups.

Courses numbered 495, 496, 498, 499, and 596 from all participating departments, with appropriate content, are acceptable for elective credit with approval of the adviser.


Group B: Cultures and Environments, Latin American Studies 320, 355 (Chicana and Chicano Studies 355), 540, 550, 580; Anthropology 350, 439, 440, 442, 520, 529, 533, 580*, 583*, Chicana and Chicano Studies 554; Geography 324, 554*; Political Science 564; Sociology 350, 522, 554; Women's Studies 310*, 512.

Group C: Arts and Literature, Latin American Studies 307 (or Portuguese 307), 310 (or Chicana and Chicano Studies 310), 380 (or Chicana and Chicano Studies 380), 400 (or Chicana and Chicano Studies 400), 580; Art 561, 563; Chicana and Chicano Studies 376; Comparative Literature 445, 580*; English 519*; Portuguese 443; Spanish 341, 342, 406A, 406B, 502, 515. * Acceptable when of relevant content with consent of adviser.

Latin American Studies Major
(Imperial Valley Campus only)

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 03081) (SIMS Code: 114302)

The major in Latin American Studies is designed to provide (1) a foundation of understanding of the history, culture and governments of the countries of Latin America and the multiple interrelationships among those countries; and (2) a basic education and training for a business or professional career involving understanding of Latin America.

A minor is not required with this major.

Preparation for the Major. The lower division preparation for the major can be fulfilled by taking the following courses at a community college: elementary Spanish; intermediate conversational Spanish or bilingual Spanish; intermediate conversational Spanish; and 12 units selected from cultural anthropology, cultural geography, history of the Americas, introduction to political science, comparative politics, and civilization of Spanish America and Brazil.

A minimum grade point average of 2.0 is required for all work attempted.

Language Requirement. The language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units selected from the courses listed below with not less than 12 units in one field and nine in two other fields. At least 33 units must be in courses having Latin American content: Anthropology 442; Art 496 (when relevant); Chicana and Chicano Studies 335 (or English 335), 350A, 376; Economics 365, 464, 496 (when relevant); Geography 324, 496 (when relevant); History 415, 416, 496 (when relevant); 550, 551, 558; Political Science 566, 567, 568; Sociology 350, 450; Spanish 406A-406B, 515; Women's Studies 310 (when relevant).

Latin American Studies Minor
(SIMS Code: 114301)

The minor in Latin American studies consists of a minimum of 15 units of Latin American content courses, with a minimum of 12 units of upper division courses. In addition, all students must demonstrate language competency equivalent to that normally attained through one college semester of Spanish, Portuguese, Mixtec, or Zapotec. All students must complete Latin American Studies 101 and two upper division courses from two of the three course groups listed below. Maximum six units from any one department.

Group A: History, Politics, and Economics, Latin American Studies 340, 350, 366 (or Political Science 366), 370, 415 (or History 415), 420, 430 (or Political Science 430), 498, 580; Chicana and Chicano Studies 340A, 350A, 375; Economics 365, 464, 565; Health and Human Services 350; History 416, 550, 551, 558, 580*; Political Science 361, 482, 566, 567, 568; Public Health 362.

Group B: Cultures and Environments, Latin American Studies 320, 355 (Chicana and Chicano Studies 355), 540, 550, 580; Anthropology 350, 439, 440, 442, 520, 529, 533, 580*, 583*, Chicana and Chicano Studies 554; Geography 324, 554*; Political Science 564; Sociology 350, 522, 554; Women's Studies 310*, 512.

Group C: Arts and Literature, Latin American Studies 307 (or Portuguese 307), 310 (or Chicana and Chicano Studies 310), 380 (Chicana and Chicano Studies 380), 400 (Chicana and Chicano Studies 400), 580; Art 561, 563; Chicana and Chicano Studies 376; Comparative Literature 445, 580*; English 519*; Portuguese 443; Spanish 341, 342, 406A, 406B, 502, 515. * Acceptable when of relevant content with consent of adviser.

High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.

2. The first three years of high school level language count as the equivalent of the first two college semesters.
Courses (LATAM)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

Native speakers of Mixtec or Zapotec will not receive credit for taking lower division courses in Mixtec or Zapotec except with advance approval from Latin American Studies.

All lower division courses in Mixtec or Zapotec are taught in Mixtec or Zapotec.

No credit will be given for Latin American Studies 110 and 111, taken out of sequence.

LATAM 101. Introduction to Latin American Studies (3) [GE]
Introduction to Latin American cultures and peoples from an interdisciplinary perspective.

LATAM 110. Elementary Mixtec I (4) [GE]
Mixtec language and culture. Pronunciation, oral practice, reading, and listening comprehension and essentials of grammar in a communicative context and through task-based activities. Not open to students with credit in Latin American Studies 111.

LATAM 111. Elementary Mixtec II (4) [GE]
Prerequisite: Latin American Studies 110. Continuation of Latin American Studies 110. Development of increased proficiency in Mixtec language and culture. Pronunciation, oral practice, listening comprehension, reading and writing, and grammar in a communicative context and through task-based activities.

UPPER DIVISION COURSES

(Intended for Undergraduates)

LATAM 307. Brazilian Music and Culture (3) [GE]
(Same course as Portuguese 307)
Prerequisites: Upper division standing, and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Brazillian music and culture with emphasis on religious and cultural practices of candomble, capoeira, carnival, and notions of race and class. (In contemporary Brazilian funk and hip-hop. Taught in English).

LATAM 310. Mexican and Chicano Music (3) [GE]
(Same course as Chicana and Chicano Studies 310)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.
Mexican dance, art, music, cuisine, politics, tourism industry, education, and other facets of daily life through visits to selected venues.

LATAM 340. Globalization and the Mexican Economy (3)
Prerequisite: One course selected from Latin American Studies 101, Anthropology 102, Economics 101, Geography 102, Political Science 103.
Mexico's industrial models in comparative perspective, including tensions between regionalization and globalization, range of industrial models and production models, industry case studies, and institutional development at regional level.

LATAM 350. Globalization and the Americas (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.
Causes and consequences of international integration in western hemisphere, including United States and Canada. Emphasis on Latin America. Multiple dimensions of integration examined from variety of disciplinary perspectives.

LATAM 355. The United States-Mexico International Border (3) [GE]
(Same course as Chicana and Chicano Studies 355)
Prerequisites: Upper division standing; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Introduction to Latin American politics. Knowledge of political change and political systems in Latin America, viewed historically and comparatively, using concepts and theories applicable to more general political analysis.

LATAM 370. History of Mexico: From Independence to Early Twentieth Century (3) [GE]
Prerequisite: Latin American Studies 101 or completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Cultural history of Mexico from its independence from Spain in early nineteenth century to presidency of Lazaro Cardenas. History of legacy of Caudillos, evolution of PRI, and US/Mexico relations from a Mexican perspective.

LATAM 380. US/Mexico Borderlands Folklore (3) [GE]
(Same course as Chicana and Chicano Studies 380)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Recommended: Chicana and Chicano Studies 110.
Border folklore, its complexities and dynamics via myths, rituals, legends, sayings, corridos (ballads), and literature of Chicanos and Mexicanos in the US-Mexican border region.

LATAM 400. Mexican Images in Film (3) [GE]
(Same course as Chicana and Chicano Studies 400)
Prerequisite: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

LATAM 415. Pre-Contact and Colonial Latin America (3) [GE]
(Same course as History 415)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Indigenous and colonial history of Latin America, pre-contact through early national period.

LATAM 420. Latin America Through Film (3) [GE]
Prerequisite: Latin American Studies 101 or completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Exploration of diverse cultures and history of Latin America through feature film by Latin American cinematographers. Political, social, and historic phenomena.

LATAM 430. Immigration and Border Politics (3) [GE]
(Same course as Political Science 430)
Prerequisites: Completion of the American Institutions requirement and the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
U.S. immigration and border politics within a global and historical perspective. Transformations of sovereignty, communities, identity, and rights within an area of mass migration and economic interdependence. Policy and popular debates about admission, border control, and incorporation of migrants.
Latin American Studies

LATAM 450. Study Abroad in Latin American Studies (3) [GE]
Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. See Class Schedule for additional prerequisites.
Selected topics in Latin American studies. Courses taught abroad through a program approved by the Center for Latin American Studies. May be repeated with new content. See Class Schedule for specific content and geographic location. Maximum credit six units of which three units may be applicable to General Education.

LATAM 495. Latin American Studies Internship (3) Cr/NC
Prerequisites: Six upper division units in Latin American content courses.
Opportunity for Latin American studies undergraduates to implement area specialist skills. Placement with a local organization with legal, commercial, or social service functions whose activities are primarily Latin American related. May be repeated with new content. Maximum credit six units.

LATAM 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

LATAM 498. Seminar on Latin America (3)
Exploration of the interdisciplinary approach to Latin America including evaluation of relevant resources and methods. Taught by a team of instructors representing two or more disciplines.

LATAM 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

LATAM 540. History, Society, and Ecology of Baja Peninsula (3)
Prerequisites: Latin American Studies 101; Geography 102; Anthropology 102 or Political Science 103.
Historical and social anthropology of Baja Peninsula, current issues in socio-economy of a small region, relations between human activity and natural environment, flora and fauna of region, and challenges to ecological preservation.

LATAM 545. The Latin American City (3)
Prerequisite: Upper division or graduate standing in Latin American studies, anthropology, Chicana and Chicano studies, history, political science, or sociology.
History and theory of urbanization in Latin America to include urban landscapes, rural to urban migrations, re-creation of community within urban centers, modified identities, globalized labor, segregation, and community borders.

LATAM 550. Mexican-US Border from a Latin American Perspective (3)
Prerequisites: Six upper division units with Latin American content.
Spanish proficiency.
Multidisciplinary analysis of Mexican-US border region.

LATAM 580. Special Topics (1-4)
Prerequisites: Six upper division units in Latin American content courses.
Interdisciplinary study of selected Latin American topics. Credit will vary depending on the scope and nature of the topic. Whenever appropriate, the course will be taught by a team of instructors representing two or more disciplines. May be repeated with different content. See Class Schedule for specific content. Maximum credit eight units.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Learning Design and Technology
In the College of Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 361
TELEPHONE: 619-594-6718 / FAX: 619-594-6376
http://go.sdsu.edu/education/edtec/index.aspx

Faculty
Emeritus: Allen, Anthony, Harrison, Hoffman, Mathison, McAllister, Ritchie, Rossett, Saba
Area Coordinator: Bober-Michel
Professors: Bober-Michel, Dodge, Wang

Offered by the School of Journalism and Media Studies
Master of Arts degree in education.
   Concentration in learning design and technology.
   Specialization in educational computing.
   Specialization in workforce education and lifelong learning.
   Minor in learning design and technology.
   Certificate in instructional design
      (refer to the Graduate Bulletin).
   Certificate in instructional technology.

Learning Design and Technology Minor
(Minor Code: 089999) (SIMS Code: 664645)
The minor in learning design and technology consists of a minimum of 15 units to include Learning Design and Technology 540, 544, and nine units selected from Learning Design and Technology 532, 561, 570, 572, or 596 (when applicable).

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable or as prerequisites for the master's degree concentration in learning design and technology. A minimum of six upper division units must be completed in residence at San Diego State University.

Instructional Technology Certificate
(SIMS Code: 664601)
To receive a certificate in instructional technology, candidates must meet departmental admission requirements (which include relevant work experience or academic preparation), complete 15 units of coursework to include Learning Design and Technology 540, 544, and nine units selected from Learning Design and Technology 561, 570, 572, or 596 (when applicable).

With the approval of the program adviser, a student may apply no more than three units of coursework from the certificate program toward a minor.

Courses (LDT)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSE

LDT 296. Experimental Topics (1-3)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

LDT 470. Technologies for Teaching (1-3)
One unit: One-half hour of lecture and one hour of activity. Two units: One hour of lecture and two hours of activity. Three units: One and one-half hours of lecture and three hours of activity. Application of computer and video technologies to practice of teaching. Meets computer literacy requirement for Level I teaching credential. (Formerly numbered Educational Technology 470.)

LDT 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

LDT 499. Special Study (1-3)
Prerequisites: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

LDT 532. Producing Digital Learning Media (1-3)
Two hours of activity per unit.
Digital learning media production for professionals in health, law, science, business, publishing, and other settings. Use of web- and video-based technologies, presentation, and data analysis tools for training and education. Not open to students in learning design and technology master’s concentration or certificate programs. (Formerly numbered Educational Technology 532.)

LDT 540. Educational Technology (3)
Six hours of activity.
Rationale, foundations, theories, careers, trends, and issues in educational technology. Implications of educational technology for instruction and information in schools, government, and corporations. (Formerly numbered Educational Technology 540.)

LDT 541. Educational Web Development (3)
One lecture and six hours of laboratory.
Prerequisite: Basic computer literacy.
Systems, graphic design, and usability principles applied to design and development of web-based educational multimedia. Planning and prototyping digital media. (Formerly numbered Educational Technology 541.)
LDT 544. Instructional Design (3)
One lecture and six hours of laboratory.
Prerequisite: Learning Design and Technology 540.
Systematic design of products for education and training. Use of analyses and content mapping to set instructional goals. Instructional methods derived from learning theories for use in schools, universities, corporations, and other settings. Rapid prototyping of instructional products. (Formerly numbered Educational Technology 544.)

LDT 561. Advanced Multimedia Design for Learning (3)
Six hours of activity.
Prerequisite: Learning Design and Technology 540.
Educational visualization with digital video, animation, sound, 2D and 3D graphics for mobile and web-based learning. (Formerly numbered Educational Technology 561.)

LDT 570. Advanced Teaching with Technologies (3)
Prerequisite: Learning Design and Technology 470 or equivalent work experience.
Design of project-based and problem-based learning using Internet resources. Constructivist learning with online databases. Collaboration with distant classrooms and experts. (Formerly numbered Educational Technology 570.)

LDT 572. Managing the Technology-Rich Classroom (3)
One lecture and six hours of laboratory.
Prerequisite: Learning Design and Technology 540.
Use of technology to support planning, presenting, and managing instructor-led courses. Strategies for integrating audience response systems, collaborative tools, and social software into courses. (Formerly numbered Educational Technology 572.)

LDT 596. Topics in Learning Design and Technology (1-3)
Selected problems in educational technology. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Lesbian, Gay, Bisexual, and Transgender Studies
Offered by the College of Arts and Letters

OFFICE: Arts and Letters 317
TELEPHONE: 619-594-6662

Faculty
Faculty assigned to teach lesbian, gay, bisexual, and transgender studies courses are drawn from the colleges at San Diego State University. The program is housed in the College of Arts and Letters.

Program Director and Undergraduate Adviser: Esther D. Rothblum (Women’s Studies)

Committee: Ben (History), Benkov (European Studies), Bigham (Linguistics and Asian/Middle Eastern Languages), Borgstrom (English), Cayleff (Women’s Studies), Corsiis (Public Health), Eadie (Journalism and Media Studies), Elliott (Sociology), Ghosh (Women’s Studies), Giordano (Women’s Studies), Gonzalez Rivera (Chicana and Chicano Studies), Godoy (Spanish), Howard (English and Comparative Literature), Kim (Sociology), Kuefl er (History), Mohammed (Religious Studies), Moore (Religious Studies), Penrose (History), Schreiber (Political Science), Sterling Aquino (Teacher Education), Vaughn (Psychology)

Offered by Lesbian, Gay, Bisexual, and Transgender Studies

Major in lesbian, gay, bisexual, and transgender studies with the B.A. degree in liberal arts and sciences.
Minor in lesbian, gay, bisexual, and transgender studies.
Certificate in lesbian, gay, bisexual, and transgender studies (refer to the Graduate Bulletin).

The Major
The interdisciplinary major in lesbian, gay, bisexual, and transgender (LGBT) studies advances knowledge in sexual and gender identity, and increases understanding of the diverse cultural, historical, ethnic/racial, and contemporary experiences of people across sexualities. The focus is on the changing nature of same-sex desire, sexual behavior, and same-sex relationships from antiquity to the present. Courses focus on emerging LGBT subcultures and identities from a global perspective. From there, courses address scientific and psychological explanations of LGBT identities, LGBT literature, the institutions of law and government, education and the workplace, family, and healthcare. We will finish by looking at local and international LGBT movements, popular culture, and news media in the current day. Throughout the program of study, we will carefully consider the full range of genders, sexualities, races, ethnicities, classes, physical abilities, religions, and political persuasions that characterize current LGBT movements and communities.

Courses are designed to provide students with a comprehensive, integrated, and scholarly education. The major also exposes students to community service and activism via a large selection of internships, and to global sexuality issues via international experiences.

A degree in lesbian, gay, bisexual, and transgender studies prepares students for a large variety of careers. Students majoring in lesbian, gay, bisexual, and transgender studies can work in LGBT non-profit agencies, law, local and national politics, health care settings, counseling centers, journalism, news media, theatre, film, fine arts, and education. LGBT studies majors may go on to obtain graduate degrees, preparing for a career as an LGBT studies scholar. LGBT studies majors can also double-major to enhance their career opportunities.

Advising
Students are required to meet with the undergraduate adviser in order to declare the major. All students admitted to the university with a declared major in lesbian, gay, bisexual, and transgender studies are urged to meet with the undergraduate adviser either prior to or during their first semester.

Impacted Program
The lesbian, gay, bisexual, and transgender studies major is an impacted program. To be admitted to the lesbian, gay, bisexual, and transgender studies major, students must meet the following criteria:

- Complete preparation for the major;
- Complete a minimum of 60 transferable semester units;
- Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Lesbian, Gay, Bisexual, and Transgender Studies Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22990) (SIMS Code: 119506)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” Students majoring in lesbian, gay, bisexual, and transgender studies must complete a minor in another field to be approved by the program director or major adviser of lesbian, gay, bisexual, and transgender studies.

Preparation for the Major. Six units selected from History 101, Psychology 101, Sociology 101, Television, Film and New Media 160, Women’s Studies 101, 102. (6 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 27 upper division units to include 15 units selected from Lesbian, Gay, Bisexual, and Transgender Studies 321, 322; History 406; English 450, 550, or Television, Film and New Media 470*; Lesbian, Gay, Bisexual, and Transgender Studies 598 or an international study abroad course*; and 12 elective units selected from General Studies 340; History 583; Journalism and Media Studies 410*; Psychology 355; Sociology 320, 420; Women’s Studies 360, 525; or any department 499 course (with approval of major adviser). Additional courses are acceptable with approval of the adviser.

* If more than one of these courses are completed, the additional course(s) will count as an elective.
* Additional prerequisites required.
Lesbian, Gay, Bisexual, and Transgender Studies Minor

(Minor Code: 49991) (SIMS Code: 119505)

Dr. Esther D. Rothblum, Department of Women's Studies, is adviser for this minor.

The interdisciplinary minor in lesbian, gay, bisexual, and transgender studies consists of a minimum of 15 units to include Lesbian, Gay, Bisexual, and Transgender Studies 321, 322, and nine units selected from Lesbian, Gay, Bisexual, and Transgender Studies 598, English 450, 550, General Studies 340, History 406, 583, Journalism and Media Studies 410*, Psychology 355*, Sociology 320, 420, Television, Film and New Media 470*, Women's Studies 360, 535, or any department 499 or upper division course with appropriate content with approval of minor adviser. Additional courses are acceptable with approval of minor adviser.

Courses in the minor may not be counted towards the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

* Additional prerequisites required.

Courses (LGBT)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSE

LGBT 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

LGBT 321. Lesbian and Gay Identities in the Modern World (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Interdisciplinary field of lesbian and gay studies with attention to social and political institutions and development of personal identity. Topics include discrimination, internalized homophobia, political activism, and diversity within lesbian, gay, bisexual, and transgendered community. (Formerly numbered General Studies 321.)

LGBT 322. Lesbian and Gay History and Culture (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Interdisciplinary field of lesbian and gay studies with attention to history and artistic expression. Topics include varying attitudes toward homosexuality in history, as well as literary, artistic, theatrical, and musical contributions of the lesbian, gay, bisexual, and transgendered community. (Formerly numbered General Studies 322.)

LGBT 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)

LGBT 598. Lesbian, Gay, Bisexual, and Transgender Studies Internship (3) Cr/NC
Prerequisite: Lesbian, Gay, Bisexual, and Transgender Studies major or minor. Lesbian, gay, bisexual, and transgender studies theories and scholarship to community service and activism. Internship includes 120 hours of work in local public and private agencies serving LGBT populations and working towards LGBT equality. Maximum credit six units.
**Liberal Studies**

**In the Division of Undergraduate Studies**

**OFFICE:** Liberal Studies Office (Administration 101)  
**TELEPHONE:** 619-594-5842 or 619-594-0597  
http://libst.sdsu.edu

**Faculty**  
Faculty assigned to teach liberal studies courses are drawn from the colleges at San Diego State University. The program is housed in the Division of Undergraduate Studies.

**Emeritus:** P. Roeder  
**Director:** Sharon F. Bendall (Division of Undergraduate Studies)

**Offered by the Division**  
Major in liberal studies with the B.A. degree in applied arts and sciences.  
- Emphasis in education-generalist.  
- Emphasis in elementary education.  
- Emphasis in mathematics.  
- Emphasis in science.

**The Major**  
The liberal studies major is designed for students who intend to teach at the elementary or middle school levels. Individuals learn to think critically, analyze evidence thoughtfully, and write clearly and effectively. Graduates develop a rich understanding of the major subject areas, including why and how practitioners create new knowledge. They learn to identify and understand the developmental stages of children and to observe, interview, and tutor children effectively in classroom settings.

Many of the lower and upper division core courses are specifically designed for future teachers, including children’s literature, linguistics, history, mathematics, science, visual and performing arts, physical education of children, and child development. The content covered in these courses closely matches the content that teachers will ultimately have to teach in the schools as well as the content assessed by the California Subject Examination for Teachers Multiple Subject (CSET-MS) examination.

Throughout the first three years, students work on critical thinking, research, and writing skills. During their second or third semester, they take Education 200, Teaching as a Profession. In this course, they complete 30 hours of fieldwork during which they critically assess issues related to teaching in culturally and linguistically diverse school settings, learn about career paths, and evaluate their occupational fitness for the teaching profession. During their junior year, students take Liberal Studies 300, Introduction to Liberal Studies, where they complete an additional 30 hours of fieldwork. They focus both on the nature of the disciplines—goals, processes, and evaluation—as well as how the knowledge being learned will ultimately be used in the classroom. During their senior year, students complete Liberal Studies 406, Assessment in Liberal Studies. This course supports students as they complete the liberal studies writing, research, and CSET-style assessments; the official CSET; and the application process for their credential program. They are strongly encouraged to save both syllabi and written work (examinations, projects, and other materials) from all their courses in preparation for the CSET and the senior-level assessment. These interdisciplinary courses plus the core subject matter courses provide a strong foundation for students’ future careers.

Students combine the above core coursework with a focus and, in some cases, an additional option in order to pursue specific interests and career goals as follows:

**Emphasis in Education-Generalist**
Preparation for teaching in elementary school.  
Open only to transfer students who have completed the Transfer Model Curriculum.  
- Focus in Literacy, Mathematics, or Science; no option.

**Emphasis in Elementary Education**  
Preparation for teaching regular education, special education, or bilingual education in elementary school or English in middle school.

- Focus in Literacy. Mathematics, or Science plus options in English as a second language, special education, bilingual education, or performing arts.

**Emphasis in Mathematics**
Preparation for teaching regular education in elementary school and/or mathematics in middle school.  
Focus in Mathematics plus option in Mathematics.

**Emphasis in Science**
Preparation for teaching regular education in elementary school and/or science in middle school.  
Focus in Science plus option in Science.

**Emphasis in Education-Generalist.** This emphasis is available only for transfer students who complete the California Community College Associate in Arts in Elementary Teacher Education (AA-T) degree and complete the Transfer Model Curriculum (TMC) for Liberal Studies/Integrated Teacher Education. Students choose a literacy, mathematics, or science focus; no option is required.

Students who choose the literacy focus in this emphasis complete the 32 units and specific coursework required to earn a Middle School Subject Matter Authorization in English, provided they earn a C or better in each course. When coupled with a multiple subject credential, this authorization allows individuals to teach elementary school or English in middle school if they so desire.

Students intending to transfer to liberal studies from local community colleges are strongly encouraged to use electives to complete courses equivalent to Exercise and Nutritional Sciences 241A, 241B; Mathematics 211; Mathematics Education 212; and Music 102, so that they will have elective units available if they wish to pursue a career option that requires additional coursework or prerequisites. Transfer students should not take focus or option courses prior to matriculating at San Diego State University.

**Emphasis in Elementary Education**
This emphasis is designed primarily for students who wish to teach at the elementary school level or pursue a career that requires an interdisciplinary liberal arts degree. Students complete both a focus and an option. The 18-21 unit focus provides an opportunity for students to explore the habits of mind and methods used in a chosen subject area as they develop both their depth and breadth of knowledge and experience. Three foci are available: literacy, mathematics, and science. The six to seven unit option helps students (a) earn the Basic Certificate in Teaching English as a Second or Foreign Language (when paired with a literacy), (b) begin preparation for the SDSU bilingual or special education credential programs, or (c) further explore the performing arts. This emphasis provides the greatest flexibility in meeting specific career goals or pursuing a variety of interests.

Students who choose the literacy focus develop depth in linguistics, literature, and theatre. The focus is designed so that they also complete the CSETs and specific coursework required to earn a Middle School Subject Matter Authorization in English, provided they earn a C or better in each course. When coupled with a multiple subject credential, this authorization allows individuals to teach English in middle school if they so desire.

Students who choose the mathematics or science focus learn to think like mathematicians or scientists as they build breadth and depth in their subject area. Once they have completed some of the coursework in their focus, they need to choose whether to take additional math or science courses or to complete one of the options described above. If they choose to take additional mathematics or science courses, they can qualify to teach middle school as described below under the mathematics or science emphases.

**Emphasis in Mathematics**
The demand for mathematics teachers continues to be high. Students complete the focus in mathematics described above plus a nine unit option in mathematics, which provide the 32 units and specific coursework required to earn a Middle School Subject Matter Authorization in mathematics; provided they earn a C or better in each course. When coupled with a multiple subject credential, this authorization allows individuals to teach mathematics in middle school if they so desire.

If students wish to further enhance their employability, they may attempt to pass the two CSET examinations—110 on algebra and 111 on geometry—required for a Foundational Level Mathematics certification. Graduates who pass these tests may choose to earn a multiple subject credential and add a single subject authorization by taking the extra, single subject mathematics methods course, Teacher Education 914. Those whose sole goal is to teach middle school, however, may choose to do the regular single subject credential program, which gives them the advantage of doing their student teaching in a middle
school or high school class. A single subject credential in Foundational Level Mathematics qualifies individuals to teach general mathematics, algebra, geometry, probability and statistics, and consumer mathematics at the middle school or high school level.

**Emphasis in Science.** The demand for middle school science teachers also continues to be high. Students complete the focus in science described above plus a seven to nine unit option in science, which provides the 32 units and specific coursework required to earn a Middle School Subject Matter Authorization in science provided they earn a C or better in each course. When coupled with a multiple subject credential, this authorization allows individuals to teach science in middle school if they so desire.

With proper selection of courses (Biology 101, 101L; Chemistry 200; and Physics 180A, 182A) and completion of a portfolio, this emphasis also leads to a Foundational Level General Science certification. This program was approved by the Commission on Teacher Credentialing in October 2011. Thus, students satisfy subject matter competency; they do not have to pass the CSET science tests—118 on earth science and physics and 119 on life science and chemistry. For maximum employability, graduates may choose to earn a multiple subject credential and add a single subject authorization by taking the extra single subject science methods course, Teacher Education 914. Graduates whose sole goal is to teach middle school if they so desire.

Middle School Subject Matter Authorization in science provided they earn a C or better in each course. When coupled with a multiple subject credential, this authorization allows individuals to teach science in middle school if they so desire. With proper selection of courses (Biology 101, 101L; Chemistry 200; and Physics 180A, 182A) and completion of a portfolio, this emphasis also leads to a Foundational Level General Science certification. This program was approved by the Commission on Teacher Credentialing in October 2011. Thus, students satisfy subject matter competency; they do not have to pass the CSET science tests—118 on earth science and physics and 119 on life science and chemistry. For maximum employability, graduates may choose to earn a multiple subject credential and add a single subject authorization by taking the extra single subject science methods course, Teacher Education 914. Graduates whose sole goal is to teach middle school, however, may choose to do the regular single subject credential program, which gives them the advantage of doing their student teaching in a sixth, seventh, or eighth grade classroom.

**Advising**

Advising is extremely important because students must make numerous decisions that include choosing their emphasis, focus, and option; selecting appropriate courses; and preparing for the senior-level assessments. See the website for current information, advising procedures, and email questions. Information about SDSU credential programs and financial aid opportunities is available at the College of Education, Office of Student Services, EBA-259, 619-594-6520, and in the Graduate Bulletin.

**Retention Policy**

The liberal studies program expects that all majors will make reasonable academic progress towards the degree. Liberal studies premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.7 may be removed from the premajor and placed in undeclared.

**Impacted Program**

The liberal studies major is an impacted program. To be admitted to the liberal studies major with an emphasis in elementary education, mathematics, or science, students must meet the following criteria:

- a. Complete a minimum of 60 transferable semester units;
- b. Have a cumulative GPA of 2.70 or higher;
- c. Complete all courses listed in Preparation for the Major sections for the liberal studies major;
- d. Complete with a grade of C or higher: a certified Area A1 Oral Communication course; a certified Area A3 Intermediate Composition and Critical Thinking course; Exercise and Nutritional Sciences 241A and 241B; and Mathematics 210 and 211. These courses cannot be taken for Credit/No Credit (Cr/NC);
- e. Earn a passing score on the SDSU Liberal Studies Mathematics Proficiency Assessment;
- f. Declare the liberal studies major by following the procedures explained on the website.

To complete the major, students must fulfill the degree requirements for the major and emphasis described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

To be admitted to the liberal studies major with an emphasis in Education-Generalist, students must complete the Transfer Model Curriculum (TMC) for Liberal Studies and satisfy criteria “a” and “b.”

**Major Academic Plans (MAPs)**

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

**Liberal Studies Major**

**With the B.A. Degree in Applied Arts and Sciences**

(Major Code: 49015)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

**Completion of the liberal studies major fulfills General Education requirements**.

A minor is not required for this major.

**International Experience Requirement.** In recognition of the increasing globalization in all sectors of world society, the Liberal Studies International Experience has been established. Students participate in designated, preapproved study abroad experiences in a different country. Options include a variety of short term and semester formats designed to meet the needs of different students, including those with family and work responsibilities. The purpose of the experience is to increase student awareness of cross-cultural and global issues – issues that are critical to their development as future teachers and citizens in a complex, rapidly changing world. All liberal studies majors are required to participate in an international experience approved by the adviser.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. One of the following courses:
   - Asian Studies 490;
   - General Studies 450;
   - Health and Human Services 350;
   - Honor 450;
   - International Security and Conflict Resolution 450;
   - Latin American Studies 450;
   - Liberal Studies 350 or 351;
   - Political Science 450.

**Lower Division Core (46-50 units)**

Students in the Elementary Education, Mathematics, and Science emphases must complete the following General Education and American Institutions requirements and Education 200.

**I. Communication and Critical Thinking: 9 units.** You may not use Credit/No Credit (Cr/NC) grades in this section.

1. Oral Communication (3 units). A grade of C or higher is required.
2. Composition (3 units).
3. Intermediate Composition and Critical Thinking (3 units). A grade of C or higher is required.

**II. Foundations of Learning: 28 minimum units.**

A. Natural Sciences and Quantitative Reasoning (10 units)

1. Biology 100 (3 units).
2. Geology 104 (3 units).
3. Biology 100L (1 unit).
4. Mathematics 210 (3 units). Complete with a grade of C or higher [cannot be taken for credit/no credit (Cr/NC)].

B. Social and Behavioral Sciences (6 minimum units)

1. Geography 106 (3 units).
2. Three to six units selected from Child and Family Development 170 (3 units); or Teacher Education 170 (3 units); or Psychology 101 and Psychology 230 (6 units).²

C. Humanities (12-13 units)

1. Literature: Three units selected from Comparative Literature 270A, 270B; English 220.
2. Visual and Performing Arts: Three units selected from Art 157, 259; Theatre 120.
3. History: History 100 (3 units).
4. Philosophy, Religious Studies, or Foreign Language.³ (3-4 units)

¹ See the General Education requirements in Communication and Critical Thinking.
² Upper division transfer students may substitute a transfer course equivalent to SDSU course Child and Family Development 270 in lieu of Teacher Education 170.
³ See the General Education requirement in Foundations of Learning IIC. Three to four units selected from 4. Philosophy or Religious Studies or 5. Foreign Language.
Emphasis in Elementary Education
(SIMS Code: 886456)

Preparation for the Major. Complete 46-50 units of lower division coursework including Exercise and Nutritional Sciences 241A, 241B (with a grade of C or higher); Mathematics 211 (with a grade of C or higher); Mathe-

matics Education 212; Music 102. Exercise and Nutritional Sciences 241A, 241B and Mathematics 211 may not be taken for Credit/No Credit (Cr/NC). (55.5-59.5 units)

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above or with a grade of C or better in Rhetoric and Writing Studies 280 or 281 before taking English 306W and earn a grade of C (2.0) or higher. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. All liberal studies majors are required to complete the international experience requirement.

Major including required focus and option (44.5-60 units).

Upper Division Core (34.5-35 units):

Liberal Studies: Liberal Studies 300, 303, 468 (0.5 - 1 units).

Mathematics and Science: Mathematics 3123, 313; Physics 412; Social and Behavioral Sciences: Linguistics 420.

Humanities: English 306A, 306W; History 411, 413; and six units selected from Art 387, Education 451, Music 343.

Focus (17-21 lower and upper division units). All students complete a focus in literacy, mathematics, or science. A minor or second major may not be substituted for a focus.

LITERACY (15 units): Six units selected from Linguistics 2533, 4503, 4523; three units selected from Theatre 310, 315; three units selected from Africana Studies 365A [or English 365A], 365B [or English 365B], American Indian Studies 430, Chicana and Chicano Studies 335 [or English 335], Comparative Literature 470, Women's Studies 352; three units selected from English 501, 502, or 503.

MATHEMATICS (15 units):

Breadth Course: Linguistics 2533 [or Rhetoric and Writing Studies 253].

Mathematics Courses: Mathematics 141, 302, 413; three units selected from Statistics 119 or 250.

SCIENCE (14-15 units):

Breadth Course: Linguistics 2533 [or Rhetoric and Writing Studies 253].

Science Courses: Geological Sciences 412 (4 units). Teacher Education 211B (1 unit); three units selected from Biology 324 or 327; three to four units selected from Chemistry 100 (4 units) or Geological Sciences 503.

The statewide TMC in liberal studies includes courses equivalent to the Lower Division Core completed by students in the Elementary Education, Mathematics, and Science emphases with the following distinctions: a) courses equivalent to Music 151 and Theatre 100 are additional choices for the Music and Performing Arts requirement and b) a fourth General Education Humanities philosophy, religious studies, or foreign language course is not required. The focus for the Education-Generalist emphasis does not include a breadth requirement for Chemistry 308 or Natural Science 100 because this requirement is part of the TMC.

Students must pass the Liberal Studies Mathematics Proficiency Assessment prior to enrolling in Mathematics 312 and 313. Students may substitute Special Education 527 if seeking a special education credential. Students must pass the Lower Division Core completed by students in the Elementary Education, Mathematics, and Science emphases with the following distinctions: a) courses equivalent to Music 151 and Theatre 100 are additional choices for the Music and Performing Arts requirement and b) a fourth General Education Humanities philosophy, religious studies, or foreign language course is not required. The focus for the Education-Generalist emphasis does not include a breadth requirement for Chemistry 308 or Natural Science 100 because this requirement is part of the TMC.

Students must pass the Liberal Studies Mathematics Proficiency Assessment prior to enrolling in Mathematics 312 and 313. Students may substitute Special Education 527 if seeking a special education credential. Students must pass the Lower Division Core completed by students in the Elementary Education, Mathematics, and Science emphases with the following distinctions: a) courses equivalent to Music 151 and Theatre 100 are additional choices for the Music and Performing Arts requirement and b) a fourth General Education Humanities philosophy, religious studies, or foreign language course is not required. The focus for the Education-Generalist emphasis does not include a breadth requirement for Chemistry 308 or Natural Science 100 because this requirement is part of the TMC.

Students must pass the Liberal Studies Mathematics Proficiency Assessment prior to enrolling in Mathematics 312 and 313. Students may substitute Special Education 527 if seeking a special education credential. Students must pass the Lower Division Core completed by students in the Elementary Education, Mathematics, and Science emphases with the following distinctions: a) courses equivalent to Music 151 and Theatre 100 are additional choices for the Music and Performing Arts requirement and b) a fourth General Education Humanities philosophy, religious studies, or foreign language course is not required. The focus for the Education-Generalist emphasis does not include a breadth requirement for Chemistry 308 or Natural Science 100 because this requirement is part of the TMC.

Students must pass the Liberal Studies Mathematics Proficiency Assessment prior to enrolling in Mathematics 312 and 313. Students may substitute Special Education 527 if seeking a special education credential. Students must pass the Lower Division Core completed by students in the Elementary Education, Mathematics, and Science emphases with the following distinctions: a) courses equivalent to Music 151 and Theatre 100 are additional choices for the Music and Performing Arts requirement and b) a fourth General Education Humanities philosophy, religious studies, or foreign language course is not required. The focus for the Education-Generalist emphasis does not include a breadth requirement for Chemistry 308 or Natural Science 100 because this requirement is part of the TMC.

Students must pass the Liberal Studies Mathematics Proficiency Assessment prior to enrolling in Mathematics 312 and 313. Students may substitute Special Education 527 if seeking a special education credential. Students must pass the Lower Division Core completed by students in the Elementary Education, Mathematics, and Science emphases with the following distinctions: a) courses equivalent to Music 151 and Theatre 100 are additional choices for the Music and Performing Arts requirement and b) a fourth General Education Humanities philosophy, religious studies, or foreign language course is not required. The focus for the Education-Generalist emphasis does not include a breadth requirement for Chemistry 308 or Natural Science 100 because this requirement is part of the TMC.
Emphasis in Mathematics  
(SIMS Code: 886457)

Preparation for the Major. Complete 46-50 units of lower division core and Exercise and Nutritional Sciences 241A, 241B (complete with a grade of C or higher); Mathematics 211 (complete with a grade of C or higher); Mathematics Education 212; Music 102. Exercise and Nutritional Sciences 241A, 241B and Mathematics 211 may not be taken for Credit/No Credit (Cr/NC). (Note: lower division units).

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above or with a grade of C or better in Rhetoric and Writing Studies 280 or 281 before taking English 306W and earn a grade of C (2.0) or higher. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. All liberal studies majors are required to complete the international experience requirement. Major including required focus and option (43.5-47 units).  
[Note: plus additional lower division units]

Upper Division Core (34.5-35 units):

Liberal Studies: Liberal Studies 300, 498 (0.5 - 1 unit).
Mathematics and Science: Mathematics 312, 313; Physics 412.
Social and Behavioral Sciences: Linguistics 420.

Humanities: English 306A, 306W; History 411, 413; and six units selected from Art 387, Education 451, Music 343.

Mathematics Focus (18 units): [Note: lower and upper division units].

Breadth Courses: Chemistry 308 [Imperial Valley only] or Natural Science 100; Linguistics 253 or Rhetoric and Writing Studies 253.

Mathematics Courses: Mathematics 141, 212, 312, 313; three units selected from Statistics 119 or 250.

Mathematics Option (9 units): [Note: lower and upper division units].

Mathematics 150 (4 units), 241 entitled “Mathematics Software Workshop: Geometers Sketchpad” (1 unit), 303; Teacher Education 211A (1 unit).

Students must pass the Liberal Studies Mathematics Proficiency Assessment prior to enrolling in Mathematics 312 and 313. Verify with a liberal studies adviser.

Emphasis in Science  
(SIMS Code: 886458)

Preparation for the Major. Complete 46-50 units of lower division core and Exercise and Nutritional Sciences 241A, 241B (complete with a grade of C or higher); Mathematics 211 (complete with a grade of C or higher); Mathematics Education 212; Music 102. Exercise and Nutritional Sciences 241A, 241B and Mathematics 211 may not be taken for Credit/No Credit (Cr/NC). (Note: lower division units).

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above or with a grade of C or better in Rhetoric and Writing Studies 280 or 281 before taking English 306W and earn a grade of C (2.0) or higher. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. All liberal studies majors are required to complete the international experience requirements. Major including required focus and option (38.5-46 units).

Upper Division Core (34.5-35 units): [Note: plus additional lower division units]

Liberal Studies: Liberal Studies 300, 498 (0.5 - 1 unit).
Mathematics and Science: Mathematics 312, 313; Physics 412.
Social and Behavioral Sciences: Linguistics 420.
Humanities: English 306A, 306W; History 411, 413; and six units selected from Art 387, Education 451, Music 343.

Science Focus (18-19 units): [Note: lower and upper division units].

Breadth Courses: Chemistry 308 [Imperial Valley only] or Natural Science 100; Linguistics 253 or Rhetoric and Writing Studies 253.

Science Courses: Chemistry 100 (4 units); Geological Sciences 412 (4 units); Teacher Education 211B (1 unit); three to four units selected from Biology 101 and 101L (4 units) or Rhetoric and Writing Studies 253.

Physics Option (7-9 units): [Note: lower division units].

Physics 180A (3 units); three to five units selected from Chemistry 130 (3 units), 200 (5 units); one additional lower or upper division unit of science selected from Physics 182A (1 unit) or an alternative course selected with approval of adviser.

1 Students who select Biology 101 and 101L - consult with a Liberal Studies adviser.
2 Students must pass the Liberal Studies Mathematics Proficiency Assessment prior to enrolling in Mathematics 312 and 313.
3 Verify with a liberal studies adviser.
4 Required for Foundational Level General Science certification. A portfolio assessment is also required. See science adviser.

Courses (LIB S)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSE

LIB S 296. Experimental Topics (1-4)  
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES (intended for undergraduates)

LIB S 300. Introduction to Liberal Studies (3)  
Prerequisites: Education 200 and preparation for the major completed or to be completed concurrently.

Introduction to ideas, structures, and values within and among the various disciplines in this interdisciplinary major. Exploration of issues of diversity in contemporary society through directed field experience and required readings. Individual qualitative evaluation process required by major included.

LIB S 350. International Experience-Fieldwork (1) Cr/NC  
(Offered only in the College of Extended Studies)  
Prerequisite: Concurrent registration in a three unit faculty led international experience lecture course.

International experience. Guided fieldwork in host country to include observations and tutoring suitable to content of concurrent three unit lecture course. Maximum credit two units.

LIB S 351. International Experience-Mexicali (1) Cr/NC  
(Offered only in the College of Extended Studies)  
Prerequisite: Completion of the General Education requirement in Communication and Critical Thinking 1.3., Intermediate Composition and Critical Thinking.

International experience in Mexicali, Mexico. History and culture of region, microcredit businesses to include bee keeping, border issues, education in Baja California. Service learning project.

LIB S 498. Assessment in Liberal Studies (0.5-1) Cr/NC  
Prerequisites: Senior standing and Liberal Studies 300. Not open to premajors.

Senior assessment including reflections upon educational experiences in each subject area and role as future educator. Students will explore differences between subject areas and reflect upon learning and teaching.

LIB S 499. Special Study (1-3)  
Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.
Linguistics
In the College of Arts and Letters

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
http://www-rohan.sdsu.edu/dept/linguist/index.html

Faculty
Chair: Osman
Professors: Csomay, Gawron, Higurashi, Kaplan, Osman, Poole, Zhang
Associate Professors: Keating, Kitajima, Malouf, Samraj, Wu
Assistant Professors: Bigham, Hansen

Offered by the Department of Linguistics and Asian/Middle Eastern Languages
Master of Arts degree in linguistics.
Minor in linguistics.
Minor in teaching English as a second or foreign language (TESL/TEFL).
Certificate in computational linguistics.
Certificate in teaching English as a second or foreign language (TESL/TEFL), basic and advanced.

The Major
Linguistic 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, socio-linguistics, psycholinguistics, bilingualism, computational linguistics, and the linguistics of certain languages and language families.

Linguistics majors must complete a minor in another field approved by the adviser in linguistics. Recommended fields include anthropology, communication, ethnic studies, a foreign language, history, journalism and media studies, literature, philosophy, psychology, public affairs, sociology, and speech, language, and hearing sciences.

In addition to the major and minor programs, the Department of Linguistics and Asian/Middle Eastern Languages offers two basic certificate programs. The Basic Certificate in Computational Linguistics prepares students for employment as computational linguists in commercial and government settings. The Basic Certificate in Teaching English as a Second or Foreign Language (TESL/TEFL) prepares students to teach English as a second language in adult and private schools and to teach English in foreign countries.

Employment opportunities for linguistics majors exist in the teaching of English as a second language to immigrant and refugee population groups in various locales throughout the southwestern United States. In addition, many students are interested in teaching English in Latin America, the Far East, or other areas outside the United States and continental Europe. Linguistics training can also be used as a valuable skill in conjunction with a California teaching credential in another field. Government work is another alternative, where such divisions as the State Department and the foreign service hire trained linguists. Researchers are needed at institutes working in the fields of animal communication, computer science development, disorders of communication, or advanced research in linguistics theory. By combining a linguistics major with courses in accounting, business administration, or related fields, there are jobs available with multinational corporations, particularly those which emphasize trade among the Pacific rim nations. Linguists are also hired in such fields as computer science, advertising, communication media, public relations, and curriculum development.

With a master’s or doctoral degree, linguistics majors may find teaching positions at community colleges or universities.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The linguistics major is an impacted program. To be admitted to the linguistics major, students must meet the following criteria:

- Complete preparation for the major.
- Complete a minimum of 60 transferable semester units.
- Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Linguistics Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15051) (SIMS Code: 114701)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in linguistics courses can apply to the degree.

Students majoring in linguistics must complete a minor in another field approved by the departmental adviser in linguistics. Recommended fields include anthropology, communication, ethnic studies, a foreign language, history, journalism and media studies, literature, philosophy, psychology, public affairs, sociology, and speech, language, and hearing sciences.

Preparation for the Major: Linguistics 101 (3 units)

Students should note that a number of the upper division required and recommended courses listed below have lower division prerequisites, but these prerequisites do not constitute requirements per se for the completion of the major.

Language Requirement. Competency equivalent to that which is normally attained through three college semesters of a foreign language with a C (2.0) average, or the equivalent. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or Linguistics 305W, or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 27 upper division units to include at least 21 units in linguistics (and those 21 must include Linguistics 420 or 501, 521, 522, and 525; and cannot include more than nine units from 300-level courses); with the approval of the adviser, up to six units may be selected from related fields.
Linguistics Minor
(Minor Code: 15051) (SIMS Code: 114701)

The minor in linguistics consists of a minimum of 15 units, 12 of which must be upper division and at least 12 of which must be linguistics courses selected under the guidance and with the approval of the adviser. Linguistics 101 or 420 or 501 is required. Linguistics 100, 200, and 305W may not be applied to the minor. No more than three units may be applied to the minor from Anthropology 410, Communication 465, Philosophy 534, Spanish 448.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Teaching English as a Second or Foreign Language (TESL/TEFL) Minor
(Minor Code: 15051) (SIMS Code: 114707)

The minor in teaching English as a second or foreign language consists of a minimum of 15 units to include Linguistics 420 or 501; Linguistics 430 or 530 or 551; Linguistics 452 or 454 or 552; Linguistics 550; Linguistics 555 or 556. Students must also complete 15 hours of ESL tutoring.

Courses in the minor may not be counted toward the linguistics major or the TESL/TEFL certificate, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Computational Linguistics Basic Certificate
(SIMS Code: 114787)

The Department of Linguistics and Asian/Middle Eastern Languages offers a basic Certificate in Computational Linguistics. The certificate requires 12 units to include:

- Introductory Linguistics: Linguistics 420 or 501;
- Scripting and Linguistic Databases (corpora): Linguistics 571;
- Introduction to Computational Linguistics: Linguistics 581;
- Mathematical Tools: Linguistics 570.

Students must obtain a “C” or better in each of the certificate courses. Under certain circumstances comparable courses taken at other institutions may count toward the certificate. Such courses must be evaluated and approved by the certificate adviser. In order to enroll, you must contact the certificate adviser in the Department of Linguistics and Asian/Middle Eastern Languages. Courses in the certificate may count toward the major or the TESL/TEFL certificate, but may be used to satisfy preparation for the major and general education requirements, if applicable.

Teaching English as a Second or Foreign Language (TESL/TEFL) Basic Certificate
(SIMS Code: 114786)

The Department of Linguistics and Asian/Middle Eastern Languages offers a basic and advanced Certificate in Teaching English as a Second or Foreign Language (TESL/TEFL). The basic certificate requires 15 units to include:

- Introductory Linguistics: Linguistics 420 or 501;
- Language Acquisition: Linguistics 452 or 454, or 552;
- ESL Teaching: Linguistics 550;
- Practical Issues/Computer Assisted Language Learning: Linguistics 555 or 556;
- Elective: Linguistics 430 or 530 or 551.

Students must obtain a “C” or better in each of the certificate courses. Under certain circumstances comparable courses taken at other institutions may count toward the certificate. Such courses must be evaluated and approved by the certificate adviser. In addition, there is a 15-hour tutoring requirement. In order to enroll, you must contact the certificate adviser in the Department of Linguistics and Asian/Middle Eastern Languages. Courses in the certificate may count toward the major in linguistics, the major in English, or the major in liberal studies (including the linguistics specialization) but may not count toward the minor in linguistics or the minor in Teaching English as a Second or Foreign Language (TESL/TEFL).

Refer to the Graduate Bulletin for information on the advanced certificate.

Courses (LING)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

LING 94. Developmental Writing for International or Bilingual Students (3) Cr/NC
(Same course as Rhetoric and Writing Studies 94)

Prerequisites: A score of 146 and below on the EPT, and nonnative English speakers.

Intermediate written English with emphasis on problems of nonnative speakers: discussion of sentence, paragraph, and essay writing skills. Open only to ESL students who have not satisfied the SDSU Writing Competency requirement. Students earning a grade of “Cr” satisfy the SDSU writing competency requirement. Students receiving a “NC” should re-enroll in Rhetoric and Writing Studies 94 or Linguistics 94.

LING 100. English Composition for International Students (3) [GE]

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

Introduction to college-level written English; attention to English language/grammar needs of non-native speakers of English; grammatical and rhetorical techniques for effective writing, based in part on study of models of current American writing. Not open to students with credit in a higher-numbered composition course or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Rhetoric and Writing Studies 100 or 101.

LING 101. Introduction to Language (3) [GE]

The nature of language. Sound, meaning, and grammar. Language history and change. Dialects and variation. Language acquisition. Animal communication. Language and the brain. Not open to students with credit in upper division linguistics courses, excluding Linguistics 305W.

LING 200. Advanced English for International Students (3) [GE]

Prerequisites: Satisfaction of the English Placement Test and Writing Competency requirements; and Linguistics 100. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Further practice in mastering conventions of standard academic writing, with emphasis on strategies for research in writing papers. Focus on language issues specific to non-native speakers of English. Not open to students with credit in Africana Studies 200, Chicana and Chicano Studies 200, English 200, or Rhetoric and Writing Studies 200.

LING 243. Invented Languages – Klingon and Beyond! (3) [GE]

Prerequisite: Rhetoric and Writing Studies 100.

Invented languages such as Klingon and Esperanto are the medium for engaging linguistic theory and diversity. The art, ideas, and goals behind invented languages will be explored using diverse current and historical sources from literature, the Internet, film, and video games.

LING 250. Directed Language Study (1-4)

Prerequisite: Consent of instructor.

Directed independent study of a foreign language (excluding languages taught in other departments) with aim of acquiring a developing competency in the language. May include speaking, listening, reading, writing, and grammar. May be repeated with approval of undergraduate adviser. Maximum credit eight units.
LING 253. Grammar and Usage for Writers (3)  
(Same course as Rhetoric and Writing Studies 253)  
Prerequisite: Passage of EPT.  
Instruction in sentence structure with attention to integrating sentences into their logical and rhetorical contexts. Identifying and understanding source of sentence-level writing problems.

LING 281. Academic Reading and Writing for Second Language Learners and International Students (3)  
(Same course as Rhetoric and Writing Studies 281)  
Prerequisite: Open only to students who qualify for Rhetoric and Writing Studies 280 and whose first language is not English. Academic prose, emphasizing purposes, structures, and styles of academic English writing. Designed to improve students' ability to plan, draft, revise, and edit essays, as well as to read and analyze complex academic texts. Additional emphasis on grammatical features of English relevant to the second language population.

LING 296. Experimental Topics (1-4)  
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

LING 299. Special Study (1-4)  
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

UPPER DIVISION COURSES  
(Intended for Undergraduates)

LING 305W. Advanced Composition for International Students (3)  
Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a 2 or higher in RWS 280, 281, or LING 281 if scores on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Advanced expository writing, with practice in the various writing skills (planning, organization, research, presentation, rhetoric). The goal is to enable non-native English speakers to function completely with written English on advanced university levels. This course may not be used toward the major or minor in linguistics.

LING 345. Queer Linguistics (3)  
(Same course as Africana Studies 345)  
Prerequisite: Linguistics 101 or 420 and upper division standing. Queer theory in linguistics and the recognition of specifically queer speakers in general linguistics: theory and practice.

LING 350. Language and Politics (3)  
(Same course as Africana Studies 350)  
Prerequisite: Consent of instructor. Specialized study of a selected topic in linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

LING 352. Language and Advertising (3)  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Linguistic devices used to persuade in politics. Differences between what is actually said and what is actually conveyed in political discourse. How political speakers and writers use grammar, sound structure, and vocabulary to persuade.

LING 354. Language and Computers (3)  
(Same course as Africana Studies 354)  
Prerequisite: Passage of EPT. Computers, computer programming languages, and "artificial intelligence" viewed from perspective of human language.

LING 363. Sociocultural Analysis of Black Languages (3)  
(Same course as Africana Studies 363)  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Social and cultural functions of Black languages, verbal and nonverbal, in Afro-American life, and their profound impact on larger society. Also, a probe into issues concerning validity of Black English.

LING 420. Linguistics and English (3)  
(Same course as American Indian Studies 420)  
Prerequisite: Consent of instructor. Introduction to sound and grammatical structure of language, with special attention to English. Language acquisition and variation. Of special interest to prospective teachers. Not open to students with credit in Linguistics 520.

LING 430. English Grammar for Prospective Teachers (3)  

LING 452. Language Acquisition (3)  

LING 454. Second Language Acquisition (3)  

LING 457. Community-Based Language Fieldwork (1)  
Prerequisite: Concurrent registration in upper division course requiring term paper on language behavior (e.g. Linguistics 452). Fieldwork in language use in community setting. Students observe, keep field notes, analyze language behavior (e.g. speaking, reading, writing, listening).

LING 460. American Indian Languages (3)  
(Same course as American Indian Studies 460)  
(Same course as Anthropology 460)  
Prerequisite: Consent of instructor. Specialized study of a selected topic in linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

LING 499. Special Study (1-3)  
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.
Linguistics

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

LING 501. Fundamentals of Linguistics (3)
Prerequisite: Upper division standing.
Principles of modern linguistics, with attention to English phonetics, phonology, morphology, syntax, semantics and pragmatics; universals and typology. (Formerly numbered Linguistics 520.)

LING 502. Language in Mind and Society (3)
Prerequisite: Linguistics 501. Proof of completion of prerequisite required: Copy of transcript.
Child language acquisition, adult language production/comprehension and sociolinguistics. Dialects, language variation, and standardization. Bilingualism and language change.

LING 503. Functions of Language (3)
Prerequisite: Linguistics 501. Proof of completion of prerequisite required: Copy of transcript.

LING 505. Writing for Graduate Students (3)
Prerequisite: Conditional or classified admission to an SDSU graduate program or undergraduates with consent of instructor.
Conventions of scholarly writing appropriate for student papers, theses, or academic journal articles. Development of research questions and literature reviews as appropriate for students' disciplines. Revision of current or previous course papers according to disciplinary conventions.

LING 521. Phonology (3)
Prerequisite: Linguistics 420 or 501.
Theoretical principles of transformational-generative phonology.

LING 522. Syntax (3)
Prerequisite: Linguistics 420 or 501.
Theoretical principles of transformational-generative syntax.

LING 523. Morphology (3)
Prerequisite: Linguistics 420 or 501.
Theoretical principles of words structure, including inflection, derivation, and compounding; organization of the lexicon; structure of inflectional paradigms; morphophonological and morphosyntactic alterations; and computational applications.

LING 525. Semantics and Pragmatics (3)
Prerequisite: Linguistics 420 or 501.
Advanced semantic theory; systematic analysis of the interaction of sequences of language with real world context in which they are used.

LING 526. Discourse Analysis (3)
Prerequisite: Linguistics 420 or 501.
Theories of discourse structure. Text and context. Frameworks for analyzing written and spoken discourses such as genre analysis, conversation analysis, critical discourse analysis, discourse and grammar, speech act theory, and corpus linguistics. Applications of discourse analysis such as cross-cultural misunderstanding.

LING 530. English Grammar (3)
Prerequisite: Six upper division units in linguistics.
English morphology, syntax, and discourse structure, including simple and complex sentence structure; lexical categories and subcategories; discourse functions of selected constructions. Problems and solutions in teaching English grammar.

LING 550. Theory and Practice of English as a Second Language (3)
Prerequisite: Linguistics 101, 420, or 501.
The nature of language learning; evaluation of techniques and materials for the teaching of English as a second language.

LING 551. Sociolinguistics (3)
Prerequisite: A course in introductory linguistics.
Investigation of the correlation of social structure and linguistic behavior.

LING 552. Psycholinguistics (3)
Prerequisite: Linguistics 420 or 501.
Psychological and mental processes related to comprehension, production, perception, and acquisition of language in adults and children.

LING 554. Child Language Acquisition (3)
Prerequisite: Linguistics 420 or 501.
Theory and practice of computer assisted language learning and language teaching. Hands-on experience with pedagogical aspects of using technology in the language classroom.

LING 570. Mathematical Linguistics (3)
Prerequisite: Two linguistics courses.
Mathematical tools for linguistics: set theory; basic algebraic structures such as groups, lattices, and Boolean algebras; formal language theory; propositional and 1st-order logic. Some emphasis on proofs. Applications to linguistics.

LING 571. Computational Corpus Linguistics (3)
Prerequisite: Upper division or graduate standing.
Practical introduction to computation with text corpora and introduction to Python. Tokenizing, part-of-speech tagging, and lemmitizing (stemming) large corpora. Writing of Python programs required.

LING 572. Python Scripting for Social Science (3)
Prerequisite: Upper division or graduate standing.

LING 581. Computational Linguistics (3)
(Same course as Computer Science 581)
Prerequisites: Linguistics 570 or Mathematics 245, Linguistics 571 or Computer Science 320.

LING 596. Selected Topics in Linguistics (1-3)
Prerequisite: Upper division standing.
Advanced study of selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 596A applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Management
In the College of Business Administration

OFFICE: Student Services East 3356
TELEPHONE: 619-594-5306 / FAX: 619-594-3272
A Member of the AACSB International—The Association to Advance Collegiate Schools of Business.

Faculty
Emeritus: Atchison, Belasco, Brady, Butler, Dunn, Ehrlich, Hampton, Hergert, Mitton, Naughton, Robbins, Shore, Wright
Chair: Rhyne
Professors: Chung-Herrera, De Noble, Ryan, Sundaramurthy
Associate Professors: Dean, Ehrhart, Francis, Musteen, Randel, Rhyne, Zheng
Assistant Professors: Ahsan, Fernandez
Lecturers: Robbins, Samwald

Offered by the Department
Master of Science degree in business administration,
Master of Business Administration,
Major in management with the B.S. degree in business administration,
Major in general business with the B.S. degree in business administration. See Business Administration.
Minor in entrepreneurship.
Minor in management.

The Major
Management is defined as the process of administering and coordinating resources in an effective and efficient manner to achieve the goals of an organization. Managers plan, organize, lead, and control:

• Planning deals with the establishment of goals;
• Organizing involves the determination of tasks to be done, who will do them, and how they will be organized;
• Leading is the function that directs members of a work group to achieve the goals of the organization; and
• Controlling involves the identification of deviations between planned and actual outcomes of the organization.

Major areas within management include international business, entrepreneurship, human resource management, and corporate governance. Recent studies indicate that the demand for professional managers will continue to increase. Typical careers include:

• Organization and management analysts design and evaluate strategy, structure, and culture;
• International managers supervise foreign-based manufacturing and/or marketing operations for American companies;
• Entrepreneurs start new ventures or create new ventures within an existing organization;
• Human resource management analysts/administrators function as recruiters, trainers, compensation and benefits specialists, labor relations specialists, and ethical officers for the organization;
• Top managers lead organizations and may share power and responsibility with directors, investors, and employees.

Business Honors Program
The Business Honors Program offers excellent upper division business students the opportunity to explore issues in our local, regional, and global business environments focusing on the social and ethical responsibility that business has to the community and society. Honors students will enroll in a one unit business honors seminar each semester. During their enrollment they will participate in activities to promote their academic and personal growth, documenting their work in a written portfolio.

Generally, students should apply to this program at the time of application to upper division business. Applicants must submit an essay with their application. Applicants must have a 3.6 cumulative GPA or good standing in the Weber Honors College. Students not meeting these requirements may petition for admission to the program. Successful completion of the Business Honors Program will be recognized at graduation. Contact Dr. Robert A. Judge, Department of Management Information Systems, for more information about this program.

Statement on Computers
Before enrolling in upper division courses in the College of Business Administration, students must be competent in the operation of personal computers, including word processing and spreadsheets. Business students are strongly encouraged to have their own computers capable of running word processing, spreadsheet, presentation, e-mail, and Internet applications such as those found in packages sold by major software publishers. Availability of on-campus computing resources can be limited due to increasing demand across the university.

Retention Policy
The College of Business Administration expects that all business students will make reasonable academic progress towards the degree. Business premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.9 may be removed from the premajors and placed in undeclared. Upper division business majors earning less than a 2.0 average in their major GPA for two consecutive semesters may be removed from business and placed in undeclared.

Business Passport
All majors in the College of Business Administration will be introduced to the Business Passport in Business Administration 310, and complete the Business Passport in the capstone course (Business Administration 404, 405, or 458). Contact the Business Advising Center (EBA-448), 619-594-5628, for more information.

Transfer Credit
Lower Division: Courses clearly equivalent in scope and content to San Diego State University courses required for minors or as preparation for all business majors will be accepted from regionally accredited United States institutions and from foreign institutions recognized by San Diego State University and the College of Business Administration. Upper Division: It is the policy of the San Diego State University College of Business Administration to accept upper division transfer credits where (a) the course content, requirements, and level are equivalent to San Diego State University courses and (b) where the course was taught in an AACSB International—The Association to Advance Collegiate Schools of Business accredited program. Exceptions require thorough documentation evidencing the above standards.

Impacted Program
The management major is impacted. Before enrolling in any upper division courses in business administration, students must advance to an upper division business major and obtain a business major code. To be admitted to an upper division business major (accounting, finance, financial services, real estate, information systems, management, or marketing), students must meet the following criteria:

a. Complete with a grade of C or higher: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290 (RWS 290 is not required for the accounting major); and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (CR/NC);

b. Complete a minimum of 60 transferable semester units;

c. Have a cumulative GPA of 2.9.

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Students who meet all requirements except the GPA may request to be placed on the waiting list. Waitlist spaces are filled on a first-come, first-served basis by eligible students, if there is room in the program after all the fully-qualified students have been accommodated, students will be admitted from the waiting list in GPA order. Contact the Business Advising Center (EBA-448), 619-594-5828, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

**Major Academic Plans (MAPs)**

Visit [http://www.sdsu.edu/mymap](http://www.sdsu.edu/mymap) for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

**Management Major**

With the B.S. Degree in Business Administration

(Major Code: 05061) (SIMS Code: 222557)

A minor is not required with this major.

**Preparation for the Major.** Complete with a grade of C or higher: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved lower division course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201. (27 units)

These prerequisite courses may not be taken 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.

**Graduation Writing Assessment Requirement.** Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

**Major.** Students may elect to major in management or to complete the management major with a specialization in human resource management or entrepreneurship.

Forty-four upper division units consisting of Management 352, 357, 358, 401, 444, 475; Business Administration 300, 310, 323, 350, 360, 370, 405; Management Information Systems 301; and six units selected from Management 353, 355, 452, 455, 459, 460, 461, 462, 463, 464, 467, 498. A "C" (2.0) average or better is required in the courses stipulated here for the major.

**Specialization in Entrepreneurship**

(SIMS Code: 222564)

Forty-four upper division units consisting of Management 358, 401, 444, 460, 475; Business Administration 300, 310, 323, 350, 360, 370, 405; Management Information Systems 301; and nine units selected from Management 353, 355, 452, 455, 459, 498, Journalism and Media Studies 480. A "C" (2.0) average or better is required in the courses stipulated here for the major.

**Specialization in Human Resource Management**

(SIMS Code: 222563)

Forty-four upper division units consisting of Management 352, 401, 444, 461, 462, 475; Business Administration 300, 310, 323, 350, 360, 370, 405; Management Information Systems 301; and six units selected from Management 463, 464, 466, 467, 498. A "C" (2.0) average or better is required in the courses stipulated here for the major.

**Entrepreneurship Minor**

(SIMS Code: 222565)

The minor in entrepreneurship consists of 15 units to include Accountancy 201; Management 358, 460; one course selected from Management 353, 355, 452, 455, 459, Finance 328; and one or two courses selected from the following preapproved electives:


Students will be required to participate in at least one experiential component. See list of options in the Business Advising Center (EBA-448).

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Students with a major in the College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Business Advising Center (EBA-448). The entrepreneurship minor is not open to management majors.

Students must meet the prerequisites for the minor in effect at the time they declare the minor. Before declaring the minor, students must attend an advising session with the entrepreneurship minor adviser and have the faculty sign the advising form. Contact the Business Advising Center (EBA-448) for admissions criteria and procedures.

*Accountancy 201 waived for Business Administration, Hospitality and Tourism Management, and International Business majors.

**Management Minor**

(SIMS Code: 222559)

For all majors outside of the College of Business Administration, Hospitality and Tourism Management, and International Business, the minor in management consists of a minimum of 22 units to include Accountancy 201; Business Administration 300, 350, Economics 101, 102; Management 352, 357 or 358, and 444.

For all majors in the College of Business Administration, Hospitality and Tourism Management, and International Business, the minor in management consists of a minimum of 15 units to include Accountancy 201; Management 352, 357 or 358, 444, and one upper division course in management.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. Students with a major in the College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Business Advising Center (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Business Advising Center (EBA-448) for admissions criteria and procedures.
Courses (MGT)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

MGT 202. Business Professions (1) Cr/NC
Students explore career options, analyze and evaluate career decisions through self assessment and career research. Computer programs and resources in Career Services library used to identify potential career.

MGT 296. Experimental Topics (1–4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES

(Intended for Undergraduates)

MGT 352. Human Resource Management (3)
Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisites required: Copy of transcript.
Acquisition, development, maintenance, and termination of human resources in accordance to goals of the organization.

MGT 353. Creativity and Innovation (3)
Prerequisite: Business Administration 350. Proof of completion of prerequisite required: Copy of transcript.
Managing creativity, including selling creative ideas to others, scanning for new opportunities, taking creativity to the marketplace, and creating an organizational culture for innovation. (Formerly numbered Management 453.)

MGT 355. International Entrepreneurship (3)
Prerequisite: Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisite required: Copy of transcript.
Launch of and managing an international entrepreneurial venture. Search and identification of opportunities in foreign markets, logistics of international business expansion, cross-cultural business communication, and international networking. (Formerly numbered Management 456.)

MGT 357. Multinational Business and Comparative Management (3)
Prerequisite: Business Administration 350. Proof of completion of prerequisite required: Copy of transcript.
Process of initiating, expanding, purchasing, and consolidating businesses. Concepts, theories, and techniques of managerial innovation and implementation.

MGT 358. Fundamentals of Entrepreneurship (3)
Prerequisite: Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisite required: Copy of transcript.
Context of international business, environment, institutions, and business practices. Cultural awareness, sensitivity, interpersonal, and leadership skills needed in an international context.

MGT 359. Multinational Business and Comparative Management (3)
Prerequisite: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisite required: Copy of transcript.

MGT 401. Business Internship (3) Cr/NC
Prerequisites: Business Administration 350 and consent of faculty adviser. Proof of completion of prerequisites required: Copy of transcript.
Internship with business firms, nonprofit organizations, or government agencies. Work done under joint supervision of intern organization and course instructor.

MGT 444. Business Ethics and Corporate Governance (3)
Prerequisites: Business Administration 300, 303. Proof of completion of prerequisites required: Copy of transcript.
Corporate social responsibility, stakeholder theory, morality of capitalism, and corporate governance. Ethical theory and its application to ongoing issues and current events within the business context. (Formerly numbered Management 356.)

MGT 452. Family Business Management (3)
Prerequisite: Management 358. Proof of completion of prerequisite required: Copy of transcript.
Managing a family owned business. Succession planning, governance, strategy and family dynamics of mixing family and business roles, non-family employees, and culture.

MGT 455. Social Entrepreneurship (3)
Prerequisite: Management 358. Proof of completion of prerequisite required: Copy of transcript.
Entrepreneurial skills to craft innovative responses to social needs. Social mission, launching and building a social venture and developing social returns to an enterprise.

MGT 459. Franchise Management (3)
Prerequisite: Management 358. Proof of completion of prerequisite required: Copy of transcript.
Franchising presented as a viable alternative path to entrepreneurship. Nature and role of franchisor and franchisee including challenges of becoming a franchisee of an existing system and of becoming a franchisor.

MGT 460. Business Plan Development (3)
Prerequisite: Management 358. Proof of completion of prerequisite required: Copy of transcript.
Core concepts and key elements of producing a business plan for a new entrepreneurial venture or for new business opportunity within an existing organization.

MGT 461. Human Resource Selection (3)
Prerequisite: Management 352. Proof of completion of prerequisite required: Copy of transcript.
Employee selection and placement issues in organizations including strategic, legal, and measurement issues. Roles of recruitment, job analysis, and human resource planning in human resource selection process.

MGT 462. Compensation (3)
Prerequisite: Management 352. Proof of completion of prerequisite required: Copy of transcript.
Wage and salary administration in organizations. Determinants of general wage and salary levels and structures. Total compensation systems, interrelationship among employee performance, intrinsic and extrinsic rewards, pay equity, and employee pay satisfaction.

MGT 463. Performance Management (3)
Prerequisite: Management 352. Proof of completion of prerequisite required: Copy of transcript.
Definition, measurement, and evaluation of employee performance, development of employee skills, and implementation of a performance management system.

MGT 464. Legal Issues in Managing Employees (3)
Prerequisite: Management 352. Proof of completion of prerequisite required: Copy of transcript.
Statutes, case law, and legal issues relevant to managers, including recruitment, hiring, wages and hours, discrimination, sexual harassment, occupational safety and health, firing and post-termination. Focus on California and federal laws that managers need to know.

MGT 466. International Human Resource Management (3)
Prerequisite: Management 352. Proof of completion of prerequisite required: Copy of transcript.
Human resource issue facing multinational corporations including staffing, training and development, performance management, expatriation and repatriation, and compensation.

MGT 476. Diversity Issues (3)
Prerequisite: Management 352. Proof of completion of prerequisite required: Copy of transcript.
Management

MGT 475. Leadership in Organizations (3)
Prerequisite: Business Administration 350. Proof of completion of prerequisite required: Copy of transcript.
Leadership, communicating vision, initiating changes and innovation, and developing leadership competencies through self-assessment.

MGT 496. Selected Topics in Management (1-4)
Prerequisite: Consent of department chair.
Selected areas of concern in management. See Class Schedule for specific content. May be repeated with new content with consent of department chair. Limit of nine units of any combination of 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

MGT 498. Investigation and Report (1-3)
Prerequisite: Consent of instructor.
A comprehensive and original study of a problem connected with management under the direction of one or more members of the management staff. May be repeated with new content. Maximum credit six units.

MGT 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)
MGT 596. Advanced Topics in Management (3)
Prerequisites: Six upper division units in management. Proof of completion of prerequisites required: Copy of transcript.
Advanced special topics in management. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Management Information Systems

In the College of Business Administration

OFFICE: Student Services East 2411
TELEPHONE: 619-594-5316 / FAX: 619-594-3675

A Member of AACSB International—The Association to Advance Collegiate Schools of Business.

Faculty
Emeritus: Beatty, Easton, G., Feeney, Flatley, Hatch, Lackritz,
Langenbach, Lyons-Lawrence, Norman, Sherrard, Spaulding, Vik
Chair: Easton, A.
Professors: Briggs, Jennex, Koster, Penrose, Raafat, Reing, Shin, Yang
Associate Professors: Addo, Easton, A., Plice
Assistant Professor: Wang
Lecturers: Judge, O’Byrne, Probbet, Shaul, Tyler

Offered by the Department
Master of Business Administration.
Master of Science degree in business administration.
Master of Science degree in information systems.
Major in information systems with the B.S. degree in business administration.
Major in general business with the B.S. degree in business administration. See Business Administration. Minor in information systems.

The Major
Good business decisions require good information. The purpose of an information system is to provide management with the information that is essential to decision making and to assist in interpreting that information.

Information Systems. Students interested in using computers to solve business problems and in devising new and more efficient solutions should consider a major in information systems. The major is intended to prepare students for their first job in information systems, which is normally as a systems analyst. The systems analyst studies problems, designs solutions, and implements those solutions using computer hardware and software. The major will also prepare students for continued growth as a manager in information systems.

The employment outlook for information systems specialists is currently very good. Positive projections continue into the future. Many graduates who major in information systems assume the following positions: systems analysts plan the activities necessary to solve a business problem by structuring the problem in logical form, identifying the data needed, and specifying the procedures to be followed in programming the data processing; information systems specialists represent various departments of a business in assuring that each department’s information processing needs are provided for effectively and efficiently; programmers and analysts plan and write computer programs to process business information; computer center managers direct the work of information processing in a company; and technical marketing specialists sell and coordinate the installation of computer systems.

Typical places of employment for information systems graduates include large businesses, government agencies, computer manufacturers, universities, and independent computer service organizations.

Business Honors Program
The Business Honors Program offers excellent upper division business students the opportunity to explore issues in our local, regional, and global business environments focusing on the social and ethical responsibility that business has to the community and society. Honors students will enroll in a one unit business honors seminar each semester. During their enrollment they will participate in activities to promote their academic and personal growth, documenting their work in a written portfolio.

Generally, students should apply to this program at the time of application to upper division business. Applicants must submit an essay with their application. Applicants must have a 3.6 cumulative GPA or good standing in the Weber Honors College. Students not meeting these requirements may petition for admission to the program. Successful completion of the Business Honors Program will be recognized at graduation. Contact Dr. Robert A. Judge, Department of Management Information Systems, for more information about this program.

Statement on Computers
Before enrolling in upper division courses in the College of Business Administration, students must be competent in the operation of personal computers, including word processing and spreadsheets. Business students are strongly encouraged to have their own computers capable of running word processing, spreadsheet, presentation, e-mail, and Internet applications such as those found in packages sold by major software publishers. Availability of on-campus computing resources can be limited due to increasing demand across the University.

Retention Policy
The College of Business Administration expects that all business students will make reasonable academic progress towards the degree. Business premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.9 may be removed from the premajors and placed in undeclared. Upper division business majors earning less than a 2.0 average in their major GPA for two consecutive semesters may be removed from business and placed in undeclared.

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

Transfer Credit
Lower Division: Courses clearly equivalent in scope and content to San Diego State University courses required for minors or as preparation for all business majors will be accepted from regionally accredited United States institutions and from foreign institutions recognized by San Diego State University and the College of Business Administration.

Upper Division: It is the policy of the San Diego State University College of Business Administration to accept upper division transfer credits where (a) the course content, requirements, and level are equivalent to San Diego State University courses and (b) where the course was taught in an AACSB International—The Association to Advance Collegiate Schools of Business—accredited program. Exceptions require thorough documentation evidencing the above standards.

Impacted Program
The information systems major is impacted. Before enrolling in any upper division courses in business administration, students must advance to an upper division business major and obtain a business major code. To be admitted to an upper division business major (accounting, financial services, real estate, information systems, management, or marketing), students must meet the following criteria:

a. Complete with a grade of C or higher: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290 (RWS 290 is not required for the accounting major); and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (Cr/NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.9.
Students who meet all requirements except the GPA may request to be placed on the waiting list. While all spaces are usually filled by eligible students, if there is room in the program after all the fully-qualified students have been accommodated, students will be admitted from the waiting list in GPA order. Contact the Business Advising Center (EBA-448), 619-594-5828, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Information Systems Major
With the B.S. Degree in Business Administration
(Major Code: 07021) (SIMS Code: 222337)

A minor is not required with this major.

Preparation for the Major. Complete with a grade of C or higher: Management Information Systems 180; Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201, (27 units)

These prerequisite courses may not be taken Cr/NC; the minimum grade in each course is C. Additional progress requirements must be met before a student is admitted to an upper division major.

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Management Information Systems 396W and have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Management Information Systems 396W and earned a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. Forty-four upper division units consisting of Management Information Systems 301, 315, 306, 309, 360, 370; Business Administration 300, 310, 323, 350, 360, 370; Business Administration 404, 405, or 458 (three units); six units selected from Management Information Systems 301, 305, 375, 460, 481, 482, 515, 520. A “C” (2.0) average or better is required in the courses stipulated here for the major.

Students must complete all upper division courses in the major within seven years prior to graduation. Students who have completed any of those courses more than seven years before the projected date of graduation must contact the department chair for information about ways to certify knowledge of current course content.

Information Systems Minor
(SIMS Code: 222337)

The minor in information systems consists of a minimum of 18 units to include Management Information Systems 180 and 15 units selected from Management Information Systems 305, 306, 315, 375, 380, 406, 481, 482, 483, 492, 515, 520.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. Students with a major in the College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an advisor in their major department and the Business Advising Center (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Business Advising Center (EBA-448) for admissions criteria and procedures.

Courses (MIS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

MIS 180. Principles of Information Systems (3)
Fundamentals of information systems in business. Integration of information technology, e-commerce, systems analysis, database management systems, networking, security, and collaboration. Application of concepts through developing solutions to business problems using spreadsheets, database management systems, and web development tools/languages. (Formerly numbered Information and Decision Systems 180.)

MIS 299. Special Study (3)
Prerequisites: Consent of department chair and instructor. Individual study.

UPPER DIVISION COURSES
(Intended for Undergraduates)

MIS 301. Statistical Analysis for Business (3)
Prerequisites: Management Information Systems 180; Mathematics 120; Statistics 119 or Economics 201. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisites required: Copy of transcript. Statistical methods applied to business decision making. (Formerly numbered Information and Decision Systems 301.)

MIS 305. Business Processes, ERP, and Analytics (3)
Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisites required: Copy of transcript. Fundamental business processes and Enterprise Resource Planning (ERP) systems. Utilizing an ERP to run a business. How analytics are used by organizations to improve decision making.

MIS 306. Information Systems Analysis (3)
Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisites required: Copy of transcript. Systems development life cycle concept, with emphasis on analysis of requirements using structured methodology. Feasibility study, needs assessment, prototyping, application design alternatives. (Formerly numbered Information and Decision Systems 306.)

MIS 315. Business Applications Programming (3)
Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisites required: Copy of transcript. Computer programming for business applications. Appropriate data structures, control structures and program structures. Languages widely used in business applications. (Formerly numbered Information and Decision Systems 315.)

MIS 375. Information Systems Technology (3)
Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisites required: Copy of transcript. Technologies underlying information systems, including computer organization and components, computer arithmetic, I/O and storage, multimedia processing, data communications fundamentals, local area networks, internetworking, and workgroup computing. (Formerly numbered Information and Decision Systems 375.)
MIS 380. Data Management Systems (3)
Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisites required: Copy of transcript.
Methodology for applying data base management systems in design of information systems. Analysis of data base applications from perspectives of system users and systems analysts. (Formerly numbered Information and Decision Systems 380.)

MIS 396W. Reporting Techniques for Business Professionals (3)
Prerequisites: Rhetoric and Writing Studies 290. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in WRS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisites required: Test score or verification of exemption; copy of transcript. Must be admitted to the upper division major in business.
Advanced preparation of oral and written reports used in business and other organizations. Individualized study of reports in student’s career field. (Formerly numbered Information and Decision Systems 396W.)

MIS 406. Information Systems Design (3)
Prerequisites: Management Information Systems 306, 315, 380. Proof of completion of prerequisites required: Copy of transcript.
Business information systems design, installation, and implementation as part of the systems development life cycle, with emphasis on structured design methodology. (Formerly numbered Information and Decision Systems 406.)

MIS 460. Project Management (3)
Prerequisite: Credit or concurrent registration in Business Administration 360. Proof of completion of prerequisite required: Copy of transcript.
Management of small and large projects. Work breakdown structure milestones, project cost estimating and reporting, and single and multiple resource allocation/leveling. Computerized project management software. (Formerly numbered Information and Decision Systems 460.)

MIS 481. E-Business/Web Development (3)
Prerequisite: Credit or concurrent registration in Management Information Systems 406. Proof of completion of prerequisite required: Copy of transcript.
Issues and tools related to developing Internet-based applications with database integration through hands-on projects. Developing complex sets of Web pages by linking front-end Web browser languages and databases via back-end server languages, database queries, and middleware. (Formerly numbered Information and Decision Systems 481.)

MIS 482. Information Technology Projects (3)
Prerequisite: Completion of at least 18 units of upper division management information systems courses. Proof of completion of prerequisite required: Copy of transcript.
Projects with San Diego area client organizations related to information technologies; topics may include: development life cycles, rapid application development, managing teams, client management, group interaction and conflict resolution, software metrics, and quality assurance techniques. (Formerly numbered Information and Decision Systems 482.)

MIS 483. Networks and Data Communications (3)
Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisites required: Copy of transcript.
Fundamental data communications concepts, including voice communications and carrier service offerings, communications hardware, and network design. Global, enterprise, workgroup, and local area networks. Protocols and network operating systems. Network security and control. (Formerly numbered Information and Decision Systems 483.)

MIS 492. Management of Information Systems (3)
Prerequisites: Management Information Systems 306 and 380. Proof of completion of prerequisites required: Copy of transcript.
Role of information systems in organizations from management perspective: strategic information system planning, systems administration, and management of end user computing. Management issues related to systems development and implementation. Management of computer operations and the computer center. (Formerly numbered Information and Decision Systems 492.)

MIS 496. Selected Topics in Information Systems (1–4)
Prerequisite: Consent of department chair. Selected areas of concern in information systems. See Class Schedule for specific content. May be repeated with new content with consent of department chair. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

MIS 498. Investigation and Report (1–3)
Prerequisites: Senior standing and consent of instructor. A comprehensive and original study of a problem connected with information systems under the direction of one or more members of the information systems staff. May be repeated with new content. Maximum credit six units. (Formerly numbered Information and Decision Systems 498.)

MIS 499. Special Study (1–3)
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

MIS 515. Intermediate Programming for Business Applications (3)
Prerequisite: Management Information Systems 315 or knowledge of one computer programming language. Proof of completion of prerequisite required: Copy of transcript.
Intermediate programming for business applications with Java, C#, or similar languages. Data structures, control structures, and program structures. Use of object-oriented features, classes, subclasses, and inheritance for modeling and processing of business information. (Formerly numbered Information and Decision Systems 515.)

MIS 520. Advanced Programming for Business Applications (3)
Prerequisite: Management Information Systems 515. Proof of completion of prerequisite required: Copy of transcript.
Advanced object-oriented features using Java (abstract classes, polymorphism, interfaces, generic classes) for business application programs using graphical user interfaces. Use of multithreading for business simulation. Enhancement of business applications with multimedia and database connectivity. (Formerly numbered Information and Decision Systems 520.)

GRADUATE COURSES
Refer to the Graduate Bulletin.

SDSU General Catalog 2015-2016 339
Marketing
In the College of Business Administration

OFFICE: Student Services East 3356
TELEPHONE: 619-594-5317 / FAX: 619-594-3272
A Member of the AACSB International—The Association to Advance Collegiate Schools of Business.

Faculty
Emeritus: Apple, Baker, Barber, Darley, Haas, Hale, Kartalija, Lindgren, McFai, Sciglioppaglia, Settle, Tiyagi, Vanier, Woltruba
Chair: Belch
Professors: Belch, Cradit, Krentler, Saghafi
Associate Professors: Dimofte, Honea, Peter
Assistant Professors: Baker, Castro, Cornelis
Lecturer: Olson

Offered by the Department
Master of Science degree in business administration.
Master of Business Administration.
Major in marketing with the B.S. degree in business administration.
Major in general business with the B.S. degree in business administration. See Business Administration.
Minor in marketing.

The Major
Marketing is “the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.” (American Marketing Association, 2013.) The marketing major focuses on how products/services and brands are developed, distributed, priced, promoted, and sold. This process requires an understanding of buyer and seller behavior within the context of the overall business environment. Attention is given to challenges and opportunities of global markets and the development of marketing programs for various regions and/or countries. Marketing is an interesting, complex, creative, fast-paced, and dynamic business activity. Marketers and sales professionals are involved in the development, launch, and sales process for products and services designed to satisfy consumer needs. They identify target markets for products and services as well as decide how to price them, where they will be distributed, and how to communicate and build relationships with customers. All of these decisions are made within a complex and dynamic cultural, economic, political, social, and technological environment.

Students majoring in marketing can choose the general marketing major or they can select a specialization in Integrated Marketing Communications or Professional Selling and Sales Management. Marketing is an essential part of every business as well as not-for-profit organizations which means there are many employment opportunities for marketing graduates. Some of the more common career opportunities include sales and sales management, brand management, marketing research, market analyst, retailing, advertising, digital and social media, media planning and buying, and positions in advertising and marketing communications agencies as account planners or account executives.

Business Honors Program
The Business Honors Program offers excellent upper division business students the opportunity to explore issues in our local, regional, and global business environments focusing on the social and ethical responsibility that business has to the community and society. Honors students will enroll in a one unit business honors seminar each semester. During their enrollment they will participate in activities to promote their academic and personal growth, documenting their work in a written portfolio.

Generally, students should apply to this program at the time of application to upper division business. Applicants must submit an essay with their application. Applicants must have a 3.6 cumulative GPA or good standing in the Weber Honors College. Students not meeting these requirements may petition for admission to the program. Successful completion of the Business Honors Program will be recognized at graduation. Contact Dr. Robert A. Judge, Department of Management Information Systems, for more information about this program.

Statement on Computers
Before enrolling in upper division courses in the College of Business Administration, students must be competent in the operation of personal computers, including word processing and spreadsheets. Business students are strongly encouraged to have their own computers capable of running word processing, spreadsheet, presentation, e-mail, and Internet applications such as those found in packages sold by major software publishers. Availability of on-campus computing resources can be limited due to increasing demand across the university.

Retention Policy
The College of Business Administration expects that all business students will make reasonable academic progress towards the degree. Business premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.9 may be removed from the premajors and placed in undeclared. Upper division business majors earning less than a 2.0 average in their major GPA for two consecutive semesters may be removed from business and placed in undeclared.

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

Transfer Credit
Lower Division: Courses clearly equivalent in scope and content to San Diego State University courses required for minors or as preparation for all business majors will be accepted from regionally accredited United States institutions and from foreign institutions recognized by San Diego State University and the College of Business Administration.

Upper Division: It is the policy of the San Diego State University College of Business Administration to accept upper division transfer credits where (a) the course content, requirements, and level are equivalent to San Diego State University courses and (b) where the course was taught in an AACSB International—The Association to Advance Collegiate Schools of Business accredited program. Exceptions require thorough documentation evidencing the above standards.

Impacted Programs
The majors in the Department of Marketing are impacted. Before enrolling in any upper division courses in business administration, students must advance to an upper division business major and obtain a business major code. To be admitted to an upper division business major (accounting, finance, financial services, real estate, information systems, management, or marketing), students must meet the following criteria:

a. Complete with a grade of C or higher: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290 (WRS 290 is not required for the accounting major); and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (CR/NC);

b. Complete a minimum of 60 transferable semester units;

c. Have a cumulative GPA of 2.9.
Students who meet all requirements except the GPA may request to be placed on the waiting list. While all spaces are usually filled by eligible students, if there is room in the program after all the fully-qualified students have been accommodated, students will be admitted from the waiting list in GPA order. Contact the Business Advising Center (EBA-448), 619-594-5828, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

**Major Academic Plans (MAPs)**

Visit [http://www.sdsu.edu/mymap](http://www.sdsu.edu/mymap) for the recommended courses needed to fulfill your major requirements. The MAPs were created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

**Marketing Major**

**With the B.S. Degree in Business Administration**  
(Major Code: 05091)

A minor is not required with this major.

**Preparation for the Major.** Complete with a grade of C or higher: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201, (27 units)

These prerequisite courses may not be taken 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.

**Graduation Writing Assessment Requirement.** Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

**Major.** Students may elect to major in general marketing or to complete the marketing major with a specialization in integrated marketing communications or a specialization in professional selling and sales management.

**General Marketing**  
(SIMS Code: 222771)

Forty-seven upper division units consisting of Marketing 371, 470, 479; Business Administration 300, 310, 323, 350, 360, 370. Business Administration 404 or 405; Management Information Systems 301; 15 units selected from Marketing 372, 373, 376, 377, 380, 472, 473, 474, 476, 480, 498, 499. A "C" (2.0) average or better is required in the courses stipulated here for the major.

**Specialization in Integrated Marketing Communications**  
(SIMS Code: 222775)

Forty-seven upper division units consisting of Marketing 371, 373, 470, 472; Business Administration 300, 310, 323, 350, 360, 370. Business Administration 404 or 405; Management Information Systems 301; 11 units selected from Journalism and Media Studies* 375, 408, 440, 460, 480, 560*, 562**, 565**, 566**, 574**: Marketing 380, 476, 480; Psychology 340, 380; Sociology 335. A "C" (2.0) average or better is required in the courses stipulated here for the major.

* Upper division standing required for all Journalism and Media Studies courses listed.

**Specialization in Professional Selling and Sales Management**  
(SIMS Code: 222776)

Forty-seven upper division units consisting of Marketing 371, 373, 470, 473, 479; Business Administration 300, 310, 323, 350, 360, 370. Business Administration 404 or 405; Management Information Systems 301; seven units selected from Marketing 372, 376, 474, 480, 498, 499. A "C" (2.0) average or better is required in the courses stipulated here for the major.

**Marketing Minor**  
(SIMS Code: 222772)

The minor in marketing consists of a minimum of 17-21 units, of which 11 units must be in upper division courses, to include Accountancy 201; Business Administration 370; Economics 102; and 11 to 12 units selected from Management Information Systems 301, Marketing 371, 372, 373, 376, 377, 380, 470, 472, 473, 474, 476, 480.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. Students with a major in the College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an advisor in their major department and the Business Advising Center (EBA-448).

**Specialization for the minor in effect at the time that they declare the minor.** Contact the Business Advising Center (EBA-448) for admissions criteria and procedures.

* Business Administration 370 waived for College of Business Administration, Hospitality and Tourism Management, and International Business majors.

* Students who are required to take Management Information Systems 301 for the major may not take the course for the minor.
Courses (MKTG)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

UPPER DIVISION COURSES
(Intended for Undergraduates)

MKTG 371. Consumer Behavior (4)
Prerequisite: Business Administration 370 with a minimum grade of C (2.0).
Proof of completion of prerequisite required: Copy of transcript.

Consumer behavior concepts and theories for developing, implementing, and assessing marketing strategy. Psychological, social, and environmental factors in understanding of needs, wants, preferences, and decision making related to consumption behaviors.

MKTG 372. Retail Marketing Methods (4)
Prerequisite: Business Administration 370 with a minimum grade of C (2.0).
Proof of completion of prerequisite required: Copy of transcript.

Retailing industry and retailer strategy to include online retailers, multi-channel retailing, consumer behavior, retail market strategy, site selection, locations, human resource management, merchandise management, pricing, marketing communications strategy, store layout, design, and management.

MKTG 373. Integrated Marketing Communications (4)
Prerequisite: Business Administration 370 with a minimum grade of C (2.0).
Proof of completion of prerequisite required: Copy of transcript.

Communication theory in context of integrating marketing communication tools to include advertising; digital, social, nontraditional media; sales promotion; public relations. Media planning and strategy; budgeting, effectiveness measurement, social/ethical issues, regulation of advertising and promotion.

MKTG 376. Global Marketing Strategy (4)
Prerequisite: Business Administration 370 with a minimum grade of C (2.0).
Proof of completion of prerequisite required: Copy of transcript.

International marketing concepts. Assessing organization internationalization potential, external environmental analysis for global market segmentation, target country market selection, entry strategies, international product, pricing decisions, analysis of international distribution systems, developing international advertising and promotion programs.

MKTG 377. Selling Strategy and Practices (4)
Prerequisite: Business Administration 370 with a minimum grade of C (2.0).
Proof of completion of prerequisite required: Copy of transcript.

Marketing and sales process. Theories, approaches, techniques used in selling process, development of sales presentations, and use of partnering/relationship selling and technology in professional selling.

MKTG 380. Direct Marketing Methods (4)
Prerequisite: Business Administration 370 with a minimum grade of C (2.0).
Proof of completion of prerequisite required: Copy of transcript.

Direct marketing as part of a company or organization's marketing program. Major direct marketing media and methods to include direct mail, broadcast and print advertising, Internet and interactive media, catalogs, and telemarketing. Data base creation and management and effectiveness measurement for direct marketing programs.

MKTG 470. Marketing Research (4)
Prerequisites: Completion of lower division courses in the major or minor. A minimum grade of C (2.0) in Business Administration 370 and Management Information Systems 301.
Proof of completion of prerequisites required: Copy of transcript.

Marketing research process. Research design and data collection principles for qualitative and quantitative research techniques in marketing practice. Analysis, data visualization, and reporting of primary and secondary marketing research.

MKTG 472. Advanced Integrated Marketing Communications (4)
Prerequisites: Marketing 373 with minimum grade of C. Marketing 371 and 470 with minimum grade of C or an average of 2.0 in both courses.
Proof of completion of prerequisites required: Copy of transcript.

Management of marketing communications function with emphasis on integration and coordination of all activities. Planning, implementation, and program evaluation of an integrated marketing communications project.

MKTG 473. Sales Management (4)
Prerequisite: Business Administration 370 with a minimum grade of C (2.0).
Proof of completion of prerequisite required: Copy of transcript.

Management of recruitment, training, motivation, and compensation of the sales personnel of a company. Policies and procedures used for organization, evaluation, and control of the sales force.

MKTG 474. Business Marketing (4)
Prerequisite: Business Administration 370 with a minimum grade of C (2.0).
Proof of completion of prerequisite required: Copy of transcript.

Marketing strategy and practices designed for organizational customers. Purchasing practices of organizational buyers and development of marketing programs for enterprise customers and markets, both domestic and global.

MKTG 476. Internet/Interactive Marketing (4)
Prerequisite: Business Administration 370 with a minimum grade of C (2.0).
Proof of completion of prerequisite required: Copy of transcript.

Impact of networked, cloud, mobile and contextual technologies on consumer behavior, business and marketing practice. Marketing communication and strategy leveraging the Internet to include search optimization, user experience design, social media, contextual advertising, pricing, distribution, commerce, and analytics.

MKTG 479. Strategic Marketing Management (4)
Prerequisites: Marketing 371 and 470 with a minimum grade of C (2.0) or an average of 2.0 in both courses. Completion of lower division courses required in the major or minor.
Proof of completion of prerequisites required: Copy of transcript.

Marketing concepts and decision tools for analyzing and solving marketing problems; marketing strategy and plans; problem identification, evaluation of alternatives, strategic and tactical recommendations.

MKTG 480. Marketing Analytics (4)
Prerequisites: Business Administration 370 and Management Information Systems 301 with a minimum grade of C (2.0).
Proof of completion of prerequisites required: Copy of transcript.

Analysis and interpretation of large, complex data sets (Big Data). Theory, analytical approaches to solve marketing problems, utilizing software tools for marketing and sales decision making.

MKTG 496. Selected Topics in Marketing (1-4)
Prerequisite: Consent of department chair.

Selected areas of concern in marketing. See Class Schedule for specific content. May be repeated with new content with consent of department chair. Limit of nine units of any combination of 496, 497, 498 courses applicable to a bachelor's degree. Maximum credit six units.

MKTG 498. Investigation and Report (1-3)
Prerequisites: Senior standing and consent of instructor.

A comprehensive and original study of a problem connected with marketing under the direction of one or more members of the marketing staff. May be repeated with new content. Maximum credit six units.

MKTG 499. Special Study (1-3)
Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Mathematics
In the College of Sciences

OFFICE: Geology/Mathematics/Computer Science 413
TELEPHONE: 619-594-6191

Faculty
Chair: O’Sullivan
Professors: Blomgren, Carretero, Castillo, Dunster, Hui, Lobato, Mahaffy, Nemirovsky, O’Sullivan, Palacios, Ponomarenko, Rasmussen, Salamon, Shen, S.
Associate Professors: Bowers, Interlando, Kirschvink, Nickerson, Shen, B.
Assistant Professors: Curtis, Gilles, Luque Santolaria, Zahner

Offered by the Department of Mathematics and Statistics
Master of Arts degree in mathematics.
Master of Science degree in applied mathematics.
Concentration in dynamical systems.
Concentration in mathematical theory of communication systems.
Master of Arts for teaching service with a concentration in mathematics.
Major in mathematics with the B.A. degree in liberal arts and sciences.
Major in mathematics with the B.S. degree in applied arts and sciences.
Emphasis in applied mathematics.
Emphasis in computational science.
Emphasis in science.
Teaching major in mathematics for the single subject teaching credential.
Minor in mathematics.
Certificate in communication systems (refer to the Graduate Bulletin).
Certificate in mathematics specialist (refer to the Graduate Bulletin).
Certificate in single subject mathematics.

The Majors
Mathematics is the language and instrument for the sciences and technology. It is concerned with a wide range of diverse problems from developing techniques to model real world applications and designing efficient methods for calculating their solutions, to creating new branches of mathematics and theories for as yet unsolved problems. Some students find mathematics stimulating because of its many and varied applications, while others are fascinated and attracted to it for the beauty of its intrinsic order, structure, and form.

Because of its broad scope, degrees in mathematics can prepare students for many different careers and the Department of Mathematics and Statistics offers a variety of such degrees and emphases to provide students with several blends and specialties according to their interests and goals.

Graduates with a mathematics major have many options for either careers in applications, for further study in graduate school, or for teaching. Mathematics majors are important because their training involves quantitative abilities and critical reasoning that many potential employers can utilize. With a minor in an area of applications, graduates are suited for further graduate study in many areas that heavily depend upon mathematical methods and techniques. Graduates with an interest in the more theoretical aspects of mathematics are sought after in many diverse graduate programs from applied and pure mathematics to computer and computational sciences and statistics. Careers in teaching include positions in secondary schools, for which a teaching credential is additionally required, teaching in two year colleges, for which a master’s degree is required, and teaching at the university level, which requires a doctorate degree and involves research and creation of new mathematics.

Impacted Program
The mathematics major and emphases are impacted programs. To be admitted to the mathematics major or an emphasis, students must meet the following criteria:

- a. Complete preparation for the major;
- b. Complete a minimum of 60 transferable semester units;
- c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Mathematics Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 17011) (SIMS Code: 776301)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in mathematics and statistics courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major.
Mathematics 150, 151, 245, 254.
A minor is not required with this major.

Language Requirement.
Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement.
Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major.
A minimum of 27 upper division units selected with approval of the departmental adviser before starting upper division work to include Mathematics 337, 521A, 524, 534A; one course selected from Mathematics 521B, 531, 534B, 537, 538, 542, 543, Statistics 551B; and 12 units of electives.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the Office of Advising and Evaluations.

Mathematics Major
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 17031)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

There are three emphases offered in this major: Applied Mathematics, Computational Science, and Science.
Mathematics

Emphasis in Applied Mathematics (SIMS Code: 776313)
This emphasis is designed to train the student in those areas of mathematics which may be applied to formulate and solve problems in other disciplines. The program is designed to qualify the student for employment as an applied mathematician, but the graduate would also be well prepared for graduate study in pure or applied mathematics.

Preparation for the Major. Mathematics 150, 151, 245, 254, (14 units)
Additional Lower Division Coursework Required. Mathematics 252, Computer Science 107, Statistics 250. (10 units)
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Mathematics 337, 534A; 524 or 543; 532 or 534B; at least six units selected from Mathematics 521A, 525, 531, 532, 537; 12 units from a science to which mathematics may be applied (these should be from a single science and must be approved by the B.S. adviser); and six units of electives in computer science, mathematics, or statistics excluding Mathematics 302, 303, 311, 312, 313, 315, 342A, 342B, 413, 414, 509.
Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the Office of Advising and Evaluations.

Emphasis in Computational Science (SIMS Code: 776322)
Additional Lower Division Coursework Required. Mathematics 150, 151, 245, 254. (14 units)
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 39 upper division units to include Mathematics 337, 521A, 524 or 543, 534A, 541; Computer Science 310; at least nine units selected from Computational Science 526, 526, Computer Science 503, 558, Mathematics 336, 525, 532, 537, 542, 543, three units of Mathematics 499 (Senior Project); and nine units of electives in computer science, mathematics, or statistics (approved by the Applied Mathematics adviser) excluding Mathematics 302, 303, 311, 312, 313, 315, 342A, 342B, 413, 414, 509.
Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the Office of Advising and Evaluations.

Emphasis in Science (SIMS Code: 776348)
Additional Lower Division Coursework Required. Mathematics 242 or Computer Science 107, Mathematics 252, Statistics 250. (10 units) Some lower division courses are prerequisite to science courses applied to the major.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Mathematics 337, 534A; 524 or 543; 532 or 534B; at least six units selected from Mathematics 521A, 525, 531, 532, 537; 12 units from a science to which mathematics may be applied (these should be from a single science and must be approved by the B.S. adviser); and six units of electives in computer science, mathematics, or statistics excluding Mathematics 302, 303, 311, 312, 313, 315, 342A, 342B, 413, 414, 509.
Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the Office of Advising and Evaluations.

Mathematics Major
In preparation for the Single Subject Teaching Credential With the B.A. Degree in Liberal Arts and Sciences (Major Code: 17011) (SIMS Code: 776303)
All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Dual Language and English Learner Education or Teacher Education. For students completing the single subject teaching credential program, no more than 48 units in mathematics and statistics courses can apply to the degree.

This major may be used by students preparing to be high school teachers as an undergraduate major for the B.A. degree in liberal arts and sciences.
A minor is not required with this major.
Preparation for the Major. Mathematics 150, 151, 245, 254. (14 units)
Additional Lower Division Coursework Required. Mathematics 241, 252, Statistics 250, Teacher Education 211A. (9 units) Recommended: Computer Science 107, Physics 195, 195L, 196L, 197L, 197L; or Chemistry 200, 201, and a course for which these are prerequisite; or Economics 101, 102, 320, 321. The intent is to train the student in an area in some depth. Some latitude may be allowed in the choice of department and mix of courses, but all programs must be approved by the Applied Mathematics adviser. The 10 unit requirement is minimal, and a minor in an approved field is highly recommended.

Graduation Writing Assessment Requirement.
Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 24 upper division units in mathematics to include Mathematics 302, 303, 311, 312, 313, 315, 342A, 342B, 413, 414, 509.
Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the Office of Advising and Evaluations.

Mathematics Minor (Minor Code: 17011) (SIMS Code: 776301)
The minor in mathematics consists of a minimum of 20-21 units in mathematics to include 12 upper division units, at least six of which have as prerequisite Mathematics 151; or Mathematics 252 and nine upper division units in mathematics, at least six of which have as prerequisite Mathematics 151. The courses selected will be subject to the approval of the minor adviser.
Courses in the minor may not be counted toward the major, but may be used to satisfy prerequisites for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
Single Subject Mathematics Certificate
(SIMS Code: 776357)

The purpose of the Single Subject Mathematics Certificate program is to provide individuals appropriate mathematics coursework to establish their subject matter competency in accordance with California State requirements for high school mathematics teachers. Admission is open to individuals who are majoring or have majored in an area other than mathematics and who have the equivalent of two years of high school mathematics and satisfy the Entry-Level Mathematics Examination requirement. In order to enroll in the program, individuals should contact the single subject mathematics credential adviser in the Department of Mathematics and Statistics.

The program consists of 46 units to include Mathematics 150, 151, and 241, 245, 252, 254, 302, 303, 414, 510, 521A, 534A, Statistics 250, 550, and three units of upper division electives selected from mathematical or physical sciences.

Individuals must complete at least nine upper division units at San Diego State University and have a cumulative grade point average of 2.5 in the required courses to qualify for the certificate.

Mathematics Departmental Placement Examination

All students who expect to enroll in Computer Science 100, 107, Mathematics 105, 118, 120, 122, 124, 141, 150, 210, 211, Statistics 119, 250 must satisfy the Entry-Level Mathematics Examination requirement. For Mathematics 150, 311, and 312, students must also pass the required part of the Mathematics Departmental Placement Examination. For Mathematics 150, certain prerequisite courses taken at San Diego State University may be used to satisfy the Mathematics Departmental Placement Examination requirement.

COMPUTER SCIENCE
(See this section of catalog under Computer Science)

STATISTICS
(See this section of catalog under Statistics)

Courses (MATH)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

NOTE: Proof of completion of Entry-Level Mathematics requirement required for Mathematics 105, 118, 120, 122, 124, 141, 150, 210, 211: Copy of ELM score or verification of exemption.

MATH 105. College Algebra (3) [GE]
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.
Real numbers, graphs, theory of functions, sinusoidal equations, and their applications to science. Excel and Maple programming. Not open to students with credit in Mathematics 121, 124, or 141.

MATH 118. Topics in Mathematics (3) [GE]
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.
Topics selected from algebra, analysis, geometry, logic, probability, or statistics, designed to give student insight into structure of mathematical theories and their applications.

MATH 120. Calculus for Business Analysis (3) [GE]
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.
Matrix algebra, Calculus including differentiation and integration. Graphing and optimization. Exponential and logarithmic functions. Multivariable calculus. Not open to students with credit in Mathematics 150.

MATH 122. Calculus for the Life Sciences II (3) [GE]
Two lectures and two hours of activity.
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.
A continuation of Mathematics 121 with topics from integral calculus and an introduction to elementary differential equations. Not open to students with credit in Mathematics 150.

MATH 124. Calculus for the Life Sciences (4) [GE]
Three lectures and three hours of laboratory.
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.
Basic concepts of calculus with life science applications. Topics from differential and integral calculus and an introduction to elementary differential equations. Computer applications to biological problems. Not open to students with credit in Mathematics 121 and 122, or 150.

MATH 141. Precalculus (3) [GE]
Two lectures and two hours of activity.
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.
Real numbers, inequalities; polynomials; rational, trigonometric, exponential and logarithmic functions; conic sections. Not open to students with credit in Mathematics 105, 121, 124, or 150.

MATH 150. Calculus I (4) [GE]
Three lectures and two hours of activity.
Prerequisites: Knowledge of algebra, geometry, and trigonometry as demonstrated by either (1) satisfactory completion of Mathematics 141 with a grade of C (2.0) or above; or (2) satisfaction of the Entry-Level Mathematics requirement and qualification on the Mathematics Departmental Precalculus Proficiency Examination. Proof of completion of prerequisites required.
Algebraic and transcendental functions. Continuity and limits. The derivative and its applications. The integral and the fundamental theorem of calculus.

MATH 151. Calculus II (4) [GE]
Three lectures and two hours of activity.
Prerequisite: Mathematics 150 with minimum grade of C. Proof of completion of prerequisite required.

MATH 210. Number Systems in Elementary Mathematics (3) [GE]
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.
Number sense, operation concepts, estimation, mental arithmetic, algorithms, problem solving, whole, rational, real numbers, ratio, and number theory. This course or its equivalent is required for students working toward a multiple subject credential in elementary education.

MATH 211. Geometry in Elementary Mathematics (3) [GE]
Prerequisites: Satisfaction of the Entry-Level Mathematics requirement and Mathematics 210.
Two and three dimensional shapes and interrelationships, congruence, similarity and proportional reasoning, measurement of length, angle size, area, volume, metric system, and problem solving.

MATH 241. Mathematics Software Workshop (1)
Prerequisite: Mathematics 150.
Introduction to mathematical software environment such as MATLAB, MAPLE, MATHEMATICA or the Geometers Sketchpad. May be repeated for credit with different software. See Class Schedule for specific content. Maximum credit two units.

MATH 242. Mathematical Programming (3)
Prerequisite: Mathematics 124 or 150.
Rudiments of programming mathematical and scientific problems on various platforms which include: EXCEL, Matlab, and Maple.

MATH 245. Discrete Mathematics (3) [GE]
Prerequisite: Mathematics 124 or 150. Recommended: Mathematics 151.
Logic, methods of proof, set theory, number theory, equivalence and order relations, counting (combinations and permutations), solving recurrence relations.

MATH 252. Calculus III (4) [GE]
Prerequisite: Mathematics 131 with minimum grade of C.
Functions of several variables. Vectors. Partial derivatives and multiple integrals. Line integrals and Green’s Theorem.
MATH 296. Experimental Topics (1-4)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.

MATH 299. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.

MATH 302. Transition to Higher Mathematics (3)
Prerequisite: Mathematics 141 or 150.
Selected topics in mathematics to emphasize proof writing and problem solving. Intended for those planning to teach secondary school mathematics.

MATH 303. History of Mathematics (3) [GE]
Prerequisite: Mathematics 141 or completion of the General Education requirement in Foundations of Learning IIA., Natural Sciences and Quantitative Reasoning for nonmajors.
Major currents in the development of mathematics from ancient Egypt and Babylon to late nineteenth century Europe.

MATH 311. Statistics and Probability in Elementary Mathematics (2)
Prerequisites: Mathematics 211 and satisfactory performance on Mathematics Departmental Placement Examination, Part LS.
Topics from statistics and probability. Enrollment limited to liberal studies majors. Not open to students with credit in Mathematics 312.

MATH 312. Topics from Elementary Mathematics: Statistics and Probability (3)
Prerequisites: Mathematics 211 and satisfactory performance on Liberal Studies Mathematics Proficiency Assessment.
Topics from statistics and probability. Enrollment limited to future teachers in grades K-8. Not open to students with credit in Mathematics 311.

MATH 313. Topics in Elementary Mathematics: Algebra of Change (3)
Prerequisites: Mathematics 211 and satisfactory performance on Liberal Studies Mathematics Proficiency Assessment.
Capstone course for prospective K-8 teachers. Advanced topics in mathematics selected from algebra, number systems, transformation geometry, and problem solving. Enrollment limited to future teachers in grades K-8.

MATH 315. Special Topics in Algebra, Geometry, and Problem Solving (2)
Prerequisites: Mathematics 210, 311.
Capstone course for prospective elementary teachers to include algebra (describing change), geometry (rigid motions), and non-routine problem solving.

MATH 336. Introduction to Mathematical Modeling (3)
Prerequisite: Mathematics 254.
Models from the physical, natural, and social sciences including population models and arms race models. Emphasis on classes of models such as equilibrium models and compartment models.

MATH 337. Elementary Differential Equations (3)
Prerequisite: Mathematics 254 or 342A.
Integration of first-order differential equations, initial and boundary value problems for second-order equations, series solutions and transform methods, regular singularities.

MATH 342A. Methods of Applied Mathematics I (3)
Prerequisite: Mathematics 252.

MATH 342B. Methods of Applied Mathematics II (3)
Prerequisite: Mathematics 342A with minimum grade of C.

MATH 413. Mathematics for the Middle Grades (3)
Prerequisite: Mathematics 313.
Teacher-level look at mathematics taught in middle grades, to include proportional reasoning, rational and real numbers, probability, and algebra. Intended for those planning to teach mathematics in middle grades; cannot be used as part of major or minor in mathematical sciences with exception of major for single subject teaching credential. Students in the SSTC major must receive instructor permission.

MATH 414. Mathematics Curriculum and Instruction (3)
Prerequisites: Senior standing and 12 upper division units in mathematics.
Historical development of mathematics and mathematics curriculum. Principles and procedures of mathematics instruction in secondary schools. For secondary and postsecondary teachers and teacher candidates. Course cannot be used as part of the major or minor in mathematical sciences with exception of major for the single subject teaching credential.

MATH 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

MATH 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Intended for Undergraduates)
MATH 525. Algebraic Coding Theory (3)
Prerequisite: Mathematics 254.
Linear codes, perfect and related codes, cyclic linear codes, BCH codes, burst error-correcting codes.

MATH 531. Partial Differential Equations (3)
Prerequisites: Mathematics 252 and 337.
Boundary value problems for heat and wave equations: eigenfunction expansions, Sturm-Liouville theory and Fourier series. D’Alembert’s solution to wave equation; characteristics. Laplace’s equation, maximum principles, Bessel functions.

MATH 532. Functions of a Complex Variable (3)
Prerequisite: Mathematics 252.
Analytic functions, Cauchy-Riemann equations, theorem of Cauchy, Laurent series, calculus of residues, and applications.

MATH 533. Vector Calculus (3)
Prerequisite: Mathematics 254 or 342A.
Scalar and vector fields; gradient, divergence, curl, line and surface integrals: Green’s, Stokes’ and divergence theorems. Green’s identities. Applications to potential theory or fluid mechanics or electromagnetism.

MATH 534A. Advanced Calculus I (3)
Prerequisites: Mathematics 245 and 254; or 342A.
Completeness of the real numbers and its consequences, sequences of real numbers, continuity, differentiability and integrability of functions of one real variable.

MATH 534B. Advanced Calculus II (3)
Prerequisite: Mathematics 534A.
Series and sequences of functions and their applications, functions of several variables and their continuity, differentiability and integrability properties.

MATH 537. Ordinary Differential Equations (3)
Prerequisite: Mathematics 337.
Theory of ordinary differential equations: existence and uniqueness, dependence on initial conditions and parameters, linear systems, stability and asymptotic behavior, plane autonomous systems, series solutions at regular singular points.

MATH 538. Discrete Dynamical Systems and Chaos (3)
Prerequisites: Minimum grade of C in Mathematics 151; Mathematics 254 or 342A, 342B.
One- and two-dimensional iterated maps, equilibria and their stability; sensitive dependence on initial conditions, Lyapunov exponents, horseshoe maps, period doubling, chaotic attractors, Poincare maps, stable/unstable manifolds, bifurcations. Applications in biology, chemistry, physics, engineering, and other sciences.

MATH 541. Introduction to Numerical Analysis and Computing (3)
Prerequisites: Mathematics 254 or 342A; and Mathematics 241 or 242 or Computer Science 106 or 107.
Solution of equations of one variable, polynomial interpolation and approximation, numerical differentiation and quadrature, linear least squares approximation, the fast Fourier transformation.

MATH 542. Introduction to Computational Ordinary of Differential Equations (3)
Prerequisites: Mathematics 337 and 541.

MATH 543. Numerical Matrix Analysis (3)
Prerequisite: Mathematics 541.

MATH 562. Mathematical Methods of Operations Research (3)
Prerequisites: Mathematics 252 and 254.
Theory and applications concerned with optimization of linear and non-linear functions of several variables subject to constraints, including simplex algorithms, duality, applications to game theory, and descent algorithms.

MATH 579. Combinatorics (3)
Prerequisite: Mathematics 245.
Permutations, combinations, generating functions, recurrence relations, inclusion-exclusion counting. Polya’s theory of counting, other topics and applications.

MATH 596. Advanced Topics in Mathematics (1-4)
Prerequisite: Consent of instructor.
Selected topics in classical and modern mathematical sciences. May be repeated with the approval of the instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.
Mathematics Education

Mathematics Specialist Certificate Program

The Mathematics Specialist Certificate Program for Grades K-6 is open only to credentialed teachers. The certificate program is described in the Graduate Bulletin in the Mathematics and Science Education section. Undergraduate mathematics and mathematics education courses for the certificate program are listed below.

Courses (MTHED & MATH)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSE IN MATHEMATICS EDUCATION

(Intended for Undergraduates) (MTHED)

NOTE: Proof of completion of Entry-Level Mathematics requirement required for Mathematics 105, 118, 120, 122, 124, 141, 150, 210, 211: Copy of ELM score or verification of exemption.

MTHED 212. Children's Mathematical Thinking (1-1.5)
Prerequisite: Credit or concurrent registration in Mathematics 210. Children's mathematical thinking and in-depth analyses of children's understanding of operations (addition, subtraction, multiplication, and division) and place value. Students will observe individual children solving mathematics problems. Real, compact disc, and/or web-based experience included.

UPPER DIVISION COURSE IN MATHEMATICS EDUCATION

(Also Acceptable for Advanced Degrees)

UPPER DIVISION COURSES IN MATHEMATICS

(Also Acceptable for Advanced Degrees) (MATH)

NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.

MATH 501A. Reasoning: Place Value and Arithmetic Operations (1)
Prerequisites: Teaching credential and consent of instructor. Place value and its role in development and understanding of arithmetic operations, to include number systems, student methods, standard algorithms, and mental computation.

MATH 501B. Reasoning: Rational Numbers and Real Number Systems (1)
Prerequisites: Teaching credential and consent of instructor. Rational numbers and structure of real number system, to include meanings and models for fractions with attention to operations on rational numbers.

MATH 504A. Reasoning: Quantities and Mathematical Relationships (1)
Prerequisites: Teaching credential and consent of instructor. Reasoning about measurable characteristics in problem context, and relationships among these measurements. Additive, multiplicative reasoning, and proportional reasoning in middle grades.

MATH 504B. Reasoning: Algebra and Nature of Change (1)
Prerequisites: Teaching credential and consent of instructor. Pattern searching, generalizing, graphing to represent quantitative relationships, and role of these topics in preparing elementary and middle school students for algebra.

MATH 506A. Algebra in the Middle Grades I (3)
Prerequisites: Teaching credential and consent of instructor. Mathematical foundations that underlie concepts and procedures emphasized in algebra I and algebra II as taught at middle and high school level, to include focus on real number system, ratios, proportional reasoning, equality, number theory, and proof.

MATH 506B. Algebra in the Middle Grades II (3)
Prerequisites: Mathematics 506A, practicing teachers with valid teaching credential, and consent of instructor. Mathematical foundations that underlie concepts and procedures emphasized in algebra I and algebra II as taught at middle and high school level, to include focus on functions in context of relations, patterns, and graphing.

MATH 507A. Functions and Study of Change I (2)
Prerequisites: Mathematics 506B, practicing teachers with valid teaching credential, and consent of instructor. Mathematical ideas surrounding linear functions and change to include proportionality, slope, and graphing. Arithmetic and geometric sequences.

MATH 507B. Functions and Study of Change II (3)
Prerequisites: Mathematics 507A, practicing teachers with valid teaching credential, and consent of instructor. Mathematical ideas surrounding nonlinear functions and variable rates of change to include quadratic and exponential situations.

GRADUATE COURSES

Refer to the Graduate Bulletin.
Mechanical Engineering

In the College of Engineering

OFFICE: Engineering 326
TELEPHONE: 619-594-6067
E-MAIL: me@engineering.sdsu.edu
http://mechanical.sdsu.edu

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

Faculty
Emeritus: Bedore, Craig, Hoyt, Hussain, Impelluso, Lybarger, Mansfield, Murphy, Ohnysty
Chair: Moon (Interim)
Professors: Beyene, Bhattacharjee, German, Kline, May-Newman, Mehrabadi, Moon, Morsi, Olevsky
Associate Professors: Kassegne, Miller
Assistant Professors: Akbari Hamed, Battiato, Naseradinmousavi

Offered by the Department
Doctor of Philosophy degree in engineering sciences:
(bioengineering), (electrical and computer engineering),
(mechanical and aerospace engineering), (structural engineering).
Master of Engineering.
Master of Science degree in bioengineering.
Master of Science degree in mechanical engineering.
Major in mechanical engineering with the B.S. degree.
Emphasis in bioengineering.

Transfer Credit
No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of engineering work attempted at this university. At that time, and upon recommendation of the department, credit will be given for the unaccredited work.

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

I. Communication and Critical Thinking: 9 units
You may not use Credit/No Credit grades in this section.
1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)

II. Foundations of Learning: 29 units
A. Natural Sciences and Quantitative Reasoning (17 units):
1. Physical Sciences (11 units)
   Engineering students will take Chemistry 202 (4 units) or Chemistry 200 (5 units).
   Physics 195 (3 units)
   Physics 196L (1 unit)
   Physics 196 (3 units)
2. Life Sciences (3 units)
   Mechanical engineering majors will take Biology 100 or 101. Students in bioengineering emphasis will take Biology 203.
3. Laboratory (satisfied under A.1. above)
4. Mathematics/Quantitative Reasoning
   Engineering students will take Mathematics 150 (3 units applicable to General Education). You may not use Credit/No Credit grades.
B. Social and Behavioral Sciences (3 units)
C. Humanities (9 units)
   Complete three courses in three different areas. One of these courses and the one under IVA. below must be taken in the same department.

III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.

IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing (60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Total nine units; must include one course of cultural diversity.
A. Upper division Humanities (3 units)
   Three units must be taken from the same department as one of the Humanities courses selected in Foundations of Learning.
B. Upper division Social and Behavioral Sciences (3 units).
C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

The Major
Mechanical engineers work on diverse, challenging problems that require the integration of science, engineering, and socioeconomic knowledge. Mechanical engineers develop solutions to physical problems, question how things work, make things work better, and create ideas for doing things in new and different ways. As a mechanical engineering student, you'll cover a broad scope of topics to prepare you for a successful engineering career.

Jobs in mechanical engineering include developing products to improve air and water quality, inventing more efficient energy sources, designing farm equipment to improve crop yield throughout the world, and developing systems for biological research as well as lifesaving medical equipment. A mechanical engineer, now more than ever, is someone who can translate scientific theories into the real products and processes to improve the quality of life.

Mechanical engineers are designers, and the program is dedicated to teaching engineering through the process of design. Design methodology and design projects are integrated throughout the curriculum, culminating in a capstone, design experience in the senior year where students are members of a design team.

The future depends on solving the worldwide problems of energy shortages, environmental pollution, world health, and inadequate food production. Mechanical engineers are actively involved in finding solutions for these problems. The emphasis in bioengineering prepares students for employment in industry, or for higher professional degrees in medicine, or bioengineering.

In addition to the majors in mechanical engineering with the B.S. degree and emphasis in bioengineering, the department offers two BS/MS 4 +1 degrees: The BS/MS 4 + 1 degree program (B.S. and M.S. in Mechanical Engineering) and the BS/MS 4 + 1 degrees program (B.S. in Mechanical Engineering and M.S. in Bioengineering). These degrees are for SDSU mechanical engineering students who wish to gain expertise in a specialization of mechanical engineering or bioengineering prior to employment in industry, government, or as preparation for further training.
Mechanical Engineering

Educational Objectives

The objectives of the mechanical engineering program are to produce Bachelor of Science graduates who:

1. Will be able to use their strong grounding in the core fundamentals of mechanical engineering, basic science, and mathematics in their future careers;
2. Will be able to employ an open minded but critical approach to the analysis of problems and design of systems, keeping in mind the technical, professional, societal, environmental, economic, and ethical dimensions of any solution;
3. Will be prepared for successful careers and have an appreciation of the need for lifelong learning in a rapidly changing field;
4. Will be productive engineers with a broad appreciation of the world and the role that engineering plays in society.

Mechanical engineering students will have the following abilities upon graduation: knowledge of mathematics, science, and engineering; design and conduct experiments, analyze and interpret data; design a system, component, or process to meet desired needs; function on multidisciplinary teams; identify, formulate, solve engineering problems; understanding of professional and ethical responsibility; communicate effectively; understand impact of engineering solutions in a global and societal context; recognition of need for and an ability to engage in life-long learning; knowledge of contemporary issues; techniques, skills, and modern engineering tools necessary for engineering practice; apply principles of engineering, basic science, and mathematics (including multivariate calculus and differential equations) to model, analyze, design, and realize physical systems, components or processes; work professionally in both thermal and mechanical systems areas.

Impacted Program

The mechanical engineering major is an impacted program. To be admitted to the mechanical engineering major, students must meet the following criteria:

a. Complete with a grade of C or higher: Mechanical Engineering 200 [or Aerospace Engineering 200]; Chemistry 202 [or 200]; Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit (Cr/NC);

b. Have an overall cumulative GPA of 2.5.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymp for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Mechanical Engineering Major

With the B.S. Degree

(Major Code: 09101) (SIMS Code: 447001)

All students in mechanical engineering pursue a common program of basic sciences, engineering, and mechanical engineering fundamentals. The major consists of 48 upper division units. Students are provided with the opportunity to select a pattern of study to satisfy their areas of interest. This pattern of study is indicated in the sequence known as “professional electives” and may be selected from available courses in IV.B. With the B.S. degree, students must follow the specific General Education program outlined in this section of the catalog except for area IV. Explorations of Human Experience. Students with this emphasis are required to take Biology 336 to satisfy three units of upper division Natural Sciences in place of IV.B.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or above or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 51 upper division units to include Mechanical Engineering 304 (or Civil Engineering 301), 310, 314, 330, 350, 351, 452, 490A, 490B, 499 (three units), 520, 555, 580, and 585; Aerospace Engineering 340, 341, Biology 356; Biology 436 or Mechanical Engineering 496 Bioengineering Systems Laboratory (two units). Biology 336 will also satisfy three units of the General Education requirement in IV.B.

BS/MS 4+1 Degree Program

B.S. and M.S. in Mechanical Engineering

(SIMS Code: 447012)

Students must complete 160 units to be simultaneously awarded the B.S. degree in mechanical engineering and the M.S. degree in mechanical engineering. Students can apply for admission to the BS/MS 4 + 1 (B.S. and M.S. in Mechanical Engineering) degree program when they have successfully completed a minimum of 90 units or a maximum of 115 units. These units must count towards one or the other of the two SDSU degree programs (BS or MS) that will ultimately be awarded in the dual degree program. All students must have a satisfactory score (minimum of 850 for combined verbal and quantitative on the Graduate Record Examination (GRE) General Test) and a minimum overall GPA of 3.0.
To satisfy the requirements for the BS/MS 4 + 1 degree program (B.S. and M.S. in Mechanical Engineering), students must achieve at least a 3.0 average in the 30 units of courses used to satisfy the graduate program of study. Of the 30 units, a maximum of nine units may be in 500-numbered mechanical engineering electives and all other program requirements must be satisfied. Three 500-level courses may be used to fulfill the elective requirements for the 4+1 BS/MS degree program (B.S. and M.S. in Mechanical Engineering) at the same time as serving as prerequisite courses for graduate study. The BS/MS 4 + 1 degree program (B.S. and M.S. in Mechanical Engineering) allows students to use any three 500-level M E courses toward their graduate degree. Students in the BS/MS 4 + 1 degree program (B.S. and M.S. in Mechanical Engineering) must follow the thesis option. Upon successful completion of the BS/MS 4 + 1 degree program, students will receive the B.S. degree in mechanical engineering and M.S. degree in mechanical engineering.

BS/MS 4+1 Degree Program  
B.S. in Mechanical Engineering and M.S. in Bioengineering  
(SIMS Code: 447013)

Students must complete 160 units to be simultaneously awarded the B.S. degree in mechanical engineering and the M.S. degree in bioengineering. Students can apply for admission to the BS/MS 4 + 1 degree program (B.S. in Mechanical Engineering and M.S. in Bioengineering) when they have successfully completed a minimum of 90 units or a maximum of 115 units. These units must count towards one or the other of the two SDSU degree programs (BS or MS) that will ultimately be awarded in the dual degree program. All students must have a satisfactory score (minimum of 950 for combined verbal and quantitative on the Graduate Record Examination (GRE) General Test) and a minimum overall GPA of 3.0.

To satisfy the requirements for the BS/MS 4 + 1 degree program (B.S. in Mechanical Engineering and M.S. in Bioengineering), students must achieve at least a 3.0 average in the 30 units of courses used to satisfy the graduate program of study. Of the 30 units, a maximum of nine units may be in 500-numbered mechanical engineering electives and all other program requirements must be satisfied. Three 500-level courses may be used to fulfill the elective requirements for the BS/MS 4 + 1 degree program at the same time as serving as prerequisite courses for graduate study. For the BS/MS 4 + 1 degree program (B.S. in Mechanical Engineering and M.S. in Bioengineering), students must take M E 580 and 585 for the biomaterials specialization; M E 580, 540 or 543, and 585 for the bioinstrumentation specialization. The bioinstrumentation specialization is not open to students in the BS/MS 4 + 1 degree program. Upon successful completion of the BS/MS 4 + 1 degree program, students will receive the B.S. degree in mechanical engineering and M.S. degree in bioengineering.

Courses (M E)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

M E 101. Solid Modeling I (2)  
Six hours of laboratory.  
Prerequisite: Mechanical Engineering 101.  

M E 102. Solid Modeling II (2)  
Six hours of laboratory.  
Prerequisite: Mechanical Engineering 101.  

M E 200. Statics (3)  
(Same course as Aerospace Engineering 200)  
Prerequisites: Physics 195 and credit or concurrent registration in Mathematics 151. Proof of completion of prerequisites required: Copy of transcript or registration confirmation.  

M E 202. Computer Programming and Applications (3)  
Two lectures and three hours of activity.  
Prerequisites: Mechanical Engineering 101 and credit or concurrent registration in Mathematics 151. Recommended: Mechanical Engineering 102.  
Principles of C programming to solve selected numerical methods. Syntax topics include data types, loops, control flow, arrays, memory, acquisition, functions. Algorithm topics include Gauss Reduction and Newton Raphson. Matlab implementations. Application areas in mechanical engineering include finite element, dynamics, computational fluid mechanics, physics based computer animation.

M E 204. Mechatronics Preparation Laboratory (1)  
Three hours of laboratory.  
Prerequisites: Electrical Engineering 204 and Mathematics 151.  
Simulated and hands-on circuit experiences with instrumentation and data acquisition, sensors and actuators to include transformers, op amps, digital gates, flip flops, motors, various transducers, sensors and actuators.
M E 220. Dynamics (3)
(Same course as Aerospace Engineering 220)
Prerequisite: Mechanical Engineering 200 or Aerospace Engineering 200 with a grade of C or better. Proof of completion of prerequisite required: Copy of transcript.
- Kinetics of a particle; central force motion; systems of particles; work and energy; impulse and momentum; moments and products of inertia; Euler’s equations of motion; vibration and time response; engineering applications.

M E 240. Introduction to Engineering Materials (3)
Prerequisites: Chemistry 202 (or 200) and credit or concurrent registration in Mechanical Engineering 200 or Aerospace Engineering 200. Proof of completion of prerequisites required: Copy of transcript and evidence of concurrent registration in Mechanical Engineering 200 or Aerospace Engineering 200.
- Atomic and molecular structure of materials utilized in engineering. Analysis of the relationships between structure of materials and their mechanical, thermal, electrical, corrosive, and radiation properties. Examples of material structure relevant to civil, electrical, aerospace, and mechanical engineering applications.

M E 241. Materials Laboratory (1)
- Three hours of laboratory. Prerequisite: Credit or concurrent registration in Mechanical Engineering 240.
- Experimental methods used to characterize engineering materials and their mechanical behavior.

M E 296. Experimental Topics (1-4)
- Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES
(Intended for Undergraduates)
NOTE: Proof of completion of prerequisites required for all Mechanical Engineering 300-, 400-, and 500-level courses: Copy of transcript is acceptable as proof. In addition, Mechanical Engineering 351 and 490A require evidence of concurrent registration in appropriate courses.

M E 304. Mechanics of Materials (3)
Prerequisite: Mechanical Engineering 200 or Aerospace Engineering 200.
- Concepts of stress and strain. Generalized Hooke’s law. Formulations for axial, shear, bending, torsion, and combined stresses applied to tension members, pinned joints, beams, and shafts. Euler buckling criteria for columns. Energy methods. Not open to students with credit in Civil Engineering 301.

M E 310. Engineering Design: Introduction (3)
- Two lectures and three hours of guided design activities. Prerequisites: Mechanical Engineering 102, 202, and Aerospace Engineering 220 or Mechanical Engineering 220. Every mechanical engineering student must have a master plan on file before enrolling in Mechanical Engineering 310.
- Professional approach to engineering design problems. Problem definition, information gathering, feasibility studies, analysis, final design and communication. Several design studies and projects are completed.

M E 314. Engineering Design: Mechanical Components (3)
Prerequisites: Mechanical Engineering 102, 202, 304 (or Civil Engineering 301).
- Application of mechanics, physical properties of materials, and solid mechanics to the design of machine elements. Student design projects.

M E 330. Control Systems Laboratory (3)
Two lectures and three hours of laboratory. Prerequisites: Mechanical Engineering 202, 204; Electrical Engineering 204; Aerospace Engineering 220 or Mechanical Engineering 220; Aerospace Engineering 280; Aerospace Engineering 340; Linguistics 200 or Rhetoric and Writing Studies 200.
- Control theory (e.g. stability, feedback, PID control) with applications in microprocessor-based control of dynamic, vibrational, and mechatronic systems. "Breath-boarding" and BASIC programming of microcontrollers and graphical programming of PC-based controller interfaces.

M E 350. Thermodynamics (3)
Prerequisites: Mathematics 252 and Mechanical Engineering 200 or Aerospace Engineering 200.
- Basic concepts and principles of thermodynamics with emphasis on simple compressible substances. First and second law analysis, entropy, exergy analysis and state relations. Not open to students with credit in Mechanical Engineering 352.

M E 351. Engineering Thermodynamics (3)
Prerequisites: Mechanical Engineering 350 and credit or concurrent registration in Aerospace Engineering 340.

M E 452. Principles of Heat Transfer (3)
Prerequisites: Mechanical Engineering 350 and Aerospace Engineering 340.
- Analytical and numerical solutions of steady and transient one- and two-dimensional conduction problems, forced and natural convection in external and internal flows, and thermal radiation. Applications.

M E 490A-490B. Engineering Design: Senior Project (3-3)
Prerequisites for 490A: Mechanical Engineering 304 (or Civil Engineering 301), 310, 314, 452. Biology students enrolling in this course must have completed Biology 366, Electrical Engineering 204, Mechanical Engineering 350, and have credit or concurrent registration in Biology 590.
Prerequisites for 490B: Mechanical Engineering 490A, 495. Biology majors: Mechanical Engineering 490A and Biology 590.
- Applications of engineering principles and design techniques to the designing, building, and testing of an engineering system. A single project is completed in this two-course sequence and is judged completed upon presentation of an oral and a written report. In addition, issues related to ethics and engineering practice are discussed.

M E 495. Mechanical and Thermal Systems Laboratory (2)
One lecture and four hours of guided design activities. Prerequisites: Mechanical Engineering 310, 330, 351, 452. Data acquisition theory, instrumentation, sensors, data reduction, statistical and uncertainty analysis, and design of experiments. Experience in designing, performing, and reporting experiments on mechanical and thermal systems, mechanisms, vibrations, structures, thermodynamics, heat transfer.

M E 496. Advanced Mechanical Engineering Topics (1-3)
Prerequisite: Consent of instructor. Proof of completion of prerequisite required: Copy of transcript.
- Modern developments in mechanical engineering. See Class Schedule for specific content. Maximum credit nine units for any combination of Mechanical Engineering 496, 499 and 596.

M E 499. Special Study (1-3)
Prerequisite: Consent of instructor. Proof of completion of prerequisite required: Copy of transcript.
- Individual study. Maximum credit nine units for any combination of Mechanical Engineering 496, 499 and 596.
UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

NOTE: Proof of Completion of prerequisites required for all Mechanical Engineering 300-, 400-, and 500-level courses: Copy of transcript.

M E 520. Introduction to Mechanical Vibrations (3)
Prerequisites: Mechanical Engineering 304 (or Civil Engineering 301) and Mechanical Engineering 330.
Analysis of mechanical vibration; single- and multi-degree of freedom systems; free and forced vibrations; vibration isolation; vibration absorbers. Theory of vibration measuring instruments.

M E 530. Automatic Control Systems (3)
Prerequisite: Mechanical Engineering 330.
Dynamic characteristics of control components and systems. Stability and response of closed loop systems. Design of control systems.

M E 535. Mechanics of Composite Structures (3)
(Same course as Aerospace Engineering 535)
Prerequisites: Aerospace Engineering 280 and Aerospace Engineering 310 or Mechanical Engineering 314.
Micro- and macro-mechanics of composite materials, classical lamination theory, initial failure prediction and progressive failure analysis of laminates, analysis of beam and plate structures, stiffness and strength based design of composites. Not open to students with credit in Mechanical Engineering 540.

M E 540. Nonmetallic Materials (3)

M E 543. Powder-Based Manufacturing (3)
Prerequisite: Mechanical Engineering 240.
Manufacturing of micro and nano-structured engineering components and composites starting with metal and/or ceramic powders. Powder production methods, characterization, powder shaping and compaction, sintering, hot consolidation, design considerations, and finishing operations.

M E 552. Heating, Ventilating, and Air-Conditioning (3)
Prerequisites: Mechanical Engineering 351 and 452.

M E 555. Energy and Thermal Systems Analysis and Design (3)
Prerequisites: Mechanical Engineering 351 and 452.
Analysis, design, and optimization of thermal systems using microcomputers. Modeling of thermal systems and components. Thermal system component characteristics and their effect on overall system performance. Relationship among thermal sciences in design process. Introduction to thermo-economic optimization.

M E 556. Solar Energy Conversion (3)
Prerequisites: Mechanical Engineering 351, 452, and Aerospace Engineering 340.
Application of thermodynamics, fluid mechanics and heat transfer to the thermal design of solar energy conversion systems. Computer simulations utilized.

M E 580. Biomechanics (3)
Prerequisites: Mechanical Engineering 304 (or Civil Engineering 301) and Aerospace Engineering 340.

One lecture and four hours of laboratory.
Microfabrication techniques, microsensors and microactuators, and scaling laws. A design project of a micro-device including schematic creation, test of performance, layout generation, and layout versus schematic comparison.

M E 596. Advanced Mechanical Engineering Topics (1-3)
Prerequisite: Consent of instructor. Proof of completion of prerequisite required: Copy of transcript.
Modern developments in mechanical engineering. May be repeated with new content. See Class Schedule for specific content. Maximum credit of nine units for any combination of Mechanical Engineering 496, 499 and 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Military Science
In the College of Professional Studies and Fine Arts

OFFICE: Exercise and Nutritional Sciences 451
TELEPHONE: 619-594-4943 / FAX: 619-594-7084

Faculty
Chair: Turner
Professor: Turner
Assistant Professors: Armas, Cotte, Hughes, Jason

Offered by the Department
Army ROTC curriculum leading to a commission as a second lieutenant in the US Army.
Minor in military science.

Curriculum
The Department of Military Science offers a two, three, and four-year Army Reserve Officers Training Corps (ROTC) program designed to develop future officers in the areas of leadership, management, foreign policy, national security, military history, and military skills. The Army ROTC program also offers a series of optional adventure outings and on-campus activities during the school year. These include orienteering, rappelling, sports programs and social activities. Enrollment in the Army ROTC program is not a requirement for taking military science courses. The Military Science Department offers a varied class schedule to meet students’ requirements.

The Army ROTC program consists of one course per semester along with scheduled leadership laboratories and field training. The four-year program is divided into two parts: the basic course and the advanced course. The basic course is usually taken in the freshman and sophomore years. No military commitment is incurred during this time, and students may withdraw at any time through the end of the second year. The first year consists of three-unit introductory courses each semester. The second year consists of three-unit courses with instruction on organizational leadership theories. Uniforms, necessary military science textbooks, and materials are furnished without cost.

After completing the basic course, students who have demonstrated officer potential, have met physical and scholastic standards and agree to contract are eligible to enroll in the advanced course. This course is normally taken in the final two years of college and consists of outlined military science and designated enrichment courses that include communication skills, military history, and computer literacy. In addition, the advanced course consists of a paid five-week Cadet Leaders Course (CLC) held during the summer between the junior and senior years. This camp permits students to put into practice the leadership principles and theories acquired in the classroom. All students in the advanced course receive uniforms, necessary military science textbooks, and pay for the Advanced Camp, and a living allowance of up to $4,000 each school year.

Upon completion of the advanced course, students are commissioned Second Lieutenants in the US Army. The available options after commissioning are active duty for a minimum of three years or three months active duty for training followed by part-time participation in the US Army Reserve or US Army National Guard.

Several special programs are available for students who have previous ROTC training or active military service. These programs allow for part- or full-placement credit for the basic course. In addition, a program is available for simultaneous participation in both Army ROTC and the Army Reserve or Army National Guard.

Two-Year Commissioning Program
This program offers students the opportunity to be commissioned officers after two years of Army ROTC instead of four years. The two-year program is designed for community and junior college graduates and students who did not take Army ROTC during their first two years or who have prior military experience. The five-week Cadet Initial Entry Training (CIET) provides the military skills and leadership training normally taught during the freshman and sophomore on-campus courses. CIET is conducted at Fort Knox, Kentucky, and a paid salary, transportation, meals, and lodging will be furnished. CIET graduates enroll in Military Science 301 to enter the advanced course.

Cross Enrollment
Students can participate in Army ROTC while attending any other college or university in San Diego County. For further information concerning cross enrollment, contact the Department of Military Science at 619-594-4943.

Applying for the Program
SDSU students enroll in military science courses by signing up during registration in the same manner as for other university classes. There is no advance application needed for the freshman or sophomore classes. Students need to contact the Department of Military Science to enroll in the Army ROTC program and to receive information on lab schedules and activities.

Students enrolling in other area colleges and universities need to contact the Department of Military Science at SDSU for curriculum requirements and application procedures at 619-594-4943.

Financial Assistance
All students have the opportunity to compete for two, three, and four-year scholarships. These scholarships cover all tuition, laboratory, and book fees, and a $300-500 monthly subsistence allowance during the school year. Scholarship applications are processed by the Department of Military Science. In addition, two-year scholarships are available at the CIET in Fort Knox, Kentucky, where you will be in competition only with the students attending the camp. Contact the department chair for details. Paid positions (part-time) are available through simultaneous membership in local reserve and National Guard units.

Military Science Minor
(Minor Code: 30009) (SIMS Code: 664901)
The minor in military science consists of a minimum of 18 to 20 units to include Military Science 301, 302, 401, 402; and a minimum of six to eight units selected from a critical foreign language such as Arabic, Persian, or Russian.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
Military Science

Courses (MIL S)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

MIL S 96. Leadership Laboratory (1) Cr/NC
Application of individual skills and military tasks appropriate to a small unit leader. Prepares cadets for higher level leadership positions. Emphasis is on performance in leader roles which includes instruction. Maximum credit eight units. Credit earned in this course not applicable to a bachelor’s degree.

MIL S 101. Leadership and Personal Development (3)
Structure, organization, and missions of US Army. Preparation and development for officer status.

MIL S 102. Introduction to Tactical Leadership (3)
Officer leadership, development, and functions. Emphasizing command responsibilities for basic foundation of military fundamentals.

MIL S 110. United States Military History (3)
Analyze decisions made by American military leaders. Military engagements from colonial period through current operating environment. Principles of war and reviews of decisions affecting outcomes.

MIL S 201. Innovative Team Leadership (3)
Scientific approach to leadership theory and its applicability to military settings through study of human behavior and leadership models at individual and group levels using simulations, case studies, and diagnostic instruments.

MIL S 202. Foundations of Tactical Leadership (3)
Leadership at organizational level with application to military settings with emphasis on developing leader skills and examination of theories and concepts of civil-military relations, using simulations, case studies, and diagnostic instruments.

MIL S 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

MIL S 299. Special Study (1-4)
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

UPPER DIVISION COURSES

(Intended for Undergraduates)

MIL S 301. Adaptive Tactical Leadership (3)
Prerequisite: Equivalent of two-year basic course program. Techniques and skills required of military leaders. Military methods of instruction, review of essential map reading skills and case studies of military leadership techniques.

MIL S 302. Leadership in Changing Environments (3)
Prerequisite: Equivalent of two-year basic course program. Current tactical doctrine and military techniques of planning and coordination required to apply doctrine to small unit operations.

MIL S 401. Developing Adaptive Leaders (3)
Prerequisites: Military Science 301 and 302.
Leadership and management problems encountered in a mid-level sized organization. Role of junior officer. Prepares senior cadets for positions as leaders and managers of resources at platoon/company level.

MIL S 402. Leadership in a Complex World (3)
Prerequisites: Military Science 301 and 302.
Military justice system as it has evolved from international law principles and established national security policies. History of military law, philosophy and structure of system to include court-martial ethics and decision-making.

MIL S 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

MIL S 499. Special Study (1-3)
Prerequisite: Consent of department chair. Individual study. Maximum credit six units.
Music
In the College of Professional Studies and Fine Arts

OFFICE: Music 112
TELEPHONE: 619-594-6031 / FAX: 619-594-1692
E-MAIL: music.dance@sdsu.edu

Faculty
Director: Friedrichs (Interim)
Professors: Conaty, Dutton, Follingstad, Liebowitz, McDonald, Waters, Yeager
Associate Professors: Delgado, Friedrichs, Rewoldt, Smigel, Thompson, Walders
Assistant Professor: Kitelinger
Lecturers: Ayres, Bolzenthal, Hibbs, Nikkel, Starr

Applied Music Instruction
Bassoon: Marchev, V.
Cello: Greenbaum, Zhao
Chamber Music: Hausmann Quartet
Clarinet: Rein
Classical Guitar: Bassett, Benedetti, Wetzel
Composition: Dutton, Waters
Double Bass: Kurtz-Harris, Magnusson
Euphonium: Dutton
Flute: Marchev, P.
Harp: Mashkovtseva
Horn: McCoy
Jazz Guitar: Boss
Jazz Studies: Thompson, Yeager
Non-Western Instruments: Specialists from specific cultures as available each semester
Oboe: Conaty, Skuster
Percussion: Cohen, Holguin
Piano: Follingstad
Saxophone: Rewoldt, Rekevics
Trombone: Starr
Trumpet: Cannon, Wilds
Tuba: Dutton
Viola: Chen, Maril
Violin: Allen, Tsai
Voice: Ayres, Bolzenthal, Nikkel

Offered by the School of Music and Dance
Master of Arts degree in music.
Master of Music degree.
Major in music with the B.A. degree in liberal arts and sciences.
Bachelor of Music degree in applied arts and sciences.
Teaching major in music for the single subject teaching credential.
Minor in music.
Certificate in performance.
Certificate in artist diploma, advanced (refer to the Graduate Bulletin).

The Major
Music serves to enhance the lives of all people and provides a challenging avenue of creative expression for those who wish to pursue its serious study.

The Bachelor of Music program is for those students who have professional ambitions in music performance, public school teaching, composition, jazz studies, as a music generalist or seek a foundation for graduate study leading to college or university teaching or research positions. This program strongly emphasizes the professional aspects of music. The Bachelor of Music degree with a specialization in Music Education leads to the California Single Subject Teaching Credential.

Performance is the most obvious and frequent use of the musician’s skill. However, graduates may also teach, compose, review, sell, and record music. In addition, inventing, constructing, tuning, and repairing instruments requires skills that are based on understanding the fundamentals of music. Some of the positions that a music graduate might hold include studio instructor; teacher in public or private schools; researcher for libraries, publishers, and museums; music therapist; recording artist, composer, or arranger, professional musician with an orchestra, band, or opera company, or arts management professional.

The Bachelor of Arts degree is a liberal arts degree for those students who seek broad understanding of and an intimate orientation to the discipline of music without professional goals. Several Music Minor options are available for those students whose primary interest is in another department.

Advising
All music majors are required to consult with their music faculty adviser as soon as possible; they are required to meet with their faculty adviser within the first two semesters after acceptance or transfer into the major.

Impacted Program
The music major is an impacted program. To be admitted to the music major, students must meet the following criteria:

a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.
d. For professional studies (e), track 1, music entrepreneurship and business specialization, students must have a cumulative GPA of 2.9 or higher. Music 205B and Accountancy 201 must be completed with a grade of C or higher. These courses cannot be taken for credit/no credit (Cr/NC).

to complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Music Curricula
General Basic Requirements
1. All new students and transfer students who wish to enroll as music majors or minors are given placement examinations in music theory and piano and auditions on their major instrument. (Students wishing to be considered for Global Composition must submit a portfolio of compositions. Please contact the composition faculty directly for the contents of the portfolio.) As a result of these placement examinations, students will be directed to enroll in one or more of the following: Music 105, 105A, 105B, 205A, 205B, 206A, 206B, 305A, 305B, 405A, 405B, Music 250, 251, 450, and 451 with the appropriate letter suffix; and Music 110A-110B, 210A-210B.
2. Each semester of private instruction concludes with a solo performance before a faculty jury.
3. To qualify for upper division study, music majors must pass a Junior Level Examination.
4. A final grade of C or higher is required in each semester of the CM courses in order to advance to the next higher course.
5. Students must participate in at least one major ensemble each semester of enrollment. Please see each degree program and specialization for specific unit requirements. Refer to the Music Student Handbook for specific requirements.
6. Attendance at and performance in recitals is a requirement of all music majors. Freshmen must meet ushering requirements. Refer to the Music Student Handbook for detailed information.
Statement on Computers

Students must become competent in the operation of personal computers to include word processing software, presentation software, web-based applications, and music notation software. Students, especially those planning to pursue Global Composition are encouraged to own a Macintosh laptop computer capable of running sophisticated music notation/composition software. For additional information regarding suggested platform and software, contact the School of Music and Dance.

Electives in Music – Nonmajors

The School of Music and Dance offers certain courses for students who are interested in music as an elective study area for the enrichment of their cultural background. Courses particularly suited for these needs are Music 102, 151, 345, 351, and the music ensemble courses numbered 170 through 189 and from 370 to 389. Some students will be musically prepared to elect courses which may or may not be included in this group. Enrollment by qualified students who wish to elect these courses is encouraged.

Opportunities to participate in instrumental and vocal ensembles are also available to non-music majors. Music ensemble courses may be repeated. A maximum credit of 14 units of ensemble courses (Music 170-189, 370-389, 570-589) may be counted toward a bachelor's degree for nonmajors.

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Music Major

With the B.A. Degree in Liberal Arts and Sciences

(Major Code: 10051) (SIMS Code: 665304)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in music courses can apply to the degree.

A minor is required with this major.

Preparation for the Major. Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151; three units selected from courses numbered 170-189; Music 205A, 205B, 206A; three units of Music 251. (20-23 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 24 upper division units to include Music 305A, 305B, 308A, 308B, 347; four units selected from courses numbered 370-389, 408A, and four units of upper division music electives.

Music Major

With the Bachelor of Music Degree in Applied Arts and Sciences

(Major Code: 10041)

All candidates for a bachelor of music degree must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” The maximum number of units in upper division music courses acceptable toward the Bachelor of Music degree is 70.

A minor is not required with this major.

Preparation for the Major. All majors must fulfill the requirements in one of the following areas of specialization.


(c) Global Composition (SIMS Code: 665362). Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151, 160, 166; four units from courses numbered Music 170 through 189; Music 205A, 205B, 206A-206B, two units of Music 207, Music 210A-210B; two units of Music 251L; Music 260, 266. (33-36 units)

(d) Jazz Studies (SIMS Code: 665378). Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151, 166, 204, 205A, 205B, 206A-206B, 266; six units selected from music courses numbered 170 through 189; six units of Music 251 (eight units if piano is primary instrument); two units of lower division music electives (34-37 units) Students with piano as primary instrument are not permitted in Music 110A or 110B (must complete eight units of Music 251 to compensate).

(e) Professional Studies.

Track 1 – Music Entrepreneurship and Business (SIMS Code: 665324): Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151, 205A, 205B, four units selected from music courses numbered 170 through 189; four units of Music 251, six units of lower division music electives. Accountancy 201; Communication 103; Economics 101 or 102; Journalism and Media Studies 210; one course selected from Economics 201, Statistics 119, or 250. (42-45 units) Students must have a cumulative GPA of 2.9 or higher. Music 205B and Accountancy 201 must be completed with a grade of C or higher. These courses cannot be taken for credit/no credit (C/NC).

Prior to enrolling in upper division College of Business Administration courses, students must complete Accountancy 201, have earned a minimum of 60 units and must participate in the entrepreneurship minor workshop; students must earn a grade of C (2.0) or better in Music 205B prior to enrolling in upper division music courses. School of Music and Dance, in consultation with the College of Business Administration, will monitor completion of experiential component required in the entrepreneurship coursework.


Track 3 – Music Recording Technology and Audio Design (SIMS Code: 665326). Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151, 160, four units selected from Music 170 through 189; 205A, 205B, two units of Music 207, 260, 290 [or Dance 290], Art 101, Art 103 or 240; Psychology 101; Computer Science 100 or 107. (37-40 units)

Language Requirement.

1. Music Education – competency (equivalent to that which is normally attained in one semester of college study) in German, Italian, or Spanish.

2. Performance – vocalists only – competency (equivalent to that which is normally attained in two years high school, or one semester of college study) in each of French, German, and Italian as evaluated in a language competency examination administered by the head of the vocal area.

3. Jazz Studies, instrumental performance majors, and Professional Studies Track 1 – no language equivalency required.

4. Global Composition and Professional Studies Track 2 – competency (equivalent to that which is normally attained in one semester of college study) in French, German, Italian, or Spanish.

5. Professional Studies Track 3 – competency (equivalent to that which is normally attained in two semesters of college study) in French, German, Italian, or Spanish.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major.
(a) Music Education. All candidates for a teacher credential must complete all requirements as outlined in this section of the catalog under Dual Language and English Learner Education or Teacher Education as an undergraduate major for the Bachelor of Music Education degree. Music 305A, 305B, 308A, 308B, 309A, 309B, 346, 347, 349, 405A, 405B, 408A, 408B, 446; four units selected from music courses numbered 370 through 389; three units of Music 451; Music 434 and three units of upper division music electives; Business Administration 350, 554; one course selected from Music 345, 561. (45 units)

(b) Performance. Music 305A, 305B, 308A, 308B, 347, 408A, 515; six units selected from courses numbered 370 through 389; 12 units of Music 450.

(Keyboard majors must include two units of Music 516; Music 541, 543, 554.)
(String majors must include three units of Music 516; Music 541, 554.)
(Vocal majors must include two units of Music 516; Music 541, 543, 554.)
(Woodwind majors must include Music 516, 541, 554.)

(All other performance majors must include nine units of upper division electives.) (42-45 units)

All Bachelor of Music students in performance must perform a public solo junior recital comprised of one-half hour of music (normally given in the second semester of their junior year) and a public solo senior recital comprised of one hour of music (normally given in the second semester of their senior year).

(c) Global Composition. Music 305A, 305B, 308A, 308B, 345, 347; four units of Music 360; four units selected from courses numbered 370 through 389; Music 405A, 405B, 408A; four units of Music 451L; Music 460; two units of Music 507, 554. (46 units)

Students specializing in global composition are required to present a concert of their compositions during their senior year and present the scores of works to be performed to the music faculty no later than one month in advance of the performance.

(d) Jazz Studies. Music 305A, 305B, 308A, 308B, 347, 364A-364B, 366, 408A, 466, 515, 566A-566B; six units selected from music courses numbered 370 through 389; eight units of Music 451D; two units of upper division music electives. (46 units)

All Bachelor of Music students in jazz studies must perform a public junior recital comprised of one-half hour of music (normally given in the second semester of their junior year) and a public senior recital comprised of one hour of music (normally given in the second semester of their senior year).

(e) Professional Studies.
Track 1 – Music Entrepreneurship and Business: Music 305A, 305B, 308A, 308B, 408A, 460, 466, 515, 516; two units selected from music courses numbered 370 through 389; six units of Music 530; 12 units of upper division music electives; Business Administration 350, Management 358, 460; one course selected from Business Administration 370 or Management 353, 455; one course selected from Hospitality and Tourism Management 332, Theatre 470 or 476; one course selected from Africana Studies 385 or Theatre 465. (57 units)

Track 2 – General: Music 305A, 305B, 308A, 308B, 345, 347, 349; four units selected from music courses numbered 370 through 389, 405A, 405B, 408A, 408B, two units of Music 451H, two units of Music 554, 13 units of upper division music electives. (49 units)

Track 3 – Music Recording Technology and Audio Design: Music 305A, 305B, 308A, 308B, four units of Music 360, 408A, 460; six units of Music 530, 546, nine units of upper division music electives selected from Music 405A, 405B, 554, 561; one unit from music courses numbered 370 through 389; Theatre 548; one course selected from Art 344, Dance 371 or 471. (45-46 units)

Performance Studies for Credit
Credit may be allowed for performance studies under the following conditions:
1. Properly enrolled Bachelor of Music majors may enroll for performance studies with resident faculty without an additional fee.
2. Students may under no circumstances change instructors in the middle of a semester without first securing the permission of the director of the School of Music and Dance.
3. Prior to the start of performance studies at San Diego State University, students are required to take a preliminary audition conducted by music faculty which will indicate status at the beginning of their studies.
4. Students who have dropped out of school or have stopped taking performance studies for credit for one semester or more, upon resumption of that instruction for credit are required to present another preliminary audition.
5. At the end of each semester, the School of Music and Dance will sponsor a jury examination to satisfy itself that its standards have been met.
6. Students enrolled in performance studies must be concurrently enrolled in the Comprehensive Musicianship program and class piano until such time as the CM and piano requirements are fulfilled.

Music Minor
(Minor Code: 10051)
To be admitted to the minor program, the student must audition to demonstrate vocal or instrumental performing ability. The minor in music consists of a minimum of 22 units in music selected from one of the following areas:
Elementary Music Education (SIMS Code: 665308). Requirements include Music 102, 110A-110B; two units selected from courses numbered 170 through 189; Music 205A, 205B; five units of Music 212, 214, 215, 216, 217, 218; Music 246A, 343, 345; two units selected from courses numbered 370-389, and two units of upper division music electives.

Students receive a strong multicultural component in Music 343 and 345.

Classical Music (SIMS Code: 665307). To be admitted to this area students must take a placement examination in comprehensive musicianship. Requirements include Music 105 (or passing placement examination), 110A-110B, 151; two units selected from Music 170-189; Music 205A, 205B; two units selected from Music 370-389; and eight units of upper division electives selected with the approval of the adviser.

Jazz Instrumental (SIMS Code: 665320). Requirements include Music 105 (or passing placement examination), two units each of Music 170 and 370; two units each of Music 189 and 389; Music 166, 205A, 205B, 266, 305A, 305B, 364A, 364B, 366, 466, 566A, 566B.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
Performance Certificate  
(SIMS Code: 665389)  

The performance certificate serves to prepare preprofessional performance students who have not earned a university degree for professional careers by giving focused instruction in all areas of performance including performing technique, interpretation, repertoire, performing experience and knowledge of the business of professional performance.  

Successful completion of an entrance audition and placement examinations are required for entrance to this certificate program. Applicants must also present a one-page statement of purpose, academic transcripts, and test scores that satisfy CSU eligibility requirements. Voice students must be at least 21 years of age.  

Students must complete the following 33 unit program: Two to three units selected from Music 151; 308A, 308B, 408A, 408B; 170-189 (3 units); six units selected from Music 205A, 205B, 305A, 305B, 405A, 405B; six units of Music 250; three units selected from courses numbered 370 through 389; six units of Music 450; Music 515, 516 (2 units), 554; three to four units of music electives. Students must present a full-length qualifying solo recital at the end of their second semester and a full-length solo recital in their final semester. Vocal students must demonstrate competency equal to two years of high school instruction or a college level course in French, German, or Italian.  

Students must maintain a minimum 3.0 grade point average in all advanced certificate coursework, with no less than a grade of C in any course. Only three units of coursework with a grade of C can count toward the performance certificate.  

All units in this certificate program are applicable to the various specializations in the Bachelor of Music degree program. However, not all courses are required in each specialization. All entrance requirements must be met to matriculate as a music major. See requirements for each specialization listed under the music major.

Courses (MUSIC)  

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.  

LOWER DIVISION COURSES  

MUSIC 101. Recitals (1) Cr/NC  
Preparation for individual solo performances and attendance at a minimum of 12 concerts or recitals in accordance with music requirements. Maximum credit four units.

MUSIC 102. Music for Elementary Classroom Teachers (3)  
Rudimentary music theory involving the elements of music: melody, rhythm, and harmony. Developing the understanding of these elements through instrumental and vocal experiences which include the use of unison and part-singing, the keyboard, and simple melodic and harmonic instruments. For liberal studies and preservice teachers. Not open to students with credit in Music 105 or 105B.

MUSIC 105. Introduction to Elements of Music (3)  
Music from aesthetic, communicative, theoretical, and creative perspective. Development of understanding of aesthetic valuing, musical notation, rhythm, theory, pitch, aural skills, and musical terminology. Not open to students with credit in Music 105 or 105B.

MUSIC 106A. Introduction to Aural Skills I (1)  
Three hours of activity.  
Prerequisite: Music 105 with a grade of C (2.0) or better, or passing placement examination.  
Introduction to sight-singing and music dictation. Not open to students with credit in Music 102.

MUSIC 106B. Introduction to Aural Skills II (1)  
Three hours of activity.  
Prerequisite: Music 106A with a grade of C (2.0) or better, or passing placement examination.  
Introduction to sight-singing and music dictation continued.

MUSIC 110A-110B. Piano - Elementary Class Instruction (1-1)  
Two hours.  
Prerequisite: For 110A: Music 105 with a grade of C (2.0) or better or passing placement examination. For 110B: Music 110A with a grade of C (2.0) or better.  
Basic keyboard experience through study of music reading, notation, scales, chords, and sight-reading covering a repertoire of beginning and intermediate songs and piano literature, with emphasis on keyboard harmony. Required of music majors and minors and credential candidates for teaching at the kindergarten-primary level. Music 110A not open to students with credit in Music 110B, 210A, 210B, 211A, 211B. Music 110B not open to students with credit in Music 210A, 210B, 211A, 211B.

MUSIC 151. Introduction to Music (3) [GE]  
Elements of music as exemplified by works representing different areas, cultures, styles, and forms. See Class Schedule for specific content.

MUSIC 160. Introduction to Electro-Acoustic Music (2)  
One lecture and two hours of activity.  
Historical overview of electro-acoustic music with hands-on introduction to analog multi-trade recording/mixing, digital sequencing with emphasis on shared lineage of classical and popular idioms.

MUSIC 166. Elements of Jazz I (2)  
Fundamental harmonic analysis of basic jazz progressions, common modes and blues scale variations, solo transcription analysis, and ear-training.

Performance Organization Courses  
(Music 170 through 189)  
The performance organization courses are devoted to the study in detail and the public performance of a wide range of representative literature for each type of ensemble and designed to provide students with practical experience in rehearsal techniques.

MUSIC 170. Chamber Music (1)  
Three hours. Four hours for opera.  
Prerequisite: Consent of instructor.  
Sections for string, woodwind, brass, piano, vocal, and mixed ensemble groups of three or more players. May be repeated with new content. See Class Schedule for specific content. Maximum credit four units.

MUSIC 175. Marching Band (2)  
More than six hours.  
Prerequisite: Consent of instructor.  
Study and public performance of literature for the ensemble. Practical experience in rehearsal techniques. Maximum combined credit for Music 175 and 375 eight units.

MUSIC 176. Wind Symphony (1)  
Five hours.  
Prerequisite: Consent of instructor.  
Study and performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

MUSIC 177. Symphonic Band (1)  
Five hours.  
Prerequisite: Consent of instructor.  
Study and performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

MUSIC 180. Symphony Orchestra (1)  
Five hours.  
Prerequisite: Consent of instructor.  
Maximum credit four units.

MUSIC 183. Opera Workshop (1)  
Two hours of activity.  
Prerequisites: By audition and consent of instructor.  
Opera scenes, specific roles, chorus, design, and technical support functions in opera. Maximum credit four units.

MUSIC 184. Opera Theatre (2)  
Six or more hours per week.  
The interpretation and characterization of light and grand opera. Specific work in coordination of operatic ensemble. Maximum credit eight units.
MUSIC 185. Concert Choir (1)  
Five hours.  
Prerequisite: Consent of instructor.  
Maximum credit four units.

MUSIC 186. Chamber Singers (1)  
Five hours.  
Prerequisite: Consent of instructor.  
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal technique. Maximum credit four units.

MUSIC 189. Jazz Ensemble (1)  
More than three hours.  
Prerequisite: Consent of instructor.  
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

MUSIC 204. Music Composition Technology (1)  
Two hours of activity.  
Current technology in electro-acoustic music composition, score preparation, performance practices. Open to music majors and minors only.

MUSIC 205A. Comprehensive Musicianship (3)  
Prerequisite: Music 105 with a grade of C (2.0) or better, or passing placement examination.  
Music theory, harmony, composition, counterpoint, and analysis. Open to music majors and minors only. Not open to students with credit in Music 205B, 305A, 305B, 405A, 405B.

MUSIC 205B. Comprehensive Musicianship (3)  
Prerequisite: Music 205A with a grade of C (2.0) or better.  
Continuation of Music 205A. Open to music majors and minors only. Not open to students with credit in Music 305A, 305B, 405A, 405B.

MUSIC 206A-206B. Aural Skills (1-1)  
Prerequisite for Music 206A: Music 106B with a grade of C (2.0) or better. Prerequisite for Music 206B: Music 206A with a grade of C (2.0) or better.  
For music majors only.

MUSIC 207. Composition Laboratory (1)  
Three hours of laboratory.  
Prerequisite: Consent of instructor.  
Original writing in different homophonic and polyphonic forms for various media. See Class Schedule for specific content. Maximum credit two units.

MUSIC 210A-210B. Piano - Elementary Class Instruction (1-1)  
Two hours.  
Prerequisite: For 210A: Music 110B with a grade of C (2.0) or better. For 210B: Music 210A with a grade of C (2.0) or better.  
Continuation of Music 110A-110B. Not open to students with credit in Music 211A-211B.

MUSIC 211A-211B. Class Piano - Keyboard Major (1-1)  
Two hours.  
Prerequisite: For 211B: Music 211A  
Technical studies, keyboard harmony to include figured bass and jazz, performance practice and orchestration, open score reading, transcription and accompanying skills, improvisation and arranging for the advanced pianist. Not open to students with credit in Music 110A, 110B, 210A, 210B.

MUSIC 212. Voice - Elementary Class Instruction (1)  
Two hours.  
Mastery of the fundamentals of voice. Not open to voice majors.

MUSIC 214. Strings - Elementary Class Instruction (1)  
Two hours.  
Fundamentals of string instruments by lecture and acquisition of elementary skills for purpose of gaining teaching and conducting skills in working with strings. Primarily for music education majors.

MUSIC 215. Woodwinds - Elementary Class Instruction (1)  
Two hours.  
Fundamentals of woodwind instruments by lecture and acquisition of elementary skills for purpose of gaining teaching and conducting skills in working with woodwinds. Primarily for music education majors.

MUSIC 216. Brass - Elementary Class Instruction (1)  
Two hours.  
Fundamentals of brass instruments by lecture and acquisition of elementary skills. Primarily for music education majors.

MUSIC 217. Percussion - Elementary Class Instruction (1)  
Two hours.  
Fundamentals of percussion through acquisition of elementary skill on the snare drum and by demonstration and lecture regarding all commonly used percussion instruments of definite and indefinite pitch. Not open to percussion majors. Primarily for music education majors.

MUSIC 218. Guitar - Elementary Class Instruction (1)  
Two hours.  
Open to all students interested in fundamentals of guitar and elementary music skills. Not open to guitar majors.

MUSIC 243. Diction I (1)  
Three hours of activity.  
Prerequisite: Music 105.  
Principles of pronunciation and enunciation. Application to song and opera using the IPA, in English and Italian.

MUSIC 246A. Practicum in Music Education I (2)  
One lecture and two hours of activity.  
Prerequisite: Music 205B.  
Introduction to music education. Exposure to music teaching problems at all grade levels before choosing an area of specialization.

MUSIC 246B. Practicum in Music Education II (2)  
One lecture and two hours of activity.  
Prerequisite: Music 246A with a grade of C (2.0) or better.  
Methods and materials. Development of lesson plan and selection of appropriate materials and methods. Rehearsal techniques for elementary, junior high, and high school. Observations of public school master teachers.

MUSIC 250. Performance Major Studies (3)  
Prerequisite: Open only to music majors in the performance specialization. Audition required.  
Studies in technical, stylistic, and aesthetic elements of artistic performance. Maximum credit for Music 250 is 12 units.

A. Keyboard  
B. Voice  
C. Woodwinds  
D. Brass  
E. Percussion  
F. Strings

MUSIC 251. Performance Studies (1-2)  
Prerequisites: Open only to music majors. Audition and approval by music faculty.  
Studies in technical, stylistic, and aesthetic elements of artistic performance. Maximum credit for Music 251 is eight units.

A. Keyboard  
B. Voice  
C. Woodwinds  
D. Brass  
E. Percussion  
F. Strings

MUSIC 250. Performance Major Studies (3)  
Prerequisite: Open only to music majors in the performance specialization. Audition required.  
Studies in technical, stylistic, and aesthetic elements of artistic performance. Maximum credit for Music 250 is 12 units.

A. Keyboard  
B. Voice  
C. Woodwinds  
D. Brass  
E. Percussion  
F. Strings

MUSIC 260. Electro-Acoustic Music Composition I (2)  
One lecture and two hours of activity.  
Prerequisite: Music 160.  
Sound sampling, musique concrete, subtractive synthesis, physics of sound and basic digital audio theory. Emphasis on application of techniques and theoretical knowledge to produce original musical compositions.

MUSIC 266. Elements of Jazz II (2)  
Prerequisite: Music 166.  
Harmonic analysis of standard and bebop repertoire, less common modes and dominant scales, solo transcription, analysis, and ear-training.

MUSIC 290. Body Modalities (2)  
(Same course as Dance 290)  
One lecture and two hours of activity.  
Alternative movement theory systems including an introduction to body modalities of yoga, Pilates, ideokinesis, Alexander and Feldenkrais techniques, Laban movement analysis and authentic movement. Maximum credit four units.
MUSIC 296. Experimental Topics (1-4)  
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

MUSIC 299. Special Study (3)  
Prerequisites: Consent of School of Music and Dance director, and instructor.
Individual study.

UPPER DIVISION COURSES  
(Intended for Undergraduates)

MUSIC 301. Recitals (1) Cr/NC  
Preparation for individual solo performances and attendance at a minimum of 12 concerts or recitals in accordance with music requirements. Maximum credit four units.

MUSIC 305A. Comprehensive Musicanship (3)  
Prerequisites: Music 205B with a grade of C (2.0) or better. Concurrent registration in Music 308A.
Music theory, harmony, composition, counterpoint, and analysis. Continuation of Music 205B. Open only. Not open to students with credit in Music 305B, 405A, 405B.

MUSIC 305B. Comprehensive Musicanship (3)  
Prerequisites: Music 305A with a grade of C (2.0) or better. Concurrent registration in Music 308B.
Music theory, harmony, composition, counterpoint, and analysis. Continuation of Music 305A. Open to music majors and minors only. Not open to students with credit in Music 405A or 405B.

MUSIC 308A. Music History I: Medieval, Renaissance, and Baroque (3)  
Prerequisite: Music 151.
European art music from ancient Greece through the Baroque. Evolution of musical style in a historical and cultural context. Interrelationships of music, politics, technology, economics, and ideology. Open to music majors and minors only.

MUSIC 308B. Music History II: Classical and Romantic (3)  
Prerequisite: Music 151.
European art music from 1750 to beginning of 20th century. Evolution of musical style as a response to historical and cultural context. Interrelationships of music, politics, technology, economics, and ideology. Open to music majors and minors only.

MUSIC 343. Music Literature for Children (3)  
Prerequisite: Music 102 or 205B.
Analytical study of music suitable for children of all ages. Background information, musical structure and functions of this music in the lives of children.

MUSIC 345. World Music in Contemporary Life (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Folk, ancient, and modern art music of world cultures, including traditional music of Africa, Asia, Latin America, the United States and Europe, as they relate to contemporary culture. Concert attendance required. Not open to music majors except those completing Global Composition, Music Education, or Professional Studies Track 2-General.

MUSIC 346. Practicum in Music Education III (2)  
One lecture and two hours of activity.
Prerequisites: Music 110B and 248B with a grade of C (2.0) or better. Practical teaching applications. Students will develop and teach model lessons evaluated by students, faculty, and master teachers. Students choose a primary area of specialization and a master teacher in preparation for the final semester of the practicum series.

MUSIC 347. Conducting (1)  
Prerequisite: Music 205B with a grade of C (2.0) or better.
Basic techniques of conducting. Baton technique, conducting patterns, score reading, elements of performance and interpretation. Practical experience in typical conducting situations.

MUSIC 349. Instrumental Conducting (1)  
Prerequisite: Music 297 with a grade of C (2.0) or better.
Elements of baton technique and development of skills common to instrumental conducting. Representative literature and techniques for instrumental organizations studied and performed. Practical experience in typical conducting situations.

MUSIC 351. Music and Culture (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Significant music literature of various historical and cultural periods with emphasis on stylistic characteristics through directed listening. Not open to music majors. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units from Music 351, 351C, and 351D of which three units may be applicable to General Education.

MUSIC 360. Electro-Acoustic Music Composition II (2)  
One lecture and three hours of laboratory.
Prerequisite: Music 260.
Concepts, terminology, and history combined with composition and recording projects introducing analog electro-acoustic music with multi-track recording and analog synthesizers; or digital electro-acoustic music using digital synthesizers and computer software. May be repeated with new content. Maximum credit four units.

MUSIC 364A-364B. History of Jazz (2-2)  
Jazz style and forms as they have evolved historically. Classroom playing experience in jazz styles as a part of study. Designed for music majors and minors.

MUSIC 366. Elements of Jazz III (2)  
Prerequisite: Music 266.
Post bop repertoire, altered modes and scales, solo transcription, analysis, and ear-training.

Performance Organization Courses  
(Music 370 through 389)
The performance group courses are devoted to the study in detail and the public performance of a wide range of representative literature for each type of ensemble, and designed to provide students with practical experience in rehearsal techniques.

MUSIC 370. Chamber Music (1)  
Three hours. Four hours for opera.
Prerequisite: Consent of instructor.
Sections for string, woodwind, brass, piano, vocal, and mixed ensemble groups of three or more players. May be repeated with new content. See Class Schedule for specific content. Maximum credit four units.

MUSIC 375. Marching Band (2)  
More than six hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum combined credit for Music 175 and 375 eight units.

MUSIC 376. Wind Symphony (1)  
Five hours per week.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

MUSIC 377. Symphonic Band (1)  
Five hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

MUSIC 380. Symphony Orchestra (1)  
Five hours.
Prerequisite: Consent of instructor. Maximum credit four units.
MUSIC 383. Opera Workshop (1)
Two hours of activity.
Prerequisites: By audition and consent of instructor.
Opera scenes, specific roles, chorus, design, and technical support functions in opera. Maximum credit four units.

MUSIC 384. Opera Theatre (2)
Six or more hours per week.
Interpretation and characterization of light and grand opera. Specific work in coordination of opera ensemble. Maximum credit eight units.

MUSIC 385. Concert Choir (1)
Five hours.
Prerequisite: Consent of instructor.
Maximum credit four units.

MUSIC 386. Chamber Singers (1)
Five hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal technique. Maximum credit four units.

MUSIC 388. Jazz Ensemble (1)
More than three hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

MUSIC 390. Somatic Practices for Performers (2)
(Same course as Dance 390)
One lecture and two hours of activity.
Prerequisite: Music 290 or Dance 290 with a grade of C or better.
Analysis, investigation, and physical realization of movement theory systems to include body modalities of yoga, Pilates, Alexander technique.

MUSIC 405A. Comprehensive Musicianship: Orchestration, Arranging (3)
Prerequisite: Music 305B with a grade of C (2.0) or better.
Orchestration and arranging techniques for comprehensive musicianship composition and arranging projects. Open to music majors and minors only.

MUSIC 405B. Comprehensive Musicianship: Counterpoint (3)
Prerequisite: Music 305B with a grade of C (2.0) or better.
Counterpoint in the sixteenth and eighteenth century. Open to music majors and minors only.

MUSIC 408A. Music History III: 20th and 21st Centuries (3)
Prerequisites: Music 151 and 308B.
Art music from beginning of 20th century to present. Evolution of musical style in a historical and cultural context. Interrelationships of music, politics, technology, economics, and ideology. Open to music majors and minors only.

MUSIC 408B. Music History IV: Jazz History and Improvisation (2)
One lecture and two hours of laboratory.
Prerequisites: Music 151 and 305B.
Historical and theoretical overview of jazz art music tradition. Rhythmic, harmonic, and melodic components. Analytical score study. Practical experience in modal and tonal jazz improvisation. Open only to music majors and minors.

MUSIC 446. Practicum in Music Education IV (2)
One lecture and two hours of activity.
Prerequisites: Music 205B, 210A, 346, 347 with a grade of C (2.0) or better.
Early field experience. Students will complete 20 hours of public school teaching in their area of specialization. Master teachers will provide on-site guidance and evaluation. Field experience and increased effectiveness discussed.

MUSIC 450. Performance Major Studies (3)
Prerequisite: Open only to music majors in the performance specialization. Audition required.
Studies in technical, stylistic, and aesthetic elements of artistic performance. Maximum credit for Music 450 is 12 units.

MUSIC 451. Performance Studies (1-2)
Prerequisites: Open only to music majors. Audition and approval by music faculty.
Studies in technical, stylistic, and aesthetic elements of artistic performance. Maximum credit for Music 451 is eight units.

MUSIC 496. Elements of Jazz IV (2)
Prerequisite: Music 360.
Atonal and aeromedical theories and philosophy, research paper, solo transcription, analysis, and ear-training.

MUSIC 507. Composition Laboratory (1)
Three hours of laboratory.
Prerequisites: Music 207 with a grade of C (2.0) or better and consent of instructor.
Continuation of Music 207. Maximum credit two units.

MUSIC 514. Volunteerism in the Arts (3)
Prerequisite: Upper division standing.
Study of volunteerism and its effects on non-profit organizations and the creation and implementation of volunteer projects in partnership with local non-profit performing arts organizations.

MUSIC 515. Professional Orientation for Music Performers (2)
One lecture and two hours of activity.
Prerequisite: Twelve units of upper division or graduate standing in B.M., or M.M. degree. Others by consent of instructor.
Conditions met in professional music world as well as opportunities available. Auditions, contracts, legal and tax responsibilities, media and press promotion, grants, professional management, apprenticeships.

MUSIC 516. Performance Practice Forum (1)
Two hours of activity.
Prerequisite: Consent of instructor.
Musical style, repertoire, presentation, and evaluation as embodied in a musical performance. May be repeated with new content. Maximum credit four units.

### UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

MUSIC 541. Performance Studies I (3)
Prerequisites: Open only to music majors. Audition and approval by music faculty.
Studies in technical, stylistic, and aesthetic elements of artistic performance. Maximum credit for Music 451 is eight units.

MUSIC 546. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

MUSIC 599. Special Study (1-3)
Prerequisite: Consent of School of Music and Dance director.
Individual study. Maximum credit six units.

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### ARTS AND HUMANITIES COURSES

**Composition**

MUSIC 499. Special Study (1-3)
Prerequisite: Consent of School of Music and Dance director.
Individual study. Maximum credit six units.

**Non-Western Instruments**

MUSIC 400. Non-Western Instrumental Ensembles (1)
Prerequisite: Consent of instructor.
Performance. Maximum credit for Music 450 is 12 units.

**Voice**

MUSIC 305. Choir (1)
Prerequisite: Consent of instructor.
More than three hours.
Maximum credit for Music 450 is 12 units.

**Orchestration and Arranging**

MUSIC 408. Orchestration and Arranging (2)
Prerequisite: Music 305B with a grade of C (2.0) or better.
Orchestration and arranging techniques for comprehensive musicianship composition and arranging projects. Open to music majors and minors only.

**Theater**

MUSIC 384. Opera Theatre (2)
Prerequisite: Music 205B, 210A, 346, 347 with a grade of C (2.0) or better.
Art music from beginning of 20th century to present. Evolution of musical style in a historical and cultural context. Interrelationships of music, politics, technology, economics, and ideology. Open to music majors and minors only.
MUSIC 518. Community Performance Practicum (2)  
One lecture and two hours of activity.  
Practicum for performers, educators, administrators, researchers, or clinicians intending to develop and implement performing arts outreach programs in the community. (Formerly numbered Music 518A.)

MUSIC 530. Music Internship (1-3)  
Two hours of activity per unit.  
Prerequisite: Upper division or graduate standing in a music degree program.  
Work with approved music professionals and agencies off-campus to include education, performance, production, and administration under the combined supervision of agency personnel and instructor. Maximum credit six units.

MUSIC 541. Performance Studies Pedagogy (3)  
Two lectures and three hours of laboratory.  
Prerequisite: Consent of instructor.  
Teaching strategies for beginning and intermediate applied music. Survey and evaluation of teaching materials. Observation of individual or group lessons. See Class Schedule for specific content. Maximum credit three units.

MUSIC 542. Performance Studies Laboratory (2)  
One lecture and three hours of laboratory.  
Prerequisite: Music 541 with grade of C (2.0) or better.  
Practical experience in teaching of individual or group lessons. See Class Schedule for specific content. Maximum credit two units.

MUSIC 543. Diction II (1)  
Prerequisite: Music 243.  
Principles of pronunciation and enunciation. Application to song and opera in Spanish, German, and French.

MUSIC 554. Music Literature (2)  
Prerequisite: Music 205B with a grade of C (2.0) or better.  
Study of music literature. Analysis of scores and recordings. May be repeated with new course content. See Class Schedule for specific content. Maximum credit six units applicable to a bachelor's and master's degree.

MUSIC 560. Music and Visual Media (3)  
Two lectures and three hours of activity.  
Prerequisite: Music 460.  
Techniques and aesthetics of combining music/sounds and visual elements, including contemporary film scoring techniques, sound design for installations and performance art, video game scoring and experimental immersive 3-D virtual reality.

MUSIC 561. Area Studies: Ethnomusicology (3)  
Prerequisite: Music 305B with a grade of C (2.0) or better.  
Music of a specific culture. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

MUSIC 563A-566B. Jazz Arranging and Composition (2-2)  
Prerequisite: Music 305B with a grade of C (2.0) or better.  
Analysis of jazz compositions and arrangements; arranging and composing for large and small jazz ensembles.

MUSIC 570. Advanced Chamber Music (1)  
Three hours.  
Prerequisite: Consent of instructor.  
Study and public performance of established repertory as well as new compositions. Sections for string, woodwind, brass, piano, vocal, and mixed ensemble groups of three or more players. May be repeated with new course content. See Class Schedule for specific content. Maximum credit four units.

MUSIC 576. Wind Symphony (1)  
Five hours.  
Prerequisite: Consent of instructor.  
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

MUSIC 577. Symphonic Band (1)  
Five hours.  
Prerequisite: Consent of instructor.  
Study and performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

MUSIC 580. Symphony Orchestra (1)  
Five hours.  
Prerequisite: Consent of instructor.  
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

MUSIC 583. Opera Workshop (1)  
Two hours of activity.  
Prerequisites: By audition and consent of instructor.  
Opera scenes, specific roles, chorus, design, and technical support functions in opera. Maximum credit four units.

MUSIC 584. Opera Theatre (2)  
Six or more hours per week.  
Prerequisite: By audition.  
Interpretation and characterization of light and grand opera. Specific work in coordination of opera ensemble. Maximum credit eight units of which six units are applicable to a master's degree.

MUSIC 585. Concert Choir (1)  
Five hours.  
Prerequisite: Consent of instructor.  
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

MUSIC 586. Chamber Singers (1)  
Five hours.  
Prerequisite: Consent of instructor.  
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

MUSIC 588. Advanced Practicum in Music (3)  
Prerequisite: Consent of instructor in area of practicum.  
Students will be assigned to appropriate class sections within selected undergraduate area as instructional assistants under staff supervision.

MUSIC 596. Special Topics in Music (1-3)  
A specialized study of selected topics from the several areas of music. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

MUSIC 598. Music Review: History, Analysis, and Aural Skills (3) Cr/NC  
Prerequisite: Admission to the graduate program.  
Review basic concepts of music theory, aural skills, and music history required for full candidacy in the graduate music program. Not applicable to the master's degree in music.

GRADUATE COURSES  
Refer to the Graduate Bulletin.
Natural Science
In the College of Sciences

OFFICE: Physics 131
TELEPHONE: 619-594-6240
http://www-rohan.sdsu.edu/~natsci

Faculty
Emeritus: Dowler, Feher, Fisher, Goldberg, May, Wallace
Faculty: Kimbrough (Geological Sciences)

Offered by Natural Science
Teaching major in physical science for the single subject teaching credential in science/physical science.

The Major
The physical science major is offered as an interdisciplinary approach to the study of science. It stresses the interrelationship of physics with chemistry, geology, astronomy, biology, and mathematics. The major is designed primarily for students who intend to become high school teachers of both interdisciplinary science and physics.

One of the requirements for acceptance into the College of Education’s post-baccalaureate credential program is to either pass the appropriate CSET examinations or complete an approved academic program. The single subject teaching credential in science subject matter preparation program described below satisfies the academic requirements for a student planning to teach integrated science and physics.

One of the requirements for acceptance into the College of Education’s post-baccalaureate credential program is to either pass the appropriate CSET examinations or complete an approved academic program. The single subject teaching credential in science subject matter preparation program described below satisfies the academic requirements for a student planning to teach integrated science and physics.

One of the requirements for acceptance into the College of Education’s post-baccalaureate credential program is to either pass the appropriate CSET examinations or complete an approved academic program. The single subject teaching credential in science subject matter preparation program described below satisfies the academic requirements for a student planning to teach integrated science and physics.

Impact Program
The physical science major is an impacted program. To be admitted to the physical science major, students must meet the following criteria:

- Complete preparation for the major;
- Complete a minimum of 60 transferable semester units;
- Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Physical Science Major
In preparation for the Single Subject Teaching Credential in Science/Physical Science
With the B.A. Degree in Applied Arts and Sciences
(Major Code: 19011) (SIMS Code: 777303)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of the catalog on “Graduation Requirements.” Candidates may complete one of their two American Institutions courses at the upper division level or satisfy the California state and local government portion of American Institutions by passing the California Government examination available through the Testing Services office.

A minor is not required for this major.

Preparation for the Major, Africana Studies 140 or Chicano and Chicano Studies 111A or Communication 103; Astronomy 109, 201; Biology 203, 203L, 204, 204L; Chemistry 200, 201; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, 197L; Teacher Education 211B (1 unit). (50 units)

Graduation Writing Assessment Requirement.
Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major.
A minimum of 32 upper division units to include Geological Sciences 412; Mathematics 342A; Physics 311, 317, 350, 354, 357, 360, 400A, 499 (History of Science and Technology).

Additional Requirements for Subject Matter Preparation Certification
Satisfactory Grades. A 2.0 or higher grade point average based on all upper division courses is required for the major. At most one course with a C- or lower among the courses listed under Preparation for the Major, and at most one course with a C- or lower among the courses listed under the Major. If a course is repeated, the highest grade will count.

Formative Assessment. Completion of a satisfactory, preliminary portfolio two semesters prior to graduation. Contact the subject matter preparation adviser for information.

Summative Assessment. Completion of a satisfactory, final portfolio and a positive recommendation from the instructor of Physics 357.
Courses (N SCI)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSE

N SCI 100. Physical Science (3) [GE]
Conceptual approach to major issues in physics and chemistry, including principles of motion and energy and structure and properties of matter. Effects of physical science and technology on individuals and human society.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)

N SCI 596. Special Topics in Natural Science (1-4)
Prerequisites: Minimum ten units of natural science. Selected topics in natural science for preservice and inservice elementary and secondary teachers and candidates for the M.A. in education. May be repeated with consent of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES

Refer to the Graduate Bulletin.
Naval Science
In the College of Professional Studies and Fine Arts

OFFICE: Communication 130
TELEPHONE: 619-594-3985 / 619-594-1134 / 619-594-1135
FAX: 619-594-7848 / 619-260-6821

Faculty
Chair: Johnson
Professor: Johnson
Associate Professor: Dickerson
Assistant Professors: Billhardt, Gladfelter, Johnson, Long, Nelson, Thornton

Offered by the Department
Minor in naval science.

NROTC Curriculum
The naval science program provides college students desiring to become Naval or Marine Corps reserve officers a basic professional background in the areas of leadership, ethics, and management; piloting and celestial navigation; nautical rules of the road; ship characteristics, design and propulsion; theory and employment of weapon systems; and development of warfare and amphibious operations. This curriculum is open to all university students. A graduate will be able to assume, through development of mind and character, the highest responsibilities of command, citizenship, and government.

The primary objectives of the Naval Science department curriculum are to provide:

1. An understanding of the fundamental concepts and principles of naval science;
2. A basic understanding of associated professional knowledge;
3. An appreciation of the requirements for national security;
4. A strong sense of personal integrity, honor and individual responsibility; and,
5. An educational background which will allow naval science students to undertake successfully, in later periods in their careers, advanced and continuing education in a field of application and interest to the Navy or Marine Corps.

Naval Science Minor
(Minor Code: 31119) (SIMS Code: 665701)
The minor in naval science consists of a minimum of 15 units in naval science, 12 of which must be upper division.

Courses in the minor may not be counted toward the major, but may be used to satisfy requirements for preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (NAV S)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

NAV S 101. Introduction to Naval Science (3)
Two lectures and two hours of activity. Structure, principles, and practices; lines of command and control; logistical organizations; functions and services of major components of the Navy and Marine Corps; shipboard organization; ethics and basic leadership skills.

NAV S 102. Naval Engineering (3)
Ship characteristics and types including hull, electrical, auxiliary systems, stability and damage control. Operation advantages and disadvantages of steam, gas turbine, and diesel propulsion engines receive in-depth study. Leadership topics in an engineering setting.

NAV S 201A. Naval Leadership and Management I (3)
Prerequisites: Naval Science 101 and 102. Tactics and integrity, progressing through management theory and practical functions of management, culminating with module on leadership. Exposure to complex ethical, managerial, and leadership issues.

NAV S 202. Sea Power and Maritime Affairs (3)
Sea power and maritime affairs; general concept of sea power including Merchant Marine; role of naval warfare components used to support the Navy's mission; sea power as an instrument of national policy; comparative study of US and Soviet strategies.

UPPER DIVISION COURSES
(Intended for Undergraduates)

NAV S 301. Navigation (3)
Piloting, navigation, maneuvering, rules of nautical road. Use of charts, visual and electronic aids, operation of magnetic and gyro compasses, relative motion vector analysis, formation tactics, and ship employment. Tides, currents, wind, weather, navigation instruments, and characteristics of electronic navigation.

NAV S 302. Naval Operations (3)
Prerequisite: Naval Science 301. Naval operations and operations analysis, ship handling, and afloat communications. Case analyses stress practical application of skills. Leadership traits in themes of communication counseling and conflict resolution applicable to naval operations.

NAV S 310. Evolution of Strategic Operations (3)
Prerequisite: Naval Science 302. Study of operations and strategic objectives in the 20th century. Forms of warfare through history to formulate sense of historical continuity in evolution of warfare, to develop a basic sense of strategy and alternative military actions, and to explore impact of historical precedent on military thought and actions.

NAV S 401A. Naval Weapons (3)
Prerequisite: Naval Science 302.
Develop working foundation and understanding of diversity and complexity of Navy and Marine Corps weapons systems including target detection and tracking, radar, sonar, electronic warfare systems, weapons warheads, fusing, propulsion, guidance, launching, and fire control systems.

NAV S 402. Naval Leadership and Ethics (3)
Prerequisite: Naval Science 401A.
Naval leadership and management with emphasis on military justice administration, naval personnel management, material management, and administration of discipline.

NAV S 410. Amphibious Operations (3)
Amphibious warfare, doctrinal origins, and its evolution as an element of naval policy during the twentieth century.
Nursing
In the College of Health and Human Services

OFFICE: Adams Humanities 3138
TELEPHONE: 619-594-5357 / FAX: 619-594-2765
http://nursing.sdsu.edu

Agency Member of the American College of Nurse Midwives and the American Association of Colleges of Nursing. Accredited by the American College of Nurse Midwives Accreditation Commission for Midwifery Education, California Board of Registered Nursing, and the Commission on Collegiate Nursing Education.

Faculty
Emeritus: Broom, Dillon (Salerno), Flagg, Freitas, Hatton, Heineken, Hines, Laiho, LaMonica, Lantz, Leslie, Lookinland, Loveridge, Moffett, Morris, Reed, Riegel, Robinson, Saarmann, Shively, Stichter, Sweepney, Todero, Verderber, Wahl, Walker, Wozniak

Director: Greiner
Associate Director: Peck

Professors: Bienner, Fields, Greiner, Hunter
Associate Professors: Fitzsimmons, Gates, Hadley, Lee
Assistant Professors: Attin, Carlson

Lecturers: Bass, Bidwell, Burns, Casey, Concilio, Cullum, DeSilva, Finkel, Gribble, Hall, Herold, Jurf, Kari, Katzman, Lischke, Long, McEwan, Miller, Moreno, Parr, Peck, Preston, Rivera, Samad, Scott

Offered by the School
Doctor of Nursing Practice.

Master of Science degree in nursing
Concentration in advanced practice nursing of adults and the elderly.
Concentration in community health nursing.
Concentration in nursing education.
Concentration in nursing leadership in health care systems.
Concentration in women’s health and midwifery.

Major in nursing with the B.S. degree in applied arts and sciences.
Registered Nurse B.S., Major in Nursing Program.

School nurse services credential (refer to the Graduate Bulletin).

The Major

The nursing profession is concerned with the total health care of individuals, families, and communities. It is a profession that believes in the prevention of illness, caring for those who are acutely ill, and helping people with long-term rehabilitative problems to live in the healthiest way possible. Nursing is both a science and an art. It has its foundation in biophysical and behavioral sciences, as well as in nursing science and evidence-based practice.

Students in the nursing program are provided opportunities to acquire knowledge from the natural and social sciences; to develop clinical decision-making abilities; to utilize current research in the application of the nursing process; to develop leadership potential and accountability in professional practice; to become aware of the emerging roles of the professional nurse and of the social forces affecting health and health care systems; and to learn to balance professional and personal growth and values.

Nurses are in demand throughout the country and are needed in such settings as acute care hospitals, community health agencies, homes, jails, outreach programs, public schools, health maintenance organizations, and clinics which serve underprivileged, minority, and rural populations. Career opportunities are particularly good for minority, bilingual / bicultural persons.

Retention Policy

Progress in the nursing program is dependent upon completion of preparation for the major and nursing courses each semester. Students will not be permitted to progress to the next semester until preparation for the major and nursing courses are completed from the previous semester. Students who earn a grade of C- to F in two nursing or prerequisite courses or in one course twice will be dropped from the program. Continuation in good standing in the nursing program is contingent on students following the defined plan of study. Student failure to follow the plan of study may lead to either removal from the program or an extended time frame for program completion. See the School of Nursing website for updated information.

Impacted Programs

The nursing majors are impacted programs. To be admitted to the nursing major, students must meet the following criteria:

a. First-time freshmen must have completed one year of high school college preparatory courses in intermediate algebra, biology, and chemistry with laboratory.

b. Transfer students must have completed the same requirements as entering freshmen at the time they are accepted into the nursing major at SDSU (assuming continuous enrollment).

c. Biology 211, 211L, 212, 261*, Chemistry 102*, Statistics 250 (or Biology 215 or Psychology 280)*, Communication 103 (or a course listed under General Education, I.1. Oral Communication)*, Rhetoric and Writing Studies 100 (or a course listed under General Education, I.2. Composition)*, and Rhetoric and Writing Studies 200 (or a course listed under General Education, I.3. Intermediate Composition and Critical Thinking)* or with the required grades (B- or above for all biology courses, C or above for all others). These courses cannot be taken for credit/no credit (Cr/NC). (Note: registration in Biology 261 may be concurrent with the start of nursing department courses)

d. Have a cumulative GPA of 3.2 or higher.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the nursing major at SDSU (assuming continuous enrollment).

Standards for Admission

Admission to the University

Applicants must be eligible for admission to the University. See “Regulations: Admission and Registration” section of this catalog.

Admission to the Professional Program in Nursing

The School of Nursing is an impacted program with more qualified applicants applying than can be accepted into the major. Admission to the School of Nursing is competitive. Students with the highest grade point averages and test scores will be ranked for admission. Students will be admitted according to rank and the number of positions available

1. Minimum admission requirements for transfer students are:

   a. The Test of Essential Academic Skills (T.E.A.S.): 80% or above overall.

   b. Cumulative GPA of 3.2 or better.

   c. Successful completion of Biology 211, 211L, 212, 261*, Chemistry 102*, Statistics 250 (or Biology 215 or Psychology 280)*, Communication 103 (or a course listed under General Education, I.1. Oral Communication)*, Rhetoric and Writing Studies 100 (or a course listed under General Education, I.2. Composition)*, and Rhetoric and Writing Studies 200 (or a course listed under General Education, I.3. Intermediate Composition and Critical Thinking)* or their equivalents with the required grades (B- or above for all Biology courses, C or above for all others).

2. Prerequisite courses are required for nursing majors before students may begin taking clinical nursing courses.

   a. Course grade requirement (B- or better) in each of these required courses: Biology 211, 211L, 212, and 261* (Note: registration in Biology 261 may be concurrent with the start of nursing department courses).

   ▲ Upper division transfer students fulfill these course requirements by completing human anatomy (with required laboratory), human physiology (with required laboratory), and microbiology (with required laboratory), designated as certified CSU GE Life Sciences and Laboratory (B2, B3) transfer courses.

   ★ Upper division transfer students fulfill this course requirement with a CSU GE certified B1 chemistry course (general, organic, inorganic, or integrated).

   ✔ Upper division transfer students fulfill this area with a statistics course certified for CSU GE mathematics/quantitative reasoning B4.

   ☑ Upper division transfer students fulfill this area with any certified CSU GE oral communication (A1) transfer course.

   ■ Upper division transfer students fulfill this area with any certified CSU GE written communication (A2) transfer course.

   ▲ Upper division transfer students fulfill this area with any certified CSU GE critical thinking (A3) transfer course.
3. Minimum Grade Point Average. Students must complete the eight prerequisite courses with a minimum overall grade point average of 3.0. Academic progress must be maintained.

4. Mathematics and Writing Competency Requirements. Prior to beginning clinical nursing courses, all students must satisfy the SDSU mathematics and writing competency requirements.

5. Health Requirement. To meet the specific health requirements, a medical examination and immunizations must be completed. The medical examination is in addition to the one required for admission to the university. For specific information concerning medical examination and immunization series, consult the School of Nursing website.

6. Registered Nurse – Bachelor of Science, Major in Nursing Program. A registered nurse-Bachelor of Science in nursing program is available for registered nurses who completed a regionally accredited program with either an Associate Degree in Nursing or a Diploma in Nursing. Students eligible for this option should contact the School of Nursing RN to BS adviser for special advising and program planning.

7. Formal Application. Applicants must submit an application to the university according to deadlines for impacted programs. Transfer students: In addition to the university application, an application to the nursing program must be submitted during the semester transfer students are completing prerequisites for the nursing program. RN to BS students: the nursing program application should be submitted the semester before they wish to enroll. Application forms, deadlines, and current information may be obtained on the School of Nursing website at http://nursing.sdsu.edu.

Special Instructions
1. Impacted Program. The nursing major is designated as an impacted program and specific regulations related to admissions may be imposed.

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 and with approval of the Director.

3. Transportation. Students enrolled in the nursing program are required to provide their own transportation to off-campus clinical agencies and for home visits.

4. Health Insurance. All admitted School of Nursing students are advised to obtain health insurance coverage. Students are responsible for health care cost when services are rendered by a health care agency.

5. CPR Certification. Upon admission to the School of Nursing, students must have CPR certification through the American Heart Association—BLS for Health Care Provider. Certification must be maintained throughout the program.

6. Malpractice Insurance. Malpractice insurance is provided by the School of Nursing at no cost to the student. A secondary policy is highly recommended.

7. Upon completion of the first year of courses and prior to beginning any clinical nursing courses, students are required to have a physical examination and bring proof of the examination and required immunizations as instructed by the School of Nursing.

8. Background Check and Drug Screen. Upon admission to the nursing program, and possibly yearly thereafter, students must successfully pass a background check and drug screen in order to be placed in a clinical rotation. Red flag issues which prevent placement may impede progression and successful completion of degree requirements.

9. A valid social security number may be required for placement in most clinical agencies and to take the RN NCLEX examination. THIS OPTION HAS NO RELATION TO DEGREE REQUIREMENTS AND DEGREE COMPLETION.

Course Requirements for Licensed Vocational Nurse (L.V.N.) 30-Unit Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 211, 211L</td>
<td>Fundamentals of Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 261</td>
<td>Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>NURS 304</td>
<td>Clinical Pharmacology in Nursing Practice</td>
<td>2</td>
</tr>
<tr>
<td>NURS 312</td>
<td>Concepts in Professional Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 316</td>
<td>Psychiatric-Mental Health Nursing</td>
<td>5</td>
</tr>
<tr>
<td>NURS 400</td>
<td>Nursing Care of the Acute and Chronically Ill Adult and Gerontologic Patient II</td>
<td>3.5</td>
</tr>
<tr>
<td>NURS 400L</td>
<td>Nursing Care of the Acute and Chronically Ill Adult and Gerontologic Patient II Laboratory</td>
<td>2.5</td>
</tr>
<tr>
<td>NURS 458</td>
<td>Nursing Management and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>NURS 458L</td>
<td>Nursing Management and Leadership Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>NURS 499</td>
<td>Special Study (elective in the clinical or health focus of student’s choice)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

General Education Requirements

Students will complete a minimum of 49 units in General Education to include a minimum of nine upper division units. No more than 12 units may be used for General Education credit from any one department or academic unit. Upper division transfer students are required to complete an approved CSU General Education pattern. Students seeking a second bachelor's degree in nursing have satisfied all requirements in sections I, II, III, and IV of General Education with their first baccalaureate degree from a regionally accredited association.

I. Communication and Critical Thinking: 9 units

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

1. Oral Communication: Communication 103, or Africana Studies 140, or Chicana and Chicano Studies 111A (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)

II. Foundations of Learning: 32 units

A. Natural Sciences and Quantitative Reasoning (14 units):
   1. Physical Sciences: Chemistry 102 (5 units)
   2. Life Sciences: Biology 212 (4 units)
   3. Laboratory: Biology 211L (2 units)
   4. Mathematics/Quantitative Reasoning:
      a. Biology 215 (3 units)
      b. Psychology 280 (4 units)
   5. Statistics 250 (3 units) – Recommended

   You may not use Credit/No Credit grades.

B. Social and Behavioral Sciences (6 units) to be satisfied by:
   1. Psychology 101 (3 units) – Required
   2. Sociology 101 (3 units) – Required
   3. Humanities (12 units)

Refer to General Education course offerings in the Graduation Requirements section of the catalog.

Note: Upper division transfer students should refer to the footnotes under the Admission to the Professional Program in Nursing section.

III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.
IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing (60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Nine units to include Philosophy 330 and one of the following options: three upper division units in Natural Science, and three upper division units in Social and Behavioral Sciences; OR three upper division units in Humanities, and three upper division units in Social and Behavioral Sciences; OR six upper division units in Social and Behavioral Sciences. Three units must be selected from a course designated as cultural diversity. Refer to General Education Requirements section of the catalog and to the course guidelines provided during program orientation.

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Nursing Major
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 12031) (SIMS Code 554603 - Internal SDSU, Transfers) (SIMS Code Track 1: 554605 - First Time Freshmen Admits)
(SIMS Code Track 2: 554606 - First Time Freshmen Admits)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” A minor is not required with this major. Nursing majors may be part-time students in the curriculum with Director approval. Consultation with the undergraduate adviser is mandatory.

Preparation for the Major: Students in the nursing program are coded as nursing majors once they successfully complete Biology 211, 211L, 212, 261*, Chemistry 102*, Statistics 250 (or Biology 215 or Psychology 280)*, Communication 103 (or a course listed under General Education I.1. Oral Communication)*, Rhetoric and Writing Studies 100 (or a course listed under General Education, I.2. Composition)*, and Rhetoric and Writing Studies 200 (or a course listed under General Education, I.3. Intermediate Composition and Critical Thinking)*, with the required grades (B- or above for all). Nursing 202, 206, 208, 219, and 221 (43 units)

Upper division transfer students fulfill these course requirements by completing human anatomy (with required laboratory), human physiology (with required laboratory), and microbiology (with required laboratory), designated as certified CSU GE Life Sciences and Laboratory (B2, B3) transfer courses.

Upper division transfer students fulfill this course requirement with a CSU GE certified B1 chemistry course (general, inorganic, or organic chemistry).

Upper division transfer students fulfill this area with a statistics course certified for CSU GE mathematics/quantitative reasoning (B4).

Upper division transfer students fulfill this area with any certified CSU GE oral communication (A1) transfer course.

Upper division transfer students fulfill this area with any certified CSU GE written communication (A2) transfer course.

Upper division transfer students fulfill this area with any certified CSU GE critical thinking (A3) transfer course.

NOTE: Students must complete Psychology 101 and 230 to satisfy nursing program requirements. A grade of C (2.0) or better is required in all biology courses.

Progress in the nursing program is dependent upon completion of preparation for the major and nursing courses each semester. Students will not be permitted to progress to the next semester until preparation for the major and nursing courses are completed from the previous semester. Students who earn a grade of C- to F in two nursing or prerequisite courses or in one course twice will be dropped from the program.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. Nursing majors are required to participate in an international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course and community service activity in the U.S. will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:
1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;


Registered Nurse – Major in Nursing Program
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 12032) (SIMS Code: 554604)
A Registered Nurse - Bachelor of Science nursing program is available for registered nurses who completed a regionally accredited program with either an Associate Degree in nursing or a Diploma in nursing. This program gives credit for previous coursework. Students eligible for this option should contact the School of Nursing for special advising and program planning.

Standards for Admission. See Standards of Admission for Professional Program in Nursing.

Additional Requirements. The following documents are also required for admission to the RN-BS Program:
1. Copy of current California RN license.
2. Official transcript showing AD Degree or Diploma.
3. Official transcripts from all colleges/universities attended to date.
4. CPR certification – “Healthcare Provider” or “Professional Rescuer” level.

General Education Requirements. See General Education Requirements for nursing major.

International Experience. Nursing majors are required to participate in an international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course and community service activity in the U.S. will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:
1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;

Curriculum Plan. A total of 120 units are required for the degree. Transfer credit for 27 or more nursing units is granted. Upon passing NCLEX, 15 units will be credited to the student’s transcript.
**Courses (NURS)**

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

### LOWER DIVISION COURSES

**NURS 200. Informatics for the Nurse (1)**

Prerequisite: Admission to nursing major.


**NURS 202. Client Assessment (3)**

One-and-one-half hours of lecture and 4.5 hours of laboratory. Determining and measuring variables relevant to assessment of psychosocial and physical functioning.

**NURS 206. Fundamentals of Nursing Practice (5)**

Three lectures and six hours of laboratory. Prerequisites: Admission to nursing program and concurrent registration in Nursing 206.

Basic nursing skills and integration of diagnosis, planning, and implementation of nursing care. Application of nursing process.

**NURS 208. Pathophysiology (3)**

Prerequisites: Biology 212 and credit or concurrent registration in Biology 261.

Pathophysiologic processes as they apply to nursing care of patients.

**NURS 219. Information Management for Professional Relationships (2)**

Prerequisite: Admission to the School of Nursing.

Information management in patient care, research, evidence-based practice, outcomes and practice management. Patient/family-provider communication, privacy, security, and ethical decision making on patient care, research, and quality management.

**NURS 221. Professional Formation A (1)**

History of health care and changing roles of nurses in relation to other health professions. Social, cultural, regulatory agencies, and policy affecting patient care.

**NURS 296. Experimental Topics (1-4)**

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

### UPPER DIVISION COURSES (Intended for Undergraduates)

**NURS 300. Nursing Care of the Acute and Chronically Ill Adult and Gerontologic Patient I (8)**

Three lectures and 15 hours clinical per week. Prerequisites: Nursing 206, 208, and credit or concurrent registration in Nursing 304.

Psychological, social, and physiologic stressors affecting acute and chronic illness and health of adults. Appropriate nursing care and interventions. Not open to students with credit in Nursing 252.

**NURS 302. Nurse-Client Relationships: Cultural and Mental Health Concepts (3)**

Prerequisite: Nursing 208.

Nurse-client communication and application to clinical nursing practice. Origins of a variety of communication styles. Cultural and mental health concepts related to communication.

**NURS 304. Clinical Pharmacology in Nursing Practice (2)**

Prerequisites: Biology 212, Chemistry 102, and credit or concurrent registration in Biology 261.

Major classifications of drugs; pharmacological and toxicological activity; clinical applications. Role of nurse in assessment, intervention, and patient education.

**NURS 307. Research and Evidence-Based Practice (3)**

Prerequisites: Mathematics/Quantitative Reasoning General Education, and credit or concurrent registration in Nursing 300.

Nursing research process. Emphasis on identification of researchable questions and beginning critiquing ability.

**NURS 312. Concepts in Professional Nursing (3)**

Prerequisite: Admission to the RN to BS program.

Concepts in professional nursing. Differentiation of professional practice with emphasis on stress theory, therapeutic communication, values clarification, and legal aspects. Not open to generic students.

**NURS 316. Psychiatric-Mental Health Nursing (5)**

Three lectures and six hours of laboratory. Prerequisite: Admission to the School of Nursing.

Theory and clinical laboratory in application of nursing process to care of clients evidencing maladaptive responses to psychosocial stressors. Presentation of theories describing and explaining maladaptive behaviors and application of nursing interventions in a variety of treatment modalities. (Formerly numbered Nursing 416.)

**NURS 320. Health Assessment and Health Promotion for RN to BS (4)**

Two lectures and six hours of laboratory. Prerequisite: Admission to the RN to BS program.

Expands the registered nurse’s ability to measure and interpret physical, physiologic, and psychosocial functioning. Clinical presentation of disease and disability. Evidence-based practice guidelines for health promotion and disease management. Not open to students with credit in Nursing 501 and 501L.

**NURS 321. Professional Formation B (1)**

Prerequisite: Nursing 221.

Virtue ethics, California Nurse Practice Act, and American Nurses Association Code of Ethics. Societal expectations, obligations, professional requirements, legal decisions, and clinical realities.

**NURS 350. Women's Health Across the Lifespan (3) [GE]**

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A. Natural Sciences and Quantitative Reasoning.

Explores health issues women face across their lives. Focus on developing knowledgeable users of research on causes of and risk factors for health problems. Not applicable to nursing majors.

**NURS 354. Nursing Care of the Childbearing Family (5)**

Two-and-one-half hours of lecture and 7.5 hours of laboratory. Prerequisites: Nursing 206, 208, and 302 or 304.

Family-centered focus encompassing adaptive and maladaptive responses to stressors in the maternity cycle and their effect on the neonate. Clinical laboratory focuses on the application of nursing theory and process in providing preventive, supportive, and restorative care to mothers and neonates.
NURS 356, Pediatric Nursing (5)
Two-and-one-half hours of lecture and 7.5 hours of laboratory.
Prerequisites: Nursing 206, 208, and 302 or 304.
Stressors affecting the child on health-illness continuum. Nursing theory and laboratory focuses on application of nursing process in providing preventive, supportive and restorative therapeutic modalities in a variety of settings. Emphasis on the child in the family and the necessary intervention to promote adaptation of the child to attain, maintain or regain an optimum level of health.

NURS 358, Basic Electrocardiography (1) Cr/NC
Prerequisite: Nursing 300.
Basic electrophysiological and interpretive concepts necessary for identification and management of supraventricular and ventricular rhythms.

NURS 397, Preparation for Clinical Practice (1) Cr/NC
Two hours per week of supervised practice.
Prerequisite: Admission to the School of Nursing.
Supervised practice of nursing skills and techniques. Course is elective for students. Credit earned in this course not applicable to bachelor's degree.

NURS 400, Nursing Care of the Acute and Chronically Ill Adult and Gerontologic Patient II (3.5)
Prerequisites: Nursing 300 and concurrent registration in Nursing 400L.
Theory in care of adults of all ages who have acute and chronic health concerns leading to complex and high acuity health problems. Not open to students with credit in Nursing 452 or 454.

NURS 400L, Nursing Care of the Acute and Chronically Ill Adult and Gerontologic Patient II Laboratory (2.5)
Nine hours of clinical practice.
Prerequisites: Nursing 300 and concurrent registration in Nursing 400.
Clinical care of adults of all ages who have acute and chronic health concerns leading to complex and high acuity health problems. Not open to students with credit in Nursing 452 or 454.

NURS 410, Gerontological Nursing (3)
Two lectures and three hours of laboratory.
Prerequisites: Nursing 300, 304.
Theory and selected laboratory experience focusing on stressors affecting elderly on health-illness continuum. Gerontologic nursing in a variety of settings.

NURS 415, Community Health Nursing (3)
Prerequisites: Nursing 300, 304 and concurrent registration in Nursing 415L.
Assessment and utilization of community health care concepts and delivery with emphasis on promotion of health, prevention of illness and individual and group teaching techniques. Consideration given to cultural aspects of health care.

NURS 415L, Community Health Nursing Laboratory (2)
Six hours of laboratory.
Prerequisites: Nursing 300, 304 and concurrent registration in Nursing 415.
Laboratory experience in care of clients in the community and nursing of community as client.

NURS 421, Professional Formation C (1)
Prerequisite: Nursing 321.
Current and emerging roles in nursing leadership. Practice environments, expectations of society in these environments, role of health policy and advocacy in leadership, methods to remain current in professional practice.

NURS 458, Nursing Management and Leadership (3)
Prerequisites: Nursing 316, 415, 415L; concurrent registration in Nursing 458L.
Theories and functions of nursing management and leadership within health care system. Economics of health care.

NURS 458L, Nursing Management and Leadership Laboratory (2)
Six hours of laboratory.
Prerequisite: Concurrent registration in Nursing 458.
Laboratory experience in nursing management and leadership.

NURS 496, Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

NURS 498, Cooperative Education Supervised Practice (2-6) Cr/NC
Seminar: Two hours biweekly. Clinical hours arranged by student and employer.
Prerequisite: Nursing 300.
Supervised practice in application of previously learned knowledge and skills in selected clinical agencies. Professional interaction with other health care workers to strengthen professional nursing identity. Work under supervision of registered nurse preceptor and faculty coordinator. May be repeated. Maximum credit two units applicable to a bachelor's degree.

NURS 499, Special Study (1-3)
Prerequisites: Nursing 300 and consent of instructor.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

NURS 501, Advanced Health Assessment and Health Promotion (3)
Prerequisites: Consent of School of Nursing graduate adviser; concurrent registration in Nursing 501L.
Physical and psychosocial assessment techniques, health promotion strategies for select populations.

NURS 501L, Advanced Health Assessment and Health Promotion Laboratory (1)
Three hours of laboratory.
Prerequisites: Consent of School of Nursing graduate adviser; concurrent registration in Nursing 501.
Laboratory experience in advanced health assessment and health promotion.

NURS 596, Special Topics in Nursing (1-3)
Prerequisites: Completion of 30 upper division units in nursing or graduate status; 3.0 grade point average.
Selected topics in the practice of nursing. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Nutrition
In the College of Health and Human Services

OFFICE: Exercise and Nutritional Sciences 351
TELEPHONE: 619-594-5541
http://ens.sdsu.edu

Didactic Program in Dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) – Academy of Nutrition and Dietetics.

Faculty
Emeritus: Beshgetoor, Boggs, Cooke, Dickerson, Josephson, Spindler
Director: Kolkhorst
Professor: Kern
Associate Professor: Hong
Assistant Professor: Hooshmand-Yazdi
Lecturers: Lane, Rupp

Offered by the School of Exercise and Nutritional Sciences
Master of Science degree in nutritional sciences.
Master of Science degree in nutritional science and Master of Science degree in exercise physiology (concurrent program).
Major in foods and nutrition with the B.S. degree in applied arts and sciences.

The Major
The major in foods and nutrition offers a comprehensive multi-disciplinary study of the nature and quality of the food supply and the nutritional requirements for health in people. Students take core sequences of coursework in the areas of nutrition, food science, and food management founded on prerequisite courses in chemistry, biology, biochemistry, physiology, accounting, management, and the behavioral and social sciences. Course emphasis in the major is placed upon the composition, properties, quality, and safety of foods and food ingredients; the relationships of metabolism and utilization of nutrients in food by the human body to health and disease states; influences of exercise and fitness; the physiological basis for diet therapy; nutrition problems in the community; and organization, management and operation of food service facilities.

This major is planned for students interested in qualifying professionally for diverse careers in the fields of dietetics, food service management, and food industries. The accredited didactic program in foods and nutrition allows students eligibility for membership in the Academy of Nutrition and Dietetics and for post-baccalaureate dietetic internships or preprofessional practice programs. Students must be admitted to and complete satisfactorily a post-baccalaureate program and pass the Academy of Nutrition and Dietetics Registration Examination prior to qualifying for registration as dietitians.

Professional careers in dietetics include administrative, therapeutic, teaching, research, and public service positions in hospitals, schools, clinics, and other public and private organizations and institutions. Graduates may also qualify as food science technical specialists within food companies, governmental agencies, and laboratories; as food service managers; and as specialists in advertising, sales, or marketing of foods and nutritional products and services.

Impacted Program
The foods and nutrition major is an impacted program. To be admitted to the foods and nutrition major, students must meet the following criteria:

a. Complete the following courses (or their equivalents): Nutrition 201, 203, 205; Biology 100, 100L, 211, 211L, 212; Chemistry 100, 130, 160; Economics 201 (or Statistics 250); Exercise and Nutritional Sciences 200; Psychology 101; Sociology 101. A grade of C or higher must be earned in Chemistry 100 and 130. These courses cannot be taken for credit/no credit (Cr/NC).

b. Have a cumulative GPA of 2.90 or higher.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Foods and Nutrition Major
With the B.S. Degree inApplied Arts and Sciences
(Major Code: 13061) (SIMS Code: 552931)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

A minor is not required with this major.

Preparation for the Major.
Nutrition 201, 203, 205; Biology 100, 100L, 211, 211L, 212; Chemistry 100, 130, 160; Economics 201 (or Statistics 250); Exercise and Nutritional Sciences 200; Psychology 101; Sociology 101. (43 units)

These prerequisite courses may not be taken Cr/NC. A grade of C or higher must be earned in Chemistry 100 and 130.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. Foods and nutrition majors are required to participate in an international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course and community service activity in the U.S. will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:
1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;

Major. A minimum of 40 upper division units to include Nutrition 302, 302L, 303, 304, 401, 404, 405, 406, 408; Biology 336; Exercise and Nutritional Sciences 304, 434; and seven units selected with the approval of the adviser from Nutrition 312, 407, 409, 499, 510; Biology 315, 326; Business Administration 350*, Communication 307*, 371; Counseling and School Psychology 320, 400; Management 352*; Nursing 350; Psychology 319*; Public Health 301*, 302*, 303*, 305*, 362. Biology 336 will also satisfy three units of the General Education requirement in Explorations of Human Experience IV.A. Natural Sciences.

* Additional prerequisites required.
Courses (NUTR)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

NUTR 201. Fundamentals of Nutrition (3)
Prerequisites: Biology 100; Chemistry 100 or 200. Proof of completion of prerequisites required: Copy of transcript.
Role of nutrition in health promotion and disease prevention. Current concepts, controversies, and dietary recommendations from a scientific perspective.

NUTR 203. Cultural Aspects of Food and Nutrition (2)
Prerequisite: Completion of a General Education course in 1) Oral Communication, 2) Composition, or 3) Intermediate Composition and Critical Thinking.
Food habits and health beliefs about foods and nutrition. Regional and ethnic influences.

NUTR 205. Introduction to Science of Food (4)
Two lectures and six hours of laboratory.
Prerequisites: Grade of C or better in Chemistry 100. Credit or concurrent registration in Chemistry 130.
Composition, preparation, preservation, sensory and consumer evaluation of foods.

NUTR 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

NUTR 302. Advanced Nutrition (3)
Prerequisites: Nutrition 201, Biology 336, and one course in biochemistry. Concurrent registration in Nutrition 302L. Proof of completion of prerequisites required: Copy of transcript.
Integration of cellular, physiological, and biochemical relationships with human nutrient requirements.

NUTR 302L. Advanced Nutrition Laboratory (2)
Six hours of laboratory.
Prerequisites: Nutrition 201, Biology 336, and one course in biochemistry. Concurrent registration in Nutrition 302. Proof of completion of prerequisites required: Copy of transcript.

NUTR 303. Quantity Food Production (2)
Prerequisite: Nutrition 205 or Business Administration 360.
Quantity food production service delivery systems. Skills for food safety, recipe standardization, menu planning, purchasing, production operations, and quality standards. Intended for majors in foods and nutrition and hospitality and tourism management.

NUTR 304. Nutrition Throughout the Life Span (3)
Prerequisite: Nutrition 201.
Factors affecting nutrient needs and ways to meet nutrient requirements across the life span. Not open to students with credit in Nutrition 208.

NUTR 312. Nutrition for Athletes (3)
Prerequisite: Nutrition 201.
Influence of exercise on nutritional status and dietary requirements. Current theories and practices related to nutrition and athletic performance.

NUTR 313. Contemporary Nutrition (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.
Food and nutrient classifications, functions, requirements, and recommendations. Relationship of nutrition to health, fitness, performance, and disease. Menus and recipes, food packaging labels, nutrition literature.

NUTR 398. Supervised Field Experience (1-3)
Three hours per week for 15 weeks per unit of course credit.
Prerequisites: Upper division standing; limited to foods and nutrition majors.
Supervised practical experience in areas of food and nutrition. Maximum credit six units.

NUTR 401. Advanced Science of Food (3)
Prerequisites: Nutrition 205 and Biology 211, 211L. Proof of completion of prerequisites required: Copy of transcript.
Physical, chemical, nutritional, and functional properties and quality attributes of foods and food additives; food handling, changes and interactions of food components induced by processing and storage; food laws, regulations, legislation, and food safety issues. (Formerly numbered Nutrition 301.)

NUTR 404. Food Systems Management (3)
Prerequisite: Credit or concurrent registration in Nutrition 303.
Managerial functions in food service systems.

NUTR 405. Experimental Food Science and Technology Laboratory (2)
Six hours of laboratory.
Prerequisite: Credit or concurrent registration in Nutrition 401.
Application of principles and methods of physical and sensory evaluation and food component analysis to conventional and fabricated foods; effects of additives and ingredient variations; project studies; data interpretation and report writing.

NUTR 406. Medical Nutrition Therapy I (3)
Prerequisites: Nutrition 302 and 302L. Proof of completion of prerequisites required: Copy of transcript.
Nutrition assessment, diagnosis, pathophysiology, and medical nutrition therapy for chronic diseases.

NUTR 407. Medical Nutrition Therapy I Laboratory (1)
Two hours of laboratory.
Prerequisites: Admission to SDSU Didactic Program in Dietetics, Nutrition 302, 302L, and concurrent registration in Nutrition 406.
Required for Didactic Program in Dietetics competencies established by the American Dietetic Association. Builds multi-level skills for dietetic practice to assess nutritional status and to develop care plans for patients.

NUTR 408. Medical Nutrition Therapy II (3)
Prerequisite: Nutrition 406.
Concepts and principles of disease pathophysiology, nutrition assessment and medical nutrition therapy for specific diseases and conditions.

NUTR 409. Medical Nutrition Therapy II Laboratory (1)
Two hours of laboratory.
Prerequisites: Admission to SDSU Didactic Program in Dietetics, Nutrition 406 and credit or concurrent registration in Nutrition 408.
Advanced practical experience in food service and medical nutrition therapy for future dietitians.

NUTR 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

NUTR 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.
UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

NUTR 510. Nutrition and Community Health (3)
Two lectures and three hours of activity.
Prerequisites: Grade of C or better in Nutrition 203, 302, 302L, 304, and consent of instructor.
Nutritional problems in the community with consideration of their resolution. Field placement experience required.

NUTR 596. Advanced Studies in Nutrition (1-6)
Prerequisite: Nine upper division units in nutrition.
Advanced study of selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of nine units of 596. No more than six units of 596 may be applied to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
San Diego State University provides preparation for ocean-oriented careers by offering marine-related coursework and oceanographic experience within regular degree programs in the Departments of Biology, Chemistry and Biochemistry, Economics, Civil, Construction, and Environmental Engineering, Geography, Geological Sciences, Mechanical Engineering, and Physics. Master's degrees with specialization in marine problems may also be earned in these departments. The Ph.D. degree is offered in biology, chemistry, and ecology, jointly with the University of California. Degrees in general oceanography or marine studies are not offered by the university. The Coastal and Marine Institute coordinates work in the area of marine studies and provides special supporting services to the faculty, staff and students, including student advising, assistance in research and publication, operation of the university’s marine laboratory at San Diego Bay, and a boat operations program.

Courses in general oceanography are offered by faculty from the Departments of Biology and Geological Sciences. Advanced coursework and research in geological and physical oceanography are conducted in the Geological Sciences Department. Advanced courses and research in biological oceanography, marine biology, marine botany, and marine zoology are conducted in the Department of Biology. Similar marine-related coursework and research are offered in the Departments of Economics and Geography and in the College of Engineering. Students who require advising in these areas should inquire at one of the departments listed above or the Coastal and Marine Institute. (See section of this catalog on Colleges, College of Sciences Research Centers and Institutes.)

Oceanography Minor
(Minor Code: 19191) (SIMS Code: 775379)
Offered for undergraduate science students by the Department of Geological Sciences, the minor in oceanography consists of a minimum of 16 upper division units to include Oceanography 320; Biology 515 or 517; and nine additional units selected with the approval of the adviser. Additional prerequisite courses are required.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (OCEAN)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSE

OCEAN 100. The Ocean Planet (4) [GE]
Three lectures and three hours of laboratory.
Physical, chemical, geological, and biological foundations of the global ocean system, with emphasis on science as a process and its role in environmental issues from global climate change to local pollution.

UPPER DIVISION COURSES
(Intended for Undergraduates)

OCEAN 320. Oceans of Change (3) [GE]
Prerequisites: One introductory college course in a life science and one in a physical science, and completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.
Scientific, socioeconomic, and geopolitical perspectives on human impacts upon the global ocean system to include ocean warming and acidification, regional fisheries depletion, and local coastal issues.

OCEAN 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

For additional courses in Marine Studies see:
Biology 515. Marine Invertebrate Biology
Biology 517. Marine Ecology
Geography 592. Intermediate Remote Sensing of Environment
Geography 592L. Intermediate Remote Sensing of Environment Laboratory

Oceanography
Administered by the
Department of Geological Sciences

OFFICE: Geology/Mathematics/Computer Science 237
TELEPHONE: 619-594-5586
http://www.geology.sdsu.edu

Oceanography
(SAN DIEGO STATE UNIVERSITY)
Persian

In the Department of Linguistics and Asian/Middle Eastern Languages
In the College of Arts and Letters

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
http://www-rohan.sdsu.edu/dept/linguist/index.html

Faculty
Chair: Osman

Offered by the Department of Linguistics and Asian/Middle Eastern Languages
Courses in Persian.
Major or minor work in Persian is not offered.

Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Persian to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Persian 201 or the equivalent level of achievement. The usual sequence of coursework is Persian 101, 102, and 201. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:
1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

Courses (PERS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

Native speakers of Persian will not receive credit for taking lower division courses in Persian except with advance approval from the department.

No credit will be given for Persian 101, 102, 201, and 202 taken out of sequence.

PERS 101. Elementary Modern Persian I (4) [GE]
Introduction to modern Persian and Persian writing system. Development of speaking, listening, and reading skills using multimedia materials. Vocabulary for everyday topics and develop culturally appropriate discourse strategies for everyday situations. Not open to students with credit in Persian 102, 201, 202, 301, or a higher-numbered Persian course.

PERS 102. Elementary Modern Persian II (4) [GE]
Prerequisite: Persian 101 or two years of high school Persian. Continuation of Persian 101. Development of speaking, listening, and reading skills using multimedia materials. Vocabulary for everyday topics and develop culturally appropriate discourse strategies for everyday situations. Not open to students with credit in Persian 201, 202, 301, or a higher-numbered Persian course.

PERS 201. Intermediate Persian I (4) [GE]
Further development of speaking, reading, listening, and writing skills, with emphasis on language of everyday conversation. Integrated approach to learning Persian to include awareness and appreciation of Persian culture. Not open to students with credit in Persian 202, 301, or a higher-numbered Persian course.

PERS 202. Intermediate Persian II (4) [GE]
Prerequisite: Persian 201.
Intermediate level students achieve further proficiency in speaking, listening, reading, and writing; produce language needed for daily routines and work related discourse. Not open to students with credit in Persian 301 or a higher-numbered Persian course.

PERS 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES
(Intended for Undergraduates)

All upper division courses in Persian are taught in Persian unless otherwise stated.

No credit will be given for Persian 301 and 302 taken out of sequence.

PERS 301. Advanced Persian I (4) [GE]
Prerequisites: Persian 202 and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Oral expression and writing for practical purposes; exposure to various dialects through newspaper and media; elements of literary and classical language.

PERS 302. Advanced Persian II (4) [GE]
Prerequisites: Persian 301 and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Writing complex literary and expository texts. Reading modern and classical texts to include complicated media. Producing, understanding debates and speeches.

PERS 496. Topics in Persian Studies (1-4)
Topics in Persian language, literature, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit eight units. May be taught in English.
Philosophy
In the College of Arts and Letters

OFFICE: Arts and Letters 446
TELEPHONE: 619-594-5263
http://philosophy.sdsu.edu

Faculty
Chair: Atterton
Professors: Atterton, Corlett, Francescotti, Wawrytko, Weston
Associate Professors: Barbone, Wheeler
Lectors: Reyes, Schlesinger

Offered by the Department
Master of Arts degree in philosophy.
Major in philosophy with the B.A. degree in liberal arts and sciences.
Minor in philosophy.

The Major
The philosophy major explores and seeks to understand values and the nature of reality. Through the study of philosophy, questions are asked about existence and experience: What is truth? What is morally right? What kind of life is best? What kind of society? Is there an ultimate reality? Philosophy studies the types of questions that most other subject areas are unable to address fully.

There are three different ways these questions are characteristically investigated in the philosophy major at San Diego State University. They are approached historically, by studying the history of philosophy from the ancient Greeks to the present; analytically, by carefully examining the meanings and interrelationships of ideas; and critically, by training students in the art of evaluating various claims and the arguments for and against them.

While the analytical and critical approach are part of every course in philosophy, the philosophy curriculum at San Diego State University emphasizes the historical approach. The aim is to provide the philosophy major with a thorough grounding in the development of philosophy so that the student is well prepared to participate in the discussion of contemporary issues.

The education of a philosophy major, along with providing the satisfaction of dealing with fundamental issues which have concerned serious thinkers for many centuries, also provides the student with skills that may be used in a variety of careers. Some students begin graduate work after their B.A., either in philosophy, with the expectation of teaching or writing in the field, or in law, education, or other professional programs. Some enter new fields of research, working on computer problems or artificial intelligence. Other students find that the special skills they have developed as philosophy majors - the ability to read complex material with comprehension, to analyze problems, to find relevant sources, to evaluate evidence, to propose solutions and to examine them self-critically, and to report the results of their inquiries with clarity and coherence - are valued by employers in many different fields. Such students may find career opportunities in government, industry, finance, and social services.

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program
The philosophy major is an impacted program. To be admitted to the philosophy major, students must meet the following criteria:

a. Complete preparation for the major;

b. Complete a minimum of 60 transferable semester units;

c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Philosophy Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15091) (SIMS Code: 115301)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in philosophy courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major. Six lower division units in philosophy to include Philosophy 120.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 27 upper division units in philosophy to include Philosophy 401A and 401B. No more than six units of 300-level philosophy courses will count toward the major.

Philosophy Minor
(SIMS Code: 115301)

The minor in philosophy consists of a minimum of 18 units in philosophy to include at least three lower division units and 15 upper division units. No more than six units of 300-level philosophy courses will count toward the minor.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
Courses (PHIL)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

PHIL 101. Introduction to Philosophy: Ethics (3) [GE]
Philosophical inquiry, with emphasis on problems of moral value. Students are encouraged to think independently and formulate their own tentative conclusions concerning a variety of vital contemporary issues facing individuals and society.

PHIL 102. Introduction to Philosophy: Knowledge and Reality (3) [GE]
Introduction to philosophical inquiry with emphasis on problems of knowledge and reality. Students are encouraged to think independently and formulate their own tentative conclusions.

PHIL 110. Critical Thinking and Composition (3) [GE]
Prerequisites: Satisfaction of the English Placement Test and Writing Competency requirements and Africana Studies 120 or American Indian Studies 120 or Chicana or Chicano Studies 111B or English 100 or Linguistics 100 or Rhetoric and Writing Studies 100 or 101. Proof of completion of prerequisites required: Test scores or verification of exemption; grade report or copy of transcript. Introduction to critical thinking and writing. Evaluation and development of correct reasoning and effective style and organization in argumentative writing. Correct deductive and inductive reasoning. Fallacies. Critical appraisal of evidence. Construction of rebuttals and counter-arguments.

PHIL 120. Introduction to Logic (3) [GE]
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement. Introduction to deductive and inductive logic. Logic and language. Analysis of fallacies. Uses of logic in science and in daily life.

PHIL 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

PHIL 299. Special Study (3)
Prerequisite: Consent of department chair and instructor. Individual study.

UPPER DIVISION COURSES (Intended for Undergraduates)

PHIL 305. Classics of Western Philosophy (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Analysis of major texts selected from diverse historical periods in Western philosophy. Texts will illustrate different world views (e.g., Platonism, Stoicism, Skepticism) and their relationship to other disciplines and to present world views.

PHIL 310. Philosophy and Human Nature (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Concept of human nature. Descriptive and normative aspects of major theories of human nature.

PHIL 312. Women and Philosophy (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Exploration of women's contributions to philosophy, both present and historically. Concepts relating to women and femininity, both by the philosophical canon and by more recent feminist philosophers.

PHIL 315. Philosophy and Literature (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Study of literature of philosophical significance and of philosophical problems of literature. (Formerly numbered Philosophy 334.)

PHIL 325. A Major Philosophical Topic (3)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. General introduction to a major philosophical topic (e.g. cosmopolitan justice, freedom of the will, the nature and existence of God, theory and evidence). Maximum credit six units.

PHIL 329. Social Ethics (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Ethical issues of contemporary life. Individualism vs. collectivism; democracy vs. dictatorship; ethical problems arising in law, medicine, business, government and interpersonal relationships.

PHIL 330. Biomedical Ethics (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Value judgments upon which medicine is based and the ethical issues which medicine faces.

PHIL 331. Ethics in Health Care (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Ethical, professional, and legal standards. Promoting patient wellbeing given competing interests, diverse cultural and religious beliefs, increasing demands, practical constraints.

PHIL 332. Environmental Ethics (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Development of traditional values concerning the natural environment. Reasons for altering values in light of modern changes in relationship of human beings to the environment. Application of ethical principles to actions affecting the environment.

PHIL 340. Morality of War and Peace (3) [GE]
Prerequisite: Completion of General Education requirement in Foundations of Learning II.C., Humanities. Current debates in political philosophy concerning the justification, content, and scope of duties of global justice to include distributive justice, nationalism vs. cosmopolitanism, morality of immigration controls, justification of human rights, and limits of sovereignty.

PHIL 341. Logic and the Law (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Logic in legal contexts. Inductive reasoning methods applied to legal briefs, case studies, and LSATs. Construction, presentation, and evaluation of written and oral arguments, using historical and contemporary legal decisions.

PHIL 342. Morality and the Law (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Understanding and application of the law via contemporary moral controversies in case law and legal practice.

PHIL 344. Global Justice (3) [GE]
Prerequisite: Completion of General Education requirement in Foundations of Learning II.C., Humanities. Current debates in political philosophy concerning the justification, content, and scope of duties of global justice to include distributive justice, nationalism vs. cosmopolitanism, morality of immigration controls, justification of human rights, and limits of sovereignty.

PHIL 348. Morality and Climate Change (3) [GE]
Prerequisite: Completion of General Education requirement in Foundations of Learning II.C., Humanities. Moral questions and policy responses that arise from existing and projected anthropogenic climate change.

PHIL 351. Chinese Philosophy (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities. Philosophical traditions which have shaped the intellectual life and culture of China. Emphasis on foundational texts surviving from pre-Han China.
PHIL 353. Buddhist Philosophy (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Foundations of Learning II.C., Humanities.

PHIL 375. Symposium in Philosophy (3)
Prerequisite: Three units in philosophy.

Different philosophers from different areas in philosophy (e.g., metaphysics, ethics, aesthetics) present series of 13 to 15 lectures on one particular issue (e.g., Darwinism, free will, war and peace). May be repeated with new content. Maximum credit six units.

PHIL 401A. History of Philosophy: Pre-Socratic through Medieval (3)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

From Pre-Socratic through Medieval. Not open to students with credit in Philosophy 411 and 412.

PHIL 401B. History of Philosophy: Renaissance and Early Modern (3)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Renaissance and early modern philosophy. Not open to students with credit in Philosophy 412 and 413.

PHIL 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

PHIL 499. Special Study (1-3)
Prerequisites: Six upper division units in philosophy and prior arrangements with a supervising instructor. Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

PHIL 505. Nineteenth-Century European Philosophy (3)
Prerequisite: Upper division or graduate standing.

Major European philosophers of the nineteenth century. May include Hegel, Kierkegaard, Marx, Mill, Nietzsche, and Schopenhauer.

(Formerly numbered Philosophy 414.)

PHIL 506. Twentieth-Century Continental Philosophy (3)
Prerequisite: Upper division or graduate standing.

Major figures and movements in European philosophy from Husserl to the present.

PHIL 508. Existentialism (3)
Prerequisite: Upper division or graduate standing.

The philosophical aspects of existentialism. Major emphasis is on the diversity of thought within a common approach as this is shown in individual thinkers.

PHIL 509. Theory of Ethics (3)
Prerequisite: Upper division or graduate standing.

Advanced topics in ethical theory, including normative ethics and meta-ethics. May include historical or contemporary readings or both. Issues may include content of moral value, nature of moral judgment, and accounts of virtue and right action. (Formerly numbered Philosophy 528.)

PHIL 510. Philosophy of Law (3)
Prerequisite: Upper division or graduate standing.

Philosophical and ethical investigation into the nature of law, rights, liberty, responsibility, and punishment.

PHIL 512. Political Philosophy (3)
Prerequisite: Upper division or graduate standing.

Selected aspects of the political structures within which we live, such as law, power, sovereignty, justice, liberty, welfare.

PHIL 514. Philosophy of Art (3)
Prerequisite: Upper division or graduate standing.

The nature of aesthetic experience. Principal Western theories of art in relation to actual artistic production and to the function of art in society. (Formerly numbered Philosophy 542.)

PHIL 515. Philosophy of Film (3)
Prerequisite: Upper division or graduate standing.

Investigation into metaphysical, aesthetic, and epistemological dimensions of film. Narration, authorship, cognitive and emotional engagement, social and philosophical ramifications.

PHIL 516. Non-Western Aesthetics (3)
Prerequisite: Upper division or graduate standing.

How non-Western cultures developed aesthetic theories complementing, challenging, or expanding more familiar Amero-eurocentric theories. Historical and contemporary works representing a spectrum of non-Western philosophies.

PHIL 521. Deductive Logic (3)
Prerequisite: Philosophy 120.

Principles of inference for symbolic deductive systems; connectives, quantifiers, relations and sets. Interpretations of deductive systems in mathematics, science and ordinary language. Not open to students with credit in Mathematics 523.

PHIL 523. Theory of Knowledge (3)
Prerequisite: Upper division or graduate standing.

Philosophical analysis of knowledge, including conceptions of belief, justification, and truth.

PHIL 530. Metaphysics (3)
Prerequisite: Upper division or graduate standing.

Prominent theories of reality, e.g., realism and nominalism, materialism and idealism, teleology and determinism. (Formerly numbered Philosophy 525.)

PHIL 534. Philosophy of Language (3)
Prerequisite: Upper division or graduate standing.

An introduction to theories of meaning for natural languages and formal systems; concepts of truth, synonymy and analyticity; related epistemological and ontological problems. (Formerly numbered Philosophy 531.)

PHIL 535. Philosophy of Religion (3)
Prerequisite: Upper division or graduate standing.

Philosophical analysis of the nature and existence of God.

PHIL 536. Philosophy of Mind (3)
Prerequisite: Upper division or graduate standing.

Prominent theories and arguments regarding relation between mind and body. Varieties of dualism considered along with major materialist rivals.

PHIL 537. Philosophy of Science (3)
Prerequisite: Upper division or graduate standing.

The basic concepts and methods underlying contemporary scientific thought. Contributions of the special sciences to a view of the universe as a whole.

PHIL 565. Asian Philosophies (3)
Prerequisite: Upper division or graduate standing.

Dimensions of Asian philosophies, past and present. Encounter between Buddhism and post-modern science, contemporary Asian philosophers (“global gurus”) and their impact on non-Asian cultures, enigmatic notion of emptiness (sunya, wu). See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

PHIL 576. A MajorPhilosopher (3)
Prerequisite: Upper division or graduate standing.

The writings of one major philosopher. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units applicable to the major. Maximum credit six units applicable to a master's degree.

PHIL 576. A Major Philosophical Tradition (3)
Prerequisite: Upper division or graduate standing.

Focused study of a major philosophical tradition (e.g., Platonism, Confucianism, positivism). May be repeated with new content. See Class Schedule for specific content. Maximum credit six units applicable to the major. Maximum credit six units applicable to a master's degree.
PHIL 577. A Major Philosophical Problem (3)
Prerequisite: Upper division or graduate standing.
Focused study of a major philosophical problem (e.g., the problem of evil, the problem of other minds, the existence of God). May be repeated with new content. See Class Schedule for specific content. Maximum credit six units applicable to the major. Maximum credit six units applicable to a master’s degree.

PHIL 578. Philosophical Methods (3)
Prerequisite: Upper division or graduate standing.
Focused study of major philosophical methods (e.g., uncertain inferences and non-bivalent logics, phenomenological method, deconstruction). May be repeated with new content. See Class Schedule for specific content. Maximum credit six units applicable to the major. Maximum credit six units applicable to a master’s degree.

PHIL 596. Selected Topics (3)
Prerequisite: Upper division or graduate standing.
A critical analysis of a major problem or movement in philosophy. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of nine units of 596 applicable to the major in philosophy. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

PHIL 599. Special Study (1-3)
Prerequisite: Upper division or graduate standing.
Directed individual study in philosophy on a theme or topic chosen in consultation with the instructor. Maximum credit six units. Maximum combined credit six units of Philosophy 599 and 798 applicable to the M.A. degree in Philosophy.

GRADUATE COURSES
Refer to the Graduate Bulletin.
also plays a significant role in chemistry, biology, astronomy, and structure, nuclear structure, motion, relativity, space and time. Physics encompasses such areas as Newton to Maxwell, Einstein, Bohr, Schroedinger, Oppenheimer and science. It has fascinated the finest minds of every age – from about the transistor and its successors.

Electrical power might be transmitted without loss; quantum mechanical has led to the search for a high-temperature superconductor so that stimulated whole new areas in physics applications. Superconductivity laser in the late 1950s revolutionized the field of optics. These advances instilled a new excitement in physics. For example, the invention of the and vital career. The great burst of activity during the last 20 years has admitted to one of the majors in the department, students must meet requirements.

The Major

Teaching major in physical science for the single subject teaching. The majors in the Department of Physics are impacted. To be accepted into the premajor at SDSU (assuming continuous enrollment). for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Physics Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 19021) (SIMS Code: 777702)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” Individual master plans for each student are filed with both the physics undergraduate adviser and the Office of Advising and Evaluations. No more than 48 units in physics courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major. Physics 195, 195L, 196, 196L, 197, 197L; Chemistry 200; Mathematics 150, 151, 252. (29 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 34 upper division units to include Physics 311, 317, 350, 354, 357, 360, 400A-400B, 410; Mathematics 342A, 342B.

Physics Major

With the B.S. Degree in Applied Arts and Sciences (Major Code: 19021)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” Individual master plans for each student are filed with both the physics undergraduate adviser and the Office of Advising and Evaluations. A minor is not required with this major.

Basic Requirements for all Students

Preparation for the Major. Physics 195, 195L, 196, 196L, 197, 197L; Chemistry 200; Mathematics 150, 151, 252. (29 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 46 upper division units to include Physics 311, 317, 350, 354, 357, 360, 400A-400B, 410, 498A, 498B; Mathematics 342A, 342B. In addition, the student must complete the requirements for either one of the following areas:

(a) General Physics

(SIMS Code: 777701)

Nine units of elective coursework in physics or related areas. Electives must be approved by the Physics department undergraduate adviser.

(b) Modern Optics

(SIMS Code: 777728)

Required: Physics 406, 552, 553.
Chemical Physics Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 19081) (SIMS Code: 772801)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” Individual master plans for each student are filed with the physics and chemistry undergraduate advisers and the Office of Advising and Evaluations.

A minor is not required with this major.

Preparation for the Major. Physics 195, 195L, 196, 196L, 197, 197L; Chemistry 201, 302, 232, 232L, 251; Mathematics 150, 151, 252, (42 units)

Recommended: A course in computer programming.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Physics 311, 350, 400A, 410; Chemistry 410A-410B, 417, 550; Mathematics 342A, 342B; three units selected from Physics 357, 360, 400B, Chemistry 432, 432L, 457, 510; Physics 538 or Chemistry 538; and Research Project: Chemistry 497 (3 units) or Chemistry 498 (3 units) or Physics 498A and 498B (3 units).

Physical Science Major

In preparation for the Single Subject Teaching Credential in Science/Physical Science

With the B.A. Degree in Applied Arts and Sciences
(Major Code: 19011) (SIMS Code: 777303)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of the catalog on “Graduation Requirements.” Candidates may complete one of their two American Institutions courses at the upper division level or satisfy the California state and local government portion of American Institutions by passing the California Government examination available through the Testing Services office.

A minor is not required for this major.

Preparation for the Major. Africana Studies 140 or Chicana and Chicano Studies 111A or Communication 103; Astronomy 109, 201; Biology 203, 203L, 204, 204L; Chemistry 200, 201; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, 197L; Teacher Education 211B (1 unit) (50 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 32 upper division units to include Geological Sciences 412; Mathematics 342A; Physics 311, 317, 350, 354, 357, 360, 400A, 499 (History of Science and Technology).

Additional Requirements for Subject Matter Preparation Certification

Satisfactory Grades. At most one course with a C- or lower among the courses listed under Preparation for the Major, and at most one course with a C- or lower among the courses listed under the Major. If a course is repeated, the highest grade will count.

Formative Assessment. Completion of a satisfactory, preliminary portfolio two semesters prior to graduation. Contact the subject matter preparation adviser for information.

Summative Assessment. Completion of a satisfactory, final portfolio and a positive recommendation from the instructor of Physics 357.

Physics Minor
(Major Code: 19021) (SIMS Code: 777701)

The following courses are prerequisites to the physics minor and do not count toward the 15 units required for the minor. Physics 195, 195L, 196, 196L, 197, 197L; Mathematics 150, 151, 252.

The minor in physics consists of a minimum of 15 units to include Physics 350, 354, 360, 400A; Mathematics 342A.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (PHYS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES


PHYS 180A. Fundamentals of Physics (3)
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement. Physics 180A is prerequisite to 180B. Recommended: Concurrent registration in Physics 182A.
Mechanics, wave motion, sound, and fluids. Physics 180A not open to students with credit in Physics 195. Biological sciences majors must complete entire sequence of Physics 180A-180B or Physics 195, 196, 197.

PHYS 180B. Fundamentals of Physics (3)
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement. Physics 180A is prerequisite to 180B. Recommended: Concurrent registration in Physics 182B.
Electricity, magnetism, optics, and modern physics. Presented in a two-semester algebra/trigonometry based sequence. Physics 180B not open to students with credit in Physics 195. Biological sciences majors must complete entire sequence of Physics 180A-180B or Physics 195, 196, 197.

PHYS 182A. Physical Measurements Laboratory (1)
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Physics 180A. A laboratory course to accompany Physics 180A-180B. Properties of matter, mechanics, sound, and wave motion. Not open to students with credit in Physics 195L.

PHYS 182B. Physical Measurements Laboratory (1)
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Physics 180B. A laboratory course to accompany Physics 180A-180B. Electricity, DC circuits, oscilloscope measurement techniques, electric and magnetic fields, and optics. Not open to students with credit in Physics 196L.

PHYS 195. Principles of Physics (3)
Prerequisites: High school physics or Physics 180A. Mathematics 150 with a minimum grade of C.
Fundamental principles of physics in areas of mechanics and oscillatory motion. Designed for students requiring calculus-based physics.

PHYS 195L. Principles of Physics Laboratory (1)
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Physics 195. Experiments in mechanics, wave motion, resonance phenomena using precision air tracks. Not open to students with credit in Physics 182A.
**PHYS 196. Principles of Physics (3)**
Prerequisites: Physics 195 and Mathematics 151.
Fundamental principles of physics in areas of electricity and magnetism. Designed for students requiring calculus-based physics.

**PHYS 196L. Principles of Physics Laboratory (1)**
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Physics 196.
Experiments in DC circuits, AC circuits, electrical resonance, oscilloscope measurement techniques, and electric and magnetic fields. Not open to students with credit in Physics 182B.

**PHYS 197. Principles of Physics (3)**
Prerequisite: Physics 196.
Fundamental principles of physics in areas of wave motion, sound, electromagnetic waves, optics, relativity, and modern physics. Designed for students requiring calculus-based physics.

**PHYS 197L. Principles of Physics Laboratory (1)**
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Physics 197.
Experiments in optics, lasers, holography, and nuclear counting.

**PHYS 296. Experimental Topics (1-4)**
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

**PHYS 299. Special Study (1-3)**
Prerequisites: Consent of department chair and instructor. Individual study.

**UPPER DIVISION COURSES (Intended for Undergraduates)**

**PHYS 311. Electronics for Scientists (4)**
Prerequisites: Physics 180B and 182B, or 196 and 196L.
AC and DC circuits, diodes, transistors, conventional and operational amplifiers, analog to digital conversion, pulse and digital electronics. Introduce science majors to modern electronic devices and their utilization in scientific instrumentation.

**PHYS 317. Introduction to Computational Physics (3)**
One lecture and six hours of laboratory.
Prerequisites: Physics 197 and Mathematics 342A.
Numerical methods applied to a variety of physics topics. Use of computers to solve and plot problems involving differential equations, matrices, root finding, numerical integration.

**PHYS 350. Classical Mechanics (3)**
Prerequisites: Physics 195 with a minimum grade of C and Physics 197. Credit or concurrent registration in Mathematics 342A.
Newtonian mechanics, gravitation, small oscillations, collisions, motion of rigid bodies, Lagrangian mechanics.

**PHYS 354. Modern Physics (3)**
Prerequisites: Physics 197 with a minimum grade of C. Credit or concurrent registration in Mathematics 342A.
Special theory of relativity. Particle properties of electromagnetic radiation, and wave properties of particles. Introduction to quantum theory with applications to atomic structure.

**PHYS 357. Advanced Physical Measurements (3)**
One lecture and six hours of laboratory.
Prerequisites: Physics 197L, 311, 354, and Chemistry 200.
Stresses both laboratory experiments and techniques of data and error analysis. Experiments are taken from major areas of physics.

**PHYS 360. Thermal Physics (3)**
Prerequisites: Physics 350, Mathematics 342A, Physics 354 or Chemistry 410A.

**PHYS 400A-400B. Classical Electromagnetism (3-3)**
Prerequisites for Physics 400A: Physics 196 with a minimum grade of C; Physics 197 and Mathematics 342A. Physics 400A is prerequisite to Physics 400B.
Electrostatics, magnetostatics, electromagnetic induction, Maxwell's equations, radiation and wave propagation.

**PHYS 406. Optics (3)**
Prerequisites: Physics 197, 197L, Mathematics 342B.
Reflection, refraction, matrix methods, dispersion, polarization, double refraction, interference, diffraction, Fourier optics, coherence theory, lasers, and holography with applications to optical instruments, wave propagation, and the nature of light.

**PHYS 410. Quantum Mechanics (3)**
Prerequisites: Physics 350, Mathematics 342B, Physics 354 or Chemistry 410A.
Mathematical and physical foundations of quantum theory in terms of wave and matrix mechanics. Applications to properties of atoms and solids.

**PHYS 412. Processes and Inquiry in Physics (4)**
Three lectures and two hours of activity.
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.
Investigation of processes of inquiry and rational thinking skills characteristic of physics, focusing on energy transformations, heat transfer and thermodynamics, force and motion, electricity and magnetism, and waves. (Formerly numbered Natural Science 412.)

**PHYS 496. Selected Topics in Physics (1-4)**
Prerequisite: Consent of instructor. Selected topics in classical and modern physics. May be repeated with consent of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

**PHYS 498A. Senior Research (1) Cr/NC**
One discussion period and two additional hours per week to be arranged.
Prerequisites: Physics 367 and consent of instructor. Selection and design of individual research project. Oral and written progress reports.

**PHYS 498B. Senior Research (2)**
Two discussion periods and four additional hours per week to be arranged.
Prerequisite: Physics 498A.
Laboratory work, progress reports, oral and written final reports.

**PHYS 499. Special Study (1-3)**
Individual study or laboratory work on a special problem in physics selected by the student. Each student will be assigned a member of the staff who will supervise his/her work. Credit, hours and topics to be arranged in each case. Maximum credit six units.
**UPPER DIVISION COURSES**  
(Also Acceptable for Advanced Degrees)

**PHYS 538. Polymer Science (3)**  
(Same course as Chemistry 538)  
Prerequisites: Chemistry 200 or 202, and Chemistry 410B or Physics 380 or Mechanical Engineering 350.  
Structure, synthesis, physical properties, and utilities of polymers.

**PHYS 552. Modern Optics and Lasers (3)**  
Prerequisites: Physics 406 with minimum grade of C; credit or concurrent registration in Physics 400B.  
Electromagnetic theory, matrix methods of optics, propagation of Gaussian beams, optical resonators, interaction of radiation and atomic systems, theory of laser oscillation, nonlinear optics, specific laser systems, optical detectors, applications of lasers in physics.

**PHYS 553. Modern Optics Laboratory (3)**  
One lecture and six hours of laboratory.  
Prerequisites: Physics 357 with minimum grade of C; Physics 406 with minimum grade of C; credit or concurrent registration in Physics 552.  
Experiments in various fields of modern optics such as holography, physics of lasers, Fourier transform spectroscopy, Raman spectroscopy, light modulation techniques, fiber optics, spatial filtering, diffraction grating spectroscopy, radiometry, and nonlinear optics.

**PHYS 560. Radiological Physics and Dosimetry (3)**  
Prerequisite: Credit or concurrent registration in Physics 354.  
Ionizing radiation fields, interactions of radiation with matter, cavity theory, external radiation dosimetry.

**PHYS 561. Nuclear Instrumentation (3)**  
One lecture and six hours of laboratory.  
Prerequisites: Physics 311 and 560.  
Radiation detection, measurement, and spectroscopy. Ionization chambers, GM and proportional counters, scintillation and semiconductor detectors, and thermoluminescent dosimetry.

**PHYS 564. Nuclear Physics (3)**  
Prerequisite: Credit or concurrent registration in Physics 410.  
Nuclear and elementary particle phenomena including nuclear structure, decay, and radioactivity. Nuclear reactions and devices. Experimental methods and applications.

**PHYS 565. Radiobiology and Radiation Safety (3)**  
Prerequisites: Credit or concurrent registration in Physics 560 and consent of instructor.  
Effects of ionizing radiation on physical and biological systems in medical imaging and radiation therapy. Associated radiation safety precautions.

**PHYS 567. Nuclear Medicine Physics (3)**  
Prerequisite: Physics 560.  
Physical principles of nuclear medicine and operating principles of nuclear medicine instrumentation. Radionuclide production, dose calibrators, well counters, gamma cameras, SPECT, PET, image quality, tomographic reconstruction, and image processing.

**PHYS 570. Relativity (3)**  
Prerequisites: Physics 354 and 400B.  
Relative coordinates, Lorentz transformation, covariant formation of the laws of physics, applications of special relativity, introduction to curved space time, cosmology.

**PHYS 580. Computational Physics (3)**  
Prerequisites: Physics 354; Computer Engineering 160; and credit or concurrent registration in Physics 400A.  
Computer programming for numerical solution of problems in classical mechanics, electromagnetism, optics, and quantum mechanics. Use of Fortran and C programming languages and the UNIX operating system. Incorporation of standard subroutines for linear algebra and differential equations into student written programs.

**PHYS 596. Special Topics in Physics (1-4)**  
Prerequisite: Consent of instructor.  
Selected topics in classical and modern physics. May be repeated with the consent of the instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a master's degree with approval of the graduate adviser.

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**GRADUATE COURSES**  
Refer to the Graduate Bulletin.

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**Policy Studies in Language and Cross-Cultural Education**  
Refer to "Dual Language and English Learner Education" in this section of the catalog.
Political Science
In the College of Arts and Letters

OFFICE: Nasatir Hall 126
TELEPHONE: 619-594-6244 / FAX: 619-594-7302

Faculty
Emeritus: Andrain, Fairlie, Gupta, Heck, Hobbs, Hofstetter, Johns, Keiser, Lewin, Little, Loveman, Miles, Schultz, Soule, Strand
Chair: Schreiber
Professors: Adams, Alexseev, Carruthers, Graubart, Guang, King, McCall, Schreiber
Associate Professors: Abdel-Nour, Branch, Kennedy, Kuru, Maher, Saccarelli, Varadarajan
Assistant Professors: Baer, Fletcher, O’Brien
Lecturers: Bee, Gastelum, Ingram, Mercurio, Samstad, Smith

Offered by the Department
Master of Arts degree in political science.
Major in political science with the B.A. degree in liberal arts and sciences.
Minor in political science.
Certificate in public law.

The Major
Political science is the study of governments. Its concerns, however, are not limited to formal governmental institutions such as the executive and legislative branches or the justice systems. Political science is also interested in other organizations and activities which are part of the process of government, including political parties, interest groups, and the press.

Students who become political science majors will learn about who creates the rules by which people are governed, the attitude and behavior of leaders and members of the public which cause certain decisions to be made, and how these decisions affect such values as liberty, equality, welfare, and justice. Political science is concerned with contemporary public affairs, problems in other political systems and contemporary international politics, as well as with historical growth, evolution, and decline of various types of governments.

The many career opportunities which might be available to political science graduates include teaching at the secondary level; positions with the federal government in areas such as intelligence, foreign affairs, environmental protection, and budget and computer administration; positions with state and local governments, including administrative aide for a city manager, staff assistant for a county supervisor, and assistant to the registrar of voters; administrative positions on the staffs of national, state, and local legislators; claims adjuster or claims representative; statistical technician; marketing researcher; lobbyist for a business or trade organization; political reporter; and title office trainee.

Impacted Program
The political science major is an impacted program. To be admitted to the political science major, students must meet the following criteria:

a. Complete with a grade of C or higher: Political Science 101, 102, either 103 or 104, and three units of either statistics or logic (Political Science 201; Economics 201; Psychology 280; Sociology 201; Statistics 119, 250; Philosophy 120). These courses cannot be taken Cr/NC.

b. Have a cumulative GPA of 2.40 or higher.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser in order to declare or change the major.

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Political Science Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22071) (SIMS Code: 115501)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” A total of 40 upper division units must be taken, of which 27 must be selected as described in the major. No more than 48 units in political science courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major
Political Science 101, 102, either 103 or 104, and three units of either statistics or logic (Political Science 201; Economics 201; Psychology 280; Sociology 201; Statistics 119, 250; Philosophy 120). (12 units)

These prerequisite courses may not be taken Cr/NC. The minimum grade in each class is C or higher.

Language Requirement
Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement
Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience
The department encourages international experience for its majors. It will facilitate the transfer of political science credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive political science credit, if approved in advance by a department adviser.

Major
A minimum of 27 upper division units to include (a) 24 upper division units in political science (students are permitted to take up to six units selected from Africana Studies 321, 322, American Indian Studies 485, Women’s Studies 375), provided that at least three units are taken in each field; and (b) a three unit capstone requirement, fulfilled by Political Science 495, 497B, 498, or any 500-level political science course excluding Political Science 516.

Field I. Political Theory

Field II. American Politics

Field III. Comparative Politics

Field IV. International Politics
Political Science 375, 380, 393, 478, 479, 482, 485, 575, 577.
Political Science

Political Science Minor
(SIMS Code: 115501)
The minor in political science consists of a minimum of 21 units in political science to include Political Science 101, 102, and either 103 or 104. Twelve of the 21 units must be in upper division courses and at least nine of these units must be selected from one of the following subject matter areas (a or b or c) as listed in the major.

a. Political Theory (Field I)
b. American Politics (Field II)
c. Comparative Politics and International Politics (Fields III and IV)

International Experience. The department encourages international experience for students in the political science minor. It will facilitate the transfer of political science credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive political science credit, if approved in advance by a department adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Public Law Certificate
(SIMS Code: 115526)
The Certificate in Public Law offers courses in the College of Arts and Letters with law content. Students specialize in public law to obtain multiple perspectives on the use of law to regulate social problems; to strengthen critical thinking skills; and to learn to form and defend arguments.

The certificate requires 15 units to include Political Science 346 and 12 units selected from Africana Studies 380, American Indian Studies 485, Political Science 347A, 347B, 348, 541, 577, Sociology 443, 543, Women's Studies 370. Students must obtain a grade of C or better in each of the certificate courses. Up to nine units in the certificate may count towards the political science major but may not count towards the political science minor. Students may obtain the Certificate in Public Law without majoring in political science or another major in the College of Arts and Letters. Contact the Department of Political Science to enroll in the certificate program or call 619-594-6245 for additional information.

Courses (POL S)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

POL S 101. Introduction to American Politics in Global Perspective (3) [AI]
Politics and basic political concepts as applied to the American political system. American political system as a constitutional democracy viewed in historical and comparative perspectives and within context of the global system. When taken with Political Science 102 will satisfy graduation requirement in American Institutions.

POL S 102. Introduction to American and California Government and Politics (3) [AI]
Political processes and institutions in the United States and California. Considers a variety of public policy issues such as environmental quality, health, education, relation between government and business, taxation, and foreign affairs as reflected in the dynamics of national and state politics. When taken with Political Science 101 will satisfy graduation requirement in American Institutions.

POL S 103. Introduction to Comparative Politics (3) [GE]
Analytical models and techniques for examination of problems of decision making and control in various political systems. Emphasis on patterns of political action in various cultural contexts.

POL S 104. Global Politics (3) [GE]
Basic concepts, terms, and institutions of global politics. Explores power and inequality in the global system in a variety of issue areas, such as war and diplomacy, human rights, migration, the global economy, development, and the environment.

POL S 201. Elementary Statistics for Political Science (3) [GE]
Prerequisites: Satisfaction of the Entry-Level Mathematics requirement; course in intermediate algebra; Political Science 101 and 102.
Quantitative methods in political science. Tabular and graphic presentation, measures of central tendency, simple correlation and sampling techniques. Students with credit or concurrent registration in the following lower division statistics courses will be awarded a total of four units for the two (or more) courses: Political Science 201; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Economics 201; Psychology 280; Sociology 201; Statistics 119, 250.

POL S 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content, credit, and preparation. May be repeated with new content. 296, 496, 596 courses applicable to a bachelor's degree.

Field I: Political Theory
UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

POL S 301A-301B. History of Western Political Thought (3-3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Development of political ideas from the Golden Age of Greece until the French Revolution. Relevance of theory to a critical understanding of concrete political and social problems involving power, freedom, equality, justice and action. Political Science 301A emphasizes Plato, Aristotle, Augustine, Aquinas, and Marsilius of Padua. Political Science 301B stresses major political theorists such as Machiavelli, Hobbes, Locke, and Rousseau.

POL S 302. Modern Political Thought (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Major writers of political thought in the last two centuries, including Burke, J.S. Mill, Freud, Marx, Weber and Sartre. The following topics may be covered: conservatism, liberalism, utilitarianism, socialism, fascism, positivism and existentialism.

POL S 305. American Political Thought (3) [AI]
Origin and development of American political ideas from colonial times to the present. Meets the graduation requirement in the United States Constitution. When taken with Political Science 320, 321 or 422, will also satisfy graduation requirements in American Institutions.

POL S 406. Democracy and Mass Society (3)
Origins and development of democracy as an idea and political reality. Historical and ongoing struggles for mass democracy to include the English Civil War, the Haitian and Russian Revolutions, and the Spanish Civil War.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

POL S 507. Marx and Marxism (3)
Prerequisite: Three units in political theory.
Marxism examined as an important tradition of political thought and as a political movement. Theoretical and political debates in the development of Marxism, including works by Marx, Engels, Luxemburg, Lenin, and Trotsky. Contemporary significance of Marxism.

POL S 510. Contemporary Political Thought (3)
Prerequisite: Political Science 301B or 302 or 305 or 406.
Contemporary political questions and theoretical attempts to address them. Debates about justice, citizenship, and multiculturalism; as well as controversies over nature and scope of politics.
Field II: American Politics

UPPER DIVISION COURSES (Intended for Undergraduates)

POL S 320. The U.S. Constitution (3) [AI]
Principles inherent to the constitutional framework in the United States, the controversies accompanying those principles, and the political institutions that have developed under them. Meets the graduation requirement in the United States Constitution and California state and local government. When taken with Political Science 305, 321 or 422, will also satisfy graduation requirements in American Institutions.

POL S 321. State Politics (3) [AI]
Politics and policy making at the state and local levels, relations among national, state, and local governments. Emphasis on California problems and politics. Meets the graduation requirement in California government. When taken with Political Science 305 or 320, will also satisfy graduation requirements in American Institutions.

POL S 322. Politics and Conflict (3)
Prerequisite: Political Science 102.
Nature of interpersonal, group, and societal conflict and mechanisms that can facilitate conflict resolution and bargained agreement.

POL S 331. American Indian Political Experience (3) (Same course as American Indian Studies 331)
Prerequisite: Political Science 102 or American Indian Studies 110.
Social and political responses to dominant group policies by American Indians as compared to other minority groups.

POL S 332. Politics of Race and Ethnicity (3)
Prerequisite: Political Science 102.
Complexity of identity politics, addressing issues as discrimination, integration, immigration, and fair political representation.

POL S 334. Politics of the Environment (3) [GE]
(Same course as Sustainability 334)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Environmental politics and policy in historical and comparative non-dominant perspective. Alternative environmental world views, cases/materials on sustainability, climate change, social and racial justice, globalization and developing nations.

POL S 335. Public Policy (3)
Prerequisite: Political Science 102.
Principles and practice of American policy making, to include analysis of social problems and the policies developed to address them.

POL S 336. Women's Issues in the American Political Process (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
American politics and public policy debates around women participating in politics, including support of and restrictions to feminism, legal strategies, and new understandings of public and private issues.

POL S 338. The Legislative Process (3)
Detailed analysis of legislatures. Special attention devoted to impact of dynamic factors on formal procedures. May include a substantial amount of material about foreign political systems.

POL S 346. Law and the Political System (3)
Courts as political institutions and judges as political actors. Dynamics of civil and criminal litigation. Law and politics, judicial selection, and impact of political factors on judicial decisions.

POL S 347A. American Constitutional Law: Institutional Powers and Constraints (3) [AI]
Substantive principles of American constitutional law. Constitutionally provided powers of and constraints on government action as defined by the United States Supreme Court. May include study of judicial review, commerce clause, federalism, and separation of powers. Satisfies graduation requirement in United States Constitution. (Formerly numbered Political Science 547A-547B.)

POL S 347B. American Constitutional Law: Civil Rights and Civil Liberties (3) [AI]
Substantive principles of American constitutional law. Civil rights and liberties protected by the Constitution against government action. May include discussion of freedom of speech, religion, press, assembly, as well as defendants’ rights and protection from discrimination. Satisfies graduation requirement in United States Constitution. (Formerly numbered Political Science 547A-547B.)

POL S 348. The Supreme Court and Contemporary Issues (3)
Recent decisions of the Supreme Court of the United States and their relationship to contemporary political and social issues. Not open to students with credit in both Political Science 347A and 347B.

POL S 422. Urban Politics (3) [AI]
Politics and policy issues in urban areas to include central cities and suburbs. Urban sprawl, suburbanization, local/state/federal relations, regional governance, and local electoral dynamics. Urban policy issues to include public safety, housing, and transportation. Meets graduation requirement in California state and local government. Will satisfy all requirements in American Institutions when taken with Political Science 102, 305, or 320.

POL S 425. Political Behavior (3)
Prerequisite: Political Science 102.
Social and attitudinal variables in political behavior. Quantitative research data as used in electoral studies. May include a substantial amount of material about foreign political systems.

POL S 426. Political Communication (3)
Communication as a political process; the effects of political communication on individuals and groups. May include a substantial amount of material about foreign political systems.

POL S 428. Campaigns and Elections (3)
Prerequisite: Political Science 102.
Campaigns and elections are essential to proper functioning of democracy. Theories concerning decision-making processes of individual voters, actors who seek to influence electoral outcomes, and the strategies used by organized political campaigns in attempting to affect voting behavior.

POL S 430. Immigration and Border Politics (3) [GE]
(Same course as Latin American Studies 430)
Prerequisites: Completion of the American Institutions requirement and the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
U.S. immigration and border politics within a global and historical perspective. Transformations of sovereignty, communities, identity, and rights within an era of mass migration and economic interdependence. Policy and popular debates about admission, border control, and the incorporation of migrants.

POL S 435. Power and Poverty in the United States (3) [GE]
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Impact of government upon income inequality and poverty in the United States. Examines programs of U.S. welfare state in comparative perspective and their successes and failures. Minimum standards for distributional justice and inquiries into obligations we have toward our fellow citizens.

POL S 436. The American Presidency (3)
Prerequisites: Political Science 101 and 102.
Analysis of principal institutions, functions and problems of the presidency and federal executive branch. Attention given to presidential leadership, staffing, executive-legislative relations and policy formation.

POL S 440. Food Justice (3)
(Same course as Geography 440)
Prerequisite: Political Science 102 or Geography 102.
Food justice from perspectives of theory, institutions, markets, law, ethics, social mobilization, politics, and ecology. Political strategies, capabilities of food justice organizations; movements aimed at creating fair, healthy, sustainable food systems locally and globally.
UPPER DIVISION COURSES
(Intended for Senior and Graduate Students)
(Also Acceptable for Advanced Degrees)

POL S 530. Political Parties (3)
Prerequisite: Political Science 102 or 320.
The political party as a part of the process of government; party organization and activities; nominating and campaign methods; theories and functions of the party system; party responsibility. The functioning of political parties in the American political system. May include a substantial amount of material about foreign political systems.

POL S 531. Interest Groups and Political Movements (3)
Prerequisite: Political Science 101 or 102.
Pressure group activity, lobbies, mass movements; factors which explain origins and motivations of group behavior; votes, money, information, protest as political resources; theories of pluralism, power elite and mass society; class and ethnic politics. May include a substantial amount of material about foreign political systems.

POL S 533. Democracy in America (3)
Prerequisite: Political Science 102 or 320.
How gender matters in understanding key political science concepts including democracy, public/private participation and representation. Women involved in political institutions as elected officials, activists, and policy makers from U.S. and comparative perspectives.

POL S 535. Gender and Politics (3)
Prerequisites: Political Science 101 and 102.
How gender matters in understanding key political science concepts including democracy, public/private participation and representation. Women involved in political institutions as elected officials, activists, and policy makers from U.S. and comparative perspectives.

POL S 541. Special Problems in Public Law (3)
Prerequisite: Three units selected from Political Science 346, 347A, 347B, or 348.
Issues of contemporary relevance in field of public law, examining legal, moral, and political implications.

Field III: Comparative Politics

UPPER DIVISION COURSES
(Intended for Undergraduates)

POL S 356. Politics of Europe (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
The politics and government systems of Europe, addressing differences and similarities across the advanced industrial countries of the region and the evolving role of the European Union.

POL S 359. Government and Politics of Russia and the Commonwealth (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Contemporary developments in Russia and states of former Soviet Union. Focus on Gorbachev era and post-Gorbachev transformations of political, economic, and social systems.

POL S 361. Governments and Politics of the Developing Areas (3) [GE]
Prerequisites: Political Science 101 or 103; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Internal political systems, governmental structures and the foreign policies of developing nations.

POL S 362. Governments and Politics of East Asia (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
The internal political structure and foreign policies of China, Japan, and Korea.

POL S 363. Governments and Politics of the Middle East (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
The governmental and political structures of representative states in the Middle East including Turkey, Israel, and the Arab states.

POL S 364. Political Change in Modern Africa (3)
Dynamics of social and political change in modern Africa.

POL S 365. Chinese Politics (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Government and political changes in China and Taiwan since 1949; state-society relations and economic development in China and Taiwan; relationship between mainland China, Taiwan, and world powers.

POL S 366. Latin American Politics (3)
(Same course as Latin American Studies 366)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Introduction to Latin American politics. Knowledge of political change and political systems in Latin America, viewed historically and comparatively, using concepts and theories applicable to more general political analysis.

POL S 370. Political Violence (3) [GE]
Prerequisites: Political Science 101, 102 or 103; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Underlying conditions, expressions, and consequences of violence within political systems.

UPPER DIVISION COURSES
(Intended for Senior and Graduate Students)
(Also Acceptable for Advanced Degrees)

POL S 555. Comparative Political Systems (3)
Prerequisite: Political Science 103.
An examination of selected political and governmental systems for purposes of comparative study and analysis to determine similarities, differences and general patterns and universals among political systems.

POL S 560. Comparative Public Policy (3)
Prerequisite: Political Science 103 or 335.
How political, social, and economic forces shape public policy in selected countries. Focus on policies related to minority and immigrant populations, environment, or poverty.

POL S 562. Religion and Politics in Comparative Perspective (3)
Prerequisite: Political Science 103.
Various types of relationships between contemporary states and religious institutions. Concepts and theories on religion and politics. Cases of state-religion interaction.

POL S 564. Political Ecology of Latin America (3)
Prerequisite: Upper division or graduate standing.
Debates surrounding origins, meaning and future of nationalism, and its most common embodiment, the nation-state form. Theoretical analyses of phenomenon and empirical case studies.

POL S 566. Political Change in Latin America (3)
Prerequisite: Political Science 101 or 103.
General pattern of politics and political development in Latin America with an emphasis on those features which condition domestic and foreign policy making.

POL S 567. Political Systems of Latin America (3)
Prerequisite: Political Science 560.
Domestic and international politics of selected Latin American states.

POL S 568. Mexican Politics (3)
Prerequisite: Political Science 101 or 103.
Principal factors in Mexican governmental decision making. Ideology, political groups, tactics of leaders and governmental structure.
POL S 375. International Relations: Theory and Practice (3)
Prevailing and critical theories of international relations and application to historical developments and contemporary issues in global affairs.

POL S 380. Human Rights in a Global Perspective (3)
Historical development of international human rights standards and global, political, moral, and legal debates concerning when and how to implement human rights standards.

POL S 393. Hostler Institute on World Affairs (3)
Exploration of a particular theme in global politics, such as global justice. Selected weeks of guest lectures from prominent scholars, diplomats, and activists.

POL S 478. Conduct of American Foreign Relations (3)
Institutional arrangements by which American foreign policy decisions are formulated and implemented. Issues confronted by American foreign policy decision makers.

POL S 479. National Security Policy (3)
Objectives, instruments, and consequences of national security policy.

POL S 482. International Relations of the Latin American States (3)
Foreign policies of Latin American states; the Organization of American States; relationships with the United Nations and the United States.

POL S 485. Politics of Globalization (3)
Prerequisite: Political Science 103 or six units of political science. Ideas and practice of globalization since end of World War II, focusing on political debate around contemporary changes in trade, production, and global social relations, and on impact of globalization on political institutions such as state, civil society, social movements, and democracy.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

POL S 495. Internship in Local Politics (3)
Prerequisite: Consent of instructor. Students will be assigned to political agencies in Washington, D.C., such as congressional staffs, interest groups, executive agencies, legal/judicial offices and political party committees. For information on internship opportunities, especially state politics, refer to the internship section on the department website. Maximum credit six units applicable to the major in political science; maximum credit three units applicable to the minor in political science.

POL S 499. Special Study (1-3)
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

POL S 516. Statistics for Political Scientists (3)
Prerequisite: Political Science 201. Does not fulfill undergraduate capstone major requirement. Basic concepts, theories, and methods that are utilized by political and other social scientists using statistics and microcomputers. Intermediate level introduction to statistical methods in political science.

POL S 596. Topics in Political Science (1-3)
Prerequisites: Upper division or graduate standing. Selected topics in political science. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Portuguese
In the College of Arts and Letters

OFFICE: Arts and Letters 134
TELEPHONE: 619-594-6588 / FAX: 619-594-5293

Faculty
Chair: Blanco
Professor: Blanco
Associate Professor: Urzua Beltran
Assistant Professor: Vasconcelos

Offered by the Department of
Spanish and Portuguese Languages and Literatures
Minor in Portuguese.

Offered by the Department of European Studies
Major in European studies, with emphasis in Portuguese.

Offered by International Business
Major in international business, with emphasis in Portuguese.

Portuguese Minor
(Minor Code: 11079) (SIMS Code: 115701)
The minor in Portuguese consists of a minimum of 15 units, nine of which must be approved upper division courses, to include at least six units of upper division courses taught in Portuguese. Any course taught in English needs department approval to apply to the minor requirements.

The following courses are acceptable for the Portuguese minor:
Portuguese 101, 201, 299, 301, 307 [or Latin American Studies 307], 401, 443, 499, 535.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Language Requirement for the
B.A. Degree in Liberal Arts and Sciences
Students electing the study of Portuguese to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Portuguese 301 or the equivalent level of achievement. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

High School Equivalents
High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:
1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

Courses (PORT)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES
Native speakers of Portuguese will not receive credit for taking lower division courses in Portuguese except with advance approval from the department.

All lower division courses in Portuguese are taught in Portuguese.

No credit will be given for lower division courses taken after successfully completing any upper division Portuguese course taught in Portuguese. No credit will be given for Portuguese 101, 201, 301 taken out of sequence.

PORT 101. Elementary / Intensive Portuguese I (5) [GE]
Five lectures and one hour of laboratory.
Prerequisite: Three years of high school Romance language or two semesters of college romance language. Pronunciation, oral practice, reading on Luso-Brazilian culture and civilization, essentials of grammar. Not open to students with credit in Portuguese 201, 301, or higher-numbered Portuguese course.

PORT 201. Elementary/Intensive Portuguese II (5) [GE]
Prerequisite: Portuguese 101. Continuation of Portuguese 101. Not open to students with credit in Portuguese 301 or higher-numbered Portuguese course.

PORT 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

PORT 299. Special Study (1-3)
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Intended for Undergraduates)

All upper division courses in Portuguese are taught in Portuguese unless otherwise stated.

No credit will be given for lower division courses taken after successfully completing any upper division Portuguese course taught in Portuguese.

PORT 301. Intermediate Portuguese Reading and Composition (3) [GE]
Prerequisites: Portuguese 201; and completion of the General Education requirement in Foundations of Learning II.C., Humanities. Culture-centered oral and written language, based on Portuguese and Brazilian texts. Review of grammar.

PORT 307. Brazilian Music and Culture (3) [GE]
(Same course as Latin American Studies 307)
Prerequisites: Upper division standing; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Brazilian music and culture with emphasis on religious and cultural practices of candomble, capoeira, carnival, and notions of race and class in contemporary Brazilian funk and hip-hop. Taught in English.
PORT 401. Advanced Portuguese Reading and Composition (3) [GE]
Prerequisites: Portuguese 301, and completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Continued development of reading comprehension and writing skills. Review of grammar through use of literary and cultural materials. May be taken concurrently with Portuguese 307 [or Latin American Studies 307].

PORT 443. Contemporary Luso-Brazilian Civilization (3)
Prerequisite: Portuguese 401.
Historical, cultural socioeconomic, ethnic, geographic, and political factors of modern Brazil and Portugal.

PORT 496. Selected Studies in Portuguese (3)
Topics in Lusophone language, literature, culture, and linguistics. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit six units.

PORT 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)

PORT 535. Brazilian Literature (3)
Prerequisite: Portuguese 401.
Important movements, authors, and works of the literature of Brazil from the colonial period to modern times.
Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 212
TELEPHONE: 619-594-5124 / FAX: 619-594-4987

Faculty
Faculty assigned to teach Professional Studies and Fine Arts courses are drawn from the Schools of Art and Design, Communication, Hospitality and Tourism Management, Journalism and Media Studies, Music and Dance, Public Affairs, and Theatre, Television, and Film.

Professional Studies and Fine Arts
International Studies Minor
(Minor Code: 22997) (SIMS Code: 669000)
The minor consists of 18 units to include 12 upper division units from Professional Studies and Fine Arts 350, 501, 502, 550; and six units selected from Professional Studies and Fine Arts 100, Art 357, Communication 371, Criminal Justice 570*, Dance 382, Journalism and Media Studies 210, 450*, Music 345, Public Administration 580*, Recreation and Tourism Management 404, and Television, Film and New Media 363 (maximum credit three units).

Courses in the major department or that are required for the major may not be used to satisfy requirements for the minor. A minimum of six upper division units must be completed in residence at San Diego State University.

For more information, visit http://psfa.sdsu.edu/intl_minor.

*Additional prerequisites required.

Courses (PSFA)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES
PSFA 100. Sustainable Development (3) [GE]
Key concepts, definitions, and measures of sustainable development. Interrelationships between biodiversity and society. Integrated view of science of sustainable development.

PSFA 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES (Intended for Undergraduates)
PSFA 320. Creativity and Communication in the Arts (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Common elements shared by various artistic forms. Focus on creativity and communication as exemplified in subject, form, function, medium, organization, and style. Attendance at dance, drama, film, music, television, and visual art events required.

PSFA 330. Artistic Practice in the Digital Age (3)
Two lectures and two hours of activity.

Prerequisite: Upper division standing.

Multidisciplinary artistic practice related to digital technologies with emphasis on works that encourage new media collaboration and interaction with audiences. Critical issues pertinent to art and technology that seek to depict, question, and transform our cultural landscape.

PSFA 350. International Studies (3)
Awareness of international surroundings and creation of global citizens in PSFA disciplines. Concepts of culture and self-awareness, dimensions of culture, theoretical perspectives, behavioral patterns, and applications in PSFA disciplines.

PSFA 381. Cross-Cultural Interpretations of Gambling Addiction (3) [GE]
Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

Cross-cultural applications of scientific knowledge about gambling addiction and disordered gambling. Social and historic place of gambling in government revenue generation and political consequences of particular public policy actions.

PSFA 430. Art and Technology Workshop (3)
Six hours of activity.

Prerequisite: Grade of C or better in Professional Studies and Fine Arts 330.

Collaborative and/or interdisciplinary practical experience in digital media using various approaches to the creative process in the arts. Maximum credit six units.

PSFA 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

PSFA 499. Special Study (1-3)
Individual directed study on topics within context of PSFA international studies minor. Maximum credit six units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)
PSFA 501. Study Abroad I (3)
Prerequisite: Professional Studies and Fine Arts 350.

Study and practical applications of PSFA-related intercultural issues in a selected international setting. Areas of study within PSFA disciplines. Maximum credit six units.

PSFA 502. Study Abroad II (3)
Prerequisite: Professional Studies and Fine Arts 350.

Study and practical applications of PSFA-related intercultural issues in a selected international setting. Areas of study within PSFA disciplines. Maximum credit six units.

PSFA 550. International Studies Capstone (3)
Prerequisites: Professional Studies and Fine Arts 501 and 502.

Comparative exploration of the ways visited culture/society/nation addresses a problem or issue relative to approaches taken in US.
Psychology
In the College of Sciences

OFFICE: Life Sciences 110
TELEPHONE: 619-594-5358

UNDERGRADUATE ADVICING OFFICE: Life Sciences 105
TELEPHONE: 619-594-5412 / FAX: 619-594-1332
http://www.psychology.sdsu.edu

Faculty
Emeritus: Borges, Bryson, Defran, Dicken, Dunn (IVC), Fenson, Franzini, Graham, Graf, Hillix, Hornbeck, Hunrichs, Kass, Koppman, Leckart, Lee, Litrownik, Lynn, Marshall, Martin, McDowdick, McDonald, Mollenauer, Plotnik, Price (Judy), Psonmas, Reed, Reilly, Rodin, Saccuzzo, Sallis, Sattler, Schulte, Scott, Scolay, Segal, Sinnetta, Stevens
Chair: Matt
Associate Chair: Ehrrhart
Resident Adviser: Ulloa
Professors: Amir, Atkins, Castañeda (IVC), Cronan, Devos, Gallo, Gilbert, Hattup, Hirshman, Holcomb, Klonoff, Malcarne, Marlin, Matt, Mattson Weller, McGivern, Müller, Murphy, Price (Joseph), Prislin, Riley, Roessch, Thomas, Twenge
Associate Professors: Brasser, Conte, Cordero (IVC), Ehrlhart, Friend, Kath, Marinikovic, Marx, Weersing, Yeh
Assistant Professors: Sadler, Vaught, Wells
Lecturer: Laumakis

Offered by the Department
Doctor of Philosophy degree in clinical psychology.
Master of Arts degree in psychology.
Master of Science degree in psychology.
Major in psychology with the B.A. degree in liberal arts and sciences.
Minor in psychology.
Certificate in industrial/organizational psychology.

The Major

What is psychology? Psychology is the scientific discipline that studies human behavior and mental processes: how human beings develop, learn, think and feel. Psychologists study the relative influences of heredity and experience throughout the life span in a wide variety of environments, including the laboratory, home, school, workplace, jury room, hospital and hospice. Faculty of the Department of Psychology at SDSU focus on a number of areas of psychology. Among these are:

- the effects of prenatal environments, including the influence of hormones and drugs on brain development and later functioning,
- the effects of childhood experience on social-emotional and cognitive development,
- the functioning of adults and the elderly in response to biological and environmental challenges,
- the normal processes of learning, memory and cognition,
- the effectiveness of behavioral and cognitive intervention procedures for enhancing physical and mental well-being.

What do psychology graduates do? The majority of students who graduate with a B.A. in psychology enter the job market and find employment in a broad range of settings, including business, state and local government agencies, and health-care services. Because the B.A. in psychology provides a liberal arts education as opposed to technical training, psychology majors will need to acquire job-specific experience or expect additional on-the-job training.

Does the B.A. in psychology prepare students for graduate work in applied areas? Students who have maintained strong academic records in psychology often enter masters degree programs in counseling: Clinical Social Work; Marriage, Family and Child Counseling; and School Psychology. Others pursue graduate work in a number of related fields including Program Evaluation, Industrial and Organizational Psychology, Public Health, Social Ecology, Education, Program Development, Criminal Justice, Law, Administrative Social Work, Human Resource Development, and Medicine.

Ph.D. in psychology? Graduate work which leads to the Ph.D. trains one to be a scientific psychologist, to study human behavior and mental processes, and to teach at the university. The Ph.D. in clinical psychology also includes supervised training in clinical practice. The time commitment for earning a Ph.D. degree is considerable, and these programs are highly competitive. Only a small percentage of psychology graduates will in fact go on to earn the Ph.D. in psychology.

Impacted Program
The psychology major is an impacted program. To be admitted to the psychology major, students must meet the following criteria:

a. Complete with a grade of C or higher: Psychology 101, 201, 211, 230, 260, 280, and Biology 100 (or Biology 203). With the exception of Psychology 201, these courses cannot be taken for credit/no credit (Cr/NC). The minimum grade in each class is C or higher. NOTE: Psychology majors may use Psychology 280 to satisfy Mathematics/Quantitative Reasoning General Education requirement. NOTE ALSO: A college level statistics course will be accepted from another department (Biology 215; Civil Engineering 160; Economics 201; Political Science 201; Sociology 201; Statistics 119 or 250) combined with Psychology 281 in lieu of Psychology 280.

b. Have a cumulative GPA of 2.50 or higher.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Advising
All students planning to major in psychology are urged to make an appointment at the Psychology Undergraduate Advising Office (Life Sciences 105) during their first semester of residence at SDSU. Students who plan to transfer as psychology majors should make an appointment before registering. The Advising Office is open year round and may be contacted at 619-594-5412, psychology.advising.sdsu@mail.sdsu.edu.

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/ mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Psychology Major
With the B.A. Degree in Liberal Arts and Sciences (Major Code: 2001) (SIMS Code: Liberal 778301 OR Applied Arts and Sciences (Open only to AA-T/TMC) (Major Code: 2001) (SIMS Code: Applied 778307)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 56 units in psychology courses can apply to the Liberal Arts and Sciences degree.

A minor is not required for this major. However, depending on career goals, students may wish to consider minors in areas such as biology, business, public administration, recreation, social work, statistics, and others.
General Requirements for the Major

Preparation for the Major. Psychology 101, 201, 211, 230, 260, 280, and Biology 101 (or Biology 203) (20 units). With the exception of Psychology 201, these prerequisite courses may not be taken for credit/no credit (Cr/NC). The minimum grade in each class is C or higher. NOTE: Psychology majors may use Psychology 280 to satisfy Mathematics/Quantitative Reasoning General Education requirement. NOTE ALSO: A college level statistics course will be accepted from another department (Biology 215; Civil Engineering 160; Economics 201; Political Science 201; Sociology 201; Statistics 119 or 250) combined with Psychology 281 in lieu of Psychology 280.

The Applied Arts and Sciences degree is open only to students who have completed the California Community College Associate in Arts in Psychology for Transfer (AA-T) degree completing the Transfer Model Curriculum (TMC) for Psychology.

Language Requirement. For the Liberal Arts and Sciences degree, competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.” Psychology majors are urged to discuss scheduling the language requirement with an adviser in the Psychology Undergraduate Advising Office.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

The Major. Methods. All majors must complete Psychology 301 or 410 or both. Psychology 301 is suitable for most psychology majors, including those planning to enter the job market after graduation, those undecided about career plans, and those planning to pursue graduate work in related fields such as counseling.

Students planning to pursue graduate work in psychology (research degrees) should take Psychology 370 and 410 as early as possible. NOTE: Students enrolling in these courses must have earned a B or better in Psychology 280 or its equivalent. Students unsure of their statistical or computer competency may wish to take Psychology 301 before enrolling in Psychology 370 or 410.

Breadth. All majors must complete four courses or 12 units selected from a list of content courses covering areas of biological, developmental, abnormal, social, personality, cognitive, and sensation/perception.

Requirements for the Major. A minimum of 31 upper division units in psychology to include Psychology 301 or 410 and either four courses or 12 units, including at least one course or three units from each of the following groups. The remaining course or three units are selected from Group II or Group III.

Group I. One of the following:
- Psychology 340 or 344

Group II. At least one of the following:
- Psychology 319;
- Psychology 301 or 332;
- Psychology 333 or 350.

Group III. At least one of the following:
- Psychology 360 or 361 or 362;
- Psychology 380;
- Psychology 388.

An additional 14-15 elective units selected from 300- to 500-level psychology courses to satisfy the 31 units required for the psychology major.

Recommendations for Electives

Employment with the B.A. Electives should be selected in accord with general career goals. Students interested in health and human services may take courses that focus on psychological health and well-being or issues related to child development. Those interested in business may take courses that focus on organizational and consumer issues or that emphasize computer skills, measurement, data analysis, or some combination of these.

masters programs in counseling. At SDSU, a Master of Science degree in Counseling is offered by the College of Education and a Master of Social Work degree is offered by the College of Health and Human Services. For these programs students have considerable latitude in the selection of psychology electives, but it is important to develop an appropriate profile of volunteer or work experience.

Graduate programs in psychology. Most masters or doctoral programs in psychology require students to have strong research profiles. SDSU psychology majors can accomplish this by completing Psychology 370, 410, and becoming involved as early as possible in faculty-sponsored research.

Psychology Minor

The minor in psychology consists of 19-21 units selected from one of the following areas:

- Cognitive and Behavioral Neuroscience (SIMS Code: 778334): Psychology 101, 280, and Biology 100. 12 units of upper division psychology courses selected from Psychology 360, 361, 362, 365, 380, and 388. (21 units)
- Industrial/Organizational (SIMS Code: 778336): Psychology 101 and 280 or equivalent, and Psychology 319, 320, 321, 340. (19 units)
- Personality and Social (SIMS Code: 778360): Psychology 101, 230 and 211 or 260; 12 units of upper division psychology courses of which nine must be selected from Psychology 331 or 332 or 333, 340, 350 and 351. (21 units)

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

*Additional prerequisites required.

Industrial/Organizational (I/O) Psychology Certificate

(Offered only in the College of Extended Studies)

(SIMS Code: 778381)

Industrial/organizational (I/O) psychology is the scientific study of the workplace. Using psychological theory and methodology, I/O psychologists contribute to evidence based practice designed to improve understanding and management of human resources and organizational behavior. The certificate offers non-degree seeking students a rigorous introduction to theories, methods, and practice of I/O psychology; and how to apply theories and methods of psychology to issues of critical relevance to organizations to include:

1. Recruitment, assessment, and personnel selection;
2. Training needs assessment and design;
3. Performance measurement and talent management;
4. Coaching and individual development;
5. Organizational development and change management;
6. Employee satisfaction, morale, and work-life balance;
7. Leadership and motivation.

Admission Requirements

To be admitted to the certificate program, students must have earned a high school diploma or equivalent and must demonstrate by previous coursework and/or work experience evidence of potential for completing the academic program. Previous courses in psychology taken at SDSU or at other universities will be considered for credit toward certification on an individual basis, but not to exceed seven units.

The Department of Psychology is responsible for the coordination of the certificate program in conjunction with the College of Extended Studies. Applications may be submitted prior to entering the program or before the completion of nine semester units of coursework.

Students accepted into the program will be assigned an adviser by the Department of Psychology.

Certificate Requirements

Complete 16 semester units of coursework to include Psychology 101, 280, 319, 320, 321. Students may transfer up to seven units earned in Psychology 101 or 280. PSY 319, 320, and 321 must be completed at San Diego State University.

Achieve a cumulative grade point average of 2.5 or better. Each course must be completed with a grade of C (2.0) or better.

Psychology 101 must be completed before taking Psychology 319, 320, 321.

Complete coursework within four years after admission to the program.

Petition the College of Extended Studies for the certificate upon completion of 16 semester units.
Courses (PSY)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

NOTE: 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 do not complete the required prerequisite and who fail to drop the class officially will be assigned the grade of "WU," which is equivalent to an "F." Before enrolling in psychology courses, students should consult the catalog to determine that they have completed any enforced prerequisites.

LOWER DIVISION COURSES

PSY 101. Introductory Psychology (3) [GE]
Facts, principles, and concepts which are basic to understanding human behavior.

PSY 201. Academic and Career Opportunities in Psychology (1) Cr/NC
Prerequisites: Psychology 101 and completion of 30 units.
Information about careers in psychology. Includes identification of career-related strengths and interests and information on post-baccalaureate options in psychology and related fields. Introduction to resources in Psychology Undergraduate Advising and Career Services.

PSY 211. Learning (3)
Prerequisite: Psychology 101.
Basic principles and research in animal and human learning.

PSY 220. Developmental Psychology (3)
Prerequisite: Psychology 101. Proof of completion of prerequisite required: Copy of transcript.
Psychological development of normal individual from conception through childhood, adolescence, and maturity. Emphasis on interdependence of various periods of the individual's life. Not open to students with credit in Child and Family Development 170, 270, or Teacher Education 170.

PSY 260. Introduction to Physiological Psychology (3)
Prerequisites: Psychology 101 and Biology 100. Proof of completion of prerequisites required: Copy of transcript.
Elementary physiology of the nervous system. Physiological mechanisms underlying the psychological phenomena of sensation, perception, emotion, arousal, motivation, learning and memory, and cortical specialization.

PSY 280. Statistical Methods in Psychology (4) [GE]
Three lectures and two hours of laboratory.
Prerequisites: Psychology 101; satisfaction of the Entry-Level Mathematics requirement. Proof of completion of prerequisites required: Copy of ELM score or verification of exemption.
Quantitative methods in psychology for producing, analyzing, and interpreting data. Sampling, basic research designs, describing distributions, correlation, regression, applications of normal probability curve, confidence intervals, and tests of significance. Analysis and interpretation of data using statistical, spreadsheet, and word processing software. Students with credit or concurrent registration in the following lower division statistics courses will be awarded a total of four units for the two (or more) courses: Psychology 280; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Economics 201; Political Science 201; Sociology 201; Statistics 119 and 250.

PSY 281. Data Analysis in Psychology (2)
One lecture and two hours of laboratory in computer laboratory.
Prerequisites: Satisfaction of the Entry-Level Mathematics requirement and credit in a three-unit statistics course without a computer laboratory component. Proof of completion of prerequisites required: Copy of transcript.
Statistical and graphic analysis and interpretation of psychological data using computer technology. Activities involve statistical, spreadsheet, and word processing software. Not open to students with credit in Psychology 280.

PSY 296. Experimental Topics (1-3)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES

(Intended for Undergraduates)

PSY 301. Introduction to Research Methods in Psychology (4)
Three lectures and two hours of laboratory.
Prerequisites: Completion of the Graduation Writing Assessment Requirement or the eligibility to enroll in an upper division writing course. Psychology 101 and 280. Proof of completion of prerequisites required: Copy of transcript. Open only to psychology majors.
Methods used to answer questions in psychology, including case study, observation, survey, experimental, and field study procedures. Class projects using these methods, interpreting results and report writing; critically evaluating research findings.

PSY 310. Psychology of Environmental Sustainability (3)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Concepts of natural environment and psychological factors supporting more environmentally sustainable behaviors. Theory and research from multiple areas of psychology to include cognitive, developmental, cultural, social, ergonomic, Industrial/organizational, and health psychology.

PSY 316. Behavior Modification (3)
(Offered only at IVC)
Prerequisite: Psychology 101. Recommended: Psychology 211.
Contingencies of reinforcement, stimulus control, response shaping, aversive control, and other basic principles of operant behavior applied to understanding and modification of human behavior.

PSY 319. Industrial and Organizational Psychology (3)
Prerequisite: Psychology 101. Proof of completion of prerequisites required: Copy of transcript.
Broad-based survey of various content areas of industrial (e.g., selection, appraisal) and organizational (e.g., motivation, leadership) psychology. Underlying psychological principles that influence human behavior in the workplace. Not open to students with credit in Psychology 320 or 321.

PSY 320. Personnel and Industrial Psychology (3)
Prerequisite: Psychology 319. Proof of completion of prerequisites required: Copy of transcript.
Psychological principles applied to industrial problems of selection, placement and training.

PSY 321. Organizational Psychology (3)
Prerequisite: Psychology 319. Proof of completion of prerequisites required: Copy of transcript.
Human behavior in context of organizational life. Factors related to effectiveness of individuals and groups within organizations, including organization design, leadership and control, motivation, cooperation, and conflict.
PSY 331. Psychology of Infant and Child Development (3)
Prerequisites: Psychology 101 and 230. Students enrolling in this course must have earned a C or better in Psychology 230. Proof of completion of prerequisite required for Psychology 230: Copy of transcript. Psychological development of normal child from infancy through childhood focusing on physical, social, cognitive, and linguistic aspects of development.

PSY 332. Psychology of Adolescent and Early Adult Development (3)
Prerequisites: Psychology 101 and 230. Students enrolling in this course must have earned a C or better in Psychology 230. Proof of completion of prerequisite required for Psychology 230: Copy of transcript. Psychological development of normal individual from adolescence through early adulthood focusing on physical, social, and cognitive aspects of development.

PSY 333. Developmental Psychopathology (3)
Prerequisites: Psychology 101 and 230. Students enrolling in this course must have earned a C or better in Psychology 230. Proof of completion of prerequisite required for Psychology 230: Copy of transcript. Cognitive, affective, and social aspects of abnormal development from childhood through adolescence. Consideration, within a developmental framework, of etiological theories and factors, problem expression and treatment issues.

PSY 340. Social Psychology (3) [GE]
Prerequisites: Psychology 101; completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Major problems and findings concerning group behavior and group membership, the socialization of the individual, and processes of social interaction.

PSY 344. Psychology and Culture (3)
Prerequisite: Psychology 101. Impact of culture in each of psychology’s major areas, theories, and empirical findings.

PSY 345. Chicana and Chicano Psychology (3)
Prerequisite: Psychology 101. Evolution of psychology of Chicanos with emphasis on understanding underlying roots and foundations. Empirical research conducted with Chicanos in areas of psychology, psychiatry, and mental health.

PSY 350. Abnormal Psychology (3)
Prerequisites: Psychology 101; completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Causes and treatment of abnormal behavior with emphasis on major behavior disorders.

PSY 351. Psychology of Personality (3) [GE]
Prerequisites: Psychology 101; completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Major theoretical approaches to individual differences and the study of the person. Techniques of personality assessment. Selected research findings.

PSY 353. Stress, Trauma, and the Psychological Experience of Combat (3)
Prerequisite: Psychology 101. Physiology, psychological experience, historical context, and measurement of stress, to include family and workplace stress, large scale traumatic events and disasters, combat and war. Coping with stress, loss, emotional wounds, and bereavement. Treatment, diagnosis, and potential for personal growth.

PSY 355. Psychology of Human Sexual Behavior (3)
Prerequisite: Psychology 101. Evaluation of behavioral and physiological data of normal, aberrant, and dysfunctional human sexual behavior, including description of available treatment methods.

PSY 360. Behavioral Neuroscience (3)

PSY 361. Neuropsychology (3)
Prerequisites: Psychology 101 and 260. Proof of completion of prerequisites required: Copy of transcript. Characterization of human brain-behavior relationships derived from neuropsychometric studies of healthy, neuropsychiatric and brain damaged populations. Emphasis on functional neuroanatomy and the effects of abnormal brain development and disease on processes such as cognition, memory, language, visual-spatial, and other functions.

PSY 362. Cognitive Neuroscience (3)
Prerequisites: Psychology 101 and 260. Proof of completion of prerequisites required: Copy of transcript. Functional organization of the human brain, including sensorimotor and cognitive systems and their functional interactions; development and evolution; normal and pathological plasticity. Approaches applied to healthy human brain, such as neuroimaging and event-related potentials.

PSY 365. Drugs and Behavior (3)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. Fundamentals of regulation, administration, tolerance, dependence, and physiological activity of drugs. Effects of stimulants, depressants, opiates, psychedelics, and psychotherapeutic drugs on the nervous system and on cognitive, personality, and behavioral functioning.

PSY 370. Psychological Testing and Measurement (3)
Prerequisites: Grade of B or better in Psychology 280 or equivalent statistics course; grade of B or better in Psychology 301. Proof of completion of prerequisites required: Copy of transcript. Note: Students electing to take Psychology 410 for the methods requirement may petition waiver of the Psychology 301 prerequisite by permission of the undergraduate adviser. Open only to psychology majors. Measurement theory and the basic principles of testing. Selection, construction and critical evaluation of group tests of intelligence, personality, aptitude, interest and achievement.

PSY 380. Cognitive Psychology (3)
Prerequisite: Psychology 101. Recommended: Psychology 211. Theory and research on attention, learning, memory, thinking, understanding, and language.

PSY 388. Sensation and Perception (3)
Prerequisites: Psychology 101 and 260. Theory and research in sensory and perceptual processes.

PSY 407. Health Psychology (3)
Prerequisites: Psychology 211 and 280. Proof of completion of prerequisites required: Copy of transcript. Psychological components and causes of death and disability. Primary prevention of health problems through behavior change and psychological features of the health care system.

PSY 410. Advanced Research Methods Laboratory (5)
Two lectures and six hours of activity. Prerequisites: Completion of the Graduation Writing Assessment Requirement or the eligibility to enroll in an upper division writing course. Psychology 211, a grade of B or better in Psychology 280 or equivalent statistics course. Proof of completion of prerequisites required: Copy of transcript. Open only to psychology majors. Use of research design, quantitative methods, and research reports as applied to all areas of psychology.
PSY 412. Advanced Laboratory in Social Psychology (5) 
Two lectures and six hours of activity. 
Prerequisite: Psychology 410. Proof of completion of prerequisite required: Copy of transcript. 
Experimental literature, assigned and original laboratory projects in the field of social psychology. 

PSY 442. Prejudice and Stereotypes (3) 
Prerequisite: Psychology 340. Proof of completion of prerequisite required: Copy of transcript. 
Classic and contemporary theories and research on prejudice and stereotyping to include origin and forms of phenomena, consequences, and approaches aimed at reducing them. 

PSY 452. Introduction to Counseling and Therapy (3) 
Prerequisite: Psychology 350 or 351. Proof of completion of prerequisite required: Copy of transcript. 
Theory, methods, and research in psychological approaches to personality and behavior change. 

PSY 456. Psychology of Death and Bereavement (3) 
Latest psychological research and clinical practice in the area of death and dying, geared to assisting the student in appropriate ways of aiding both the dying and the bereaved in coming to terms with death. 

PSY 470. Intermediate Statistics for Psychological Research (3) 
Prerequisite: Consent of instructor. 

PSY 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 psychology undergraduate coordinator. 
Individual supervision of academic or psychological counseling experiences, geared to acquisition of counseling and communication skills. May be repeated with approval of psychology undergraduate coordinator. Maximum credit six units. No more than nine units of Psychology 491, 494, 495 may be counted toward the major and no more than 12 units of courses numbered Psychology 491, 494, 495, 497, 499 may be counted toward the major. 

PSY 492. Responsible Conduct in Scientific Research (1) Cr/NC 
Prerequisite: At least one introductory level science course. 
Responsible conduct in scientific research. Topics include conflict of interest, plagiarism, reporting of scientific results, authorship, responsible use and care of animals, responsible use of human subjects. 

PSY 494. Special Study: Techniques for Teaching and Tutoring in Psychology (2) Cr/NC 
Prerequisite: Consent of instructor. 
Practical knowledge and experience in psychology instruction and advanced content in a specific area of psychology. May be repeated with new content. Maximum credit four units. No more than nine units of Psychology 491, 494, 495 may be counted toward the major and no more than 12 units of courses numbered Psychology 491, 494, 495, 497, 499 may be counted toward the major. 

PSY 495. Field Placement in Psychology (3) Cr/NC 
Prerequisites: Psychology 350 and three units from Psychology 230, 340, or 351. Proof of completion of prerequisites required: Copy of transcript. 
Students will be assigned to various community agencies and work under joint supervision of an agency supervisor and course instructor, attend class meetings, and staff conferences. May be repeated with approval of psychology undergraduate coordinator. Maximum credit six units. No more than nine units of Psychology 491, 494, 495 may be counted toward the major and no more than 12 units of courses numbered Psychology 491, 494, 495, 497, 499 may be counted toward the major. 

PSY 496. Selected Topics in Psychology (1-4) 
Prerequisite: Psychology 101. 
Intensive study in specific areas of psychology. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit six units. 

PSY 497. Senior Project (1-3) 
Prerequisites: Twelve units of psychology and consent of instructor. 
Individual investigation and APA-style report on a research project. Maximum credit six units. No more than nine units of Psychology 497 and 499 may be counted toward the major and no more than 12 units of courses numbered Psychology 491, 494, 495, 497, 499 may be counted toward the major. 

PSY 498. Undergraduate Honors Thesis (3-6) 
Prerequisites: Psychology 410, 3.5 overall GPA or 3.75 GPA in major, and consent of honors coordinator. 
Directed research in psychology and completion of honors thesis. Required of students graduating with a Certificate of Recognition of Psychology Honors Thesis. May be repeated for a maximum of six units. 

PSY 499. Special Study (1-3) Cr/NC 
Prerequisites: Psychology 350 or 351. 
Intensive study, including library or laboratory research and a written report. Maximum credit six units. No more than nine units of Psychology 497 and 499 may be counted toward the major and no more than 12 units of courses numbered Psychology 491, 494, 495, 497, 499 may be counted toward the major. 

UPPER DIVISION COURSES 
(Also Acceptable for Advanced Degrees) 

PSY 501. History of Psychology (3) 
Prerequisite: Limited to graduate students or psychology majors with senior standing. 
Historical background of modern psychology. 

PSY 561. Advanced Neuropsychology (3) 
Prerequisite: Psychology 360 or 361 or grade of B or better in Psychology 260. 
Biological bases of neuropsychological function and dysfunction, relationships between brain structure and function, neuropsychological assessment tools. 

PSY 587. Advanced Principles of Learning and Cognition (3) 
Prerequisites: Psychology 211, 280, and 380. Limited to graduate students or psychology majors with senior standing. 
Empirical data, basic principles and theoretical positions of major theorists in learning and cognitive psychology. 

PSY 596. Selected Topics in Psychology (1-3) 
Prerequisites: Psychology 101 and consent of instructor. 
Intensive study in specific areas of psychology. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser. 

GRADUATE COURSES 
Refer to the Graduate Bulletin.
Public Administration
In the College of Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 100
TELEPHONE: 619-594-6224 / FAX: 619-594-1165

A Member of the National Association of Schools of Public Affairs and Administration (NASPAA).

Faculty
Director: Henry
Professors: Caves, Henry, Herzog, Pugh, Ryan, S.
Associate Professors: Flanigan, Kaplan, McIlwain, Mobley, Nurge, Sabath
Assistant Professors: Abdel-Samad, Appleyard, Chanin, Espinosa

Offered by the School of Public Affairs
Master of City Planning degree.
Master of Public Administration degree.
Concentration in city planning.
Concentration in criminal justice administration.
Master of Public Administration and Master of Arts in Latin American studies degrees (concurrent program).
Master of Science degree in criminal justice and criminology.
(Jointly with the College of Arts and Letters.)
Major in criminal justice with the B.S. degree in applied arts and sciences (refer to Criminal Justice).
Major in public administration with the B.A. degree in applied arts and sciences.
Emphasis in city planning.
Minor in public administration.
Certificate in public administration (available at Imperial Valley Campus only).

The Major
In an increasingly complex world, the nation is in need of effective leadership and competence in the administration of public affairs. The growth of all levels of government and public service organizations and their increasing responsibilities in a complex society have led to the need for more capable public administrators.

The undergraduate public administration major is an interdisciplinary program. In addition to the courses taken within the department, students select additional courses in areas as diverse as economics, sociology, social welfare, political science, and psychology. Required preparatory courses for the major include classes in accountancy, economics, management information systems, political science, and statistics.

The primary purpose of the public administration major is to provide knowledge and skills for students who wish to prepare themselves for management careers in government, community agencies, private not-for-profit organizations, planning and consulting firms, and private sector organizations that work in partnership with the public sector. Career opportunities in public administration can be found throughout the public and private sectors, and the future is represented by a stable job market. The school employs a full-time internship coordinator and careers adviser. The Public Administration Center within the School of Public Affairs provides a comprehensive file of current job openings locally, throughout California, and across the country.

Public administration students are employed in a wide variety of administrative positions within government, the private sector, and community agencies. For example, graduating students have recently been placed with city personnel and finance departments, county operating departments, special districts, hospitals, and consulting firms.

Impacted Program
The public administration major is an impacted program. To be admitted to the public administration major, students must meet the following criteria:

a. Complete 18 units in the following courses with a grade of C or higher: Accountancy 201, Economics 101 and 102, Management Information Systems 180, Political Science 102, and a three-unit course in elementary statistics. These courses cannot be taken for credit/no credit (Cr/NC);

b. Complete a minimum of 60 transferable semester units;

c. Have a cumulative GPA of 2.40 or higher;

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Public Administration Major
With the B.A. Degree in Applied Arts and Sciences
(Major Code: 21021) (SIMS Code: 666901)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” A minor is not required with this major.

Preparation for the Major
Public Administration 200, Accountancy 201, Economics 101 and 102, Management Information Systems 180, Political Science 102, and a three-unit course in statistics. (21 units)

These prerequisite courses may not be taken Cr/NC. The minimum grade in each class is C.

Graduation Writing Assessment Requirement
Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major
A minimum of 36 upper division units to include Public Administration 201, 301 or 312 or 315, 330, 450, 460, 497 or 498, nine units of public administration electives, and six additional units selected with the approval of an adviser from the public administration faculty. Note: Students may only double count one elective course also taken to satisfy the university upper division Explorations of Human Experience requirement. Within this program, students may build an informal concentration by selecting a cluster of courses in such areas as personnel and labor relations, urban management, urban planning, public finance and budgeting, information systems, and environmental management. Interested students must seek guidance from a public administration program faculty adviser.

Master Plan
Students should follow the Master Plan Advising Guide to ensure completion of major requirements. Contact the School for a copy of the guide or download it at http://spa.sdsu.edu/web/index.php/academic_programs/pa_undergraduate_program.

Emphasis in City Planning
(Major Code: 21021) (SIMS Code: 666919)
Preparation for the Major
Public Administration 200, Accountancy 201, Economics 101 and 102, Management Information Systems 180, Political Science 102, and a three-unit course in statistics. (21 units)

These prerequisite courses may not be taken Cr/NC. The minimum grade in each class is C.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Public Administration 301, 310, 330, 340, 450, 460, 497 or 498; and Public Administration 320, 420, 525, and Public Administration 341 and 350.

Master Plan. Students should follow the Master Plan Advising Guide to ensure completion of major requirements. Contact the School for a copy of the guide or download it at http://spa.sdsu.edu/web/index.php/academic_programs/pa_undergraduate_program.

Public Administration Minor
(SIMS Code: 666901)

The minor in public administration consists of 21 units to include Political Science 102, Public Administration 301, 310 or 312 or 315, 330, 450, and two additional public administration courses with the consent of a public administration adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Public Administration Certificate
(Imperial Valley Campus Only)

(SIMS Code: 666930)

To receive the certificate a candidate must complete an approved program of 18 units with a minimum grade point average of 2.5. Up to two public administration courses taken at another institution may be included among the required courses with approval of the program adviser.

Requirements include Public Administration 301, 330; three units selected from Public Administration 340, 341, or 450; and nine units in an area of specialization selected with the approval of the adviser.

Courses (P A)

Refers to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSE

P A 200. The Urban Scene (3)

Key issues in public administration, social policy, and city planning. Emphasis on government structure and public decision-making process, organizational behavior, effectiveness of criminal justice policies, zoning, and land use considerations.

UPPER DIVISION COURSES (Intended for Undergraduates)

P A 301. Concepts and Issues in Public Administration (3)

Theory and practice of governmental administration in differing environments, role of administrators in public policy, issues facing administrators, techniques of administration.

P A 310. Management of Urban Governments (3)

Problems of local units of government in the urban environment. Organization and function of local agencies. Emphasis on California.

P A 312. Management of State Governments (3)

Administrative and constitutional problems of state management in the American federal system. Emphasis on California.

P A 315. Management of the Federal Government (3)

Prerequisite: Public Administration 301.

Problems in the administration of the federal government. Leadership, specialization, unity of command, and oversight.

P A 320. Introduction to Urban Planning (3)

Introduction to community planning: regional, county, and city. Consideration of master plan including its purposes, contents, and method of adoption.

P A 330. Public Personnel Administration (3)

Analysis of personnel problems. Supervision and management of public employees and public organizations in an age of change.

P A 340. Administrative Behavior (3)

Social, psychological, and behavioral theories of organization; concepts of administrative leadership; organization and the individual; emphasis on governmental organizations. Not open to students with credit in Psychology 321.

P A 341. Administrative Management (3)

Areas and problems of administrative research. Management and operations in public organizations including forecasting, resource allocation, planning and administration of programs, preparation of administrative reports. Quantitative models of managerial decision making.

P A 350. Contemporary Urban Issues (3)

Focus on urban areas and urbanism from a public policy perspective; course examines and critiques the physical, economic, social and political dimensions of contemporary American cities utilizing a multidisciplinary approach.

P A 420. Methods of Analysis in City Planning (3)

Prerequisites: Public Administration 320 and basic statistics course.

Methods of primary data collection and analysis of secondary data sources for problem solving in city planning, techniques associated with urban design and urban development.

P A 440. Microcomputer Applications in Criminal Justice and Public Administration (3)

(Offered only at IVC)

Two lectures and three hours of laboratory.

Prerequisite: Limited to criminal justice and public administration majors.

Operation and use of microcomputer hardware and software in criminal justice. Laboratory instruction focuses on applicability of programs to criminal justice operations.

P A 450. Fiscal and Budgetary Policy (3)

Prerequisite: Public Administration 301.

Policies of fiscal administration and budgeting; political implications of the governmental budget process; revenue, debt, and treasury management; the functions of accounting and financial reporting.

P A 460. Administration and Public Policy Development (3)

Process of formulating public policy with emphasis on the role of public agencies.

P A 480. Leadership and Public Sector (3)

Prerequisite: Public Administration 301.

Leaders as energizing forces for public administration. Analysis of leadership theories and case studies.

P A 485. Planning and Public Policy in U.S.-Mexico Border Region (3)

Prerequisite: Public Administration 301.

City planning, regional, and public policy issues in the binational Mexico-U.S. border region. Policy analysis: macro/regional and micro/urban.

P A 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

P A 497. Investigation and Report (3)

Analysis of special topics.

P A 498. Internship in Public Administration (2-6) Cr/NC

Prerequisites: Public Administration 301, 330, 340, 450, all lower division required courses; senior standing, a "B" (3.0) average in the major, and consent of instructor.

Students will be assigned to various government agencies and will work under joint supervision of agency heads and the course instructor. Participation in staff and internship conferences. Maximum credit six units.

P A 499. Special Study (1-3)

Prerequisite: Twelve upper division units in public administration. Individual study. Maximum credit six units.
UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

P A 501. Nonprofit Organizations and Government (3)
Prerequisites: Public Administration 301 and 460.
How nonprofit organizations interact with government institutions, influence and pressure government through policy advocacy and activism, and partner with government in contracting, public service provision, and policymaking.

P A 520. Decision Making in the Urban Community (3)
Prerequisite: Public Administration 310.
Processes of decision making in the management of urban communities.

P A 525. The U.S. City Planning Process (3)
Prerequisite: Public Administration 320 or graduate standing.
Description and critique of traditional city planning process; styles and roles of city planner; city planning values and ethics.

P A 530. Negotiation and Bargaining in the Public Service (3)
Prerequisite: Public Administration 301.
Specific issues such as strategies, the effects of threats, the physical setting, use of a third-party observer and theories of advocacy. Emphasis on analyzing simulations of the bargaining process and developing effective negotiation skills.

P A 531. Governmental Employer-Employee Relations (3)
Prerequisite: Public Administration 330.
Historical development, legal basis, and organizational implications of governmental employer-employee relations; emphasis on California local government.

P A 540. Public Administrative Systems Analysis (3)
Prerequisites: Public Administration 301 and a statistics course.
Systems and organization analysis; work standards and units; procedures analysis; administrative planning.

P A 571. Managing Water and Energy Resources (3)
(Offered only at IVC)
Prerequisite: Public Administration 301.
Management and economics of water and energy resources, delivery systems, regulatory framework, and renewable resources. Contemporary water and energy management issues.

P A 580. Comparative Public Administration (3)
Prerequisite: Public Administration 301.
Administrative organization and process of selected foreign and American governments. Analysis of the cultural basis of administrative systems.

P A 596. Experimental Topics (1-4)
Selected current topics in public administration. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.
Public Health
In the College of Health and Human Services

OFFICE: Hardy Tower 119
TELEPHONE: 619-594-6317 / FAX: 619-594-6112
http://publichealth.sdsu.edu

Faculty
Emeritus: Burgess, Chang, de Peyster, Elder, Hofherr, Koch, Mayer, McTaggart, Noto, Peddiecord, Seidman, Senn, Slymen, Sorochan
Director: Gersberg (Interim)
Undergraduate Adviser/Division Head: Kreisworth
Professors: Ayala, Brodine, Gersbeg, Hovell, Macera, Novotny, Quintana, Shaffer, Stoskopf, Talavera, Yu
Associate Professors: Alcaraz, Arredondo, Buhi, Chowdhury, Corliss, Finlayson, Hohl, Kiene, Lindsay, Madanat
Assistant Professors: Baek, Lemus, Schiaffino

Offered by the Graduate School of Public Health
Doctor of Philosophy degree in public health.
Concentration in epidemiology.
Concentration in global health.
Concentration in health behavior.
Master of Public Health degree.
Concentration in biometry.
Concentration in environmental health.
Concentration in epidemiology.
Concentration in health management and policy.
Concentration in health promotion and behavioral science.
Master of Science degree in public health.
Concentration in environmental health sciences.
Master of Public Health and Master of Arts in Latin American studies degrees (concurrent program).
Master of Social Work and Master of Public Health degrees (concurrent program).

The Major
The health science major with an emphasis in public health provides a broad educational opportunity and exposure of undergraduate students to the field of public health and its many disciplines. The major prepares students to develop, implement, and assess public health programs conducted in varied settings, with diverse populations and aimed at reducing threats to public health. The major prepares students for entry-level positions in a variety of settings, including government agencies, private/voluntary agencies, hospitals, clinics, and international programs. Students develop basic competencies in public health concepts, theories, and methods. Students are exposed to the disciplines of epidemiology, environmental health, occupational health, health services administration, and behavioral science. The program of study uses examples of public health problems from all of these disciplines.

Impacted Program and Standards for Admission
The health science major with an emphasis in public health is an impacted program. To be admitted to the emphasis in public health, students must meet the following criteria:

a. Receive a grade of B or higher in Public Health 101, 290, and 295. These courses cannot be taken for credit/no credit (Cr/NC);

b. Complete each remaining course in preparation for the major with a minimum grade of C. These courses cannot be taken for credit/ no credit (Cr/NC);

c. Complete all courses in preparation for the major with a minimum GPA of 2.75;

d. Have a cumulative GPA of 2.75 or higher.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Health Science Major
With the B.S. Degree in Applied Arts and Sciences (Major Code: 12011)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”
A minor is not required with this major.

Emphasis in Public Health (SIMS Code: 552841)
Preparation for the Major. Public Health 101, 290, 295; Biology 100, 100L, 211, 211L, 212; Chemistry 100; Psychology 101; Sociology 101; Statistics 119 or 250. (34 units)
Public Health 101, 290, and 295 may not be taken Cr/NC. The minimum grade for Public Health 101, 290, and 295 is B or higher. Each remaining course in preparation for the major must be completed with a minimum grade of C. These courses cannot be taken for credit/no credit (Cr/NC). Complete all courses in preparation for the major with a minimum GPA of 2.75.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or Rhetoric and Writing Studies 305W or Linguistics 305W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
International Experience. All health science majors are required to participate in an international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course and community service activity in the U.S. will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:
1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;

Major. A minimum of 45 upper division units to include Public Health 301, 302, 303, 304, 305, 402, 490A, 490B, 490C; Biology 336; and at least 15 units selected from the following:
A. Twelve units of electives from Public Health 331, 353, 362, 450, 451, 452, General Studies 330, 340. Other electives as selected and offered by the Graduate School of Public Health, with approval of academic adviser.

B. Three units from one of the following categories:

- **Preprofessional.** Science courses selected with approval of Graduate School of Public Health undergraduate academic adviser.

- **Research.** Public Health 499 (Special Study) and completion of a senior research paper under guidance of a faculty member. Must receive approval from the undergraduate public health adviser. Senior standing in public health and Public Health 402, 490A, 490B, and credit or concurrent registration in Public Health 490C.

- **Practice.** Public Health 497 (Supervised Field Experience): internship from a list of selected public health agencies.

**Time Limitation.** All public health courses taken for the major must have been taken and completed within seven years of the granting of the undergraduate degree. Courses taken prior to the seven year rule must be repeated. This policy applies to courses taken at SDSU or transferred from another four-year college or university or appropriate courses from a community college. No exceptions will be made to this policy.

### Health Science Minor

**(SIMS Code: 552801)**

The minor in health science consists of a minimum of 18 units, to include 12 units of Public Health 101, 290, 301, 302, and six units selected from Public Health 303, 304, 305.

Public Health 101 and 290 must be completed with a grade of B or higher and students must have a cumulative GPA of 2.75 or higher to enroll in the required 300-level public health courses.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

### Courses (P H)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

**NOTE:** Students who are not pre-health science or health science majors may take the following public health courses with consent of instructor.

### LOWER DIVISION COURSES

- **P H 101. Introduction to Public Health (3)**
  - Epidemics, environment, and community health challenges, including educational, political, environmental, regulatory, and organizational factors that support health of population groups and communities.

- **P H 290. Health Professions and Organizations (3)**
  - Prerequisite: Credit or concurrent registration in Public Health 101. Open only to pre-health science majors and minors.
  - Health organization and agencies, locally, regionally, nationally, and internationally. Types of public health settings, and responsibilities in different types of health careers and public health positions.

### UPPER DIVISION COURSES

**(Intended for Undergraduates)**

- **P H 301. Foundations and Practice of Public Health (3)**
  - Prerequisites: Public Health 101 and 290 with grades of B or better. Open to health science majors and minors.
  - Organization of public health field, role of government and voluntary agencies in protecting and promoting health of individuals, groups, and communities.

- **P H 302. Communicable and Chronic Disease (3)**
  - Prerequisites: Credit or concurrent registration in Public Health 301.
  - Open to health science majors and minors.
  - Impact of infectious and chronic diseases on health of the population. Epidemiologic methods, behavioral and biologic determinants, modes of transmission, and risk factors.

- **P H 303. Health Behavior in Community Settings (3)**
  - Prerequisites: Public Health 301 and 302.
  - Behavior change theory, principles, predictive models, and their application to health behavior change programs. Review of research methods related to individuals and communities. Analysis of major health behavior change programs.

- **P H 304. Environment and Public Health (3)**
  - Prerequisites: Public Health 301 and 302.
  - Environmental hazards of living and working in both industrialized and lesser developed societies. Chemical, biological, and physical agents in food, air, water, and soil.

- **P H 305. Medical Care Organization and Delivery (3)**
  - Prerequisites: Public Health 301 and 302.
  - Organizational, economic, financial, political, and cultural factors affecting finance and delivery of health and medical services in the U.S. Topics include insurance, managed care, reimbursement, private and public programs, and regulation.

- **P H 331. Emergency Preparedness and Disaster Response (3)**
  - Prerequisites: Public Health 301 and 302.
  - Roles and responsibilities of public health in disaster preparation, mitigation, planning, and response to epidemics, pandemics, natural disasters and bioterrorism, includes disaster assessment, surveillance, risk management, and principles of disaster planning.

- **P H 353. Human Sexuality and Disease (3) [GE]**
  - Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B. Social and Behavioral Sciences.
  - Development of sexual values, attitudes, and behaviors across ages, including evolution and occurrence of sexually transmitted infections worldwide. Focus on biological, medical, psychological, sociocultural, and political factors. Not open to students with credit in Community Health Education 475.

- **P H 362. International Health (3) [GE]**
  - Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B. Social and Behavioral Sciences.
  - Population dynamics, vital statistics, global disease patterns, and analysis of variations among nations and cultures with respect to health problems and health care services.
PH 402. Public Health Communications (3)
Prerequisites: Public Health 303. Open only to health science majors.
Effective communication techniques used in public health campaigns, social marketing, and risk communication. Use of technology to design and conduct public health campaigns which focus on recognizing and overcoming communication barriers, including cross-cultural issues.

PH 450. Public Health Policy (3)
Prerequisite: Public Health 302. Recommended: Public Health 305. Political, economic, cultural, institutional, and social factors influencing development and implementation of policy. U.S. and international private and public health organizations and their roles in shaping health policy. Public health advocacy by organizations.

PH 451. Public Health and Food Safety (3)
Prerequisite: Upper division standing.
Risk factors for foodborne illness, to include case studies of domestic and international outbreaks. Food safety, foodborne illness, food safety measures and prevention, management and regulation, sustainability.

PH 452. Health Impacts of Climate Change (3)
Prerequisite: Public Health 304.
Biological, chemical, physical, and social factors contributing to climate change and human health. Greenhouse effect, health impacts and adaptation, climate change projections, and climate mitigation.

PH 490A. Health Data Analysis (3)
Prerequisite: Public Health 302.
Identifying, retrieving, and using health data, with emphasis on statistical applications and interpretation of results for changing policy and health programs.

PH 490B. Planning Public Health Programs (3)
Prerequisites: Public Health 303 and 490A.
Public health programming models, including community needs assessment, goals, objectives, and strategies for effective public health interventions. Preparation of grant proposals.

PH 490C. Public Health Program Evaluation (3)
Prerequisite: Public Health 490B.
Quantitative and qualitative evaluation methods in public health programs.

PH 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.

PH 497. Supervised Specialization in Public Health (1-6)
Prerequisites: Senior standing in public health and Public Health 304, 305, 402, 490B, and credit or concurrent registration in Public Health 490C.
Placement in a public health environment. Maximum credit six units.

PH 499. Special Study (1-3)
Prerequisite: Consent of special study adviser.
Individual study. Maximum credit six units.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Recreation and Tourism Management

In the L. Robert Payne School of Hospitality and Tourism Management
In the College of Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 436
TELEPHONE: 619-594-4964 / FAX: 619-594-4443
http://www.sdsu.edu/htm

 Accredited by the National Recreation and Parks Association.

Faculty
Emeritus: Dixon, Duncan, Hanson, Hutchinson, Lamke, Peterson, Rankin
Director: Winston
Professors: Beck, Gattas
Associate Professors: Ponting, Sasidharan
Lecturers: Greenberg, Hemmens, Lustig

Offered by the L. Robert Payne School of Hospitality and Tourism Management
Major in recreation administration with the B.S. degree in applied arts and sciences.
Emphasis in outdoor resource management.
Emphasis in recreation systems management.
Emphasis in sustainable tourism management.
Minor in recreation.

The Major
A commitment to working with people to enhance the quality of their lives is important to a study of recreation and tourism.
Increasingly diverse opportunities are available in the recreation and tourism profession. The major offers a sufficiently wide range of courses for students who may wish to enter diverse recreation, tourism, or human services fields.
Students in this major elect one of three areas of emphasis. The outdoor resource management emphasis stresses conservation, natural science, ecology, and recreation/park administration. Society’s efforts to sustain a balance between the environment and recreational use are studied. Graduates find employment as naturalists, outdoor education specialists, outdoor resource management planners, park interpreters, and park rangers.
Recreation systems management stresses the effective organization, administration, and supervision of recreation, park, and tourism agencies, both public and private. Graduates find employment as administrators and supervisors with public, private, or commercial park and recreation agencies. They assume professional positions with youth and family serving agencies, private clubs and condominium associations, a variety of leisure related businesses including tourism agencies, and municipal, county, and state organizations.
Sustainable tourism management prepares students to work in tourism, recreation, cultural, natural resource, and sports settings. It stresses the cultural and ecological tourism leadership needs of new tourism professionals by emphasizing the linkages between the economic, environmental, and social (including cultural and political) spheres and involves an interdisciplinary approach. Students learn about assessment, programming, and evaluation for planning and management of sustainable tourism businesses. Graduates find employment as managers and directors with transportation agencies, destination management organizations, travel and tour companies, tourism attractions, leisure, recreation, and sports organizations, cultural industries, adventure and ecotourism services, and lodging enterprises.
The sustainable tourism management emphasis requires international experience. Refer to the international experience section under the requirements for the Emphasis in Sustainable Tourism Management.

Impact Program
The recreation administration major and emphases are impacted programs. To be admitted to the recreation administration major or an emphasis, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.3.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Recreation Administration Major
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 21031)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” The major in recreation administration must be planned with an emphasis in outdoor resource management, recreation systems management, or sustainable tourism management. A minor is not required with this major.

Emphasis in Outdoor Resource Management
(SIMS Code: 667751)
Preparation for the Major.
Recreation and Tourism Management 101, 107, 284; Biology 100 or 101; Geography 102, 104; Geological Sciences 100, 101; Professional Studies and Fine Arts 100 or Psychology 101. (26 units)
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
Major. A minimum of 51 upper division units to include Oceanography 320; Recreation and Tourism Management 304, 305, 351, 404, 469, 470, 485, 487, 489, 498 (12 units); nine units selected from Recreation and Tourism Management 468, 483, 484, 496; Anthropology 402; Biology 315, 326, 327; Geography 370, 570, 572, 575; Geological Sciences 301; Philosophy 332 (or Sustainability 332); Religious Studies 376 (or other upper division courses may be substituted with approval of the adviser).

Emphasis in Recreation Systems Management
(SIMS Code: 667765)
Preparation for the Major.
Recreation and Tourism Management 101, 107, 284; Biology 100 or 101; Management Information Systems 180; Psychology 101; Sociology 101; and six units selected from Economics 101, 102, Finance 240; Hospitality and Tourism Management 225. (28 units)
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.  

Major. A minimum of 51 upper division units to include Recreation and Tourism Management 304, 305, 404, 468, 469, 470, 498 (12 units); Psychology 340 or Sociology 356; nine units selected from Recreation and Tourism Management 340, 351, 475, 483, 489; Hospitality and Tourism Management 430, 433, 435; and nine units selected from Business Administration 350, Management 352, Public Administration 350, Sociology 444.

Emphasis in Sustainable Tourism Management  
(SIMS Code: 667766)

Preparation for the Major. Recreation and Tourism Management 101, 284; Accountancy 201; Economics 101, 102; Geography 101, 101L, 102; Hospitality and Tourism Management 223. (25 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience Requirement. All majors in the sustainable tourism management emphasis are required to complete an international experience requirement. To meet this requirement, majors must complete one of the following with the preapproved and written consent of the undergraduate adviser:

1. International Field Trip;
2. International Internship;
3. International Student Exchange;
4. CSU Study Abroad Program;
5. International Professional Engagement.

Scholarships are available for the International Experience. The International Experience should meet the student learning outcomes of the emphasis in sustainable tourism management.

Major. A minimum of 51 upper division units to include Recreation and Tourism Management 304, 305, 413, 470, 477, 487, 498 (12 units); and 21 units selected from five competency areas. At least three units must be selected from each of the following five competency areas:

(1) Environmental Sustainability: Biology 315; Geography 370, 409.
(2) Social/Cultural Sustainability, Social Justice, and Equity: Recreation and Tourism Management 351; Hospitality and Tourism Management 370 [or American Indian Studies 370]; International Security and Conflict Resolution 301; Philosophy 332 [or Sustainability 332].
(4) Sustainable Development: Environmental Engineering 320; Political Science 334 [or Sustainability 334].
(5) Field Application: Recreation and Tourism Management 305, 469, 489.

Recreation Minor  
(SIMS Code: 667701)  
The minor in recreation consists of a minimum of 15 units to include Recreation and Tourism Management 101, 304, 305 or 487, 404, and three additional upper division units selected from Recreation and Tourism Management 351, 469, 470, 475, 484, 489, 499.

Courses (RTM)  
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system; unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES  
RTM 101. Recreation and Tourism Management (3)  
Role of recreation and tourism systems in contemporary society. History and philosophy, scope of services, facilities, programs, personnel, and evaluation.

RTM 107. Recreation Programming and Leadership (4)  
Three lectures and three hours of laboratory. Theories, principles, and techniques of group leadership, group dynamics, communication, problem-solving, creativity, program planning, and publicity as they relate to selected recreation systems. Student ePortfolio is initiated.

RTM 284. Supervised Field Work (3) Cr/NC  
Prerequisites: Consent of instructor or department chair and 125 hours experience in recreation leadership. Observation and participation in community recreation leadership. Practical experience in a variety of recreational settings. Eight hours per week at an agency.

RTM 296. Experimental Topics (1-4)  
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES  
(Intended for Undergraduates)

RTM 304. Leisure and Tourism (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

RTM 305. Wilderness and the Leisure Experience (3) [GE]  
Prerequisites: Biology 100 or 101; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

RTM 340. Conduct of Recreational Sports (3)  
Three lectures plus outside practical experience in the conduct of recreational sports programs. Organization of competition, community sports programs, administration of intramural athletics, and techniques of officiating.

RTM 351. Recreation Therapy and Special Populations (3)  
Sociopsychological aspects of special populations and their implications for leisure pursuits. Field trips may be included.

RTM 396W. Writing in Recreation Settings (3)  
Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in WRS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Theory and practice of writing in the field of recreation and parks with application to various settings.

RTM 404. Cross-Cultural Perspectives of Tourism (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. Concepts, definitions, and measures of essential cultural components of tourism. Integrated view of interrelated socio-cultural tourism issues with an understanding and appreciation of diverse cultures.
RTM 413. Cultural Tourism (3)
  Two lectures and two hours of activity.
  Prerequisite: Recreation and Tourism Management 470.
  Concepts of cultural tourism and cultural heritage management.
  Strategies for planning of cultural tourism resources and for development
  of cultural tourism initiatives. Evaluating tourism potential of cultural or
  heritage assets.

RTM 468. Marketing, Financing, and Assessment in Recreation
  and Tourism Management (3)
  Marketing, financing, and assessment specifically related to recreation
  and tourism management to include services development, pricing,
  promotion, distribution; budget development, revenue generation, assets
  management, controls; evaluation and research process as they relate to
  service development and delivery.

RTM 469. Administration and Operation of Recreation and
  Tourism Agencies (3)
  Prerequisite: Recreation and Tourism Management 470 or 475.
  Administrative and operational aspects of managing and
  leading in recreation and tourism agencies to include liability, risk
  management, administrative regulations; information/decision systems
  in organizations; strategic planning; operation of facilities/areas; human
  resource functions related to successful service delivery.

RTM 470. Global Sustainable Tourism Management (3)
  Prerequisite: Recreation and Tourism Management 101 or Hospitality
  and Tourism Management 201.
  Global tourism management, economics, development and
  sustainability. Social, cultural, and environmental impact indicators and
  management tools for sustainable development.

RTM 475. Commercial Recreation and Attractions
  Management (3)
  Analysis of commercial recreation field, including design,
  development, programming and marketing aspects of various
  commercial recreation enterprises.

RTM 477. Sustainable Tourism Planning (3)
  Prerequisite: Recreation and Tourism Management 101.
  Nature and scope of sustainable tourism planning. Approaches,
  principles, and processes for creating sustainability value in tourism.
  Sustainability assessment and corporate social responsibility for tourism
  amenities, attractions, services, transportation and facilities.

RTM 483. Outdoor Education and Camp Administration (3)
  Prerequisite: Recreation and Tourism Management 101.
  Philosophy, theory, methods, application, and scope of outdoor
  education in recreation and ecotourism camp settings. Management of
  resident, day, and travel camps.

RTM 484. Directed Leadership (3) Cr/NC
  One lecture and eight hours of supervised activity.
  Prerequisite: Recreation and Tourism Management 284.
  Supervised leadership experience in public and private recreation
  agencies. Maximum credit six units.

RTM 485. Outdoor Recreation Planning and Policy (3)
  Nature and scope of recreation in nonurban areas. Public demand
  for recreation and its impact on natural resources. Management,
  planning, research and operation of regional and national park and
  recreation areas.

RTM 487. Environmental and Cultural Interpretation (3)
  Prerequisite: Recreation and Tourism Management 101.
  Philosophy, theory, methods, application, and scope of cultural
  interpretation in recreation and tourism settings.

RTM 489. Outdoor Leadership and Adventure Programming (3)
  Prerequisite: Recreation and Tourism Management 305.
  Theoretical principles and experience in leadership, judgment, and
  decision making in outdoor adventure programming.

RTM 496. Experimental Topics (1-4)
  Selected topics. May be repeated with new content. See Class
  Schedule for specific content. Limit of nine units of any combination of
  296, 496, 596 courses applicable to a bachelor’s degree.

RTM 498. Internship in Recreation and Tourism
  Management (6 or 12) Cr/NC
  Twenty off-campus hours required per week for 6-unit program, or
  40 off-campus hours required per week for 12-unit programs.
  Prerequisites: Consent of instructor or department chair, completion
  of all required lower division recreation courses, and completion of both
  Standard or Multimedia First Aid certificate and CPR certificate by end
  of semester.
  For six unit internship: 250 hours of professional work experience in
  recreation and tourism management. For 12 unit internship: 500 hours
  required Credit for course requires completion of ePortfolio. Maximum
  credit 12 units.

RTM 499. Special Study (1-3)
  Prerequisite: Consent of special study adviser.
  Individual study. Maximum credit six units.
Regulatory Affairs
In the College of Sciences

OFFICE: Geology/Mathematics/Computer Science 617
TELEPHONE: 619-594-6030 / FAX: 619-594-6381
E-MAIL: cbbd@sciences.sdsu.edu
http://regsci.sdsu.edu

Interim Director: Catherine J. Atkins, Ph.D.
Graduate Adviser: Lorah W. Bodie, Ed.D.

Offered by Regulatory Affairs
Master of Science degree in regulatory affairs.
Certificate in intellectual property and regulatory affairs
(see the Graduate Bulletin).
Certificate in regulatory affairs, advanced
(see the Graduate Bulletin).

Course (R A)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

UPPER DIVISION COURSE
(Intended for Undergraduates)

R A 460, Healthcare Product Regulations (1)
Healthcare product regulation of pharmaceutical, biotechnology, and biodevice industries. Foundational knowledge of U.S. Food and Drug Administration and laws and regulations they are responsible for enforcing.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Impacted Program

The religious studies major is an impacted program. To be admitted to the religious studies major, students must meet the following criteria:

- Complete preparation for the major;
- Complete a minimum of 60 transferable semester units;
- Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Religious Studies Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15101) (SIMS Code: 116101)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in religious studies courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major. Religious Studies 101. (3 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Religious Studies 396W and earn a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. The department encourages international experience for its majors. It will facilitate the transfer of religious studies credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive religious studies credit, if approved in advance by a department adviser.

Major. A minimum of 33 upper division units in religious studies to include Religious Studies 396W, 400, and at least three units from Texts, nine units from Traditions, three units from Theories and Methods (in addition to Religious Studies 396W and 400), six units from Critical Issues in Religion, and six additional units selected from any of the four upper division areas.

Area A, Texts: Religious Studies 301, 305, 310, 315, 373, Asian Studies 458. (3 units)

Area B, Traditions: Religious Studies 320, 325, 328, 330, 335, 337, 338, 339, 340, 342, 345, 351 [or Africana Studies 351], 470 [or American Indian Studies 470], 507 [or History 507], History 538*, Philosophy 351, 353, 401A, 565*; (3 units)


Courses with variable content (496, 580, 581, 582, 583, 596) may be used in the four areas of study when deemed relevant by the department adviser.

* Additional prerequisites required.
Religious Studies Minor
(SIMS Code: 116101)

The minor in religious studies consists of a minimum of 15 units taken in the Department of Religious Studies to include at least three lower division units and 12 upper division units.

International Experience. The department encourages international experience for students in the religious studies minor. It will facilitate the transfer of religious studies credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive religious studies credit, if approved in advance by a department adviser.

Courses (REL S)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

REL S 100. Exploring the Bible (3) [GE]
Basic content and themes of the Hebrew Bible and New Testament using methods of contemporary biblical studies. Attention to ancient Near Eastern and Greco-Roman cultural settings as well as the impact of the Bible on contemporary culture.

REL S 101. World Religions (3) [GE]
Major world and selected tribal traditions from primal times to present. Broad historical development and philosophical overview including founders, teachings, beliefs, practices, and interactions with culture, such as art, literature, politics.

REL S 102. Exploring the Qur’an (3) [GE]
Basic content and themes of the Qur’an from an historical perspective using academic methods of study. Consideration of relationships to other Abrahamic scriptures. Exegetical approaches from sectarian and modern political viewpoints.

REL S 103. American Religious Diversity (3) [GE]
Religious identities and traditions of diverse peoples living in the US. Major world religions in context of contemporary multicultural America. Religions of indigenous peoples and religious movements which have arisen in US.

REL S 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES

(Intended for Undergraduates)

NOTE: Courses for Area (A) Texts; or Area (B) Traditions; or Area (C) Theories and Methods; or Area (D) Critical Issues in Religion, are identified in the course title as (A), (B), (C), or (D).

REL S 301. Hebrew Bible (A) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Literature, history, major themes of Bible; methods and concerns of contemporary biblical studies. Situates folkloric, political, heroic, poetic, and religious meanings of texts among their original audiences.

REL S 305. The New Testament (A) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.


REL S 310. The Qur’an (A) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Major themes of Qur’an including cosmology, eschatology, good and evil, gender, God and monotheism, People of the Book (Jews and Christians), and role of religion in society. Attention to historical period in which the Qur’an was compiled.

REL S 315. Sacred Texts of Yoga (A) (3)
Prerequisite: Three units of religious studies.

Primary texts from sacred literatures of Hinduism, Buddhism, Jainism that relate to yoga. Yoga as an independent contemplative tradition with analysis of mind and various techniques of meditation. Methods of interpretation, issues of translation, social and historical contexts.

REL S 320. Judaism (B) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Jewish history, culture, theory, and practice. Biblical roots of modern Jewish beliefs, basic movements within modern Judaism; Jewish calendar and Jewish life cycle as seen in Hebrew Bible, short stories, and films.

REL S 325. Christianity (B) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Historical development of Christian traditions and major issues confronting Christianity today. Beliefs and practices important to Christian self-understanding, debates over authority of Bible, accommodations to modern science, and relationship with non-Christian religions.

REL S 328. Islam (B) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Islamic religion and culture in Asia, Africa, and Near East. History, doctrines, practices, literatures, social and intellectual movements, role of Mohammed, and gender relations within Islam as understood in global context.

REL S 330. Abrahamic Faiths: Shared Stories (B) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Theological, textual, and political relations among Judaism, Christianity, and Islam. Shared religious practices and stories such as creation, sacrifice, theories of evil and salvation, prophecy and Messianic expectations. Contemporary issues regarding gender, fundamentalism, and rise of nationalism.

REL S 335. Comparative Mysticism (B) (3)
Prerequisite: Three units of religious studies.

Meaning, origin, and development of mysticism. Purgation, illumination, annihilation, separation, covenant, and union of soul with the Divine as found in world scriptures, writings of prominent mystics, and mystical movements such as Kabbalists, Sufis, and yogic traditions.
REL S 337. Asian Religions in America (B) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
History, development, and study of Asian American religions. Issues and problems particular to predicaments and situations of Asian Americans and Pacific Islanders in the U.S.

REL S 338. Buddhism (B) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Life and teachings of Buddha, foundational concepts of Theravada, Mahayana, and Vajrayana Buddhism. Buddhist psychology and soteriology, meditative techniques, ethical issues; contemporary Buddhism, particularly in America.

REL S 339. Religions of India (B) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Religious pluralism of Indian sub-continent. Influences of Hinduism, Buddhism, Jainism, Islam, and Sikhism upon each other and social structures of gender, race, and caste. Rebirth, liberation, liberation theories and practices, the interaction of mainstream religions with minority and indigenous tribal rituals and beliefs.

REL S 340. Daoism and Chinese Religions (B) (3)
Prerequisite: Three units of religious studies.
Daoist traditions in context of Chinese popular religions. Early Daoist communities, texts, practices covered. Themes include body and cosmos, magical medicine, immortality practice, ritual, and relationship between classical and popular religious traditions.

REL S 341. Zen and the Way of Japanese Religions (D) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Historical development of Buddhism from its Harappan and Vedic origins to contemporary times. Hindu myths and rituals, gods and goddesses, art, architecture and sacred geographies; Hindu philosophies and ascriptive traditions, yoga and tantrism; modern Hinduism, diaspora Hinduism and Indian nationalism.

REL S 342. Hinduism (B) (3)
Prerequisite: Three units of religious studies.
Prerequisites: Three units of religious studies. Recommended: Completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.
Historical development of Hinduism from its Harappan and Vedic origins to contemporary times. Hindu myths and rituals, gods and goddesses, art, architecture and sacred geographies; Hindu philosophies and ascriptive traditions, yoga and tantrism; modern Hinduism, diaspora Hinduism and Indian nationalism.

REL S 345. Religions of East Asia (B) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities and religious traditions from across the world.

REL S 346. Religion and Film (D) (3) [GE]
Prerequisites: Three units of religious studies.
Representations of religion in modern cinema and analysis of how religious themes and imagery in film reflect societal values, beliefs, and morals.

REL S 350. Varieties of Religious Experience (C) (3) [GE]
Prerequisites: For specific content. Maximum credit six units of which three units may be applicable to General Education.
Soteriology, meditative techniques, ethical issues; contemporary Buddhism, particularly in America.

REL S 351. Black Religions and Spirituality (B) (3) (Same course as Africana Studies 351)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Major Black religious and spiritual responses and expressions in Africa and Black diaspora, including creation of institutions to support and advance religious and spiritual matters.

REL S 353. Religion and Psychology (C) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.
Religious dimensions of psyche using insights from academic and transpersonal psychology. Construction of religious identities through spiritual practice and transformation. May be repeated with new content.

REL S 354. Religion, Myth, and Storytelling (C) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Introduces, analyzes, and examines issues and themes in the narrative traditions of the world’s religions.

REL S 355. Religious Ritual and Practice (C) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

REL S 356. Hip Hop and Religion (D) (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Study of the intersection between the global hip hop movement and religious traditions from across the world.

REL S 358. Death, Dying, and Afterlife (D) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

REL S 359. Major Black Religions and Spirituality (B) (3)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

REL S 370. Goddess Studies (D) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.
The divine feminine in mainstream and marginalized religions. Goddess/nature worship and its transformation across time and culture to include ancient religion, mythology, indigenous traditions, and world religions.

REL S 372. Women and the Bible (A) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.
Women are depicted by authors of Bible, lives of women in ancient world, how women and women’s studies are transforming biblical studies.

REL S 376. Nature, Spirituality, Ecology (D) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.
Cross-cultural religious views of nature. Attention to sacred texts, writings of naturalists, deep ecologists, and ecofeminists on place of nature in spirituality and role of spirituality in ecology.
REL S 379. Religious Violence and Nonviolence (D) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.
Role of religion in terrorism, hate groups, scapegoating, domestic and ecological violence, versus role of religion in peacemaking and movements for social justice. Nonviolent philosophies of Gandhi, Martin Luther King, Jr., and pacifism in Jain, Buddhist, and Christian traditions.

REL S 380. Atheism, Humanism, and Secularism (D) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.
Atheism, humanism, and secularism in western culture to include the creation of institutions that support and advance these movements. Rise of unbelief in reaction to contemporary religious fundamentalism and attacks on science and reason.

REL S 390A-390B. Religion and American Institutions (D) (3-3) [AI]
Prerequisite: Three units of religious studies.

REL S 395. New Religions (C) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.
America's alternative religions, popularly called "cults" and why they attract spiritual seekers. New religions and transplanted Asian and African religions. Theoretical structures of belief systems and concrete specifics on different groups.

REL S 396W. Writing on Religion (C) (3)
Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in WRS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking.
Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.
Theoretical approaches in study of religion and religious phenomena. Writing in discipline of religious studies through analysis of key thinkers in history of religions.

REL S 400. Senior Seminar (C) (3)
Prerequisite: Religious Studies 396W; others with consent of department chair.
Senior capstone seminar in major. Discussion and research on topics in religious studies. Formal research paper and presentation.

REL S 470. American Indian Spirituality and Epistemologies (B) (3) [GE]
(Same course as American Indian Studies 470)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.
Spirits, prophesies, and renewals of the Indian way compared through symbols and ceremony. Religions surveyed as they have been influenced by foreign elements and philosophies. Influences on values and tribalism as reflected through symbols and other measures.

REL S 496. Experimental Topics (A) (B) (C) (D) (1-4)
Prerequisite: Three units of religious studies.
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

REL S 499. Special Study (A) (B) (C) (D) (1-3)
Prerequisite: Twelve upper division units in religious studies. Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

NOTE: Courses for Area (A) Texts; or Area (B) Traditions; or Area (C) Theories and Methods; or Area (D) Critical Issues in Religion, are identified in the course title as (A), (B), (C), or (D).

REL S 507. The Reformation (A) (B) (C) (D) (3)
(Same course as History 507)
Continental Europe, 1500-1648: Split of Christendom; political and intellectual dissent; social fabric of family life; relationship between gender, class, and power; cultural stratification of European society.

REL S 580. Major Figure (A) (B) (C) (D) (3)
Prerequisite: Three units of religious studies.
Life, works, and significance of one major figure in a religious tradition. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

REL S 581. Major Theme (A) (B) (C) (D) (3)
Prerequisites: Three units of religious studies and upper division or graduate standing.
Advanced systematic study of a theme or motif selected from major religious traditions. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

REL S 582. Major Text (A) (B) (C) (D) (1-3)
Prerequisites: Three units of religious studies and upper division or graduate standing.
Advanced systematic study of a selected scripture or classic text(s) selected from one of the major religious traditions. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

REL S 583. Major Tradition (A) (B) (C) (D) (3)
Prerequisites: Three units of religious studies and upper division or graduate standing.
Advanced systematic study of the doctrines, practices, and development of a major religious tradition. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

REL S 596. Advanced Topics in Religious Studies (A) (B) (C) (D) (1-3)
Prerequisite: Consent of instructor.
Advanced selected topics in religious studies. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
### Rhetoric and Writing Studies

**In the College of Arts and Letters**

**OFFICE:** Storm Hall 141  
**TELEPHONE:** 619-594-6515 / **FAX:** 619-594-6530

**Faculty**
- Emeritus: Hindman, Johns, Miller, Robinett, Sweedler-Brown  
- Chair: McClish  
- Professors: Bordelon, McClish, Ornatsowski, Poole  
- Associate Professors: Bekins, Boyd, Quandahl, Valentine, Werry  
- Assistant Professor: Minifee  
- Lecturers: Annicchairico, Barhoum, Boeck, Borgen, Brown, Brush, Bryson, Cavender, Copeland, Costello, Dill, Fielden, Fimbres, Fish, Goodman, Groza, Hoffman, Hoislin, Hughes, Kelley, Kline, Kline, Linfor, Madden, Manley, Merriman, Morgan, Nerhan, Owens, Parker, Renner, Sager, Sheppard, Sherman, Sigmon, Slater, Tempelton, Tomlin, Towner, Underwood, Vanderpot, Williams, J., Williams, M.

**Offered by the Department**
- Master of Arts degree in rhetoric and writing studies.  
- Major in rhetoric and writing studies with the B.A. degree in liberal arts and sciences.  
- Minor in rhetoric and writing studies.  
- Certificate in professional writing.  
- Certificate in advanced teaching of writing (refer to the Graduate Bulletin).

**General Information**

The Department of Rhetoric and Writing Studies offers writing programs at all levels for university students. The department works cooperatively with other academic departments and campus groups to plan and develop a comprehensive writing program integrating writing and reading with critical thinking throughout the curriculum.

**Developmental Writing Program**: Developmental writing courses in this program prepare students to satisfy SDSU’s competency requirements in written English. For more information, refer to “Writing Requirements” in the “Graduation Requirements” section of this catalog.

**General Education Program**: Completion of courses in this program fulfills the “Written Communication” requirements for the Communication and Critical Thinking portion of the SDSU General Education program.

**Upper Division Courses**: The department offers expository writing (“W”) courses which satisfy the university’s Graduation Writing Assessment Requirement. The department also offers a required course in the teaching of composition for students in the Single Subject Teaching Credential in English degree program.

**The Major**

Rhetoric refers to the study and uses of written, spoken, and visual language. From antiquity to the present, rhetoric has included both theory and practice, looking to produce and understand persuasion in social, political, and institutional settings. Rhetoric reflects on the nature and function of discourse in action, investigates literacy and literacy instruction, and offers frameworks for understanding technical and scientific writing as artifacts of community practice. The primary areas of study for the major are rhetorical theory, literacy and the teaching of writing, and professional (primarily technical and scientific) writing and public discourse.

The purpose of rhetorical education extends beyond understanding literacy as basic skills. The major teaches literacy as an array of advanced language and critical thinking abilities that enhance a person’s participation in professional, civic, and personal life. It offers sustained inquiry into the nature of writing and its relationship to knowledge, culture, and professional practice. It involves students in composing a variety of texts for multiple audiences and contexts. It provides a specifically rhetorical framework for analyzing and producing texts that circulate across disciplines and writing cultures.

International and native students who want to develop their analytical reading and writing abilities, and those interested in pursuing graduate work or entering more writing-intensive careers will benefit from the major. While virtually all professions are enhanced by skills in writing, critical reading, and analytical thinking, the major may be particularly beneficial to students seeking careers in law, business, science, engineering, non-profits, and technical and scientific writing.

Teaching at the primary to university levels also offers opportunities for rhetoric majors who continue their education at the graduate level.

The major includes five core courses intended to introduce students to the study of rhetoric, which incorporates a broad range of topics, including rhetorical theory, cultural rhetoric, and digital rhetorics. The field of rhetoric is interdisciplinary in nature and includes coursework in rhetorical history, gender and rhetoric issues, technical and scientific writing, political rhetoric, and culture. Students select the courses that best suit their future career and educational goals.

**Advising**

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

**Impacted Program**

The rhetoric and writing studies major is an impacted program. To be admitted to the rhetoric and writing studies major, students must meet the following criteria:

- Complete preparation for the major;
- Complete a minimum of 60 transferable semester units;
- Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

**Major Academic Plans (MAPs)**

Visit [http://www.sdsu.edu/mymap](http://www.sdsu.edu/mymap) for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

**Rhetoric and Writing Studies Major**

**With the B.A. Degree in Liberal Arts and Sciences**

**Major Code:** 15013 (SIMS Code: 112204)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in Rhetoric and Writing Studies courses can apply to the degree.

**Preparation for the Major**

Rhetoric and Writing Studies 200 or Journalism and Media Studies 210; Rhetoric and Writing Studies 250. (6 units)

**Language Requirement**

Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

**Graduation Writing Assessment Requirement**

Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Rhetoric and Writing Studies 500W or 503W and earn a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
International Experience. The department encourages international experience for its majors. It will facilitate the transfer of rhetoric and writing studies credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive rhetoric and writing studies credit, if approved in advance by a department adviser.

Major. A minimum of 50 units in rhetoric and writing studies to include 12 units selected from Rhetoric and Writing Studies 411, 500W or 503W, 510, and 498 or 506. The remaining 18 units will be selected from elective courses in the Rhetoric and Writing Studies Department.

Rhetoric and Writing Studies Minor
(Minor Code: 15013) (SIMS Code: 112220)

Designed for students from across the disciplines, the minor in Rhetoric and Writing Studies provides students with an enhanced awareness of the central role of language and textual practices in every discipline. Thus, both students who want to improve their critical reading, writing, and thinking skills, as well as students interested in pursuing graduate work or entering more writing-intensive professions, will benefit from the minor. The minor includes three core courses intended to introduce students to the study of rhetoric, which incorporates a broad range of topics, including rhetorical theory, cultural rhetoric, and literacy and technology. The minor is also interdisciplinary in nature and includes coursework in rhetoric, communication, linguistics, and education. Students select the courses that best suit their future career and educational goals.

While virtually all professions are enhanced by skills in writing, critical reading, and analytical thinking, the minor is particularly beneficial to students seeking careers in areas such as law, politics, journalism, business, science, engineering, public administration, and education.

The minor in rhetoric and writing studies consists of a minimum of 15 upper division units. Six units must be selected from the core courses, Rhetoric and Writing Studies 411, 500W, 510. The additional nine elective units are to be selected from Rhetoric and Writing Studies 501, 503W, 504, 505, 506, 507, 508W, 509, 512, or the remaining core course not completed above: Communication 441*, 446*, 450*, 470*, 482*, 492*, 508*, Education 451, Linguistics 430*, 530*, 550*.

A minimum of six upper division units must be completed in residence at San Diego State University. In designing the minor, students may not include courses drawn from their major department.

* Additional prerequisites required.

Professional Writing Certificate
(SIMS Code: 112298)

The purpose of this certificate program is to prepare students for careers in professional writing, or for other careers where advanced writing and document design skills are desirable. The program is designed both for students working on degrees in technical or non-technical fields and for professionals seeking career advancement or change.

Applicants to the program must have excellent general writing skills (in specific cases, applicants may be required to take additional coursework to improve writing proficiency) and basic computer literacy.

Students in the program complete 21 units of coursework approved by the director of the program. A minimum grade point average of 3.0 or better must be maintained in certificate coursework, with no less than a C grade in any course. All courses completed with a grade of B or better are applicable to the Master of Arts degree in rhetoric and writing studies with a specialization in technical and professional writing. For further information, contact the Department of Rhetoric and Writing Studies.

Required courses: (9 units)
RWS 503W Professional Writing (3)
RWS 504 Advanced Professional Writing (3)
RWS 505 Writing Project Management (3)

Recommended Electives: (12 units)
RWS 411 Digital Rhetorics (3)
RWS 501 Editing (3)
RWS 506 Writing Internship (3) Cr/NC
RWS 507 Professional Communication in Nonprofit Organizations (3)
RWS 508W Scientific Writing (3)

Other electives may be selected with the approval of the program director. A maximum of six units of transfer credit may be applied to the program. Students should consult with the program director before selecting any courses so that an individualized program of study can be developed.

Courses (RWS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

EARLY START PROGRAM
(Non-Baccalaureate Credit)

Beginning with the class of 2012, the California State University (CSU) has enacted a systemwide mandatory Early Start Program for entering resident CSU freshmen who need remediation in English. Students attending another CSU campus may enroll in the Early Start Program at SDSU. The following course is being offered for service students needing remediation who are enrolling in another CSU campus in the fall semester.

ESE 96. Developmental Writing Skills (1) Cr/NC
Prerequisite: A score of 146 and below on the EPT.
Introduction to academic writing, emphasizing purpose, structure, and style of academic essays. Designed to improve student ability to write effective college level prose by developing skills in planning, drafting, and editing essays. Meets CSU Early Start Program requirement for CSU students (not continuing at SDSU).

LOWER DIVISION COURSES
(Non-Baccalaureate Credit)

NOTE: Rhetoric and writing studies courses numbered below 100 may not be used to satisfy graduation requirements.

RWS 92. Developmental Writing: Fundamentals of Writing (3) Cr/NC
Prerequisite: A score of 146 and below on the EPT.
Academic prose, emphasizing purpose, structure, and style of academic essays. Designed to improve student skills in planning, drafting, revising, editing essays. Open to students who have scored between 142-146 on the EPT and who have not satisfied the SDSU lower division writing competency requirement. Students earning a grade of “Cr” satisfy the SDSU writing competency requirement. Not open to students with credit in Rhetoric and Writing Studies 97. (Formerly numbered Rhetoric and Writing Studies 92A.)

RWS 94. Developmental Writing for International or Bilingual Students (3) Cr/NC
(Same course as Linguistics 94)
Prerequisites: A score of 146 and below on the EPT, and nonnative English speakers.
Intermediate written English with emphasis on problems of nonnative speakers; discussion of sentence, paragraph, and essay writing skills. Open only to ESL students who have not satisfied the SDSU Writing Competency requirement. Students earning a grade of “Cr” satisfy the SDSU writing competency requirement. Students receiving a “NC” should re-enroll in Rhetoric and Writing Studies 94 or Linguistics 94.
Rhetoric and Writing Studies

RWS 98. Mini-Course: Selected Topics (1) Cr/NC
Assorted short courses which will meet three hours a week for five weeks and will cover a variety of academic skills through intensive lectures and laboratory work. Evaluation based on student writing portfolio.

Suggested topics: Research paper, communication skills, research tools, vocabulary development, learning skills, spelling, grammar, and speed reading. See Class Schedule for specific content. Credit earned in courses from this series is not applicable to a bachelor's degree.

A. Learning Skills
C. Tutorial

LOWER DIVISION COURSES
(Acceptable for Baccalaureate Credit)

RWS 100. Rhetoric of Written Argument (3) [GE]
(Same course as English 100)
International students are advised to take Linguistics 100.
Prerequisite: Satisfaction of the SDSU writing competency requirement.
(See Graduation Requirements section of catalog.) If the student fails to satisfy the SDSU writing competency requirement, the required minimum score is 151. Students who score between 147-150 on the EPT enroll in Rhetoric and Writing Studies 101. Proof of completion of prerequisite required: Copy of EPT or competency scores or verification of exemption; proof of credit (Cr) in Rhetoric and Writing Studies 92.

Writing and reading as critical inquiry, designed to help students undertake university-level writing projects. Focus on rhetoric of written arguments. Students learn to use sources in their writing and make appropriate decisions about structure, cohesion, and rhetorical conventions. Not open to students with credit in a higher-numbered composition course or Rhetoric and Writing Studies 101 or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100.

RWS 101. Rhetoric of Written Argument (3) [GE]
Prerequisite: A score of 147-150 on the EPT. Only for students who have passed the EPT.
Follows the prescribed curriculum in Rhetoric and Writing Studies 100. In addition, students are required to attend eight individual tutoring sessions throughout the semester. Students must be concurrently enrolled in Rhetoric and Writing Studies 103. Open only to students with credit in a higher-numbered composition course or Rhetoric and Writing Studies 100 or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100.

RWS 102. Critical Reading (1)
(Same course as English 102)
Two hours of activity.
Prerequisites: Students who have met lower division writing competency through completion of Rhetoric and Writing Studies 92; and concurrent registration in Rhetoric and Writing Studies 100.
For freshmen only. Cognitive and critical reading skills essential to academic writing at the university level.

RWS 103. Tutorial Support (1)
Prerequisite: A score of 147-150 on the EPT.
Tutorial support for Rhetoric and Writing Studies 101.

RWS 200. Rhetoric of Written Arguments in Context (3) [GE]
International students are advised to take Linguistics 200.
Prerequisites: Satisfaction of the SDSU writing competency requirement and Rhetoric and Writing Studies 100 or 101 or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100.
Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Further practice in writing, reading, and critical thinking. Emphasis on rhetoric of written arguments in context and using multiple sources in writing. Continued attention to structure, cohesion, and rhetorical conventions. Not open to students with credit in Africana Studies 200, Chicana and Chicano Studies 200, English 200, or Linguistics 200. Completion of Rhetoric and Writing Studies 200 may require completion of the library workshop assignment.

RWS 250. Rhetoric in Everyday Life (3) [GE]
Prerequisites: Rhetoric and Writing Studies 100; and Rhetoric and Writing Studies 200 or Journalism and Media Studies 210.
Rhetorical analysis of written, visual, and electronic texts. How rhetorical theories and perspectives help us understand the workings of popular culture, political discourse, visual images, legal arguments, social media, and other texts encountered in everyday life.

RWS 253. Grammar and Usage for Writers (3)
(Same course as Linguistics 253)
Prerequisite: Passage of EPT.
Instruction in sentence structure with attention to integrating sentences into their logical and rhetorical contexts. Identifying and understanding source of sentence-level writing problems.

RWS 279. Introduction to Academic Reading and Writing (3)
(Formerly numbered Business Administration 290 and Information and Decision Systems 290.)
(Formerly numbered Business Administration 290 and Information and Decision Systems 290.)
Prerequisite: Open only to students who have score of 4 or less on the Writing Placement Assessment and whose examinations have been formally reviewed.
University-level reading and writing, with emphasis on argumentation, analysis, and learning to write through revision process. Designed for U.S.-resident language minority students.

RWS 280. Academic Reading and Writing (3)
Prerequisite: Score of 7 or below on Writing Placement Assessment (WPA).
Academic prose, emphasizing purposes, structures, and styles of academic writing, with particular emphasis on elements of argument. Designed to improve students' ability to plan, draft, revise, and edit essays, as well as to improve their ability to read and analyze complex academic texts.

RWS 281. Academic Reading and Writing for Second Language Learners and International Students (3)
(Same course as Linguistics 281)
Prerequisite: Open only to students who qualify for Rhetoric and Writing Studies 280 and whose first language is not English.
Academic prose, emphasizing purposes, structures, and styles of academic English writing. Designed to improve students' ability to plan, draft, revise, and edit essays, as well as to read and analyze complex academic texts. Additional emphasis on grammatical features of English relevant to the second language population.

RWS 290. Business Writing and Rhetoric (3)
Prerequisites: Rhetoric and Writing Studies 100 and satisfaction of the SDSU writing competency requirement.
Effective writing and rhetoric in business and organizational settings, including letters, memos, and reports. Features organization, drafting, revision, and editing of documents and presentations. (Formerly numbered Business Administration 290 and Information and Decision Systems 290.)

RWS 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

RWS 299. Special Study (3)
Prerequisites: Consent of department chair and instructor.
Individual Study.

UPPER DIVISION COURSES
(Intended for Undergraduates)

RWS 305W. Writing in Various Settings (3)
International students are advised to take Linguistics 305W.
Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking.
Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Composing effective texts for a wide range of situations in and out of the university. Learning to adjust textual elements for specific purposes, audiences, and settings. Enhances critical reading and writing skills by exploring how content contributes to meaning and effectiveness.
RWS 411. Digital Rhetorics (3)
Prerequisite: Completion of the General Education requirements in Composition and Critical Thinking.
Exploration of digital writing and new media literacies from a rhetorical perspective. Includes research on digital rhetoric and history of literacy to investigate new media literacies, texts, and writing practices. (Formerly numbered Rhetoric and Writing Studies 511.)

RWS 412. Issues in Gender and Rhetoric (3)
Prerequisite: Completion of the General Education requirements in Composition and Critical Thinking.
Exploration of the intersection of gender, rhetoric, and power. Past and present theories of gender, technology, and visual rhetoric; historical case studies; rhetorics of contemporary scenes.

RWS 414. Rhetoric in Visual Culture (3)
Prerequisite: Completion of the General Education requirements in Composition and Critical Thinking.
Rhetorical analysis of visual texts in their social, cultural, and political contexts.

RWS 496. Topics in Rhetoric and Writing Studies (1-3)
Selected topics. May be repeated once with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

RWS 498. Seminar: Writing and Research (3)
Prerequisite: Senior standing.
Synthesis and application of rhetorical concepts and methods used to produce scholarship in the field of rhetoric and writing studies. Includes three major writing and research projects.

RWS 499. Directed Study (1-3)
Prerequisites: Consent of instructor and approval of department chair.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

RWS 500W. Advanced Writing Strategies (3)
Prerequisite: Successfully completes Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisite required: Test scores or verification of exemption; copy of transcript.
Advanced writing course focusing on how meaning is negotiated and claims are argued in academic and public discourse.

RWS 501. Editing (3)
Prerequisite: Rhetoric and Writing Studies 305W or 500W.

RWS 503W. Professional Writing (3)
Prerequisite: Rhetoric and Writing Studies 305W or 500W.
Principles and practices of professional writing, including clear and concise style and rhetorical strategies of designing effective workplace documents. Practice composing memos, reports, proposals.

RWS 504. Advanced Professional Writing (3)
Prerequisite: Rhetoric and Writing Studies 503W. Recommended: Graphics or drawing course.
Advanced principles in professional writing, including user and task analysis for interface design; document design and typography; collaboration and interpersonal communication; ethical and cultural issues; usability testing; and small group management.

RWS 505. Writing Project Management (3)
Prerequisite: Rhetoric and Writing Studies 504.
Managing technical documentation projects. Collaborative writing. Managing writing teams. Conducting task analysis, estimating cost and schedule, preparing document plans, gathering information, testing documents, and managing project documentation.

RWS 506. Writing Internship (3) Cr/NC
Prerequisites: Rhetoric and Writing Studies 504 and Rhetoric and Writing Studies 503W or 506W.
Intensive experience in writing and editing documents while student is under the joint supervision of an academic instructor and a professional coordinator.

RWS 507. Professional Communication in Nonprofit Organizations (3)
Prerequisite: Rhetoric and Writing Studies 503W.
Developing specific technical communication skills for nonprofit organizations. Learning nonprofit documentation: proposals, mission statements, advertising, member surveys, capital campaigns. Promoting volunteerism. Interacting with nonprofit boards. Adhering to requisite state and federal regulations.

RWS 508W. Scientific Writing (3)
Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisite required: Test scores or verification of exemption; copy of transcript.
Scientific writing in academic and research settings to include clear and concise writing style, rhetorical strategies, and writing of research reports, proposals, conference presentations, and articles. (Formerly numbered Rhetoric and Writing Studies 508.)

RWS 509. Teaching Composition in Secondary Schools (3)
Prerequisite: Consent of instructor based on writing sample and/or interview.
Theory and practice of teaching and assessing composition in secondary schools and comparable contexts.

RWS 510. Rhetoric and Culture (3)
Interplay of rhetoric, writing, and culture, including race/ethnicity, gender, class, and other cultural considerations. Role of texts in shaping and shifting community knowledge, identity, norms, and values.

RWS 512. Writing Tutor Theory and Practice (3)
Prerequisite: Satisfaction of Graduation Writing Assessment Requirement.
Theory, practice, and methods of tutoring written composition in post-secondary settings, to include various approaches to one-on-one student conferencing and responding to student writing. Maximum credit six units.

RWS 596. Special Topics in Rhetoric and Writing Studies (1-3)
Prerequisite: Consent of instructor.
Selected topics in rhetoric and writing studies. May be repeated with new content and consent of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

RWS 599. Special Study (1-3) Cr/NC
Directed individual study. Maximum credit six units.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Russian

In the Department of European Studies
In the College of Arts and Letters

OFFICE: Storm Hall 224A
TELEPHONE: 619-594-5111 / FAX: 619-594-8006
E-MAIL: russian.coord@sdsu.edu
http://www-rohan.sdsu.edu/~russian

Faculty
Emeritus: Dukas, Fetzer
Chair: Donadey
Professor: Shapovalov
Lecturer: Shemibel

Offered by the Department of European Studies
Major in Russian with the B.A. degree in liberal arts and sciences.
Teaching major in Russian for the single subject teaching credential in foreign languages.
Major in European studies, with emphasis in Russian.
See European Studies.
Major in Russian and Central European studies.
See European Studies.
Minor in Russian.

Offered by International Business
Major in international business, with emphasis in Russian.

The Major

Russian is one of the most widely used languages in the world today. About one-third of all scientific articles are published in Russian. Some of the world’s great literature has been produced by Russian writers such as Tolstoy, Chekhov, and Solzhenitsyn. The political impact of the Commonwealth of Independent States is felt internationally. Knowledge of Russian will provide students with a better understanding of one of the world’s important and influential countries.

The Russian program offers a wide range of courses, including specialized courses in literature and linguistics. This major is useful preparation for graduate programs in international trade, international law, librarianship, public administration, and journalism. This program requires intensive scholarly investigation and may prepare students for careers in which fluency in Russian is essential.

Knowledge of Russian, particularly when combined with business related courses, is becoming a valuable asset. Many American firms have opened offices in Moscow and St. Petersburg, and the volume of American trade with Russia has been growing at a rapid pace. As a result, there are indications of an expanding interest in Russian graduates by American business organizations with employment possibilities in the United States and Russia. Moreover, students may consider the option of pursuing a double major in another European language.

Other career possibilities include Russian specialists, generally employed by the federal government: high school teachers, librarians, translators, and interpreters.

Russian majors and minors are encouraged to explore the opportunities for study in Russia that are now becoming available.

Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Impacted Program

The Russian major is an impacted program. To be admitted to the Russian major, students must meet the following criteria:

a. Complete preparation for the major;

b. Complete a minimum of 60 transferable semester units;

c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Russian Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 11061) (SIMS Code: 116301)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 53 units in Russian courses can apply to the degree. Students majoring in Russian must complete a minor in another field to be approved by the departmental adviser in Russian.

International Experience Requirement. All Russian majors are required to complete a study abroad program in Russia or any other Slavic-language speaking country, consisting of a minimum of six units (90 hours). However, all majors are strongly encouraged to complete a more extensive abroad experience by participating in a semester or academic year program. To fulfill the study abroad requirement, Russian majors must enroll in an approved program. Unapproved study abroad programs will not meet the international experience requirement for the major.

Preparation for the Major. Russian 100A, 100B, 110, 200A, 200B. (23 units)

Language Requirement. The language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Minor. A minimum of 30 upper division units in Russian to include Russian 301, 305A or 305B, 310, 311, 430, 441, 501; and nine units of upper division electives in Russian.

Russian Major

In preparation for the Single Subject Teaching Credential in Foreign Languages

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 11061) (SIMS Code: 116303)

All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Dual Language and English Learner Education or Teacher Education. For students completing the single subject teaching credential program, no more than 48 units in Russian courses can apply to the degree.
This major may be used by students in dual language and English learner education or teacher education as an undergraduate major for the B.A. degree in liberal arts and sciences. A minor in another field approved by the departmental adviser in Russian is required for the degree.

**Preparation for the Major.** Russian 100A, 100B, 200A, 200B. (20 units)

**Language Requirement.** The language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

**Graduation Writing Assessment Requirement.** Passing the Writing Placement Assessment with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

**Major.** A minimum of 24 upper division units in Russian to include 301, 303, 305A, 305B, 430, 501; and six units in 400- or 500-level courses in Russian.

**Proficiency Examination.** Before taking a student teaching assignment in Russian, the candidate for the credential may be required to pass an oral and written proficiency examination in the language, administered by the Department of European Studies. The candidate must consult with the chair of the department concerning this examination.

**Russian Minor**

*(SIMS Code: 116301)*

The minor in Russian consists of a minimum of 22 units to include Russian 110, 200A, 200B, Russian 301 or 311, and six units of upper division Russian courses. Any course taught in English, except Russian 110, needs department approval to apply to the minor requirements.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

**Language Requirement for the B.A. Degree in Liberal Arts and Sciences**

Students electing the study of Russian to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Russian 200A or the equivalent level of achievement. The usual sequence of coursework is Russian 100A, 100B, and 200A. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

**High School Equivalents**

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.

**Courses (RUSSN)**

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

**LOWER DIVISION COURSES**

Native speakers of Russian will not receive credit for taking lower division courses in Russian except with advance approval from the department.

All lower division courses in Russian are taught in Russian unless otherwise stated.

No credit will be given for lower division courses taken after successfully completing any upper division Russian course taught in Russian.

No credit will be given for Russian 100A, 100B, 200A, 200B, 301 taken out of sequence.

**RUSSN 100A. Beginning Russian 1 (5) [GE]**

Prerequisite: Russian 100B.

Conversation skills through active participation in discussions, debates, and oral presentations.

**RUSSN 100B. Beginning Russian 2 (5) [GE]**

Prerequisite: Russian 100A or two years of high school Russian.

**RUSSN 110. Slavic Legends and Tales (3) [GE]**

Introduces fairy tales, folk epics and legends and examines aesthetic, social, and psychological values they reflect. Cultural influence of Slavic folklore in literature, music, painting, film. Taught in English.

**RUSSN 190. Conversation Practice 1 (2)**

Prerequisite: Russian 100B.

Conversation skills through active participation in discussions, debates, and oral presentations.

**RUSSN 200A. Intermediate Russian 1 (5) [GE]**

Prerequisite: Russian 200B; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Proof of completion of prerequisites required. Copy of transcript. Not open to students who graduated from schools where Russian is the primary language of instruction.

Prerequisite: Russian 100A or two years of high school Russian. Practical application and review of the basic principles of Russian. Oral practice, reading of cultural material in Russian. (Formerly numbered Russian 201.)

**RUSSN 200B. Intermediate Russian 2 (5) [GE]**

Prerequisite: Russian 200A.

**RUSSN 250, Russian Culture in a Digital World (3) [GE]**

New media's impact on social, cultural, and political development of Russian society. Russian art, values and ideologies, state power, nationalism, and democracy. Taught in English.

**RUSSN 290, Conversation Practice 2 (2)**

Prerequisite: Russian 190.

Expands active vocabulary and refines communication skills. Russian is practiced in discussions, dialogues, paired activities, and whole-class activities.

**UPPER DIVISION COURSES**

*(Intended for Undergraduates)*

All upper division courses in Russian are taught in Russian unless otherwise stated.

**RUSSN 301. Advanced Grammar and Composition (3) [GE]**

Prerequisites: Russian 200B; and completion of the General Education requirement in Foundations of Learning II.C., Humanities. Prerequisite: Russian 301.

Advanced grammar and stylistics; intensive writing practice; reports based on outside reading.

**RUSSN 303. Russian for Business Communication (3)**

Prerequisite: Russian 301.

Russian business communication to include business letters, reports, presentations. Topics include banking, business etiquette, international trade, marketing.
RUSSN 305A. Heroes and Villains: Russian Literature of the Nineteenth Century (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Nineteenth century Russian literature in translation. Prose fiction in cultural and historical context of Russian Empire to include works by Dostoevsky, Pushkin, Tolstoy, Turgenev. Taught in English with readings in English.

RUSSN 305B. Russian Literature of the Twentieth Century (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Twenty-first century Russian literature including works by Zamatin, Pasternak, Akhmatova, Solzhenitsyn. Taught in English with readings in English.

RUSSN 310. Russian and East European Cinema (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Through study of films from 1950s to post-Soviet times, major concerns of East Europeans are addressed through cinema. Interrelationships among cinematic traditions of Russia, Poland, Hungary, Czechoslovakia, and former Yugoslavia/Balkans. Taught in English.

RUSSN 311. Russian Through Media (3)
Two lectures and two hours of activity.
Prerequisite: Russian 200B.
Russian stylistics and discourse grammar in context. Emphasis on communicative skills: listening, speaking, reading, and writing. Students work with Internet materials, newspapers, magazines, and excerpts from Russian and Soviet films.

RUSSN 430. Russian Civilization (3) [GE]
Prerequisites: Russian 200B; upper division standing for majors; completion of the General Education requirement in Foundations of Learning II.C. Humanities required for nonmajors. Proof of completion of prerequisites required: Copy of transcript.
Russian civilization through literary texts, visual art, music, and film. Relationships between art and politics, art and national identity, art of the fantastic and doublespeak, art of postcommunism and postmodernism.

RUSSN 435. Russian and East European Jewish Culture (3) [GE]
Prerequisites: Upper division standing for majors; completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Russian and East European Jewish culture from 1900s to present. How literature written in Russian, Polish, Czech, Lithuanian, German by writers of Jewish origin as well as visual arts and cinema reflect changing problem of Jewish national identity. Taught in English.

RUSSN 441. Structure of Modern Russian (3)
Two lectures and two hours of activity.
Prerequisite: Russian 301.
Linguistic structure of current standard Russian. Topics include Russian phonology, phonetics and intonation, verbal and nominal morphology, syntax.

RUSSN 495. Russian Internship (3) Cr/NC
Prerequisites: Upper division standing in major and consent of instructor.
Practical work experience in a field related to Russian studies. Work done under joint direction of activity sponsor and instructor. Approved international internships may count towards international experience requirement for major.

RUSSN 499. Special Study (1-3)
Prerequisites: Fifteen upper division units in the major with an average of B (3.0) or better and consent of instructor. Proof of completion of prerequisites required: Copy of transcript.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

RUSSN 501. Translation (3)
Prerequisite: Russian 301.
Comparison of Russian and English through translation of a variety of texts from Russian to English and from English to Russian.

RUSSN 596. Topics in Russian Studies (3)
Prerequisite: Russian 305B (for literary topics). Proof of completion of prerequisite required: Copy of transcript.
Topics in Russian language, literature, or linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

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Science

OFFICE: College of Sciences Dean’s Office
Geology/Mathematics/Computer Science 604
TELEPHONE: 619-594-5142
FAX: 619-594-6381
http://www.sci.sdsu.edu/cos

Faculty
Faculty assigned to teach College of Sciences courses (SCI) are drawn from departments within the college.

Courses (SCI)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES
SCI 200. Introduction to Campus Activities and Networking (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. Maximum credit two units. (Formerly numbered Psychology 250.)

SCI 250. Informal Learning and Instruction of Mathematics and Science (3) [GE]
Two lectures and two or more hours of activity.
Theories of learning and instruction through the lens of informal mathematics and science activities. Qualitative research skills while working in after school mathematics and science programs. Design and Implementation of informal education in a service-learning environment.

SCI 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)
SCI 596. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

SCI 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.
Social Science
In the College of Arts and Letters

OFFICE: Arts and Letters 588
TELEPHONE: 619-594-5304

Offered by Social Science

Major in social science with the B.A. degree in liberal arts and sciences.

Teaching major in social science for the single subject teaching credential.

The Major

Social science is a multidisciplinary program, encompassing the faculties and courses of 12 departments. Possible studies range from Indian Studies, Anthropology, Chicana and Chicano Studies, Economics, Geography, History, Political Science, Psychology, Religious Studies, Sociology, and Women's Studies. The major aims 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 a broader capacity for understanding the human condition. Students may devise their own focus or select the emphasis in Islamic and Arabic studies.

The social science major is appropriate for many beginning positions in government and, when supplemented with a business administration minor, for careers in business. For students who continue in graduate study after receiving their bachelor's degrees, it is an excellent preparation for graduate and professional programs in law, social work, public administration, librarianship, counseling, business, and the ministry. Students who complete the Single Subject Teaching Credential in Social Science are prepared to teach world history, United States history, geography, government, and economics in high school.

The social science major with an emphasis in Islamic and Arabic studies is a multidisciplinary program which is designed to enable students to achieve fuller understanding and deeper insight and appreciation of non-western cultures. Students who specialize in Islamic studies choose from specific courses in Arabic, history, political science, religious studies, and women's studies. Students who wish to specialize in Arabic studies must also choose from specific courses in Arabic, history, political science, religious studies, and women's studies as indicated.

The social science major in preparation for the single subject teaching credential may be used by students in dual language and English learner education or teacher education or as an undergraduate major for the B.A. degree in Liberal Arts and Sciences. With regard to teacher education, the major provides academic preparation for a career teaching history and the social sciences in California public schools. Courses match the junior high core content of world history from the middle ages to recent times and of early American history, ninth grade subjects such as ancient religions and global cultures, later high school electives in politics and economics, and core high school classes in modern world history and modern US history. In addition to taking the lower and upper division courses on these topics, you may choose upper division courses in the major according to your own interests. Possible choices range from third world politics to Italian renaissance history to aspects of the experience of African-Americans, American Indians, or Chicanas and Chicanos in contemporary California.

Completion of the social science major provides excellent academic training for your teaching career. It also prepares you to take the State of California examination for history and social science teachers, the social science single subject CSET. In addition to demonstrating subject matter competence by completing the major, and passing the CSET, you will have to meet other specific requirements in order to teach history and the social sciences in California public schools. Requirements for entry into any California fifth year program in teacher education are detailed in this catalog under Dual Language and English Learner Education and Teacher Education.

You are encouraged to see the social science adviser as soon as possible for further orientation. Upon declaring the major you will need to see the social science adviser each semester.

Impacted Programs

The social science major, emphases, and social science major in preparation for the single subject teaching credential are impacted programs. Students must enter the university under the designated major code for selected programs. To be admitted to the selected program, refer to the program description for specific impacted criteria.

Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Social Science Major

With the B.A. Degree in Liberal Arts and Sciences

(Major Code: 22011) (SIMS Code: 116701)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

A minor is not required with this major.

Impacted Program. The social science major is an impacted program. To be admitted to the social science major, students must meet the following criteria:

a. Complete preparation for the major;

b. Complete a minimum of 60 transferable semester units;

c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Three units of statistics selected from Economics 201, Political Science 201, Psychology 280, Sociology 201, or Statistics 119 or 250. A six-unit sequence in each of three of the following departments selected from: (1) Anthropology 101, 102; (2) Chicana and Chicano Studies 120A-120B; (3) Economics 101, 102; (4) Geography 101, 102; (5) History 105, 106; 109, 110; (6) Political Science 101, 102, 103; (7) Sociology 101, 102. Statistics courses taken in a social science department may not be used in fulfillment of that department's six-unit sequence. (21-22 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.” Spanish is recommended for those planning to work in this part of the United States.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
Major. A minimum of 33 upper division units to include a 15-unit specialization in one department and the remaining 18 units from among three additional departments. Students may specialize in anthropology, economics, geography, history, political science, sociology, or, under certain conditions listed below, Chicana and Chicano studies. The remaining 18 units must be taken from three separate departments other than the department of specialization. Students who specialize in anthropology, economics, geography, history, political science or sociology may take a maximum of six units in Africana studies or American Indian studies or Chicana and Chicano studies or psychology or religious studies or women’s studies from courses listed below.

Students specializing in Chicana and Chicano studies must select courses from Chicana and Chicano Studies 301, 303, 320, 350A-350B, 480 and take the remaining 18 upper division units in anthropology, economics, geography, history, political science, or sociology.

Only students with a specialization in anthropology, economics, geography, history, political science or sociology may take a maximum of six units in the major from Africana studies or American Indian studies or Chicana and Chicano studies or psychology or religious studies or women's studies. These six units can only be selected from the following courses (addional prerequisites may apply):
Africana Studies 321, 322, 421, 422, 471
American Indian Studies 320, 331, 440, 480.
Chicana and Chicano Studies 301, 303, 320, 350A-350B, 480.

Master Plan. A master plan of courses taken to fulfill the major must be approved by the social science faculty adviser and filed with the Office of Advising and Evaluations at least one semester prior to graduation.

Emphasis in Islamic and Arabic Studies (SIMS Code: 116706)
The adviser for this emphasis is Dr. Hisham S. Foad, Department of Economics.

Impacted Program. The Islamic and Arabic studies emphasis is an impacted program. To be admitted to the Islamic and Arabic studies emphasis, students must meet the following criteria:

a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major (16 units)
1. Language: Arabic 101, 102, 201 (12 units) or Persian 101, 102, 201 (12 units).
2. Six units selected from History 100, 101, Religious Studies 101.

Language Requirement. The language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or higher. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 30 upper division units. Students who specialize in Islamic studies must take Religious Studies 310, 328, History 473, 474, and Women's Studies 560 (15 units), and an additional 15 units from Arabic 301, 302, 330, 350, History 574, Political Science 363, Religious Studies 330, 379, and Women's Studies 331. Students who specialize in Arabic studies must take American Indian Studies 320, 330, Political Science 363 (14 units), and an additional 16 units from Arabic 350, History 473, 474, 574, Religious Studies 310, 328, 330, Women's Studies 331 and 560.

Up to six units with appropriate content, can be applied to either area of specialization from Arabic, History, Political Science, Religious Studies 496, 499, and 596.

Social Science Major

In preparation for the Single Subject Teaching Credential With the B.A. Degree in Liberal Arts and Sciences (Major Code: 22011) [SIMS Code: 116703] All candidates for a teaching credential must take and pass the CSET and complete all requirements as outlined in this section of the catalog under Dual Language and English Learner Education or Teacher Education. This major may be used by students in dual language and English learner education or teacher education or as undergraduate for the B.A. degree in liberal arts and sciences.

Impacted Program. The social science major in preparation for the single subject teaching credential is designated as an impacted program. To be admitted to the major, students must meet the following criteria:

a. Complete with a grade of C or higher: Economics 101, 102; Geography 102; History 100, 101, 109, 110, Political Science 102; Religious Studies 101. These courses cannot be taken for credit/no credit (Cr/NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.50 or higher.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the major at SDSU (assuming continuous enrollment).

Preparation for the Major. Economics 101, 102; Geography 102; History 100, 101, 109, 110; Political Science 102, Religious Studies 101 (27 units)

These prerequisite courses may not be taken Cr/NC. The minimum grade in each class is C or higher.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.” Spanish is recommended for those planning to work in this part of the United States.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 42 upper division units to include: Teacher Education 362* (must be taken upon entering the major).

United States and California History: History 410, 445, and three units selected from any 500-level United States history course.


United States Geography: Geography 321.

Ethnic and Women's Studies: Six units from two departments selected from Africana Studies 321, 322, 421, 422, 471, American Indian Studies 320, 331, 440, 480, Asian Studies 310, Chicana and Chicano Studies 301, 350B, 375, History 422 [or Asian Studies 422], Women's Studies 310, 331, 342B, 375, 382, 535.

World History: Twelve units distributed as follows: Three units selected from any 500-level history course in an area other than U.S. history. History 412 and six additional units selected from two of the following areas (500-level history courses selected from any of the two required areas below cannot be used to satisfy both the area requirement and the above three unit requirement):
- Asia: History 420, 421, 566, 567, 570.
- Europe: History 407, 408, 418, 436, 440, 486, 488, 502, 503, 504 [or Humanities 504], 505, 506 [or Humanities 506], 508, 509, Women's Studies 340.
- Latin America: Chicana and Chicano Studies 350A; History 415 [or Latin American Studies 415], 416, 550, 551, 558, 580.
- Middle East: History 473, 474, 574.

International Politics: Three units selected from International Security and Conflict Resolution 300; Political Science 356, 359, 362, 363, 364, 366 [or Latin American Studies 366], 375, 478, 479.


* Specified section.
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
Director: Hohman
Associate Director: Min
Professors: Engstrom, Hohman, Jones, Mathiesen, Packard, Woodruff
Associate Professors: Finnegan, Ko, Min, Rasmussen, Reed, Zuniga
Assistant Professors: Li, Ogbonnaya, Villagran*
Lecturers: Archuleta, Elson, Robinson, Siegel

Offered by the School
Doctor of Philosophy degree in interdisciplinary research on substance use.
Master of Social Work degree.
Master of Social Work and Juris Doctor degrees (concurrent program).
Master of Social Work and Master of Public Health degrees (concurrent program).
Major in social work with the B.A. degree in liberal arts and sciences.
Minor in social work.
Certificate in social work administration (refer to the Graduate Bulletin).

The Major
The profession of social work is deeply committed to the relief of human distress and inequality, and to the assistance of people in the meeting of their social, psychological, and economic needs. The social work major prepares graduates who function effectively as entry-level professionals in beginning social work practice with client systems of various sizes and types; who demonstrate sensitivity to the diverse racial, ethnic, and cultural mix of the Southern California border region and are able to work effectively in a variety of roles in a range of agencies to meet the needs of the region's varied communities; who understand and use social work values and ethics throughout their professional practice; who can identify, evaluate and apply existing research evidence to guide their practice decision-making; who understand the contexts and purposes of social work practice, the changing nature of those contexts, and the nature and the dynamics of organizational behavior; and who are committed to lifelong professional growth and learning.

The social work major is designed to apply to a wide variety of social work practice settings. Preparatory coursework for the major includes a basis in the liberal arts and sciences. The upper division curriculum is intensive, encompassing coursework in cultural pluralism, human behavior, social policy, social work practice, and social work research. Required field experience is an integral part of the program.

The B.A. degree prepares students for immediate employment in those social work positions which do not require graduate level preparation, as well as providing the foundation for graduate study.

Impacted Program
The social work major is an impacted program. To be admitted to the social work major, students must meet the following criteria:

a. Complete 21 to 23 units with a minimum GPA of 2.50 and a grade of C or higher: Social Work 110, 120; Biology 100, 101, 204, or 261; Economics 101 or 102; Psychology 101; Sociology 101; Psychology 280 or Sociology 201 or Statistics 250. These courses cannot be taken for credit/no credit (Cr/NC);

b. Complete a minimum of 60 transferable semester units;

c. Have a cumulative GPA of 2.50 or higher;

d. To be admitted to the specialization in community corrections case management, students must, in addition to satisfying the criteria above, be a declared social work major; have an overall GPA of 3.0 or higher, be able to pass a background check, and submit an approved application to the undergraduate coordinator.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Social Work Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 21041) (SIMS Code: 558201)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog entitled “Graduation Requirements.” No more than 50 units in social work courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major. Social Work 110, 120; Biology 100, 101, 204, or 261; Economics 101 or 102; Psychology 101; Sociology 101; Psychology 280 or Sociology 201 or Statistics 250. (21-23 units)

These prerequisite courses may not be taken Cr/NC. The minimum grade of C or higher: Social Work 110, 120; Biology 100, 101, 204, or 261; Economics 101 or 102; Psychology 101; Sociology 101; Psychology 280 or Sociology 201 or Statistics 250. These prerequisite courses may not be taken Cr/NC. The minimum grade in each class is C or higher; complete all courses in preparation for the major with a minimum GPA of 2.50.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. All social work majors are required to participate in an international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course and community service activity in the U.S. will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.
To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;

Major. A minimum of 44 upper division units, in a prescribed course sequence, to include Social Work 350, 360, 361, 370, 381, 382, 391, 483A-483B, 489A (4 units), 489B (4 units), and nine units of approved upper division electives in social work (three units may be taken from the list of approved electives outside the School of Social Work, or six units may be taken from the list of approved electives outside the School of Social Work to include Gerontology 520).

Time Limitation. All social work courses taken for the major must have been taken and completed within seven years of the granting of the undergraduate degree. Courses taken prior to the seven year rule must be repeated. This policy applies to courses taken at SDSU or transferred from another four-year college or university or approved courses from a community college. No exceptions will be made to this policy.

Life Experience. No social work premajor or major courses can be waived or credit given towards the undergraduate degree for life experience including but not limited to employment, time spent in the military, training or workshops or volunteer experiences.

Transfer Credit. Transfer credit students may transfer 15 nonsocial work courses in the premajor and six units of Social Work 110 and 120 from a California community college or four year institution with a signed articulation agreement with SDSU. Students from outside the state must have transcripts evaluated to determine if their courses meet SDSU criteria to be accepted for the premajor. The 44 units in the major can only be transferred from a Council on Social Work Education (CSWE) accredited or candidacy status social work undergraduate program.

Prescribed Course Sequence. Students must complete all 300-level social work courses (21 units) before they will be allowed to enroll in Social Work 483A and 489A. There is no required order of the 300-level courses with the exception that Social Work 382 must be taken prior to Social Work 381.

JUNIOR YEAR (21 units) SENIOR YEAR (23 units)

SWORK 350  SWORK 360  SWORK 370  SWORK 382
SWORK 361  SWORK 381  SWORK 483A  SWORK 489A
SWORK 381  SWORK 483B  SWORK 489B  Three Electives
SWORK 391

Field Practicum. All students must enroll in field practicum. This is a 16-hour per week internship at a School of Social Work arranged and supervised social work community agency (students are not permitted to locate their own agencies). Students begin field practicum during the fall semester only and must concurrently enroll in Social Work 483A and 489A. The continuation of field practicum is offered in spring semester only when students must concurrently enroll in Social Work 483B and 489B. These courses are sequential and students must complete both “A” courses before going on to the two “B” courses. During the spring semester, preceding enrollment in field practicum, students attend a field orientation meeting. Specific date and time of the orientation is posted on the field bulletin board outside Hepner Hall 119 and announced in class. In addition, students should read the appropriate section in the current student handbook. The section outlines all requirements and processes the student is expected to follow. The coordinator of field instruction evaluates each application to determine whether the student has met all requirements for admission to field practicum (Social Work GPA of 2.00 and senior status) and assigns the student to an agency for internship. Students who do not file a field application by the deadline date will not be able to enter field practicum. Specific times and days of field practicum are arranged between the student and the assigned agency, but most agencies require daytime availability. Evening and weekend placements are not available. Students should arrange their schedules appropriately to meet these criteria.

Specialization in Community Corrections Case Management

(SIMS Code: 558202)

With the increased emphasis on rehabilitation in criminal justice work, this specialization prepares social work students to provide case management and other services in community corrections settings including probation, corrections, and re-entry programs. To be admitted to the specialization in community corrections case management, students must be a declared social work major, have an overall GPA of 3.0 or higher, be able to pass a background check, and submit an approved application to the undergraduate coordinator, in addition to satisfying the criteria above.

Requirements for specialization. A minimum of nine units in the criminal justice major in lieu of social work electives. Required courses are Criminal Justice 300 and two of the following: Africana Studies 380, Criminal Justice 330, 431, 531, or 543.

Student Handbook

The School of Social Work has a student handbook for undergraduate majors. The handbook contains policies and procedures not specified in the catalog in addition to information to aid students in completing the social work major. Students must purchase a revised handbook at the beginning of fall semester as long as they are enrolled in a social work program at SDSU. Student handbooks are available online at the school’s website.

Social Work Minor

(SIMS Code: 558201)

The minor in social work consists of 24 units to include Psychology 101, Sociology 101, Social Work 110, 120, 350, 360, 370, and three units selected from Social Work 400, 410, 430, 496, or Gerontology 520.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (SWORK)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

SWORK 110. Social Work Fields of Service (3)
Fields of services in which social workers perform professional roles. Focus on social work approach to intervention in practice and policy arenas.

SWORK 120. Introduction to Social Work and Social Welfare (3)
Two lectures and three hours of fieldwork. Orientation to field of social work. Develop understanding of social work principles, goals, values, and methods through readings and class discussion. An unpaid assignment in an agency setting is required. Scheduling is flexible.

SWORK 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.
SWORK 350. Cultural Pluralism (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Understanding of the American society as a culturally pluralistic social process and an understanding of social work as a culturally directed profession with emphasis on the concept of cultural identities created by one’s values, ideologies, knowledge and behavior.

SWORK 360. Perspectives on Human Behavior and the Social Environment (3) [GE]
Prerequisite: Completion of General Education requirement in Foundations of Learning 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.

SWORK 361. Human Behavior Across the Life Span (3)
Prerequisites: Social Work major and junior standing. Psycho-social, biological, cultural and environmental influences on individual growth and development and how knowledge is utilized by social work generalist practitioners in assessment and intervention.

SWORK 370. Social Policies and Social Issues (3)
Prerequisites: Social Work 110 and 120. Major social forces and institutions as they relate to and determine social policy emphasizing social welfare services in an industrialized society.

SWORK 381. Practice Skills Micro (3)
Prerequisites: Completion of social work or gerontology preparation for the major. Social Work 382 or consent of instructor. Micro skills utilizing motivational interviewing within overall generalist practice framework. Written and verbal communication, interviewing, and assessment with individuals.

SWORK 382. Practice Skills Macro (3)
Prerequisite: Completion of social work preparation for the major. Development of social work practice skills at macro level. Written and verbal communication needs assessment and resource development with organizations and communities.

SWORK 391. Methods of Social Work Research (3)
Definition and purpose of research in social welfare and social work. Formulation of research problems, selecting a design and methodology; techniques of collecting, organizing, interpreting, and analyzing data.

SWORK 400. Social Work Practice: Child Welfare (3)
Prerequisite: Social Work 370. Problems of children and supportive, supplementary and substitute social services which have been developed to meet these needs.

SWORK 410. Social Work Practice: Family Issues (3)
Prerequisite: Social Work 370. Issues relative to social work intervention with families, including major social work and interpersonal family problem situations. Family practice methods and social service provisions, and social policy issues around family needs.

SWORK 424. Social Work Practice: Interpersonal and Community Work (3)
Prerequisite: Social Work 370. Development of social work practice skills at mezzo level. Written and verbal communication needs assessment and resource development with organizations and communities.

SWORK 430. Alcohol and Other Drug Problems: Prevention and Intervention (3)
Prerequisite: Upper division standing. Alcohol and other drug issues related to individuals, groups, and society. Concepts include preventive methods, secondary prevention, self-help groups, models of treatment, prevention strategies in communities, and overview of alcohol and drug policies.

SWORK 483A. Generalist Social Work Practice I (3)
Prerequisites: Completion of social work preparation for the major, 300-level courses required for major, and concurrent registration in Social Work 489A.
Integration of social work theory, principles, and practice techniques across micro and mezzo social work populations to include families and groups.

SWORK 483B. Generalist Social Work Practice II (3)
Prerequisites: Social Work 483A, 489A, and concurrent registration in Social Work 489B.
Integration of social work theory, principles, and practices with emphasis on mezzo and macro generalist practice social work populations and settings.

SWORK 489A-489B, Field Experience in Social Work (3-9, 3-9) Cr/NC
Prerequisites: Completion of all 300-level social work courses; Social Work 381 and 382 with a grade of C or better and consent of instructor; arrangements made during prior semester with director of undergraduate field education. Concurrent registration in Social Work 483A for students taking 489A and Social Work 483B for students taking 489B. A minimum of eight units (four in Social Work 489A and four in Social Work 489B) is required. Students spend 16 hours per week per semester in practice field assignments in selected social work agencies or settings.

SWORK 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

SWORK 497. Investigation and Report (3)
Prerequisite: Consent of instructor. Analysis of special topics in social welfare.

SWORK 499. Special Study (1-3) Cr/NC
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

SWORK 596. Experimental Topics (1-4)
Selected topics in social work. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)

SWORK 596. Experimental Topics (1-4)
Selected topics in social work. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Sociology
In the College of Arts and Letters

OFFICE: Nasatir Hall 224
TELEPHONE: 619-594-4826 / FAX: 619-594-1325
E-MAIL: sociology@sdsu.edu
http://rohan.sdsu.edu/~sdsusoci

Faculty
Emeritus: Bloomberg, Buck, Chandler, Cottrell, El-Assal, Emerick, Gay, Gillette, Hohn, Hough, Ima, Kolody, Preston, Sandlin, Scheck, Schulze, Stephenson, Werner, Winslow
Chair: Ojeda
Professors: Johnston, Liu, Ojeda, Zhang
Associate Professors: Choi, Esbenshade, Marcelli, McCall, Roberts
Assistant Professor: Kim

Offered by the Department
Master of Arts degree in sociology.
Master of Science degree in criminal justice and criminology. (Jointly with the College of Professional Studies and Fine Arts.)
Major in sociology with the B.A. degree in liberal arts and sciences.
Minor in sociology.

The Major
Sociology is the study of human social behavior. Among other things, it includes the study of intimate personal relationships to largescale social institutions which constitute societies and world systems; the shared cultural beliefs which hold societies together and make life meaningful; the cleavages of race, class, gender, and ethnicity and the inequalities and conflicts associated with them; and the causes and consequences of crime and other forms of social deviance.

While the sociology department offers a wide variety of courses, the focus of its curriculum is community issues. Communities consist of networks of personal relationships that underlie the large scale organizational and institutional structures that constitute societies. These social ties constitute the power resources – or “social capital” – through which things get done. They provide a kind of interpersonal glue that creates social cohesion and enables people within organizations and institutions to form coalitions, initiate processes for social change, and consolidate power resources in seeking to change social structure.

A bachelor’s degree in sociology provides an excellent liberal arts foundation for embarking on a wide range of career paths. A major in sociology provides the graduate with the skills necessary to work effectively with groups of people. Some possible areas of employment are public and private agencies, college settings, publishing, businesses, research facilities, human resources, human services, corrections, local/state/federal governments, health facilities. The degree also prepares students to enter graduate programs in sociology, teaching, law, and public health; to name a few.

Impacted Program
The sociology major is an impacted program. To be admitted to the sociology major, students must meet the following criteria:

a. Complete with a grade of C or higher: Sociology 101, 102, and 201. (9 units) Note: Statistics 119 or 250, or Biology 215 will be accepted in lieu of Sociology 201. These courses cannot be taken for credit/no credit (Cr/NC);

b. Have a cumulative GPA of 2.50 or higher.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Sociology Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22081) (SIMS Code: 116901)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in sociology courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major.
Sociology 101, 102, and 201. (9 units)
Note: Statistics 119 or 250, or Biology 215 will be accepted in lieu of Sociology 201.

These prerequisite courses may not be taken Cr/NC. The minimum grade in each class is C or higher.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. Complete 18 units of core requirements listed below and 12 units of upper division sociology electives. (30 units)

Core requirements (18 units) should be completed before upper division sociology electives (12 units):

- Sociology 301
- Sociology 401
- Sociology 403
- Sociology 406 or 407 or 408
- Sociology 410 or 412
- Sociology 430 or 433

Sociology Minor
(SIMS Code: 116901)
The minor in sociology consists of a minimum of 18 units to include Sociology 101 and either 102, 201, or 301; three units selected from Sociology 401, 403, 406, 407, 408, 410, 412, 430, or 433; and nine-lecture or 45-unit units from other upper division courses in the department. Note: Statistics 119 or 250, or Biology 215 will be accepted in lieu of Sociology 201.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Sociology Honors Thesis
The Department of Sociology offers undergraduates of superior achievement the opportunity to write a sociology honors thesis leading to special recognition upon graduation. Interested students should consult with the undergraduate adviser in the Sociology Department.
Sociology

Courses (SOC)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

SOC 101. Introductory Sociology: The Study of Society (3) [GE]
This course is prerequisite to all upper division courses in sociology. Major ideas, concepts, and methods in the study of society to include socialization, culture, social structure, social stratification, deviance, social control, and social change.

SOC 102. Introduction to Social Problems (3) [GE]
Contemporary social problems. Topics may include poverty, inequality, unemployment, crime and deviance, population and ecological problems, health, family issues, and the role of ideology and interest groups in the definition of social problems.

SOC 201. Elementary Social Statistics (3) [GE]
Basic statistical techniques in sociology. Tables and graphs, measures of central tendency and variability, correlations, cross-classification, an introduction to multivariate analysis, sampling and statistical inference. Computer applications may be included. Students with credit or concurrent registration in the following lower division statistics courses will be awarded a total of four units for the two (or more) courses: Sociology 201; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Economics 201; Political Science 201; Psychology 280; Statistics 119, 250.

SOC 210. Culture and History of Surfing (3)
Surfing from Hawaiian origins to present with attention to cultural differences between Polynesian and Western societies. Relationships between subcultures of surfing and American popular culture. Sociological analysis of surfing in globalized society.

SOC 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

SOC 301. Social Research Methods (3)
Prerequisites: Sociology 201 and Sociology 101 or 102. Methods in sociological research to include surveys, field experiments, ethnography, comparative, historical, and content analysis. Methods are linked to sociological theory. (Formerly numbered Sociology 250.)

SOC 310. Love, Jealousy, and Envy: The Sociology of Emotions (3)
Prerequisite: Sociology 101.
Sociological understanding of human emotions developed through consideration of history of sex and love, social psychology of jealousy, and political implications of envy. Understanding and management of emotions analyzed in context of community and society.

SOC 320. Sex and Gender in Contemporary Society (3) [GE]
Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Ways femininity and masculinity are constructed through social arrangements associated with interpersonal relations, family, education, occupations, and economic and political systems. How gender relations are portrayed in mass media and how they are accomplished in community life.

SOC 335. Mass Communication and Popular Culture (3) [GE]
Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Development of popular culture as influenced by the growth of mass media of communication, including popular music, television, film, newspapers, and advertising. The power, functions, and effects of the mass media in society and in social change.

SOC 330. Sociology of Religion (3) [GE]
Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Major theories, problems, and findings concerning the relationship of the individual and society. Topics include consciousness and construction of meaning, self-concept and social identity, socialization and interaction, group behavior and group membership.

SOC 350. Population and Contemporary Issues (3) [GE]
Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Population processes (fertility, mortality, and migration) as they affect and are affected by such contemporary issues as rapid world population growth, environment, urbanization, family, aging, US-Mexico border, and undocumented migration.

SOC 352. Contemporary Social Problems (3) [GE]
Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Contemporary social problems in North America and other areas of the world.

SOC 355. Minority Group Relations (3) [GE]
Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Historical and comparative analysis of race and ethnic relations. Origins and maintenance of ethnic stratification systems; discrimination and prejudice; the adaptation of minority communities; role of social movements and government policies in promoting civil rights and social change.

SOC 401. Classical Social Theory (3)
Prerequisite: Sociology 101.
Theories of society; classical European and contemporary US theories of modernity and postmodernism; Western theories of cultural and economic hegemony. Evolution of modern world system. Practical understanding of sociological tradition.

SOC 403. Contemporary Sociological Theory (3)
Prerequisite: Sociology 101.
History and intellectual development of contemporary sociological theories.

SOC 406. Intermediate Social Statistics (3)
Prerequisite: Sociology 301 with a grade of C (2.0) or better.
Statistical techniques in the analysis of social research data and hypothesis testing, including analysis of variance, covariance, partial correlation, multiple and logistic regression, logic and log-linear models, discriminant and factor analysis. Practical application with the use of statistical packages.

SOC 407. Survey and Experimental Research Methods (3)
Prerequisite: Sociology 301 with a grade of C (2.0) or better.
Research process from research design through data processing, analysis, and interpretation. Quantitative research techniques including universe enumeration, sampling, questionnaire construction, scaling techniques, structured interviews, and experimental designs.

SOC 408. Qualitative Research Methods (3)
Prerequisites: Sociology 101 and 301 with a grade of C (2.0) or better.
Ethnographic research methods including interviewing, participant observation, and case studies. Problems in research design; gaining and maintaining rapport; analysis, interpretation, and writing with qualitative data.

SOC 410. Social Psychology: Mind, Self, and Society (3) [GE]
Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Major theories, problems, and findings concerning the relationship of the individual and society. Topics include consciousness and construction of meaning, self-concept and social identity, socialization and interaction, group behavior and group membership.
Sociology

SOC 412. Social Construction of Reality (3)
Prerequisite: Sociology 101.

SOC 420. Sexuality in Modern Society (3)
Prerequisite: Sociology 101.
Current research on contemporary sexual attitudes and behaviors, including changing norms in premarital, marital, and extramarital relationships. Controversies and implications for the individual and society.

SOC 421. American Families (3) [GE]
Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Changes in intimacy in American family. Selection of mating partners, spousal and parenting relationships, and alternatives to traditional family forms. Changing functions of the family viewed in historical perspective. Present diverse family arrangements and future prospects.

SOC 430. Social Organization (3) [GE]
Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Social structure of societies. Historical examination of structure and development of social institutions, communities, and other large scale organizations.

SOC 433. Wealth, Status, and Power (3)
Prerequisite: Sociology 101.
Social inequality as an institutional process. Patterns of unequal distribution of wealth, power, privilege and prestige, their causes, and impact this has on communities and societies.

SOC 436. Sociology of Health and Illness (3)
Prerequisite: Sociology 101.
Social, cultural, and political factors in definitions of health, disease, healing, and provision of services. Comparative study of medical practices and organizational structures in America and selected international settings. Emphasis on change, socialization of practitioners, relationships between health related occupations.

SOC 441. Sociology of Mental Illness (3)
Prerequisite: Sociology 101.
Social, cultural, historical, and political factors involved in definition of "madness" and theories of mental illness in various societies. Review of research about incidence, prevalence, and social epidemiology of mental illness, as a community problem, and its distribution by social class, gender, age, geographical region, and country.

SOC 442. Homicide in America (3)
Prerequisite: Sociology 101.
Characteristics and distribution of murder, including historical and cross-cultural comparisons. Social psychological, structural, cultural and situational explanations of causes and consequences of juvenile, gang, domestic, mass, serial and sexual murders.

SOC 443. Crime and Society (3)
Prerequisite: Sociology 101.

SOC 444. Juvenile Delinquency (3)
Prerequisite: Sociology 101.
Sociological theories about causes and consequences of juvenile delinquency. Social origins of juvenile justice system, with attention to methods of control and prevention at community and national levels.

SOC 445. Sociology of Deviance (3)
Prerequisite: Sociology 101.
Conformity and nonconformity; the relationship between individual liberty and social control; stigma and the labeling of deviant behavior such as prostitution, alcoholism, drug addiction, and crime.

SOC 446. Sociology of Criminal Organizations (3)
Prerequisite: Sociology 101.
Major criminal organizations that operate in underworld across time, space, and socio-cultural context, including Mafia, Yakuza, Triads, and transnational drug traffickers and human smugglers. Explore their social organizations, operations, roles, and identities.

SOC 447. Human Trafficking and Modern Day Slavery: A Sociological Perspective (3)
Prerequisite: Sociology 101 or 102.
Examine complex phenomena of transporting, harboring, and employing human beings through use of force, fraud, or coercion for labor and sexual exploitation. Analyze root causes of this modern day slavery and explore possible solutions.

SOC 450. Social Change (3) [GE]
Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Social change at the interpersonal, institutional, and societal levels of analysis. Major economic, political, technological, and demographic forces that have shaped the contemporary world. Topics may include modernization, industrialization, urbanization, revolution, and prospects of social change in rich and poor nations.

SOC 457. Protests, Reforms, and Revolutions (3)
Prerequisite: Sociology 101.
Major criminal organizations that operate in underworld across time, space, and socio-cultural context, including Mafia, Yakuza, Triads, and transnational drug traffickers and human smugglers. Explore their social organizations, operations, roles, and identities.

SOC 480. Field Internship (3-6)
Prerequisite: Sociology 101.
Supervised field placement of students in community agencies. Practical experiences related to studies within the sociology curriculum. Maximum credit six units.

SOC 496. Experimental Topics (1-4)
Prerequisite: Consent of the instructor.
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

SOC 499. Special Study (1-6)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.
Sociology

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

SOC 522. The Family in Comparative and Cross-Cultural Perspectives (3)
Prerequisite: Sociology 101. Recommended: Sociology 421. Comparative study of selected family systems in the past and present. Comparative analysis of major social and demographic changes in marriage and family in post-industrial nations and less developed countries. Cross-cultural comparisons of family arrangements in contemporary America by social classes and racial-ethnic groups.

SOC 531. Working and Society (3)
Prerequisite: Sociology 101. Structure and change in labor force, nationally and internationally. Social drama of work: self, roles, conflict, subcultures. Includes exploration of student work experiences, workers in the community, literacy, and film depictions of work worlds.

SOC 539. Sociology of Education (3)
Prerequisite: Sociology 101. Social organization of education in the United States and other societies. Structure and functions of educational institutions. Formal and informal education. Class, ethnic, and other social factors affecting the educational process. Implications of educational decision making and testing.

SOC 543. Police, Courts, and Corrections: The Sociology of Crime and Punishment (3)

SOC 554. Sociology of the United States-Mexico Transborder Populations and Globalization (3)

SOC 555. Immigrants and Refugees in Contemporary American Society (3)
Prerequisite: Sociology 101. Contemporary migration to the United States, especially from Latin America and Asia. Political and economic migration. Immigrant and refugee adaptation. Theoretical controversies, research applications, and policy implications.

SOC 596. Current Topics in Sociology (1-3)
Prerequisite: Sociology 101. Selected specialized, controversial or currently relevant topics in sociology. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

SOC 597. Investigation and Report (3)
Prerequisites: Fifteen units in sociology and consent of instructor. Analysis of special topics in sociology. Maximum credit six units.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Spanish

In the College of Arts and Letters

OFFICE: Arts and Letters 134
TELEPHONE: 619-594-6588 / FAX: 619-594-5293

Faculty
Emeritus: Barrera, Case, Castro (Castillo), Christensen, Hidalgo, Jiménez-Vera, Kish, Lemus, O’Brien, Robinson, Segade, Talamanes, Wilson, Young
Chair: Blanco
Professors: Blanco, Godoy Marquet, Martin, Martin-Flores
Associate Professors: Ewald, Urzua Beltran
Assistant Professor: Vasconcelos

Offered by the Department of Spanish and Portuguese Languages and Literatures
Master of Arts degree in Spanish:
Major in Spanish with the B.A. degree in liberal arts and sciences.
Teaching major in Spanish for the single subject teaching credential in foreign languages.
Minor in Spanish.
Certificate in translation and interpretation studies.

Offered by the Department of European Studies
Major in European studies, with emphasis in Spanish.

Offered by International Business
Major in international business, with emphasis in Spanish.

The Major
Spanish is the fourth most widely spoken language in the world and the second most frequently used language in the Southwest. Because of San Diego’s proximity to Mexico and other 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.

Impacted Programs
The majors in Spanish and Spanish in preparation for the single subject teaching credential are impacted programs. To be admitted to the Spanish major, students must meet the following criteria:

a. Complete with a grade of C or higher: Spanish 202 and 212 (or 282). These courses cannot be taken for credit/no credit (Cr/NC). These courses are automatically waived for native speakers of Spanish who have a high school diploma or equivalent from a country whose language of instruction is Spanish. International Baccalaureate or Advanced Placement credit for Spanish 202 and 212 for U.S. Hispanics. Spanish 202 and 212 (or 282) must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr/NC). These courses are automatically waived for native speakers of Spanish who have a high school diploma or equivalent from a country whose language of instruction is Spanish. See adviser. (0-22 units)

b. Have a cumulative GPA of 2.50 or higher.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Advising
All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Spanish Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 11051) (SIMS Code: 117101)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 52 units in Spanish courses can apply to the degree.

A minor is required with this major. Students majoring in Spanish who complete a minor not exceeding 15 units can complete the major within 120 units.

Preparation for the Major.
Spanish 101, 102, 201, 202, 211, and 212. Spanish 281 replaces 201 and 211 and Spanish 282 replaces 202 and 212 for U.S. Hispanics. Spanish 202 and 212 (or 282) must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr/NC). These courses are automatically waived for native speakers of Spanish who have a high school diploma or equivalent from a country whose language of instruction is Spanish. See adviser. (0-22 units)

Students completing the California Community College Associate in Arts in Spanish for Transfer (AA-T) will satisfy preparation for the major if Spanish 281 and 282 equivalent courses were completed. If not, Spanish 211 and 212 must be completed at the community college or at SDSU.

Language Requirement. The language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Pass the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience Requirement. All Spanish majors are required to complete an approved study abroad program in a Spanish-speaking country consisting of a minimum of six units (90 hours). To fulfill the International Experience Requirement, Spanish majors must enroll in a study abroad program approved by the department. Participation in other study abroad programs without the written approval of the department will not meet the international experience requirement for the major.

Major. A minimum of 30 upper division units taught in Spanish to include Spanish 301+, 302+, 350, 395, 448, 504, Spanish 340 or 341 or 342, and nine units+ selected from 300- to 500-level Spanish courses. At least 15 upper division units for the major must be taken in residence through coursework offered by or sponsored by the SDSU Spanish department or by the CSU International Programs. Students who have successfully completed courses for upper division credit may not receive credit for lower division courses.

*Spanish 381 or 382 replaces Spanish 301 and 302 for Spanish speakers.
+Four electives must be taken if Spanish 381 or 382 was taken in place of Spanish 301 and 302.
Spanish Major

In preparation for the Single Subject Teaching Credential in Foreign Languages

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 11051) (SIMS Code: 117103)

All candidates for a teaching credential must take and pass the CSET and complete all requirements as outlined in this section of the catalog under Dual Language and English Learner Education or Teacher Education. For students completing the single subject teaching credential program, no more than 52 units in Spanish courses can apply to the degree.

This major may be used by students in dual language and English learner education or teacher education as preparation for the CSET or as undergraduates for the B.A. degree in Liberal Arts and Sciences.

A minor is required with this major.

Preparation for the Major. Spanish 101, 102, 201, 202, 211, and 212. Spanish 281 replaces 201 and 211 and Spanish 282 replaces 202 and 212 for U.S. Hispanics. Spanish 202 and 212 (or 282) must be completed with a grade of C or higher and cannot be taken for credit/no credit. These courses are automatically waived for native speakers of Spanish who have a high school diploma or equivalent from a country whose language of instruction is Spanish. (0-22 units) See Spanish adviser.

Language Requirement. The language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience Requirement. All Spanish majors are required to complete an approved study abroad program in a Spanish-speaking country consisting of a minimum of six units (90 hours). To fulfill the International Experience Requirement, Spanish majors must enroll in a study abroad program approved by the department. Participation in other study abroad programs without the written approval of the department will not meet the international experience requirement for the major.

Major. A minimum of 30 upper division units taught in Spanish to include Spanish 301*, 302*, 350, 395, 448, 561; Spanish 340 or 341 or 342; and nine units selected from 300- to 500-level Spanish courses. At least 15 upper division units for the major must be taken in residence through coursework offered by or sponsored by the SDSU Spanish department or by the CSU International Programs. Students who have successfully completed courses for upper division credit may not receive credit for lower division courses.

* Spanish 381 or 382 replaces Spanish 301 and 302 for Spanish speakers.
+ Twelve units must be taken if Spanish 381 or 382 was taken in place of Spanish 301 and 302.

Spanish Minor (SIMS Code: 117101)

The minor in Spanish consists of a minimum of 18-19 units taught in Spanish, at least 12 of which must be in upper division Spanish courses.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. At least six upper division units for the minor must be taken in residence through coursework offered by or sponsored by the SDSU Spanish department or by the CSU International Programs.

Translation and Interpretation Studies Certificate (SIMS Code: 117155)

The Department of Spanish and Portuguese Languages and Literatures offers a Certificate in Translation and Interpretation Studies. A prospective candidate for the certificate should possess a bilingual facility in Spanish and English. The student must demonstrate writing proficiency in both Spanish and English either by completing with a grade of B or better Rhetoric and Writing Studies 306W (or pass the Writing Placement Assessment with a score of 10 or above, and Spanish 301, 302, and 350) or by demonstrating similar written language proficiency prior to starting work on the certificate. The student must complete an interpreting skills admission test with a grade of B or better (contact program director). The student may be advised to take Spanish 591 in preparation for the certificate.

After meeting the basic requirements for admission, the student must complete with a GPA of 3.0 or better 15 units to include Spanish 491, 492, 493, 594A, 594B.

Upon completing 15 units of coursework, the student must take a departmental examination for the certificate. Upon successful completion of the examination, the student will be awarded the certificate.

Up to nine units of the certificate program may be counted toward the major in Spanish and six units may be counted toward the minor in Spanish.

Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Spanish to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Spanish 201 or the equivalent level of achievement. The usual sequence of coursework is Spanish 101, 102, and 201. Refer to section of catalog on “Graduation Requirements” for additional ways to satisfy competency.

High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

Students entering San Diego State University with five or six years of high school Spanish may enroll in Spanish 202; the department recommends, however, that they take Spanish 301.

Advanced Placement in Spanish*

1. Students scoring a 3 on the Spanish Language Advanced Placement Examination will receive 6 units of academic credit for Spanish 201 and 211. The continuation placement level with this score is Spanish 202 and/or 212. Credit will not be awarded for numbered Spanish courses (101, 102, 281).
2. Students scoring a 4 or 5 on the Spanish Language Advanced Placement Examination will receive 6 units of academic credit for Spanish 202 and 212. The continuation placement level with these scores is Spanish 301 or 381. Credit will not be awarded for lower division Spanish courses (101, 102, 201, 211, 281, or 282).
3. Students scoring a 3, 4, or 5 on the Spanish Literature Advanced Placement Examination will receive 6 units of academic credit for Spanish 405A and 405B. The continuation placement level with these scores is Spanish 301 or 381. Credit will not be awarded for lower division Spanish courses.

* AP credit automatically clears the language requirement.

International Baccalaureate

Students with the International Baccalaureate in Spanish will be awarded six units of Spanish equal to credit in Spanish 202 and 212. International Baccalaureate students will not receive duplicate credit for Advanced Placement in Spanish scores nor for enrollment in any lower division Spanish courses.
Spanish

Courses (SPAN)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

Native speakers of Spanish will not receive credit for taking lower division courses in Spanish except with advance approval from the department.

All lower division courses in Spanish are taught in Spanish. No credit will be given for lower division courses taken after successfully completing any upper division Spanish course.

No credit will be given for Spanish 101, 102, 201, 202, 301 taken out of sequence.

SPAN 101. Introduction to Spanish I (4) [GE]
Four lectures plus laboratory.
Prerequisites: None.
Introduction to written Spanish and basic principles of writing. Grammar review and development of cross-cultural awareness. May be taken concurrently with Spanish 202 and 212. It is recommended that heritage speakers of Spanish take Spanish 281 in place of Spanish 201 and 211.

SPAN 102. Introduction to Spanish II (4) [GE]
Four lectures plus laboratory.
Prerequisites: Spanish 101 or two years of high school Spanish. Continuation of Spanish 101. Not open to students with credit in Spanish 202, 201, 281, 282, 301, or a higher-numbered Spanish course.

SPAN 201. Intermediate Spanish I (4) [GE]
Four lectures plus laboratory.
Prerequisites: Spanish 102 or completion of the third year of high school Spanish.
First course in Spanish at intermediate level. Grammatical structures presented in beginning Spanish. Culture-centered oral and written language emphasized. Not open to students with credit in Spanish 202, 281, 282, 301, or a higher-numbered Spanish course. See enrollment restrictions under AP credit in Spanish. May be taken concurrently with Spanish 211. It is recommended that heritage speakers of Spanish take Spanish 281 in place of Spanish 201 and 211.

SPAN 202. Intermediate Spanish II (4) [GE]
Prerequisites: Spanish 201 or completion of the fourth year of high school Spanish.
Second course in Spanish at intermediate level. Selected grammatical structures supported by study of cultural materials. Written and spoken Spanish emphasized. Not open to students with credit in Spanish 282, 301, or a higher-numbered Spanish course. See enrollment restrictions under AP credit in Spanish. May be taken concurrently with Spanish 212. It is recommended that heritage speakers of Spanish take Spanish 282 in place of Spanish 202 and 212.

SPAN 211. Intermediate Conversation and Reading (3) [GE]
Prerequisites: Spanish 102.
Emphasis on oral communication and reading comprehension through intermediate level cultural materials. Some writing will be adjunct to reading. May be taken concurrently with Spanish 201. Not open to students after taking Spanish 281.

SPAN 212. Intermediate Conversation and Writing (3) [GE]
Prerequisites: Spanish 201 and 211.
Emphasis on oral communication and intermediate level writing in Spanish. May be taken concurrently with Spanish 202. Not open to students after taking Spanish 282.

SPAN 281. Intermediate Spanish for Heritage Language Learners I (3) [GE]
Prerequisite: Exposure to Spanish in the home and neighborhood in the U.S. Introduction to written Spanish and basic principles of writing. Enhances awareness of cultural text produced in Spanish-speaking world. Not open to native speakers (with high school diploma from a Spanish-speaking country) or students with credit in Spanish 201, 202, 211, 282, 301, or a higher-numbered Spanish course. Replaces Spanish 201 and 211 for Preparation for the Major.

SPAN 282. Intermediate Spanish for Heritage Language Learners II (3) [GE]
Prerequisite: Spanish 281.
Continuation of Spanish 281. Not open to native speakers (with high school diploma from a Spanish-speaking country) or students with credit in Spanish 202, 212, 301, or a higher-numbered Spanish course. Replaces Spanish 202 and 212 for Preparation for the Major.

SPAN 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

SPAN 299. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES

(Intended for Undergraduates)

All upper division courses in Spanish are taught in Spanish unless otherwise stated.
No credit will be given for lower division courses taken after successfully completing any upper division Spanish course.

SPAN 301. Advanced Conversation and Reading (3)
Prerequisites: Spanish 202 and 212.
Continued development of oral communication and reading comprehension. Review of selected grammatical structures through use of literary and cultural materials. Some writing will be adjunct to reading. May be taken concurrently with Spanish 302. Not open to students with credit in Spanish 381 or 382.

SPAN 302. Advanced Conversation and Writing (3)
Prerequisites: Spanish 202 and 212.
Advanced practice at oral communication through conversations and public speaking. Practice of written Spanish through advanced composition. May be taken concurrently with Spanish 301. Not open to students with credit in Spanish 381 or 382.

SPAN 303. Advanced Business Spanish (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382.
Business vocabulary, basic business and cultural concepts, situational practice to conduct business in Spanish by preparing documents. Grammar review and development of cross-cultural awareness.

SPAN 340. Spanish Civilization (3) [GE]
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Spanish culture of the past and present, with emphasis on literature, philosophy, and the arts.

SPAN 341. Spanish American Civilization (3) [GE]
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Spanish American cultures, with emphasis on literature, philosophy, and the arts.

SPAN 342. Mexican Civilization (3) [GE]
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
The major currents and characteristics of Mexican culture, as expressed through the centuries in literature, philosophy, and the arts.

SPAN 350. Advanced Grammar (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382.
Significant systematic features of modern Spanish grammar. Required for credential applicants.

SPAN 381. Advanced Spanish for Heritage Language Learners (3)
Prerequisite: Spanish 282.
Develops oral abilities in diverse registers at advanced level of proficiency. Writing production in critical thinking. Enhances awareness of cultural texts from Spanish-speaking world. Replaces Spanish 301 and 302 for the Spanish major. Not open to students with credit in either Spanish 301 or 302.
SPAN 382. Academic Reading and Writing for Native Speakers of Spanish (3)
Prerequisite: High school diploma from Spanish-speaking country.
Reading and writing as preparation for advanced academic writing. Readings from a variety of genres to include fiction. Production of expository essays that demonstrate critical competence. Development of linguistic ability and syntactic organization. Transformation of simple, basic structures into complex writing. Replaces Spanish 301 and 302 for the Spanish major. Not open to students with credit in either Spanish 301 or 302.

SPAN 391. Spanish Enhancement for Translation and Interpretations (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382, and 350. Bridges gap between Spanish for communication and Spanish for work. Acquisition of translation and interpretation skills (active listening, text analysis, anticipation, memory, public speaking).

SPAN 395. Introduction to Literary Analysis (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Literary analysis of narrative, poetry, and theatre of Spanish-speaking world through study of rhetorical devices.

SPAN 401. Spanish Prose and Poetics (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382, and 395; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Students selectively assigned to legal firms, medical facilities, commercial establishments or public offices that deal routinely with English and Spanish translation and interpretation. Students work 15 hours weekly under joint supervision of site coordinators and instructor. Maximum credit six units.

SPAN 402. Spanish American Prose and Poetics (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382, and 395; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Spanish writers and works in a variety of literary genres.

SPAN 402A-402B. Survey Course in Spanish Literature (3-3) [GE]
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
A specifi c literary genre: overview of the genre’s development in Spanish literature (Spanish novel, short story, theatre) or focus on a narrower period (contemporary narrative, modern poetry). May be repeated with new title and content. See Class Schedule for specifi c content. Maximum credit six units.

SPAN 407. Advanced Business Spanish (3)
Prerequisites: Spanish 307; Spanish 301 and 302, or Spanish 381 or 382.
Vocabulary and discourse related to business topics and functional areas, goods and services, marketing, fi nance, foreign market entry, import-export. Geographic literacy and cultural understanding of Spanish-speaking world. (Formerly numbered Spanish 497.)

SPAN 448. Spanish Linguistics (3)
Prerequisite: Spanish 350.
Structural, historical, and applied Spanish linguistics.

SPAN 491. Introduction to Translation Studies (3)
Prerequisites: Spanish 350 and satisfaction of the Graduation Writing Assessment Requirement.
Theoretical grounding and practical problems of literary and nonliterary translation; linguistic and cultural obstacles; literary, legal, commercial, medical, social services lexicons in context.

SPAN 492. Translation Theory (3)
Prerequisite: Spanish 491.

SPAN 493. Advanced Spanish-English / English-Spanish Translation (3)
Prerequisites: Spanish 350 and 491.
Practicum involving methods and techniques in translation of legal or government papers, banking documents, and business contracts from Spanish into English and from English into Spanish. Practice in translation of old Spanish into English (deeds, surveys, baptismal records, manuscripts of books).

SPAN 495. Internship in Translation and Interpretation (3)
Prerequisites: Spanish 491 and consent of instructor.
Students selectively assigned to legal fi rms, medical facilities, commercial establishments or public offi ces that deal routinely with English and Spanish translation and interpretation. Students work 15 hours weekly under joint supervision of site coordinators and instructor. Maximum credit six units.

SPAN 496. Selected Studies in Spanish (3)
Topics in Spanish or Spanish American language, literature, culture, and linguistics. See Class Schedule for specifi c content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit six units.

SPAN 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units. This course is intended only for students who are currently enrolled in or who already have credit for all upper division courses in Spanish available in any given semester.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

SPAN 501. Genre Studies in Spanish Literature (3)
Prerequisites: Spanish 406A-406B.
A specifi c literary genre: overview of the genre’s development in Spanish literature (Spanish novel, short story, theatre) or focus on a narrower period (contemporary narrative, modern poetry). May be repeated with new title and content. See Class Schedule for specifi c content. Maximum credit six units.

SPAN 502. Genre Studies in Spanish American Literature (3)
Prerequisites: Spanish 406A-406B.
A specifi c literary genre: overview of the genre’s development in Spanish American literature (the Spanish American novel, short story, theatre) or focus on a narrower period (vanguardista poetry, the “Boom”). May be repeated with new title and content. See Class Schedule for specifi c content. Maximum credit six units.

SPAN 504. Don Quixote (3)
Prerequisite: Spanish 493.
A close reading of Cervantes’ novel Don Quixote, Parts I and II.

SPAN 515. Mexican Literature (3)
Prerequisites: Spanish 406A-406B.
A specifi c literary genre: overview of the genre’s development in Spanish American literature (the Spanish American novel, short story, theatre) or focus on a narrower period (vanguardista poetry, the “Boom”). May be repeated with new title and content. See Class Schedule for specifi c content. Maximum credit six units.

SPAN 540. Teaching of Spanish as a Second Language (3)
Prerequisite: Spanish 350 or 448.
Teaching of Spanish as a second language: contemporary theory and methods.
SPAN 594A. Consecutive English/Spanish Interpretation (3)
Prerequisite: Spanish 350 or 391.
Consecutive interpretation techniques focusing on current events to include notetaking technique for interpreters, preparation for meetings, language register, active listening, structure of a speech, abstracting meaning, sight translation in the booth.

SPAN 594B. Simultaneous English/Spanish Interpretation (3)
Prerequisite: Spanish 594A with a grade of B (3.0) or better.
Simultaneous interpretation techniques focusing on current events. Simultaneous, whispered, and relay interpretation, preparation for meetings, language register, listening, structure of a speech, abstracting, sight translation in the booth.

SPAN 596. Selected Studies in Spanish (3)
Prerequisite: Spanish 302 or 381 or 382.
Topics in Spanish or Spanish American language, literature, culture and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Special Education
In the College of Education

OFFICE: North Education 70
TELEPHONE: 619-594-6665
http://sdsu.edu/education/sped

Accredited by the California Commission on Teacher Credentialing.

Faculty
Emeritus: Brady, Cegelka, Doorlag, Forbing, Johnson, Kitano, Lewis, Lynch, McClard
Chair: Hall
Professors: Graves, Hall
Associate Professors: Brandon, Kraemer, McIntosh, Qian

Offered by the Department
Master of Arts degree in education.
Bilingual (Spanish) multiple subject and special education credential (refer to the Graduate Bulletin).

Education specialist credentials in special education.
Early childhood special education.
Mild/moderate disabilities.
Moderate/severe disabilities.
Certificate in behavior analysis (refer to the Graduate Bulletin).
Certificate in bilingual (Spanish) special education (refer to the Graduate Bulletin).
Certificate in developing gifted potential (refer to the Graduate Bulletin).
Certificate in early childhood special education authorization (refer to the Graduate Bulletin).

Courses (SPED)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

UPPER DIVISION COURSES
(Intended for Undergraduates)

SPED 450. Classroom Adaptations for Special Populations (2)
Strategies for adapting curriculum, differentiating instruction, meeting social and behavioral needs, and modifying assessments for students with disabilities and/or gifted and talented students in general education classrooms. Meets requirements for preliminary multiple and single subject teaching credentials.

SPED 496. Selected Topics in Special Education (1-4)
Prerequisite: Consent of instructor. Instructional sequences focusing on a single topic or competency dealing with special education. Topics differ each semester to adjust to current literature in the field, training needs, and resource availability. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

SPED 499. Special Study (1-3)
Prerequisite: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently. Individual study. Maximum credit six units.

SPED 500. Human Exceptionality (3)
Historical, philosophical, and legal aspects of special education that affect identification and programming for diverse learners with exceptionalities. Characteristics of individuals with special needs and implications for adapting living and learning environments. Meets special education mainstreaming requirement for all basic teaching credentials.

SPED 501. Typical and Atypical Learning Processes (3)
Prerequisites: Credit or concurrent registration in Special Education 500; concurrent registration in Special Education 502. Theory, research, and processes in learning in relation to individuals with disabilities. Foundations of learning, development, and intervention.

SPED 502. Field Experiences in General and Special Education (1) Cr/NC
Three hours of observation/participation per week. Prerequisite: Concurrent registration in Special Education 501. Observation and participation in general and special education classrooms and related school activities for students with disabilities.

SPED 505. Educational Services for Students with Serious Emotional Disturbance (1)
Prerequisite: Admission to credential program. Educational needs and services for students with serious emotional disturbance. Classroom interventions and procedures.

SPED 510. Adapting Communication Systems for Students with Severe Disabilities (1)
Prerequisite: Admission to credential program. Adaptations of communications and communication systems for students with disabilities. Educational strategies that special education teachers can use to augment classroom communications. Alternative approaches to communication for students with moderate/severe disabilities.

SPED 524. Characteristics of Students with Mild/Moderate Disabilities (3)
Prerequisite: Special Education 500. Historical and philosophical perspectives of programs related to students with mild/moderate disabilities. Research on educational programs, curricular approaches, and characteristics.

SPED 525. Characteristics of Students with Moderate/Severe Disabilities (3)
Prerequisite: Special Education 500. Historical and philosophical perspectives of programs related to students with moderate/severe disabilities. Research on educational programs, curricular approaches, and characteristics with emphasis on services in context of school reform.

SPED 526. Characteristics and Education of Students with Physical, Health, and Sensory Impairments (3)
Prerequisite: Admission to credential program. Historical and philosophical perspectives, characteristics, needs, and supports for individuals with physical, health, and sensory impairments in educational, home, and community settings. Implications of health concerns for programming.
SPED 527. Special Education in a Pluralistic Society (3)
Prerequisite: Credit or concurrent registration in Special Education 500.
Historical and philosophical perspectives of cultural pluralism in special education and programs related to diverse students with disabilities. Research on curricular approaches and instructional needs. Sociocultural aspects related to disability, race, ethnicity, gender, and language.

SPED 528. Young Children with Disabilities and Their Families (3)
Prerequisite: Special Education 500.
Characteristics, needs, and educational programs and services for infants, toddlers, and preschoolers with disabilities and their families. Legislative requirements, models of service delivery, recommended practices, and family diversity.

SPED 530. Issues in Autism (3)
Prerequisite: Admission to credential program.
Definition, etiology, assessment, and instructional practices used to address autism. Historical and current issues.

SPED 534. Classroom Assessment of Students with Mild/Moderate Disabilities (3)
Prerequisite: Admission to credential program.
Classroom assessment in general and special education for students with mild/moderate disabilities. Curriculum-based data collection strategies. Influences of cultural and linguistic diversity, and implications for curricular and instructional adaptations.

SPED 553. Behavioral Strategies and Supports for Students with Disabilities (3)
Prerequisite: Admission to credential program.
Positive behavioral supports for students with disabilities in general and special education settings. Current theories and programs in functional assessment and behavioral change. Applications in educational and community environments with diverse students.

SPED 560. Applications of Technology for Individuals with Disabilities (3)
Prerequisite: Admission to credential program.
Educational applications of current technologies for learners with disabilities. Selection, modification, and classroom use of technologies to improve or bypass physical, sensory, communicative, learning, and social limitations.

SPED 596. Selected Topics in Special Education (1-4)
Specialized study of selected topics in special education. May be offered as either a workshop or lecture/discussion. May be repeated with new content. See Class Schedule for specific content. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Speech, Language, and Hearing Sciences

In the College of Health and Human Services

OFFICE: Speech, Language, and Hearing 221
TELEPHONE: 619-594-7746 / FAX: 619-594-7109

Accredited in speech-language pathology and audiology by the Council on Academic Accreditation in Audiology and Speech-Language Pathology.

Faculty
Emeritus: Allen, Cheng, Christensen, Davies, Gutierrez-Cielen, Nichols, Riedman, Seitz, Thal, Thile, Williams, Wulfeck
Director: Shapiro
Professors: Barlow, Emmorey, Kramer, Love-Geffen, Mackersie, Newhoff, Shapiro
Associate Professors: Dreisbach Hawe, Nip, Pruitt-Lord, Torre, III
Assistant Professors: Blumenfeld, Mills
Lecturers: Branch, Dorrcott, Georgeson, Lopes, Schmitz, Turner

Offered by the School
Doctor of Philosophy degree in language and communicative disorders.
Doctor of Audiology.
Master of Arts degree in speech language, and hearing sciences.
Major in speech, language, and hearing sciences with the B.A. degree in liberal arts and sciences.
Certificate in bilingual speech-language pathology (refer to the Graduate Bulletin).

Speech language pathology credential.

The Major
The School of Speech, Language, and Hearing Sciences is committed to preparing speech-language-hearing professionals to meet the challenges of a racially, ethnically, and linguistically diverse society. There are limited employment opportunities for holders of the bachelor’s degree; the bachelor's degree in speech, language, and hearing sciences serves as the basis for graduate and professional study in speech, language, and hearing sciences. A master's or professional doctoral degree, national certification and/or state licensure or school credential are needed for professional practice in areas such as speech-language pathology, audiology, teaching American Sign Language (ASL) as a second language, ASL linguistics, and ASL interpreting. A research doctorate (Ph.D.) is required for individuals wishing a research and teaching career at the university level.

Speech-language pathology and audiology are professions that identify, help, and study persons with communicative disorders. Those entering these professions should possess a strong motivation to help individuals with genetically, physically, or psychologically caused communication problems. Preparation involves acquiring the knowledge and skills necessary to assume responsibility for assessment, education and rehabilitation of persons with speech, language, and hearing disorders.

The master's degree is an advanced degree for those wanting to work professionally as a speech-language pathologist. A professional doctorate is required for those wanting to work professionally as an audiologist. Positions in speech, language, and hearing sciences are available in many public and private settings working with persons with speech, language, hearing, and deaf-blind disorders. Graduates with certification or licensure work in rehabilitation centers, schools, hospitals, private agencies, private practice, industry, research, and university teaching and research centers. Career opportunities are particularly good for minority, bilingual or bicultural persons.

The undergraduate curriculum is broad; involving coursework on normal and disordered speech, language, and hearing, as well as clinical procedures. Students interested in the speech, language, and hearing sciences program are advised to take college level courses in anatomy, biology, psychology, English, physiology, linguistics, physics, and mathematics. Studies leading to private practice, hospital work, industrial work, work in school settings, or preparation for graduate work are similar in many ways; it is the area of specialization that serves to differentiate courses of study.

Impacted Program
The speech, language, and hearing sciences major is an impacted program. To be admitted to the speech, language, and hearing sciences major, students must meet the following criteria:

a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.75.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Speech, Language, and Hearing Sciences Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 12203) (SIMS Code: 550107)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in speech, language, and hearing sciences courses can apply to the degree.

A minor is not required with the major.

Preparation for the Major
Speech, Language, and Hearing Sciences 101, 106, 150; Biology 100; Psychology 101 and 260; Psychology 280 (Sociology 201, Statistics 119 or 250 can be substituted for Psychology 280). (23 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience. All speech, language, and hearing sciences majors are required to participate in an international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course and community service activity in the U.S. will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.
To meet the international experience requirement, majors must complete one of the following:
1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;

**Major.** Speech, Language, and Hearing Sciences 300, 305, 320, 321, 340, 340L, 512, 513, 514, 539, and 580. (33 units)

Students pursuing a graduate degree should consult the Graduate Bulletin for required undergraduate preparation.

**Time Limitation.** All courses for the major must be completed within seven years for the granting of the undergraduate degree. Any course completed more than seven years prior to the date on which all requirements for the degree are completed cannot be used to satisfy unit requirements for the degree. Exceptions for individual courses must be approved by the department and filed with the Office of Advising and Evaluations.

**Credential**

The School of Speech, Language, and Hearing Sciences offers academic and practica coursework applicable to the Speech Language Pathology (SLP) Credential (Credential Code: 00900), required for working in California public schools.

Applicants to a credential program are required to submit scores from the California Basic Education Skills Test (CBEST) as part of the application for admission to a credential program. Note that the CBEST is given only three or four times each year.

Credential candidates are required to have the Certificate of Clearance (finger printing) prior to beginning the school experience. Candidates should apply for the Certificate of Clearance several months prior to submitting an application to the school for public school practicum placement in order for the certificate to be processed in time for the placement.

**Speech Language Pathology (SLP) Credential in Language, Speech, and Hearing (Credential Code: 00900)**

Students desiring to work with pupils with speech-language and hearing impairments on an itinerant or pull-out basis must complete the Speech Language Pathology (SLP) Credential in Language, Speech, and Hearing (LSH). A master’s degree in speech, language, and hearing sciences is required of all candidates graduating with a SLP credential. Candidates for SLP credential in Language, Speech, and Hearing (LSH) must complete the requirements for the Certificate of Clinical Competence in Speech Pathology or Audiology by the Council on Academic Accreditation in Speech-Language Pathology and Audiology by the Council on Academic Accreditation in Audiology and Speech-Language Pathology. The certificate requires a professional doctorate in audiology (refer to Graduate Bulletin), a master’s degree in speech-language pathology, and specialized clinical experiences. The applicant must pass a national examination in the area for which the certificate is sought and complete a Clinical Fellowship (following approval of academic coursework and clinical practica). Consult an adviser in the area in which certificate is desired.

**Admission Requirements:**
1. Formal application to San Diego State University and to the School of Speech, Language, and Hearing Sciences. All applicants for the credential must satisfy the admission requirements of the university and of the school for classified graduate standing and be recommended by the school for admission to the credential program.
2. California Basic Education Skills Test (CBEST) results.
3. Interview with the coordinator of the Language, Speech and Hearing credential.

**Program Requirements:**
1. The credential program requires a master’s degree in Speech-Language Pathology.
2. The following courses are also required: Speech, Language, and Hearing Sciences 525, 546 (or transcript credit in an equivalent course), 618A and/or 619, 618B, 626A, 626B, 626C, 627, 929, 933.
3. The program of professional preparation for the SLP Credential in Language, Speech, and Hearing requires a minimum of 75 semester credit hours, including a minimum of 27 semester credit hours in basic sciences and a minimum of 36 semester credit hours in professional coursework. At least 30 of the 36 semester credit hours must be in courses for which graduate credit is received, and at least 21 of the 30 graduate semester credit hours must be in the professional area for which the credential is sought. The candidate must complete a minimum of 25 supervised observation hours and 350 clinical contact hours including 50 clock hours in each of three types of clinical setting. This credential also requires that a minimum of 100 clock hours be completed in the school setting. See the section on Certificates and the Credential Coordinator for additional information.

**Certificates and Licensure**

**Preparation Leading to the Certificate of Clinical Competence in Speech-Language Pathology and Audiology by the Council on Academic Accreditation in Audiology and Speech-Language Pathology**

Students may complete the academic and clinical practice requirements leading to the Certificate of Clinical Competence in Speech-Language Pathology (CCC-Sp) or to the Certificate of Clinical Competence in Audiology (CCC-A) given by the Council on Academic Accreditation in Audiology and Speech-Language Pathology. The certificate requires a professional doctorate in audiology (refer to Graduate Bulletin), a master’s degree in speech-language pathology, and specialized clinical experiences. The applicant must pass a national examination in the area for which the certificate is sought and complete a Clinical Fellowship (following approval of academic coursework and clinical practica). Consult an adviser in the area in which certificate is desired.

**Preparation Leading to State Licensure in Speech Pathology or Audiology**

Students may complete the academic and clinical practicum requirements leading to California State Licensure in Speech Pathology or in Audiology, a legal requirement for all individuals professionally employed in non-public school settings and some public school settings. The Speech Pathology and Audiology Examining Committee which operates within the California State Board of Medical Quality Assurance requires a master’s degree or equivalent in speech, language, and hearing sciences in the area (Speech Pathology or Audiology) in which the license is to be granted, 300 clock hours of supervised clinical experience, a national examination, and nine months of full-time supervised work experience (Required Professional Experience). For audiology, the fourth year externship satisfies the Required Professional Experience. Most Licensure and ASHA Certification requirements may be fulfilled concurrently. Consult an adviser in the area in which licensure is desired for specific information.

**High School Equivalents**

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:
1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
Speech, Language, and Hearing Sciences

Courses (SLHS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES

SLHS 101. American Sign Language I (4) [GE]
American Sign Language structure, use, literature, and deaf culture. Introductory level communication competence in ASL.

SLHS 106. Introduction to Speech, Language, and Hearing Sciences (3)
Orientation to field of speech-language pathology and audiology, to include scope of practice, professional issues, and research in speech, language, and hearing sciences.

SLHS 150. Sign Languages and Deaf Culture (3) [GE]
Orientation to field of speech-language pathology and audiology, to include scope of practice, professional issues, and research in speech, language, and hearing sciences.

SLHS 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

SLHS 300. Introduction to Language Science (3)
Structure, acquisition, processing, and neurological organization of language in typical and disordered communication.

SLHS 305. Hearing Science (3)
Prerequisite: Credit or concurrent registration in Speech, Language, and Hearing Sciences 106. Concepts of hearing science. Hearing science components to include physical acoustics, anatomy and physiology of auditory system, and psychoacoustics.

SLHS 320. Phonetics (3)
Two lectures and three hours of laboratory. Principles of speech production and practical skills in discriminating and transcribing sounds of various dialects in English and other languages, as well as clinical populations. Competency in IPA broad and narrow transcription, classification of speech sounds, and patterns of speech.

SLHS 321. Anatomy and Physiology of Speech (4)
Three lectures and three hours of laboratory. Prerequisite: Consent of instructor. Anatomy and physiology of respiratory, phonatory, and articulatory systems related to speech.

SLHS 340. Principles of Audiology (3)
Prerequisites: Speech, Language, and Hearing Sciences 305 with a grade of C (2.0) or better and concurrent registration in Speech, Language, and Hearing Sciences 340L. Proof of completion of prerequisites required: Copy of transcript. Diagnostic audiology procedures: Pure-tone testing, masking, speech recognition testing and immittance. Integration and interpretation of results from the basic audiological test battery.

SLHS 340L. Techniques of Audiology (1)
Three hours of laboratory. Prerequisite: Credit or concurrent registration in Speech, Language, and Hearing Sciences 340. Laboratory experience with pure-tone, speech, and immittance audiometric tests.

SLHS 496. Topics in Speech, Language, and Hearing Sciences (1-4)
Study of some problem in speech, language, and hearing sciences. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

SLHS 499. Special Study (1-3)
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

SLHS 503. Advanced Speech Physiology (3)
Prerequisites: Speech, Language, and Hearing Sciences 320 and 340. Methodology used to evaluate speech physiology in normal and disordered populations. Discussion of characteristics and etiologies of various speech disorders.

SLHS 511. Aural Rehabilitation (3)

SLHS 512. Phonological Acquisition and Disorders (3)
Prerequisite: Speech, Language, and Hearing Sciences 320 with a grade of C (2.0) or better. Proof of completion of prerequisite required: Copy of transcript. Phonology, phonological development, and phonological disorders as they relate to basic linguistic theory. Concepts considered through critical thinking and problem-solving.

SLHS 513. Foundations of Speech-Language: Development (4)
Prerequisites: Speech, Language, and Hearing Sciences 300, 321, and credit or concurrent registration in Speech, Language, and Hearing Sciences 300. Speech-language development as related to theories of language acquisition, development, and clinical practice in children from birth to school-age.

SLHS 514. Foundations of Speech-Language: Differences and Disorders in Children (3)
Prerequisite: Speech, Language, and Hearing Sciences 513. Speech and language disorders and issues related to assessment of and intervention with children from culturally and linguistically diverse populations.

SLHS 521. Speech-Language Screening of Children (1) Cr/NC
Three hours of laboratory. Prerequisite: Consent of instructor. Screening speech and language of children in various community facilities and settings.

SLHS 525. Clinical Processes (1-2) Cr/NC
Prerequisite: Consent of instructor. Experience in writing lesson plans and clinical reports. Clinical observation to partially fulfill requirements for certification. Maximum credit five units.

SLHS 539. Neuroanatomy and Disorders of Speech and Language (3)
Three hours of laboratory screening per week. Prerequisites: Speech, Language, and Hearing Sciences 150, 300, 305, and 321. Structural and functional neuroanatomy and disorders of speech and language resulting from pathology of the nervous system.

SLHS 546. Clinical Issues in Aural Rehabilitation (2)
Prerequisite: Consent of instructor. Clinical issues, policies, and methods in speech-language pathology. Experience in writing lesson plans and clinical reports. Clinical observation to partially fulfill requirements for certification. Maximum credit five units.

SLHS 570. Dysphagia (4)
Prerequisite: Consent of instructor. Measurement techniques and research in dysphagia. Assessment and treatment of dysphagia and swallowing problems in children and adults.
SLHS 580. Communication Processes and Aging (3)
Prerequisite: Twelve upper division units in an appropriate major.
Normal and disordered communication processes in the aging.
SLHS 590. Seminar in Research Foundations of Speech, Language, and Hearing Sciences (3)
Prerequisites: Consent of instructor and a grade of B+ or better in Speech, Language, and Hearing Sciences 325, 320, 513. Open only to senior speech, language, and hearing sciences majors. Graduate students may not use this course toward program of study.
Specialized study of selected topics in speech, language, and hearing sciences.
SLHS 595. Research Practicum (1-3)
Prerequisites: Consent of instructor and approval of school chair.
Participation in a specific research activity under faculty supervision. Maximum combined credit of six units of Speech, Language, and Hearing Sciences 595 and 795.

SLHS 596. Selected Topics in Speech, Language, and Hearing Sciences (1-4)
Prerequisites: Twelve units in speech, language, and hearing sciences courses.
Specialized study of selected topics from the area of speech-language pathology, audiology, education of the hearing impaired, and speech and hearing science. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.
Statistics
In the College of Sciences

OFFICE: Geology/Mathematics/Computer Science 413
TELEPHONE: 619-594-6191

Faculty
Emeritus: Burdick, Macky, Park, Romano
Chair: O’Sullivan
Coordinator for Statistics: Lui
Professors: Fan, Levine, Lui
Associate Professors: Bailey, Chen, Lin
Assistant Professor: Duncan
Lecturers: Manchester, Noble

Offered by the Department of Mathematics and Statistics

Master of Science degree in statistics.

Major in statistics with the B.S. degree in applied arts and sciences.

Emphasis in actuarial science.

Emphasis in statistical computing.

Minor in statistics.

The Major

Statistics is the discipline at the heart of the scientific method of discovery. Statistical principles are used in designing experiments and studies to obtain reliable results, to predict and evaluate risk, to optimize decisions, and to assess the impact of policy decisions. Statistical methods are used for studying relationships, making predictions, testing hypotheses, and a variety of other purposes.

The Bachelor of Science degree in statistics is designed to provide students with a fundamental understanding of probability and mathematical statistics, a complementary knowledge of basic methods for data collection and inference, and practical computing skills to carry out statistical analyses of problems in many different areas of application.

One option within the major allows students with a strong interest in statistical or biostatistical aspects of a particular science to apply courses in that science to their major. This option should provide the interested student with a good background for employment or graduate work in statistics, biostatistics, or in that science. Emphases in actuarial science and statistical computing enable students to pursue further specializations aligned with professional opportunities in these areas.

Statistics is the discipline at the heart of the scientific method of discovery. Statistical principles are used in designing experiments and surveys to collect information, and statistical procedures are applied to summarize information, draw conclusions, and make decisions.

Because of the broad applicability of their training in statistical reasoning and data analysis, undergraduate majors are prepared for careers in diverse fields – such as biotechnology, environmental science, insurance, industrial manufacturing, and market research – in which the need for professionally trained statisticians is great.

Graduates who seek to acquire additional skills in applied or theoretical statistics may also consider programs of advanced study at the master’s or doctoral level. Statisticians with advanced degrees are sought for senior positions in industry and government, as well as teaching positions in secondary schools, community colleges, and universities.

Impacted Program

The statistics major and emphases are impacted programs. To be admitted to the statistics major or an emphasis, students must meet the following criteria:

- Complete preparation for the major;
- Complete a minimum of 60 transferable semester units;
- Have a minimum cumulative GPA of 2.0.

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their major and to identify which General Education course will also fulfill a major preparation course requirement.

Statistics Major

With the B.S. Degree in Applied Arts and Sciences

(Major Code: 17021) (SIMS Code: 776371)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

A minor is not required with this major.

Upon entry to the program, the student will be assigned to an undergraduate adviser in statistics. Thereafter, the student will meet with the adviser each semester and discuss his or her academic program. A program of study must be approved by the undergraduate adviser in statistics.

In addition to meeting the requirements for undergraduate standing and the basic requirements for the bachelor of science degree as described in this catalog, the student must complete a Graduation Writing Assessment Requirement and must complete a minimum of 60 units of coursework as described below.

Preparation for the Major. Statistics 119 or 250; Mathematics 150A, 150B, 245, 254. (17 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Additional Lower Division Coursework Required. Mathematics 320, 321, 327; six units selected from Statistics 325, 496, 510, 560, 596; nine units selected from Finance 421, 427, or an approved course.

Major Plan. The student must complete these courses before being allowed to register for the upper division finance courses.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Statistics 350A, 350B, 510, 551A, 551B; nine units selected (with the approval of the undergraduate adviser in statistics) from Statistics 325, 496, 520, 560, 575, 580, 596; 12 upper division units in statistics, mathematics (excluding Mathematics 302, 303, 312, 313, 414), computer science, or a science of application (selected with the approval of the undergraduate adviser in statistics).

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the Office of Advising and Evaluations.

Emphasis in Actuarial Science

Additional Lower Division Courses Required. Mathematics 150A, 150B, 245, 252, 254. (33 units)

Major. A minimum of 36 upper division units to include Statistics 350A, 350B, 510, 551A, 551B, 575; Business Administration 323; Economics 320, 321; Finance 327; three units selected from Statistics 325, 496, 510, 560, 596; six units selected from Finance 421, 427, or an appropriate course selected with the approval of the undergraduate adviser in statistics.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the Office of Advising and Evaluations.
Emphasis in Statistical Computing  
(SIMS Code: 776373)  
Modern day statistics applications require heavy computing for manipulating massive data sets, mining immense databases, and implementing computationally intensive data analytic tools to solve complex scientific problems. This emphasis is designed to prepare students for careers in statistics by providing them with the data analytic and computational machinery needed to excel in all avenues of statistical science during an information age where statistical computing plays a crucial role. Students completing this emphasis would also be well prepared for graduate study in statistical computing and statistics.

Preparation for the Major. Statistics 250, Mathematics 150, 151, 245, 252, 254, Computer Science 107, 108. (27 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 39 upper division units to include Statistics 325, 350A, 510, 551A, 551B, 580; Mathematics 541, Computer Science 310, 320; six units selected (with the approval of the undergraduate adviser in statistics) from Computer Science 503, 514, 520, 550, 553, 558, 559, 560; six upper division units in statistics, computer science, or a science of application with a heavy statistical computing component (selected with the approval of the undergraduate adviser in statistics).

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the Office of Advising and Evaluations.

Statistics Minor  
(SIMS Code: 776369)  
The minor in statistics consists of a minimum of 15 units in statistics to include Statistics 250 (or equivalent), 350A, 350B or 510, and six units of upper division electives in statistics. For Statistics 550 and 551A, students must satisfy lower division calculus and linear algebra prerequisites (Mathematics 151, 252, and 254 as appropriate).

The minor program includes a combination of courses in applied statistical methods, computer-oriented data analysis, probability, and mathematical statistics, which can be tailored to the student’s major, academic, or professional interests. For example, business students interested in actuarial science may wish to consider a minor comprising Statistics 350A, 350B, 551A, and 551B. Students in the social, behavioral, and natural sciences who are particularly interested in applications and data analysis may wish to consider a minor comprising Statistics 350A, 350B, 510, and 520.

Students considering a minor in statistics are encouraged to consult with their major adviser and with the minor adviser in statistics. Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed at San Diego State University.

Courses (STAT)  
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

LOWER DIVISION COURSES  
NOTE: Proof of completion of Entry-Level Mathematics requirement required for Statistics 119 and 250: Copy of ELM score or verification of exemption.

STAT 119. Elementary Statistics for Business (3) [GE]  
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.  
Measures of central tendency and variability, frequency distributions; probability, Bayes theorem, probability distributions (including binomial, hypergeometric, and normal), sampling distributions, confidence intervals, significance testing, regression and correlation. Statistics 119A is designed to be taken concurrently for students who may need additional review. Not open to students with credit in Statistics 250. Students with credit or concurrent registration in the following lower division statistics courses other than Statistics 250 will be awarded a total of four units for the two (or more) courses: Statistics 119; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Economics 201; Political Science 201; Psychology 280; Sociology 201.

STAT 119A. Recitation for Elementary Business Statistics (1) Cr/NC  
Prerequisite: Concurrent registration in Statistics 119.  
Additional problem solving, data analyses, statistical concept discussions, and applications.

STAT 250. Statistical Principles and Practices (3) [GE]  
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.  
Descriptive statistics, data displays, measures of central tendency and variability, random variables, sampling distribution. Estimation and hypothesis tests for means and proportions, linear regression and correlation. Not open to students with credit in Statistics 119. Students with credit or concurrent registration in the following lower division statistics courses other than Statistics 119 will be awarded a total of four units for the two (or more) courses: Statistics 250; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Economics 201; Political Science 201; Psychology 280; Sociology 201.

STAT 296. Experimental Topics (1-4)  
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

STAT 299. Special Study (1-3)  
Prerequisite: Consent of instructor.  
Individual study. Maximum credit six units.
**UPPER DIVISION COURSES**  
(Intended for Undergraduates)

**NOTE:** Proof of completion of prerequisites required for all upper division courses: Copy of transcript.

**STAT 325. SAS Programming and Data Management (3)**  
Prerequisite: Statistics 250 or comparable course in statistics. Entry, management, and summary of statistical data using SAS programming language. Data structures and manipulation, screen editing, visual displays, macros, related topics.

**STAT 350A. Statistical Methods (3)**  
Prerequisite: Statistics 250 or comparable course in statistics. One- and two-sample hypothesis tests, paired difference tests, tests for variances, analysis of variance. Linear regression and correlation, Chi-square tests. Simple nonparametric tests. Power of hypothesis tests.

**STAT 350B. Statistical Methods (3)**  
Prerequisite: Statistics 350A. Multiple regression, factorial models and nonparametric methods, all with emphasis on applications.

**STAT 496. Experimental Topics (1-4)**  
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

**STAT 499. Special Study (1-3)**  
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

**UPPER DIVISION COURSES**  
(Also Acceptable for Advanced Degrees)

**NOTE:** Proof of completion of prerequisites required for all upper division courses: Copy of transcript.

**STAT 510. Applied Regression Analysis (3)**  
Prerequisite: Statistics 350A or comparable course in statistics. Methods for simple and multiple regression models, model fitting, variable selection, diagnostic tools, model validation, and matrix forms for multiple regression. Applications of these methods will be illustrated with SAS, SPSS, and/or R computer software packages.

**STAT 520. Applied Multivariate Analysis (3)**  
Prerequisite: Statistics 551A. Multivariate normal distribution, multivariate analysis of variance, principal components, factor analysis, discriminant function analysis, classification, and clustering. Statistical software packages will be used for data analysis.

**STAT 550. Applied Probability (3)**  
Prerequisites: Mathematics 151 and 254. Computation of probabilities via enumeration and simulation, discrete and continuous distributions, moments of random variables, Markov chains, counting and queuing processes, and selected topics.

**STAT 551A. Probability and Mathematical Statistics (3)**  
Prerequisite: Mathematics 252. Discrete and continuous random variables, probability mass functions and density functions, conditional probability and Bayes’ theorem, moments, properties of expectation and variance, joint and marginal distributions, functions of random variables, moment generating functions, special distributions and sampling distributions.

**STAT 551B. Probability and Mathematical Statistics (3)**  
Prerequisite: Statistics 551A. Point and interval estimation and hypothesis testing in statistical models with applications to problems in various fields.

**STAT 560. Sample Surveys (3)**  
Prerequisite: Statistics 550 or 551A. Methods for design and analysis of sample surveys with applications to social and biological sciences. Simple random sampling, stratification and clustering, ratio and regression estimators, subsampling, selected topics in survey methodology.

**STAT 570. Stochastic Processes (3)**  
Prerequisite: Statistics 551A. Introduction to stochastic processes with selected applications.

**STAT 575. Actuarial Modeling (3)**  
Prerequisite: Statistics 550 or 551A. Actuarial models and applications of probability and statistics to insurance and other financial risks. Utility theory, risk models, compound processes, survival distributions and life tables, life insurance, annuities and benefits.

**STAT 580. Statistical Computing (3)**  
Two lectures and two hours of activity. Prerequisite: Statistics 551B. Machine computation in development, application, and evaluation of advanced statistical techniques. Floating arithmetic and algorithm stability; numerical methods for parameter estimation (including maximum likelihood) and multivariate probability integration; simulation and other computer-intensive statistical techniques.

**STAT 596. Advanced Topics in Statistics (1-4)**  
Prerequisite: Consent of instructor. Selected topics in statistics. May be repeated with the approval of the instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

**GRADUATE COURSES**  
Refer to the Graduate Bulletin.
Sustainability

In the College of Arts and Letters

OFFICES: Arts and Letters 417
TELEPHONE: 619-594-0978
E-MAIL: mlauer@mail.sdsu.edu

Faculty

Faculty assigned to teach sustainability courses are drawn from the colleges at San Diego State University. The program is housed in the College of Arts and Letters.

Program Co-Directors and Undergraduate Advisers: David Carruthers (Political Science) and Matthew Lauer (Anthropology)

Committee: Alcosser (English and Comparative Literature), Atterton (Philosophy), Biggs (Geography), Conway (Anthropology), Elkind (History), Larom (Asian and Pacific Studies), Richelson (Geography), Sasidharan (Recreation and Tourism Management)

Offered by Sustainability

Major in sustainability with the B.A. degree in liberal arts and sciences.

The Major

The major in sustainability focuses on the interface of human and natural systems. Students gain an understanding of sociopolitical, historical, philosophical, moral, and scientific aspects of environmental problems. Students take courses in the humanities, the social sciences, and the natural sciences, and have the flexibility to concentrate their studies in one or more of these areas. Emphasis is placed on strong writing, research, quantitative skills, and broad liberal arts perspective. The curriculum emphasizes the study of cultural, historic, social, economic, political values and forces that shape resource use and constrain responses to sustainable development. Students are engaged to define sustainability in its various uses, evaluate international debates about the meaning of this term, and the goals of sustainability movements. The program takes an interdisciplinary approach to local, regional, and global environmental issues. This approach fosters systems-thinking skills, written and verbal communication skills, quantitative and qualitative skills, analytic and problem-solving skills. These skills combined with knowledge of foundational scientific principles, an understanding of the human and social contexts of environmental problems, and the policy and decision making contexts within which these problems are reckoned are consistent with careers focused on sustainability; the improvement of problem-solving skills. These skills combined with knowledge of foundational scientific principles, an understanding of the human and social contexts of environmental problems, and the policy and decision making contexts within which these problems are reckoned are consistent with careers focused on sustainability; the improvement of

Advising

Students are required to meet with an undergraduate adviser in order to declare the major. All students admitted to the university with a declared major in sustainability are urged to meet with an undergraduate adviser either prior to or during their first semester.

Impact Program

The sustainability major is an impacted program. To be admitted to the sustainability major, students must meet the following criteria:

a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Sustainability Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 49101) (SIMS Code: 117001)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units of sustainability courses can apply to the degree.

A minor is not required with this major; however, it is recommended that majors in sustainability consider a minor in an area of expertise that helps to ground interdisciplinary work in a focused area or discipline. It is also recommended that students secure competency in a chosen region and/or culture, tied to their choice of foreign language and study abroad experience.

Individual master plans are filed with the sustainability undergraduate adviser.

Preparation for the Major. Sustainability 100 [or Environmental Science 100], Economics 102; Geography 101, and Economics 201 or Political Science 201 or Psychology 280 or Sociology 201 or Statistics 119 or 250; three units from Geography 104 or Professional Studies and Fine Arts 100. (15-16 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience Requirement. All sustainability majors are required to complete an international experience. This may involve a study abroad program, student exchange, international internship, coursework abroad, summer program, international volunteer program, or other international activity approved by the undergraduate adviser. In consultation with the undergraduate adviser, when appropriate or when accredited coursework in involved, the international experience can waive three units of the field distribution. See the undergraduate adviser to make arrangements to meet the international experience requirement.

Major. A minimum of 33 upper division units to include Sustainability 400 or 495 (three units), 12 units of integrative core courses: Sustainability 332 [or Philosophy 332]; Sustainability 353 [or Anthropology 353]; Biology 315 or Geography 370; History 441 or Sustainability 334 [or Political Science 334]; and 18 units selected from three of the following fields, at least nine units of which must be 500-level courses.

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Field A, Human-Nature Interface: Anthropology 510, Comparative Literature 570, Economics 455, English 305, 491 (with relevant content), History 584, International Security and Conflict Resolution 310, Philosophy 496 (with relevant content), Psychology 310, Religious Studies 376, Women's Studies 540. (3-9 units)


Field C, Scientific and Analytical Thinking: Biology 324, 327, 538 [or Environmental Science 538], 540, Economics 455, 456, Geography 375, 409, 483, 506, 570, 572, 573, 574, Geological Sciences 305, Public Health 304, 362. (3-9 units)

With the exception of Biology 315 and Geography 370, courses not selected for the core may be used in field distribution A: History 441, Sustainability 332 [or Philosophy 332].

Courses (SUSTN)

Lower Division Courses

SUSTN 100. Environmental Sciences (3) [GE]
(Same course as Environmental Science 100)
The earth as an ecosystem composed of biological, chemical, and physical systems and how these systems interact with one another and the human population.

SUSTN 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

Upper Division Courses (Intended for Undergraduates)

SUSTN 332. Environmental Ethics (3) [GE]
(Same course as Philosophy 332)
Prerequisite: Completion of General Education requirement in Foundations of Learning II.C., Humanities.
Development of traditional values concerning the natural environment. Reasons for altering values in light of modern changes in relationship of human beings to the environment. Application of ethical principles to actions affecting the environment.

SUSTN 334. Politics of the Environment (3) [GE]
(Same course as Political Science 334)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Environmental politics and policy in historical and comparative non-dominant perspective. Alternative environmental world views, cases/materials on sustainability, climate change, social and racial justice, globalization and developing nations.

SUSTN 353. Sustainability and Culture (3) [GE]
(Same course as Anthropology 353)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
Examination of efforts of anthropology to understand sustainability and provide solutions to human-environmental problems. Comparing and explores sustainability in a variety of contexts and scales, from San Diego region to diverse communities around the world.

SUSTN 400. Sustainability Capstone (3)
Prerequisites: Senior standing and completion of core courses for the major.
Capstone course for sustainability major. Completion of research project based on coursework and study abroad experience: applying knowledge of ecologic, economic, and social interactions to real-world problems.

SUSTN 495. Internship in Sustainability (1-3)
Prerequisites: Sustainability 334 [or Political Science 334] and Sustainability 353 [or Anthropology 353].
Supervised internship in campus, community, or international organizations, government agencies, or businesses where concepts and principles of sustainability can be learned experientially and put into practice. Maximum credit three units.

SUSTN 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

SUSTN 499. Special Study (1-6)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.
In the College of Education

SCHOOL OF TEACHER EDUCATION:
Education and Business Administration 255
TELEPHONE: 619-594-6131 / FAX: 619-594-7828
http://go.sdsu.edu/education/ste/Default.aspx

A Member of the American Association of Colleges for Teacher Education. Accredited by the California Commission on Teacher Credentialing and the National Council for Accreditation of Teacher Education.

Faculty
Emeritus: Ackerly, Alger, Bee, Berg, Bobkin, Burnside, Charles, Cornejo, Curry, Duckworth, Elliott, Erickson, Fearn, Garrison, Gast, Gega, Goodson, Hild, Hovda, Ingmanson, Kastz, Kelly, Kendall, Lapp, Lujan, Mason, McCormack, McCoy, Mehaffy, Mikitka-Gomez, Mora, Moreno, Moss, Murphy, Nagel, A., Nagel, T., Platz, Reel, Retson, Riggins, Roman, Ross, P., Shaw, Stautland, Strom, Tran, Treadway, Wilding, Zozakiewicz
Director: Bezuk
Professors: Bezuk, Chizhik, A., Danforth, Evans, Farnan, Gallego, Gibson, Lamb, Neumann (IVC), Pang, Park, Philipp
Associate Professors: Branch, Cappello, Chizhik, E., Duesbery, Nieto, Ponce (IVC), Ross, D., Santa Cruz, Vaughn
Assistant Professors: Soto, Sterling Aquino
Lecturers: Littrell, Prime, Telfer

Offered by the School
Master of Arts degree in education.
Master of Arts degree in mathematics education (K-8).
Master of Arts degree in reading education.
Master of Arts in Teaching degree.
Clear program for a professional clear credential
Induction program for a professional clear credential.
Multiple subject preliminary teaching credential.
Reading/language arts specialist credential.
Single subject preliminary teaching credential.
Linked learning certificate (refer to the Graduate Bulletin).
Mathematics specialist certificate (refer to the Graduate Bulletin).
Reading certificate (refer to the Graduate Bulletin).

The Credentials
Students in California's public schools reflect a wide variety of ethnic, linguistic, and cultural backgrounds. The School of Teacher Education is committed to preparing teachers to ensure the academic success of all students. Candidates from underrepresented groups are strongly encouraged to apply.

The Multiple Subject Credential qualifies graduates to teach in any K-12 self-contained classroom (a classroom where one teacher is responsible for teaching in all subject fields). For most, this means an elementary or middle school setting but does not preclude an alternative school or school-within-a-school (e.g., pregnant teen) setting. The credential programs include a study of educational psychology plus a variety of methods courses in subjects commonly taught in elementary schools.

A variety of program options are available to credential candidates. Daytime commitments are required for student teaching placements. Examinations and/or coursework prerequisite to program admission, if not completed within the undergraduate degree program, may extend the total time commitment for credential issuance.

The Single Subject Credential qualifies graduates to teach in grades K-12 in a specific subject area. Most candidates prepare to teach in grades 7-12 (usually junior or senior high school) or in a middle school setting (usually grades 6-8). Students in the program follow a sequence of courses which normally takes two semesters to complete. The first semester of the program emphasizes curriculum theory and development, educational research, and foundations of education and includes a part-time student teaching experience. The second semester focuses on a full-time student teaching experience and accompanying seminar. The program requires a daytime commitment. A three semester program is also available. This program provides more flexibility for students who have additional responsibilities. Coursework in this program is offered in the late afternoon and evening. Examinations and/or coursework prerequisite to program admission, if not completed within the undergraduate degree program, may extend the total time commitment for credential issuance.

Multiple Subject (SB 2042) Credential
(Elementary Education) (Credential Code: 00200)

Multiple Subject – Preliminary Credential
Persons interested in teaching in the traditional elementary school will typically pursue the Multiple Subject credential which authorizes teaching service in self-contained classrooms in preschools, grades K-12, and in classes organized primarily for adults (classrooms in which one teacher is responsible for all the subjects commonly taught). Recommendation for this credential requires:

1. A baccalaureate or higher degree.
2. Completion of an approved program of professional education, including student teaching and coursework in reading methods with a grade point average of 3.0 or higher.
3. Basic skills competency as demonstrated through passing scores on the California Basic Educational Skills Test (CBEST).
4. Demonstrated subject matter competency by passing the Multiple Subjects examination of the California Subject Examinations for Teachers (CSET). Must have scores taken within five years prior to recommendation.
5. Successful completion of the Performance Assessment for California Teachers (PACT).
6. Passing scores on the Reading Instruction Competence Assessment (RICA).
7. Demonstrated knowledge of the principles and provisions of the United States Constitution through successful completion of a three-unit collegiate-level course. Courses are listed in the section of this catalog on “Graduation Requirements,” IV. American Institutions Requirement.
8. Knowledge of health education, including substance abuse and nutrition; Teacher Education 280 or approved equivalent.
9. Demonstrated knowledge of the needs of and methods of providing educational opportunities to individuals with exceptional needs: Special Education 450 or 500.
10. Demonstrated knowledge of computer hardware, software and applications to educational/classroom use (computer literacy).
11. Verify current training and certification in cardiopulmonary resuscitation (CPR).

NOTE: Undergraduate students in the Multiple Subject credential program may register for concurrent post-baccalaureate credit in their final semester prior to obtaining a baccalaureate degree as explained in the section of this catalog on “General Regulations.” According to SB 2042 legislation, teachers will be able to earn Professional Clear Credentials upon successful completion of a clear credential program or an induction program approved by the California Commission on Teacher Credentialing. For information about the SDSU clear and induction programs; visit the website at http://go.sdsu.edu/education/ste/apply_clear.aspx.

Admission Standards and Qualifications for the Multiple Subject Credential Program
Candidates for the Multiple Subject Credential Program must satisfy the standards and qualifications listed below and submit an online departmental application to the School of Teacher Education. Contact the School of Teacher Education for application dates or find them at http://go.sdsu.edu/education/ste/apply_credentials_new.aspx.
Applications must verify the following:

1. **CBEST Examination.** Students must pass the California Basic Educational Skills Test (CBEST) prior to admission to the Multiple Subject credential program. Registration information and materials for the CBEST are available at [http://www.cbest.nesinc.com](http://www.cbest.nesinc.com). Candidates are urged to take this examination as early as possible. Candidates are required to submit a copy of the individual score reports; uploaded to the online application.

2. **Subject Matter Competency.** Students must submit passing scores on the California Subject Examination for Teachers-Multiple Subjects (CSET-MS) in order to verify subject matter competency in diversified subjects commonly taught in self-contained classrooms. For the traditional, post-baccalaureate program (see below), test scores must be submitted prior to admission to the program. Test scores submitted for verification of subject matter competency are valid for only five years from the date the first subtest was passed and must be valid at the time of recommendation for the credential. Registration information and registration materials are available at [http://www.cset.nesinc.com](http://www.cset.nesinc.com).

3. **Prerequisite Courses.** These courses or approved equivalents must be completed with grades of “C” or higher no more than seven years prior to admission to the Multiple Subject Credential Program. The courses may be in progress at the time of program application. Proof of registration is required to be considered for admission.
   a. **Education 451, “Introduction to Multicultural Education.”** This course provides an introduction to ethnicity, language, and culture in education, particularly the ways in which those factors differentially affect educational outcomes for children. The course assists in preparing teacher applicants to work with students from diverse backgrounds by examining both societal and personal belief systems and the ways that those beliefs are expressed in public school classrooms.
   b. **Teacher Education 280, “Health Education for Teachers.”** This course is a prerequisite for applicants.
   c. **Mathematics 210, “Number Systems in Elementary Mathematics.”** In lieu of Mathematics 210, candidates may substitute any calculus course taken at the college or university with a grade of credit, “C,” or higher.
   d. **Special Education 450, “Classroom Adaptations for Special Populations.”** This course is a prerequisite for applicants.

Candidates are required to submit unofficial transcripts from SDSU and official transcripts from all other colleges and universities attended including any current coursework-in-progress to verify completion of or enrollment in these courses.

4. **Grade Point Average.** Candidates must have attained a grade point average of at least 2.67 in all baccalaureate and post-baccalaureate coursework or a minimum of 2.67 overall or 2.75 in the last 60 semester units attempted. Candidates are required to submit official transcripts from all colleges and universities attended and unofficial transcripts for SDSU coursework for GPA calculations.

5. **Letters of Recommendation.** Candidates must submit two letters of recommendation from individuals who know the candidate well (but are not related by blood or marriage) and who can comment directly on factors such as the candidate’s qualifications for a teaching career in a multicultural setting, work or educational experiences, experience teaching or supervising students or other groups of individuals, personal character, and/or potential for success as a teacher. These letters will be collected through our online application system. Students will need the name and email address for those who will be providing a recommendation for them.

6. **TB Clearance.** Evidence of a negative tuberculosis test (these tests are valid for four years and must be in effect during the time that candidates are enrolled in the credential program). Clearance statements may be secured from Health Services, private physicians or HMOs, or public health agencies.

7. **California Certificate of Clearance.** This certificate represents a background clearance check conducted by the State Department of Justice and Federal Bureau of Investigation. Turnaround time for the clearance can take as long as eight months. Possessors of K-12 California credentials may satisfy this requirement by submitting copies of those certificates. Candidates must submit the application directly to the California Commission on Teacher Credentialing. A printout from the CCTC website showing the granting of this clearance is required prior to admission; uploaded to the online application.

8. **Early Field Experience.** Candidate must successfully complete an approved course with fieldwork experience OR a minimum of 45 hours of independent observation and participation in a “regular” classroom in public elementary schools. This is documented through the early field experience verification page available for downloading from the School of Teacher Education website at [http://go.sdsu.edu/education/ste/apply_credential_step_8.aspx](http://go.sdsu.edu/education/ste/apply_credential_step_8.aspx).

9. **Personal Narrative.** The narrative should address the following items:
   a. What skills and life experiences do you have that can contribute to your being an effective teacher in an urban setting?
   b. We have all had challenges in a work or academic setting. Describe one of these situations and how you responded to it.

10. **Appeals Process.** Candidates who do not meet all the admission requirements may petition the Multiple Subject Admissions and Retention Committee for individual consideration; petition forms must be submitted concurrently with the application.

In addition to the minimum admissions standards identified above, the Multiple Subject Admissions and Retention Committee also may consider qualifications such as previous teaching experience, relevant working experience with children, and second language ability. Due to the number of applicants, application to the program does not ensure admission. The chancellor’s office, Executive Order 1032, establishes standards for admission to teacher credential programs as follows: “The candidate shall have demonstrated personality and character traits that satisfy the standards of the teaching profession. The assessment of the candidates shall be made by the teacher education faculty of the campus, who may also consider information from public school personnel and others. The campus may use tests, observations, and interviews for this assessment.”

**NOTE:** Appointments for discussion of individual concerns relative to the credential program may be made with the Multiple Subject Credential Program Adviser during the academic year through the School of Teacher Education, EBA-259, 619-594-6320. All candidates are urged to attend one of the regularly scheduled group advising sessions prior to making an individual appointment.

### Post-Baccalaureate Multiple Subject Preparation Program

To qualify for admission, candidates must have completed (1) a baccalaureate or higher degree and (2) the Admission Standards and Qualifications for the Multiple Subject Credential Program listed above. Each student completes student teaching in two different grade levels; one assignment is at the primary level (in grades K-3) and another is at the intermediate level (in grades 4-6). All students enrolled in the traditional Multiple Subject Teacher Preparation Program will take the following courses.

#### Multiple Subject Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TE 902</td>
<td>Classroom Management Skills</td>
</tr>
<tr>
<td>TE 910A</td>
<td>Teaching Mathematics in the Elementary School</td>
</tr>
<tr>
<td>TE 910B</td>
<td>Teaching Social Studies in the Elementary School</td>
</tr>
<tr>
<td>TE 910C</td>
<td>Teaching Science in the Elementary School</td>
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<tr>
<td>TE 920</td>
<td>Psychological Foundations of Education</td>
</tr>
<tr>
<td>TE 930</td>
<td>Teaching Reading and Language Arts in the Elementary School</td>
</tr>
</tbody>
</table>
Single Subject (SB 2042) Credential (Secondary Education)  
(Credential Code: 00100)
Teacher Education

7. California Certificate of Clearance. This certificate represents a background clearance and check conducted by the State Department of Justice and Federal Bureau of Investigation. Turnaround time for the clearance can take as long as eight months. Possessors of K-12 California credentials may satisfy this requirement by submitting copies of those certificates. Candidates must submit the application directly to the California Commission on Teacher Credentialing. A printout from the CCTC website showing the granting of this clearance is required prior to admission; uploaded to the online application.

8. Early Field Experience. Candidate must successfully complete an approved course with fieldwork experience OR a minimum of 45 hours of independent observation and participation in a “regular” classroom in public secondary schools. This is documented through the early field experience verification page available for downloading from the School of Teacher Education website at http://go.sdsu.edu/education/ste/apply_credential/step_8.aspx.

9. Personal Narrative. The narrative should address the following items:
   a. What skills and life experiences do you have that can contribute to your being an effective teacher in an urban setting?
   b. We have all had challenges in a work or academic setting. Describe one of these situations and how you responded to it.

10. Appeals Process. Candidates who do not meet all the admission requirements may petition the Single Subject Admissions and Retention Committee for 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 may consider qualifications such as previous teaching experience, relevant working experience with children, and second language ability. A personal interview may also be necessary. Due to the number of applicants, application to the program does not ensure admission.

The chancellor’s office, Executive Order 1032, establishes standards of applicants, application to the program does not ensure admission. The chancellor’s office, Executive Order 1032, establishes standards of applicants, application to the program does not ensure admission.

The narrative should address the following items:
   a. What skills and life experiences do you have that can contribute to your being an effective teacher in an urban setting?
   b. We have all had challenges in a work or academic setting. Describe one of these situations and how you responded to it.

NOTE: Appointments for discussion of individual concerns relative to the credential program may be made with the Single Subject Credential and Retention Committee or by appointment to the candidate's mentor teacher educator. The assessment of the candidates shall be made by the candidate’s mentor teacher educator or the candidate’s instructional field experience teacher. The assessment should address the following items:

Information Applicable to Both Multiple Subject and Single Subject Credentials

Departmental admission to either the Multiple Subject or Single Subject credential program does not constitute admission to the university. Candidates who are entering the university for the first time, or who have graduated or who are graduating, and are planning to re-enroll for the credential program must file a separate application for admission to the university during the regular university application period.

Advanced Standing in Teacher Education

A student transferring into San Diego State University to complete requirements for either the Preliminary or Professional Clear Multiple Subject or Single Subject credential must complete a minimum of six units of professional education coursework in residence at SDSU in order to be recommended for certification regardless of the extent of education work completed at other institutions.

Evaluation of Credits

After an interval of five years, courses in education are reevaluated and subject to reduction in credit, in light of new requirements and changes in educational procedures. All courses taken either at this university or elsewhere must be approved by an official adviser in order to be credited toward meeting credential requirements or pattern requirements for a degree.

GPA Requirements For Continuation in Multiple Subject/Single Subject Credential Programs

A grade point average of 3.0 must be maintained each semester to permit a student to continue in the Multiple Subject and Single Subject credential programs.

Supplementary Authorizations

With completion of additional units in certain curriculum areas, both Single and Multiple Subject teachers can be granted supplementary authorizations to teach in generalized areas in middle and junior high schools (e.g., Introductory English). Single subject teaching credential candidates can also be granted supplementary authorizations to teach in specialized areas K-12 (e.g., psychology). Information on requirements for these supplementary authorizations is available through the College of Education, Office of Student Services, EBA-259.

Description of Interdepartmental Major for Elementary Teaching

Liberal Studies Major

With the B.A. Degree in Applied Arts and Sciences (Major Code: 49015)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.”

A minor is not required with this major.

Refer to the section of the catalog on “Liberal Studies” for the outline of the requirements for this major.

The following coursework is required for acceptance into the education program and may be included in the Liberal Studies major unless otherwise noted:

   - Education 451
   - Mathematics 210

General advising for the Liberal Studies major is available in the Division of Undergraduate Studies.

Induction Program for a Clear Credential (Multiple and Single Subject)

The induction program offers contracted and non-contracted teachers the opportunity to obtain a professional clear credential. The year-long program provides mentored support reflecting the candidate’s instructional context and needs; develops deeper understandings of pedagogy, and advances knowledge and application of current universal access to meet the needs of all students.

Complete online classes available. Field experience in local school setting.
Prerequisite: A valid SB 2042 Preliminary Multiple or Single Subject Credential or equivalent. Clear credential program coursework cannot be taken prior to issuance of the preliminary credential. Optional: Signed CL-855 required to verify employment by contracted teachers before seeking approval to complete field experience in their own classrooms.*

Courses Required for the Credential (13-16 units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TE 602A</td>
<td>Seminar: California Clear Teaching</td>
<td>1</td>
</tr>
<tr>
<td>TE 602B</td>
<td>Seminar: Formative Assessment</td>
<td>3</td>
</tr>
<tr>
<td>TE 969</td>
<td>Clinical Practice for Induction</td>
<td>1-4</td>
</tr>
<tr>
<td>DLE 651</td>
<td>Curriculum, Teaching, and Assessment: ELD and SDAIE</td>
<td>3</td>
</tr>
<tr>
<td>LDT 570</td>
<td>Advanced Teaching with Technologies</td>
<td>3</td>
</tr>
<tr>
<td>SPED 600</td>
<td>Classroom Adaptations for Special Populations</td>
<td>2</td>
</tr>
</tbody>
</table>

* For questions regarding the program, contact the Clear Credential Office, clearcredential@mail.sdsu.edu. For details or to apply, http://go.sdsu.edu/education/ste/clear_credential.bsp.

Courses (TE)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

Note to all Multiple Subject and Single Subject credential candidates: All credential courses are listed and described in the Graduate Bulletin under the 900-series courses.

LOWER DIVISION COURSES

TE 170. Child and Adolescent Development from a Cultural Perspective (3) [GE]

(Same course as Child and Family Development 170)

Theories of human development using a cultural/ecological framework applied to case studies and direct observations. Open only to liberal studies majors. Not open to students with credit in Child and Family Development 170, 270, or Psychology 230.

TE 211A. Field Experience in Mathematics (1) Cr/NC

One lecture and 10 hours of fieldwork.
Prerequisite: Recommended for sophomore or higher level students.

Guided classroom observations for prospective middle and high school mathematics teachers. Mathematics education and strategies that promote professional development. Teaching in culturally and linguistically diverse school settings. (Formerly numbered Teacher Education 211.)

TE 211B. Field Experience in Science (1) Cr/NC

One lecture and 10 hours of fieldwork.
Prerequisite: Recommended for sophomore or higher level students.

Guided classroom observations for prospective middle and high school science teachers. Science education and strategies that promote professional development. Teaching in culturally and linguistically diverse school settings.

TE 280. Health Education for Teachers (1)

Topics designated in health framework for California; infusing health topics in the K-12 general curriculum. For multiple or single subject candidates. This course is offered only in the fall. (Formerly numbered Health and Human Services 280.)

TE 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

UPPER DIVISION COURSES (Intended for Undergraduates)

TE 303. The Teaching Profession: First Clinical Experience (3-4)
(Offered only at IVC)

Two or three lectures and three hours of laboratory.
Prerequisites: Requires clearance for all legally mandated fingerprint requirements, tuberculosis clearance, and others as required by state and/or school districts. Social science concepts and theories for the teaching profession; guided student observation and participation in public school classrooms.

TE 362. Fieldwork in Community Settings (1-4)

One lecture and one to six hours of activity.
Prerequisites: Consent of instructor and intent to enroll in teaching credential programs. Tutoring process and teaching strategies for the content being tutored. Maximum credit six units.

TE 402. Foundations of Education (3)
(Offered only at IVC)

Prerequisite: Admission to multiple or single subject teaching credential program.
Combines disciplines of anthropology, economics, history, philosophy, political science, psychology, and sociology to introduce student to concepts and generalizations informing the teaching and learning process in modern classrooms.

TE 415. Methods and Materials of Instruction (3)
(Offered only at IVC)

Prerequisite: Admission to single subject teaching credential program.
Teaching concerns, instructional planning and materials, classroom management, measurement and evaluation, effective discipline, curriculum, computer literacy, special problems encountered in teaching, career planning, school-community communication processes.

TE 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree.

TE 499. Special Study (1-3)

Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

TE 511. Assessment in Mathematics Education (3)

Techniques to assess and develop students’ mathematical understanding. For use by elementary and secondary classroom teachers and mathematics education specialists.

TE 512. Ethnic Identity Development in Education (3)

Prerequisite: Consent of instructor.
Racial and ethnic identity development through curriculum for improving academic achievement of students in K-12 schools. Racial and ethnic socialization of children and identity development of American ethnic groups.

TE 530. Children’s/Adolescents’ Literature (3)

Survey of children’s/adolescents’ literature and its incorporation into the classroom curriculum.

TE 596. Topics in Teacher Education (1-3 or 6) RP*

Designed to meet the needs of individuals or groups of teachers who wish to develop or continue the study of some problem. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 courses applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES

Refer to the Graduate Bulletin.
Theatre, Television, and Film

In the College of Professional Studies and Fine Arts

OFFICE: Dramatic Arts 201
TELEPHONE: 619-594-5091 / FAX: 619-594-7431
http://ttf.sdsu.edu

Accredited by the National Association of Schools of Theatre.

Faculty
Emeritus: Anderson, Annas, Blue, Harvey, A.C., Harvey, M., Heighton, Jones, Larlham, P., Lee, Madsen, Martin, McKerrow, Meador, O’Donnell, Ofield, Real, Reid, Salzer, Stephenson, Witherspoon, Woff, Wylie
Director: Hopkins
The Don W. Powell Chair in Scene Design: Funicello
Filmmaker in Residence: Ofield
Professors: Durbin, Freeman, Kalustian, Larlham, M., Lauzen, Morong, Powell, Reinholtz, Schreiber
Associate Professors: Bedau, Blichakova, Cirino, Hopkins
Assistant Professors: Alita, Knoo, McMills, Meffe, Slowik
Lecturers: Keith, Oppenheimer, Orr, Sheehan, Underwood, Voytilla

Offered by the School
Master of Arts degree in theatre arts.
Master of Fine Arts degree in theatre arts.
Master of Arts degree in television, film and new media production.
Major in theatre arts with the B.A. degree in applied arts and sciences.
Emphasis in design and technology for the theatre.
Emphasis in design for television and film.
Emphasis in performance: acting and musical theatre.
Emphasis in design for television and film.
Major in television, film and new media with the B.S. degree in applied arts and sciences.
Emphasis in critical studies.
Emphasis in production.
Minor in theatre arts.
Minor in television, film and new media.
Certificate in entertainment management.

The Don W. Powell Chair in Scene Design
The Don W. Powell Chair in Scene Design was established through a trust provided by the late professor emeritus. Professor Powell, who retired after 30 years with the theatre department, created the trust in order to enhance theatre education at SDSU. The current holder of The Don W. Powell Scene Design Chair is the nationally acclaimed designer Ralph Funicello.

Filmmaker in Residence
The position of Filmmaker in Residence is unique in the CSU system. It was established to provide a professional link between the Television and Film program and the media industry in a rapidly evolving technological environment.

Distinguished Visiting Artists
Through the generosity of the College of Professional Studies and Fine Arts, the School of Theatre, Television, and Film is fortunate to have distinguished theatre artists spend time with students and faculty each year. Edward Albee has for many years come to San Diego State University each spring. He is the recipient of many honors including three Pulitzer prizes and is best known for his play *Who’s Afraid of Virginia Woolf*. Marion Ross is a graduate of our program and has had an illustrious career in theatre, television, and film. For many years, she played the mother on the TV series “Happy Days.” Both Mr. Albee and Ms. Ross generously share their insights and are examples for our students of the highest professional achievements. Artists and guests have included David McKenna, Ron Major, Ryan Scott Oliver, Susan-Lori Parks, and Duncan Sheik; with support from film producer Kathleen Kennedy, other alumni, and benefactors.

General Information
The School of Theatre, Television, and Film provides high quality education for undergraduate and graduate students that emphasizes excellence in the arts and technology, grounded in conceptual and historical foundations. By example, the school’s faculty helps students realize their creative potential as artists, scholars, leaders, and global citizens who celebrate cultural diversity and promote social equality through theoretical explorations and practical experience in theatre, television, and film.

Impacted Programs
All programs in the School of Theatre, Television, and Film are impacted. To be admitted to the selected program, refer to the program description for specific impacted criteria.

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Theatre Arts Major
With the B.A. Degree in Applied Arts and Sciences (Major Code: 10071)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” Either a minor or a foreign language is required with this major. To complete the degree, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

**Impacted Program.** The theatre arts major is an impacted major. To be admitted to the theatre arts major, students must meet the following criteria:

- Complete with a grade of C or higher: Theatre 100*, 120, 130* (or appropriate transfer equivalents). These courses cannot be taken for credit/no credit (Cr/NC);
- Have a cumulative GPA of 2.40 or higher.

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* Theatres 100 is not required for the Emphasis in Design for Television and Film.
\* Theatre 130 is not required for the Emphasis in Design and Technology for the Theatre and Emphasis in Design for Television and Film.

The following program and emphases require coursework and GPA requirements in addition to those listed above. These courses cannot be taken for credit/no credit (Cr/NC).

- **General Theatre Arts Program:** Television, Film and New Media 160 must be completed with a grade of C or higher.
- **Emphasis in Performance: Acting and Musical Theatre:** Theatre 111 (or transfer equivalent of this course), and Theatre 332 with a GPA of 3.0 or higher.
- **Emphasis in Design and Technology for the Theatre and Emphasis in Design for Television and Film:** Theatre 240 (or transfer equivalent of this course) must be completed with a grade of C or higher.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

**General Theatre Arts Program**
(SIMS Code: 662504)
**Preparation for the Major.** Theatre 100, 111, 120, 130, 205, 240, Television, Film and New Media 160 (21 units). Theatre 100, 120, 130, and Television, Film and New Media 160 must be completed with a grade of C or higher and cannot be taken credit/no credit (Cr/NC).

**Graduation Writing Assessment Requirement.** Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
Major. A minimum of 33 upper division units in theatre to include Theatre 325, 359, 442A or 442B, 446A, 446B, 460A, 460B; and 15 units selected from the following sequences:

Applied Theatre and Performance: Minimum of three units selected from Theatre 310, 315, 332, 350, 351, 431, 459, 533A.

Critical Inquiry: Minimum of three units selected from Theatre 465, 525.

Design and Technical: Minimum of two to three units selected from Theatre 349, 440, 447, 448, 452, 541, 548, 558, 554A, 554B.

Management: Minimum of three units selected from Theatre 335, 336, 345, 470, 476.

Emphasis in Design and Technology for the Theatre

To declare an Emphasis in Design and Technology for the Theatre Arts major, in addition to the criteria for admission to the General Theatre Arts program, students must complete the following:

a. Theatre 240 (or transfer equivalent of this course) must be completed with a grade of C or higher;

b. Submit portfolio of design work (see undergraduate design adviser for details).

Preparation for the Major. Theatre 100, 111 or 115, 120, 240, Television, Film and New Media 160 (15 units). Theatre 100, 120, and 240 must be completed with a grade of C or higher and cannot be taken credit/no credit (Cr/NC).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

International Experience Requirement. Completion of a study abroad or experience abroad selected from the CSU/SDSU Study Abroad Program; SDSU Exchange Program; SDSU Semester Abroad Program; SDSU Study Travel Program; SDSU approved Study Abroad Program offered by other accredited institutions, theatre internship, independent study, or experience offered by the school or university which offers significant intercultural content to the student (a significant experience in a culture other than one’s own).

Major. A minimum of 32 upper division units in theatre to include Theatre 325, 332, 355, 446A, 446B, 446C (two units), 460A, 460B; 12 units selected from Theatre 320A, 350, 351, 359, 431, 434, 435, 450, 451, 532, 553A. All performance emphasis majors are required to participate in general auditions each semester.

Emphasis in Youth Theatre

To declare an Emphasis in Youth Theatre, in addition to the criteria for admission to the General Theatre Arts program, students must complete the following:

a. Theatre 240 (or transfer equivalent of this course) must be completed with a grade of C or higher;

b. Submit portfolio of design work (see undergraduate design adviser for details).

c. Complete with a grade of B or higher: Theatre 100, 120, Television, Film and New Media 110 and 160.

d. A written positive review of student’s work by the instructor of Theatre 332.

Preparation for the Major. Theatre 100, 120, 130, 205, 231, 240, Television, Film and New Media 160 (21 units). Theatre 120, 130, 231, and 240 must be completed with a grade of C or higher and cannot be taken credit/no credit (Cr/NC). Theatre 111 and 332 must be completed with a GPA of 3.0 or higher.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Television, Film and New Media Major

With the B.S. Degree in Applied Arts and Sciences

(Major Code: 06031)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” To complete the television, film and new media major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Emphasis in Critical Studies

The emphasis in critical studies guides students in the study of the history, theory, aesthetics, and cultural significance of film, television and new media. This emphasis offers a degree, which can be used for many different career paths, including graduate study, media industry coordination and production work.

Impacted Program. The emphasis in critical studies is designated as an impacted program. To be admitted to the television, film and new media major with an emphasis in critical studies, students must meet the following criteria:

a. Have a cumulative grade point average of 3.00 or higher;

b. Complete with a grade of B or higher: Theatre 100, 120, Television, Film and New Media 110, 160. (12 units) These prerequisite courses must be completed with a grade of B or higher and cannot be taken for credit/no credit (Cr/NC).

Students completing the California Community College Associate in Science in Film, Television, and Electronic Media for Transfer (AS-T) are required to complete the following equivalent courses at the community college or at SDSU if not completed as part of the AS-T: Television, Film and New Media 110 and 160, Theatre Arts 100 and 120.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or Rhetoric and Writing Studies 305W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.
**Major.** A minimum of 39 upper division units to include Television, Film and New Media 310, 330, 363, 364A, 364B, 462; nine units selected from Television, Film and New Media 470, 530, 571, 573; and 12 units selected from Television, Film and New Media 401, 430, 490, 499, Africana Studies 465 [or French 465], American Indian Studies 435, Anthropology 439, Chicana and Chicano Studies 400, Classics 350, English 577, European Studies 424, German 320, History 436, Religious Studies 364, or Theatre 460A, 460B, 465. A minor is not required with this major.

**Emphasis in Production**  
(SIMS Code: 667304)

The emphasis in production prepares students for professions in television, film and new media. The emphasis also serves those in occupations where extensive knowledge is required of message design for these media and their various distribution systems. This program focuses on skills required for careers as producers, directors, art directors, production assistants, and writers, as well as emerging careers in new media production.

**Impacted Program.** The emphasis in production is designated as an impacted program. To be considered for admittance to the television, film and new media major with an emphasis in production, students must meet the following criteria:

a. Complete with a grade of B or higher: Theatre 100 and Television, Film and New Media 160. Complete with a grade of C or higher: Television, Film and New Media 110, Theatre 120, and three units from Art 157, 258, 259, Music 151, or Theatre 130. These courses cannot be taken for credit/no credit (Cr/NC);

b. Submit a personal statement to be evaluated by the faculty;

c. Submit two letters of recommendation to be evaluated by the faculty;

d. Have a cumulative grade point average of 3.00 or higher;

e. Submit samples of visual creative work;

f. Submit a treatment for a 1-3 minute production (fiction or nonfiction).

**Preparation for the Major.** Television, Film and New Media 110, 120, Theatre 100, 120; and three units from Art 157, 258, 259, Music 151, or Theatre 130. (15 units) Television, Film and New Media 160 and Theatre 100 must be completed with a grade of B or higher and cannot be taken credit/no credit (Cr/NC). Television, Film and New Media 110, Theatre 120, and three units from Art 157, 258, 259, Music 151, or Theatre 130 must be completed with a grade of C or higher and cannot be taken credit/no credit (Cr/NC).

**Graduation Writing Assessment Requirement.** Passing the Writing Placement Assessment with a score of 10, or Journalism and Media Studies 310W, or Rhetoric and Writing Studies 250W with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

**Major.** A minimum of 42 upper division units to include 27 units from Television, Film and New Media 310, 314, 330, 361, 362, 364A or 364B, 510, 540, 560; six to nine units selected from Television, Film and New Media 321, 322, 327, 350, 401, 465, 490, 499, 522, 550, 551, 559, 561, 590, or Theatre 359; six to nine units selected from Television, Film and New Media 363, 364A or 364B, 430, 462, 470, 530, 571 or 573. A minor is not required with this major.

**Theatre Arts Minor**  
(Minor Code: 10071) (SIMS Code: 662504)

The minor in theatre arts consists of 23-24 units in theatre to include Theatre 100, 120, 130, 205, 240, 460A or 460B; three units selected from Theatre 325, 350, 431, 476; and two to three units selected from Theatre 315, 335, 345, 355, 442A, 442B, or 525.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and General Education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

**Television, Film and New Media Minor**  
(Minor Code: 06031) (SIMS Code: 667306)

The minor in television, film and new media is designed for students in business, English, music, prelegal, theatre, or other majors related to the writing, production, and distribution of media. The minor consists of a minimum of 21 units to include Theatre 100; Television, Film and New Media 110, 160, 310; six units selected from Television, Film and New Media 363, 364A, 364B, 430, 462; and three units selected from Television, Film and New Media 330, 470, 530, 571, 573. Admission to the Television, Film and New Media minor requires completion of at least 30 units with a minimum grade point average of 3.0 overall and completion of Theatre 100 and Television, Film and New Media 160 with grades of B or better.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed at San Diego State University.

**Entertainment Management Certificate**  
(SIMS Code: 662541)

The basic certificate in entertainment management provides students with specialized knowledge and skills in the area of backstage management of people and technology in the performing arts. Students study and gain experience in stage, production, event management, and business principles of television and film or marketing entertainment. These areas provide a foundation of knowledge for entry-level career positions in managerial and business environments of the creative, cultural, and events industries.

Courses are for preprofessionals in the theatre, television, film, and entertainment industries who want to expand their knowledge of management and production. The certificate is for students who want to pursue careers as producers, managers, entrepreneurs, in the areas of live performing arts, as well as professionals in adjacent fields of the not-for-profit performing arts disciplines, and in arts management and production. Students in management and business can apply this certificate to the arts and entertainment industries. For additional information, contact Jay Sheehan, 619-594-4990.

The certificate requires completion of 13-15 units to include 12 units selected from the following courses:

- THEA 335 Stage Management-Theory (3)
- THEA 336 Stage Management-Practicum (3)
- THEA 345 Theatre Marketing and Publicity (3)
- THEA 470 Facility Operations and Management for Theatre (3)
- THEA 476 Event Coordination and the Entertainment Industry (3)
- TFM 401 Business Aspects of Television and Film Production (3)

and one course selected from:

- THEA 240 Theatre Design and Technology I (3)
  OR
- THEA 241 Theatre Production Essentials (1)
  [For non-theatre majors only]
Courses (THEA & TFM)

LOWER DIVISION COURSES IN THEATRE (THEA)

THEA 100. The Art of Theatre (3) [GE]
Introduction to theatre as a reflection of society and a contributor to the world of art. Students explore theatre's continuing relevance to contemporary culture. Attendance at selected theatre events required.

THEA 111. Voice and Movement (3)
Prerequisite: Open to majors and minors in the School of Theatre, Television, and Film only.
Project-based preparation of physical and vocal instrument for acting. Not open to students with credit in Theatre 110.

THEA 115. Acting for Nonmajors (3)
Improvisational exercises (verbal and nonverbal) in sensory awareness, observation, concentration, listening, and response skills with application to other fields. Individual presentation techniques for the preprofessional in other disciplines.

THEA 120. Heritage of Storytelling (3) [GE]
Survey of significant concepts over a wide history of theatre, television, and film. Analysis of classical, contemporary, realistic, and avant-garde examples; exploring influence of historical narrative forms on contemporary storytelling.

THEA 130. Acting I (3)
Development of individual's ability to express thought and emotion through effective use of the voice and body. These fundamental concepts may be applied to stage, film, and television acting.

THEA 205. American Musical on Stage and Screen (3) [GE]
Shows, films, and performers that trace the evolution of this unique American art form from its origins to contemporary Broadway, film, and pop culture, utilizing live performance and digital media.

THEA 231. Acting II (3)
Continuation of Theatre 111 and 130. Emphasizing application of fundamental skills to problems of text analysis, subtext, playing action, characterization, and ensemble work.

THEA 240. Theatre Design and Technology I (3)
Two lectures and three hours of laboratory. Prerequisite: Theatre 120. Proof of completion of prerequisite required: Copy of transcript.

THEA 241. Theatre Production Essentials (1)
(Open only in the College of Extended Studies)
Teaching, counseling, recreation, and senior citizen programs.

THEA 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

THEA 299. Special Study (3)
Prerequisite: Consent of School of Theatre, Television, and Film director, and instructor. Individual study.

THEA 301. Creative Drama I (3)
Current philosophies, principles, and techniques of creative drama. Development of the individual through use of dramatic play, imaging, improvisation, and theatre games. Applicable to classroom teaching, counseling, recreation, and senior citizen programs.

THEA 315. Theatre for Young Audiences (3)
Current philosophies and practices in theatre for young audiences. Techniques of selecting and producing plays for and with youth. Theatre styles, script analysis, and functions of the production team.

THEA 320. Advanced Voice and Text for Actors (3)
Prerequisites: Theatre 111, 130, or by audition.
Prerequisites: Technical expression in the theatre, primarily in plays with heightened and elevated speech, e.g. Shakespeare and classic Greek drama.
A. Select heightened Speech From the Greeks to Today

THEA 325. Script Analysis (3)
Prerequisites: Theatre 120, completion of lower division writing competency requirement, and upper division standing. Proof of completion of prerequisites required: Copy of transcript.

THEA 329 Practicum in Theatre for Young Audiences (329A: 2 units) (329B: 1 unit)
Two hours of activity per unit. Prerequisite: Theatre 315.
Practical experience in department public performances of plays for young audiences.
A. Rehearsal
B. Performance

THEA 332. Advanced Acting (3)
Prerequisites: Theatre 130, 231, and by audition.
Continuation of Theatre 130 and 231, emphasizing analysis of literary text in process of creating characters. Scene study and role preparation of significant texts by modern playwrights. May be repeated once with consent of instructor.

THEA 335. Stage Management-Theory (3)
Prerequisite: Theatre 240. Theatre 241 for non-theatre majors only.
Development of the prompt script, organizational methods, and collaborative personnel interaction. Maximum credit six units. (Formerly numbered Theatre 475A.)

THEA 336. Stage Management-Practicum (3)
Six hours of activity. Prerequisite: Theatre 240. Theatre 241 for non-theatre majors only.
Practical experience in stage managing department productions. Maximum credit six units. (Formerly numbered Theatre 475B.)

THEA 345. Theatre Marketing and Publicity (5)
One lecture and four hours of activity. Prerequisite: Theatre 100. Theatre 241 for non-theatre majors only.
Practical experience in marketing and publicity for theatres, including PSAs, press releases, layout-graphics for written materials, magazine and newspaper advertisements, marketing strategy and campaign development for a full theatre season.

THEA 349. Theatrical Makeup (2)
Two lectures and three hours of laboratory. Prerequisite: Theatre 240.
Practical experience in makeup for stage, film, and television. Classroom exercises and production-related activities.

THEA 350. Musical Theatre Performance I (3)
Two lectures and three hours of laboratory. Prerequisite: By audition.
Practical experience in musical theatre. Application of acting theory to musical theatre literature. Maximum credit six units.

THEA 351. Musical Theatre Performance II (3)
Two lectures and three hours of laboratory. Prerequisite: Theatre 350 and by audition.
Practical experience in musical theatre. Vocal/production style and vocal production related to period/style musical theatre literature, solo/group/audition presentation. Maximum credit six units.

THEA 355. Movement for the Theatre I (2)
Prerequisite: By audition for majors. Theatre 111 for theatre minors. Activities to develop physical skills of the performer. Links between imagination, movement, and body expression leading to character development. Maximum credit four units.
THEA 359. Directing I (3)  
Prerequisites: Theatre 240, 325; or Television, Film and New Media 314. Proof of completion of prerequisites required: Copy of transcript.  
Principles and techniques of directing for the stage: play selection, analysis, and interpretation; casting methods; stage composition and movement; and rehearsal procedures.

THEA 431. Workshop in Improvisational Acting (3)  
Prerequisites: Theatre 332 and by audition.  
Theories and principles of improvisational acting.

THEA 434. Audition and Business Skills for the Actor (3)  
Two lectures and two hours of activity.  
Prerequisite: Theatre 332.  
Auditioning and interviewing for stage and screen; selecting audition pieces, rehearsing, performing auditions. Business skills of audition process; researching individual marketability, branding, networking to secure auditions and representation.

THEA 435. Acting on Camera (3)  
Two lectures and two hours of activity.  
Prerequisites: Theatre 111, 120, 130; Television, Film and New Media 160.  
Director-actor-camera collaborations in rehearsal and performance, using single or multi camera television techniques. Techniques for preparing and performing monologues and scenes with practical experience in front of and behind the camera.

THEA 438. Shakespeare Touring Production (2)  
Four hours of activity.  
Prerequisites: Theatre 100, 120; Television, Film and New Media 160.  
Participate in high school outreach touring production.

THEA 440. Scene Design I (3)  
Two lectures and three hours of laboratory.  
Prerequisites: Theatre 240, 325.  
Techniques and procedures in application of design, color, and perspective in designing scenery.

THEA 442. Practicum in Theatrical Production (2)  
Two hours of activity per unit.  
Prerequisite: Theatre 240.  
Technical theatre production experience for departmental public performances.  
A. Scenery Construction  
B. Costume Construction

THEA 446. Practicum in Performance (446A-446B: 2 units)  
(446C: 1-3 units Cr/NC)  
One lecture and two hours of activity for 446A and 446B.  
Two hours per unit for 446C.  
Prerequisite for 446A and 446B: Theatre 240.  
Prerequisite for 446C: By audition.  
Practical experience in departmental public performances.  
(Theatre 446C formerly numbered Theatre 445A; Theatre 446A and 446B formerly numbered Theatre 445B.)  
A. Stage Crew. Maximum credit four units for Theatre 446A.  
B. Costume Crew. Maximum credit four units for Theatre 446B.  
C. Cast Member. Maximum credit 16 units for Theatre 446C.

THEA 447. Lighting Design I (3)  
Two lectures and three hours of laboratory.  
Prerequisites: Theatre 240, 325.  
Concepts and technologies in lighting for theatre and related performance areas. Emphasis on mechanics of stage lighting, color, instruments, and control. Laboratory and production related activities.

THEA 448. Theatre Technology (2)  
Four hours of activity.  
Prerequisite: Theatre 240.  
Current materials and practices of theatre technology. Advanced construction techniques; stage machinery design and control; special effects; computer applications for stage operations; budget, research, and management procedures.

THEA 450. Musical Theatre Performance III (3)  
Two lectures and three hours of laboratory.  
Prerequisites: Theatre 351 and by audition.  
Advanced rehearsal/performance techniques in musical theatre. Performance style, vocal production, and staging relating to musical theatre literature: duet and small group presentation. Maximum credit six units.

THEA 451. Musical Theatre Performance IV (3)  
Two lectures and three hours of laboratory.  
Prerequisites: Theatre 450 and by audition.  
Advanced rehearsal/performance techniques in musical theatre. Collaboration, performance preparation, acting/singing styles, vocal production, and staging that result in a final performance for an audience. Maximum credit six units.

THEA 452. Costume Design I (3)  
Two lectures and three hours of laboratory.  
Prerequisites: Theatre 240, 325.  
Theory and creative application of principles of costume design for various types of production. Emphasis on concept development, character interpretation, research methods, color organization, and fabric selection. Laboratory and production related activities.

THEA 459. Directing II (3)  
Two lectures and two hours of activity.  
Prerequisites: Theatre 359 and consent of instructor.  
Experience and group evaluation in directing one-act plays before an audience. Attendance at selected public performances required. Maximum credit six units.

THEA 460A-460B. History of the Theatre (3-3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.  
Theatre from primitive times to the present. Special attention given to the theatre as a mirror of the social and cultural background of various countries and periods in which it is studied. Theatre 460A is not prerequisite to Theatre 460B.

THEA 465. Theatre of Diversity (3) [GE]  
Prerequisites: Theatre 325 for theatre majors. Completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.  
Racial, ethnic, political, and social diversity of American landscape as reflected in works of major playwrights of diversity.

THEA 470. Facility Operations and Management for Theatre (3)  
Prerequisite: Theatre 240. Theatre 241 for non-theatre majors only. Leadership, managing creative teams, budgeting, scheduling, liability and safety, co-producing, special event and corporate entertainment production management. Front of house operations to include house management, box office operations, ticketing, budgeting and reporting. Maximum credit six units.

THEA 476. Event Coordination and the Entertainment Industry (3)  
Two lectures and two hours of activity.  
Prerequisite: Theatre 240. Theatre 241 for non-theatre majors only.  
All aspects of producing special events, including venue designs and planning, managerial roles of entertainment industry, and how venue planning affects business decisions of these various managers.

THEA 490. Theatre Internship (1-3) Cr/NC  
Prerequisite: Theatre 325; internship contract must be completed prior to registration.  
Work with approved theatre organizations off-campus under the combined supervision of theatre personnel and instructors. Maximum credit three units.

THEA 496. Experimental Topics (1-4)  
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

THEA 499. Special Study (1-3)  
Prerequisite: Consent of instructor.  
Individual study. Maximum credit six units.
UPPER DIVISION COURSES IN THEATRE
(Also Acceptable for Advanced Degrees)

THEA 510. Creative Drama and Language Arts (3)
Prerequisite: Theatre 310 or 315.
Advanced techniques in using creative drama to teach literature and language. Emphasis on use of drama in teaching of reading and world literature. Practical experience through fieldwork in elementary or middle school classrooms.

THEA 525. Dramaturgy (3)
Prerequisite: Theatre 325 or graduate standing.
Theory and application of various aspects of dramaturgy and theatre literary management. Production-oriented synthesis of advanced text analysis, dramatic theory and criticism, historical research, and dramatic literature. Attendance at select plays required. May be repeated with new content. Maximum credit six units.

THEA 530. Period Dress and Decor (3)
Prerequisite: Theatre 240 or graduate standing.
Visual survey of relationships and cultural significance of period dress, architecture, and decorative arts as applied to theatrical productions. Emphasis on significant historic periods in dramatic literature. Theatre 530A is not open to students with credit in Theatre 530.
A. Ancient World Through Eighteenth Century
B. NeoClassical Through Twentieth Century

THEA 532. Advanced Topics in Stage and Screen Performance (3)
Two lectures and two hours of activity.
Prerequisites: Theatre 332 and either Theatre 320 or 355.
Theory and practice in performance from theatre, television, and film to include physical theatre, voice and speech, film and theatre performance styles, intercultural theatre, devised work. May be repeated with new content. Maximum credit six units.

THEA 533A. Theory and Styles in Acting and Directing I (3)
Prerequisites: Theatre 332 and either Theatre 320 or 355.
Acting and directing problems in theory and style related to the production of plays from great periods in theatre history, with attention to characterization, dramatic values, creative directing, and production approaches.

THEA 539. Theatre Rendering (2)
Four hours of activity.
Prerequisite: Theatre 240.
Rendering for scenic, costume, and lighting designers. Techniques, media, and portfolio preparation. Maximum credit four units.

THEA 540. Scene Design II (3)
Prerequisites: Theatre 440 and 530A or 530B.
History of scene design and application of contemporary styles to various types of dramatic productions.

THEA 541. Scene Painting (2)
Four hours of activity.
Prerequisite: Theatre 530A or 530B.
Theories and techniques of scene painting, including both historical backgrounds and modern procedures. Full-scale projects executed in scenery studio.

THEA 545. Mechanical Drawing for the Theatre (2)
Four hours of activity.
Prerequisite: Theatre 240 or admission to MFA in Design.
Theatre drafting standards and techniques. Floor plans, sections, elevations, perspective drawings, and light plots.

THEA 546. CADD for the Theatre (2)
Four hours of activity.
Prerequisite: Theatre 545.
Computer aided drafting applications for theatre designers.

THEA 547. Lighting Design II (3)
Two lectures and three hours of laboratory.
Prerequisite: Theatre 447.
Advanced design theories and lighting practice for theatre and dance. Laboratory and production related activities.

THEA 548. Sound Design for the Theatre (3)
Two lectures and two hours of activity.
Prerequisites: Theatre 240, 325, or Music 360, 460.
Theories and techniques of sound design and reinforcement for theatrical performance. Laboratory experience in sound production.

THEA 549. Lighting and Sound Technology (2)
One lecture and three hours of laboratory.
Prerequisite: Theatre 447.
Use of electrics for the stage. Lighting, sound, computer. Practical applications emphasized.

THEA 550. Software for Theatrical Design (2)
Four hours of activity.
Prerequisites: Theatre 440, 447, 452, or 546.
Application of computer software for theatre, including scenery, costume, lighting, and sound design. Maximum credit four units.

THEA 552. Costume Design II (3)
Prerequisites: Theatre 452 and 530A or 530B.
Advanced studies in costume design. Emphasis on theatrical style, rendering layout, design problems, materials, and budget.

THEA 553. Technical Direction (3)
Two lectures and three hours of activity.
Prerequisites: Theatre 240, 442.
Modern technical direction including project management (budgeting and procurement, managing employees); design and engineering; automation, rigging, advanced stagecraft (metalcraft, CNC machinery, composite construction), and safety. Maximum credit six units.

THEA 554A. Costume Design Technology I (2)
Four hours of activity.
Prerequisite: Theatre 240.
Current materials and practices of costume technology: advanced construction techniques, fabric selection and use, period pattern drafting, draping, and cutting. Maximum credit four units.

THEA 554B. Costume Design Technology II (2)
Four hours of activity.
Prerequisite: Theatre 240.
Advanced costume craft construction techniques and management procedures for costume production: millinery, fabric dyeing and painting, jewelry, and related crafts. Maximum credit four units.

THEA 555A. Movement for the Theatre II (2)
Four hours of activity.
Prerequisites: Theatre 332 and 355.
Movement techniques for the theatre. Movement patterns, phrase development, and partnering leading to scene work. Maximum credit four units.

THEA 555B. Movement for the Theatre II (2)
Four hours of activity.
Prerequisites: Admission to the MFA musical theatre program. Consent of instructor for undergraduates. Musical theatre movement and dance styles. Maximum credit eight units.

THEA 570. Practicum in Theatrical Production (1-3)
Prerequisite: Theatre 440, 447, or 452; or admission to MFA in Design.
Design projects in areas of scenery, costume, lighting, sound, or makeup. Maximum credit six units for Theatre 570A and six units for Theatre 570B.
A. Independent Study
B. Design for Department Public Performances

THEA 580. Theatre in the Classroom (3)
Prerequisites: Theatre 310 and 315.
Methods of teaching theatre in elementary, middle, and secondary schools. Emphasis on pedagogy, organization of curriculum, play selection, and principles of producing plays in the classroom.

THEA 596. Selected Topics in Theatre (1-3)
Prerequisite: Twelve units in theatre.
A specialized study of selected topics from the areas of theatre. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.
LOWER DIVISION COURSES IN TELEVISION, FILM AND NEW MEDIA (TFM)

TFM 110. Writing for Television and Film (3)
Prerequisites: Satisfaction of the English Placement Test. Ability to type. Proof of completion of prerequisites required: Copy of EPT or competency scores or verification of exemption.
Theory and practice in writing for electronic and film media. Introduction to techniques of narrative and documentary writing and scripting.

TFM 160. Cinema as Art (3) [GE]
Cinema in its diverse forms. Historical and stylistic influences on aesthetic values and social implications of cinema.

UPPER DIVISION COURSES IN TELEVISION, FILM AND NEW MEDIA (Intended for Undergraduates)

TFM 310. Film, Television, and New Media Criticism (3)
Prerequisite: Television, Film and New Media 160.
Critical approaches to study of film, television, and new media. Analyses of media perspectives, to include ideology, semiotics, genre, gender, and spectatorship.

TFM 314. Film and Video Production (3)
Two lectures and three or more hours of activity.
Aesthetics and practice of film and video production techniques. Instruction in equipment use combined with consideration of aesthetics, visual storytelling, and craft. Attention to development of creative voice and original work.

TFM 321. Sound Design for Video and Film (3)
Two lectures and two hours of activity.
Digital audio post-production for video, TV, and film. Includes field acquisition, Foley, editing, and assembling.

TFM 322. Cinematography for Television and Film (3)
Two lectures and three hours of laboratory.
Prerequisite: Television, Film and New Media 314.
Basic cinematography, including introduction to specialized studio and location equipment; lighting techniques for film and television; introduction to film labs. (Formerly numbered Television, Film and New Media 522.)

TFM 327. Film and Video Editing (3)
Prerequisite: Television, Film and New Media 314 (or consent of instructor).
Theory and practice of film and video editing.

TFM 330. Cultural Aspects of Media (3)
Prerequisite: Television, Film and New Media 160.
Cultural dimensions of media. Media structures, uses, and effects at national and international levels in a context of humanities and conceptual arts.

TFM 350. Staging and Art for Television and Film (3)
Prerequisite: Television, Film and New Media 361 or 362.
Aesthetic considerations and technical practices in staging, lighting, and graphics for television and film. Practical experience in university sponsored productions.

TFM 361. Studio Production (3)
Prerequisite: Television, Film and New Media 314 (or consent of instructor).
Multi-camera television production techniques for studio, sound stage, and remote multi-camera production. Responsibilities of producer, director, and production staff.

TFM 362. Intermediate Filmmaking (3)
Two lectures and more than three hours of activity.
Single camera techniques in production of narrative fiction. Crew-based location and studio production. Responsibilities of producer, director, and key creative production positions. (Formerly numbered Television, Film and New Media 360 [previously Television, Film and New Media 260].)

TFM 363. International Cinema (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Construction of foreign film to history and practice of cinema as an art. Film as an expression of national culture. Maximum credit six units of which three units may be applicable to General Education. May be repeated with new content. See Class Schedule for specific content.

TFM 364. History of Film Classics (3-3)
Prerequisite: Upper division standing.
Viewing and analysis of American and foreign theatrical films which represent milestones in development of cinema. Maximum credit six units from Television, Film and New Media 364, 364A, and 364B.
A. Early Developments Through the 1950s
B. 1960s Through Today’s Cinema

TFM 401. Business Aspects of Television and Film Production (3)
Prerequisite: Television, Film and New Media 361 or 362 or Theatre 241 for non-theatre majors only. Usually taken concurrently with Television, Film and New Media 560 or 561.
Prerequisite: Upper division standing.
Financing, preproduction planning, postproduction, and distribution of television and film.

TFM 430. History of Prime-Time Television (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
History, trends, and dynamics in the programming of prime-time network television. External and internal forces that influence what we watch.

TFM 462. Documentary: History and Theory (3) [GE]
Prerequisite: Television, Film and New Media 160 for majors.
Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.
Persuasive concepts, techniques, and forms in documentary film and television programs. Major historical works and their impact on society.

TFM 465. Compositing (3)
Prerequisite: Television, Film and New Media 361 or 362.
Computer-generated imagery and compositing techniques used in feature films and broadcast television.

TFM 470. Critical Studies of Gender/Sexuality/Media (3)
Prerequisite: Television, Film and New Media 310 and 330.
Gender and sexuality in film, television and new media, including video games and the Internet.

TFM 490. Internship (3)
Prerequisite: Television, Film and New Media 314 (or consent of instructor).
Work with approved agencies off-campus under the combined supervision of agency personnel and instructor. Maximum credit six units.

TFM 496. Experimental Topics (1-3)
Prerequisite: Upper division standing and consent of instructor.
Experimental topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 490, 496, 596 courses applicable to a bachelor’s degree.

TFM 499. Special Study (1-3)
Prerequisite: Television, Film and New Media 314 (or consent of instructor).
Individual study or project, normally in a research area selected by the student. Maximum credit six units.
UPPER DIVISION COURSES IN TELEVISION, FILM AND NEW MEDIA
(Also Acceptable for Advanced Degrees)

TFM 510. Advanced Script Writing for Television and Film (3)
Prerequisite: Television, Film and New Media 314 (or consent of instructor).
Scripting of dramatic original and adaptation forms, and documentary. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

TFM 522. Advanced Film and Television Cinematography (3)
Two lectures and three hours of laboratory.
Prerequisite: Television, Film and New Media 314 (or consent of instructor).
Advanced theory and practice of cinematography for film and television production. Lighting for mood and character; camera movement for story telling; and new techniques in film, digital, and HD formats. Careers in the purely visual aspects of film making. (Not the same course as Television, Film and Media 522 in the 2004-05 catalog and previous SDSU catalogs.)

TFM 530. Selected Topics in Genre Studies for Television and Film (3)
Prerequisites: Television, Film and New Media 310 and 330.
Open only to television, film and new media majors in upper division standing.
Film and television genres (noir, western, comedy, musical, science fiction, soap opera, etc.) including key media texts, aesthetics, themes, history, and social context. May be repeated with new course content. See Class Schedule for specific content. Maximum credit six units.

TFM 540. Documentary Production (3)
Two lectures and three or more hours of activity.
Prerequisites: Television, Film and New Media 314 and 361.
Hands-on field experiences in documentary production to include research and writing techniques, investigative procedures, interviewing, shooting and editing. Analyze significant documentaries. (Formerly numbered Television, Film and Media 340.)

TFM 550. Art Direction for Television and Film (3)
One lecture and four hours of activity.
Prerequisites: Television, Film and New Media 350; 361 or 362 for television, film and new media majors, and Theatre 440 for theatre majors, and consent of instructor. Proof of completion of prerequisites required: Copy of transcript.
Aesthetic, technical, and practical aspects of design for television and film. Experience in scenic design, graphics, set decoration, budgeting, and scheduling.

TFM 551. Production Design for Television and Film (3)
Prerequisites: Television, Film and New Media 350 and credit or concurrent registration in Television, Film and New Media 401.
Production design concepts for television and film. Development of designs and analysis of technical requirements for fictional and documentary productions.

TFM 559. Digital Design for Film and Stage (3)
Prerequisite: Television, Film and New Media 350 or Theatre 440.
Theories and applications of commonly used 3D modeling programs in the entertainment industry. See Class Schedule for specific content. Maximum credit six units.

TFM 560. Advanced Film (3)
Two lectures and more than three hours of activity.
Prerequisites: Television, Film and New Media 314 (or consent of instructor) and 362.
Practicum in direction and production of dramatic and nondramatic film. Cameras, lighting, design, sound techniques, experience in university sponsored productions. Completion of a short film.

TFM 561. Advanced Television (3)
Two lectures and more than three hours of activity.
Prerequisite: Television, Film and New Media 314 (or consent of instructor).
Production processes and techniques to include producing, critical analysis, directing, digital cinematography, and editing of scripted projects. Experience in individual and university-sponsored productions.

TFM 570. Selected Topics in History of Film, TV, and Media (3)
Prerequisites: Television, Film and New Media 310 and 330.
Open only to television, film and new media majors in upper division standing.
Media history including cultural and generic developments, patterns of exhibition, technological influences, significant creative and industrial figures, commercial and social contexts. May be repeated with new content. See Class Schedule for specific topic. Maximum credit six units.

TFM 571. Selected Topics in Director Studies (3)
Prerequisites: Television, Film and New Media 310 and 330.
Open only to television, film and new media majors in upper division standing.
Historical significance of and theoretical approaches to major media directors (Welles, Hitchcock, Spielberg, etc.) including breadth of work, cultural and generic contexts, aesthetic innovation, and recurring themes. May be repeated with new content. See Class Schedule for specific topic. Maximum credit six units.

TFM 572. Selected Topics in Director Studies (3)
Prerequisites: Television, Film and New Media 310 and 330.
Open only to television, film and new media majors in upper division standing.
Media history including cultural and generic developments, patterns of exhibition, technological influences, significant creative and industrial figures, commercial and social contexts. May be repeated with new content. See Class Schedule for specific topic. Maximum credit six units.

TFM 590. Directing for Film and Television (3)
One lecture and six hours of activity.
Prerequisite: Television, Film and New Media 314 (or consent of instructor).
Directing fundamentals and production to include script analysis, director’s preparation and directing actors.

TFM 596. Selected Topics in Television, Film and New Media (1-4)
Prerequisite: Twelve units in television, film and new media.
Specialized study of selected topics from the areas of television, film and new media. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 596, 496, 596 courses applicable to a bachelor’s degree. Maximum credit of six units of 596 applicable to a bachelor’s degree. Credit for 596 and 696 applicable to a master’s degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

Urban Studies
Refer to “Interdisciplinary Programs” in this section of the catalog.
Women’s Studies
In the College of Arts and Letters

OFFICE: Arts and Letters 346
TELEPHONE: 619-594-6524

Faculty
Emeritus: Colwill, Espín, Huckle, Jones, Kohen, Scott, Watson, Zimmerman
Chair: Ghosh
Professors: Cayleff, Donadey, Ghosh, Rothblum
Associate Professors: Hua, Lara, Mattingly, Price
Assistant Professor: Giordano

Offered by the Department
Master of Arts degree in women’s studies.
Major in women’s studies.
Minor in women’s studies.
Certificate in women’s studies, basic.
Certificate in women’s studies, advanced
(refer to the Graduate Bulletin).

The Major
Women’s studies explores who women were, who women are, who they might be, and how their lives and human interactions are affected by society’s values, traditions, and institutions. SDSU has offered courses in women’s studies since 1969 and has one of the strongest academic programs in the nation. Its origins are in the women’s movement, and its vision includes a world free of sexual, racial, age, and class distinctions and other inequalities.

Courses are designed to provide students with a coherent, integrated, and academically rigorous education. Content areas include concepts of self and family, theories of sex differences, history, cultural contributions, and the study of society’s institutions. The emphasis is on increasing the awareness of objective conditions in women’s lives throughout the world, and on developing critical analytical skills.

A degree in women’s studies may be used as preparation for a wide range of careers. Professional opportunities exist in political and social agencies working with women and developing public policy on women’s issues such as health care, employment, family violence, and education. Women’s studies students prepare for careers in such fields as law, journalism, public administration, social services, personnel, and psychology. The skills that women’s studies majors develop in critical thinking and analysis are highly valued in many additional occupations and professions today. A women’s studies major may also go on to advanced academic work preparing for a career as a women’s studies scholar.

Many women’s studies majors plan double majors to enhance their career opportunities.

Impacted Program
The women’s studies major is an impacted program. To be admitted to the women’s studies major, students must meet the following criteria:

a. Complete preparation for the major;

b. Complete a minimum of 60 transferable semester units;

c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

Women’s Studies Major
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 49991) (SIMS Code: 119501)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on “Graduation Requirements.” No more than 48 units in women’s studies courses can apply to the degree.

Students majoring in women’s studies must complete a minor in another field to be approved by the chair or major adviser of the department.

Preparation for the Major: Women’s Studies 101 and 102. (6 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on “Graduation Requirements.”

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the upper division writing courses (W) with a grade of C (2.0) or better. See “Graduation Requirements” section for a complete listing of requirements.

Internship/International Experience Requirement. All women’s studies majors are required to complete either Women’s Studies 598 or satisfy an international experience requirement. Women’s Studies 598 can be completed any semester after prerequisites are met and approved by the internship director. To meet the international experience requirement, majors must complete one of the following with the approval and written consent of the undergraduate adviser:

1. International Field Trip;
2. International Internship;
3. International Student Exchange;
4. CSU Study Abroad Program.

Scholarships are available for the international experience. The internship and the international experience meet the student learning outcomes in the Women’s Studies Department.

Major: A minimum of 27 upper division units to include nine units from Group I; 12 units from Group II; and Women’s Studies 536 and 590.


Group II: Women’s Studies 512, 515, 520, 522, 530, 533, 540, 545, 560, 565, 570, 572, 580, 581, 582, 590, 596, 598*.

* No more than three units may be applied to the major in women’s studies.

Women’s Studies Minor
(SIMS Code: 119501)

The minor in women’s studies consists of a minimum of 18 units in women’s studies, of which 12 units must be upper division to include: Women’s Studies 101, 102, and six units selected from Women’s Studies 310, 320, 325, 331, 336, 340, 341A-341B, 352, 360, 370, 375, 382, 385; Africana Studies 332*, Chicana and Chicano Studies 340A*, Lesbian, Gay, Bisexual, and Transgender Studies 321*, 322*, Political Science 336*, Religious Studies 370*.

Six units selected from Women’s Studies 512, 515, 520, 522, 530, 533, 536, 540, 545, 560, 565, 570, 572, 580, 581, 582, 590, 596, 598*.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

* No more than three units may be applied to the minor in women’s studies.
Women's Studies Certificate
(Offered through the College of Extended Studies)
(SIMS Code: 119504)

The women's studies certificate is offered to non-degree seeking students to provide training in education, health care, community activism, social service agencies, and those concerned with issues relevant to women's lives. Completion of the certificate will increase understanding of women in the humanities, health, and social sciences, as well as become proficient in theories unique to the discipline. Students will learn how women lived, worked, thought, resisted, created knowledge, and engaged in cultural activism.

Students register in upper division Women's Studies courses through the College of Extended Studies. Before being admitted to the program, students must meet with an adviser to map out suitable courses. Applications may be obtained from the College of Extended Studies. Applications may be submitted prior to entering the program or before the completion of six semester units of coursework.

The certificate requires 12 units (four courses) to include Women's Studies 590 (fall) or 536 (spring) and three courses selected from the following overview areas:


**Health Overview:** Women's Studies 325, 360, 382, 520, 522, 540, 565, 572, 582, 597.

Any Health Overview course may be taken to fulfill Women's Studies Overview. Courses must be completed with a grade point average of 2.75 or better. No more than one 300-level course may be taken for the certificate program.

For more information visit the website at [http://www-rohan.sdsu.edu/-wsweb/faculty.htm](http://www-rohan.sdsu.edu/-wsweb/faculty.htm).

*With consent of program adviser.

Courses (WMNST)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

**LOWER DIVISION COURSES**

WMNST 101. Women: Self, Identity and Society (3) [GE]
Interdisciplinary introduction to women's studies thought and scholarship in the social sciences, to include such areas as gender-based language, personality development and self-concept, social evolution, family structures, and economic life.

WMNST 102. Women: Images and Ideas (3) [GE]
Major cultural representations of women in ancient through contemporary societies from perspectives in the humanities, including philosophy, religion, art, literature, and history.

WMNST 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

**UPPER DIVISION COURSES** (Intended for Undergraduates)

WMNST 310. Global Cultures and Women's Lives (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Comparative study of social, economic, political, and ideological aspects of women's position in local and global contexts. Women's status as impacted by modern, indigenous, transitional, and/or border cultures.

WMNST 320. Socialization of Women (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Impact of formal and informal institutions on female development and roles across the life span.

WMNST 325. Psychology of Women (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Theories of the psychological development of women; investigation of biological and cultural factors influencing personality and behavior.

WMNST 331. Women in Asian Societies (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Socio-economic status of women in Asia. Feminism and the status of women in China, India, Japan, Korea, Philippines, and other countries. Feminist movements in Asia and women's status as affected by changing social, economic, and political orders in Asia.

WMNST 336. Women of Color in the United States (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Experiences of U.S. women of color through study of personal essays/autobiography, oral history, plays/novels, poetry, performance/visual art, theory, and other genres. Themes may include identity, voice, representation, empowerment, oppression, and social change.

WMNST 340. History of Women and Sexuality in Modern Europe (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

History of American social, cultural, economic, and intellectual institutions, focusing on the role and perspective of women. Semester I: From colonization to 1860; Semester II: From 1860 to the present. Satisfies the graduation requirement in American Institutions.

WMNST 341A-341B. Women in American History (3-3) [AI]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

History of American social, cultural, political, and intellectual institutions, focusing on the role and perspective of women. Semester I: From colonization to 1860; Semester II: From 1860 to the present. Satisfies the graduation requirement in American Institutions.

WMNST 352. Women in Literature (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Literature by and about women; appraisals of women's place in various literary genres; historical and contemporary themes; evolution of forms and techniques; relation to other art forms.

WMNST 360. Women's Sexuality and the Body (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Social, cultural, and political aspects of women's sexualities and bodies; relationships among beliefs and practices, and among sexual behaviors and identities in historical context; role of popular culture, scientific, medical, and religious ideas.

WMNST 370. Women, Law, and Policy (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Legal factors affecting women in employment, education, health and welfare, property ownership and criminal justice, including investigation of public policy issues which affect women's lives.

WMNST 375. Sex, Power, and Politics (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Social, economic and political factors which explain women's political status and participation. Topics include institutional structures, leadership and ideology, power and authority, and the women's movement as a political movement.
WMNST 382. Gender, Science, and Technology (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning I.A.2. Life Sciences required for nonmajors.  
Feminist science studies to include women in science, scientific research on sex and gender differences, gender in relation to technology, social and political impacts of science and technology and global contexts.

WMNST 385. Women's Work: Invisibility and Empowerment (3) [GE]  
Prerequisite: Completion of the General Education requirement in Foundations of Learning I.B., Social and Behavioral Sciences required for nonmajors.  
Conditions and factors affecting women's paid and unpaid work. Marriage, divorce, fertility, and childcare; women's occupations, earnings and education; economics of sex discrimination; government economic policies and women's welfare.

WMNST 406. Experimental Topics (1-4)  
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

WMNST 499. Special Study (1-3)  
Prerequisites: Three upper-division units and consent of the department chair and instructor.  
Individual study. Maximum credit six units.

**UPPER DIVISION COURSES**  
(Also Acceptable for Advanced Degrees)

WMNST 512. Latinas in the Americas (3)  
Prerequisite: Three upper division units in women's studies.  
How social and other factors impact the lives of Latin American women. Theoretical frameworks illuminate their situation. Sociocultural perspectives are offered on Latin American women's life narratives.

WMNST 515. Women: Myth, Ritual, and the Sacred (3)  
Prerequisite: Three upper division units in women's studies.  
Meanings and functions of myths and rituals in their sacred and secular aspects, emphasizing their impact on women's lives and relationships in differing cultural contexts, past and present.

WMNST 520. Reproductive Rights and Justice (3)  
Prerequisite: Three upper division units in women's studies.  
Mental health and mental illness in literature, film, and psychological research. Clinical and feminist approaches to mental health issues in women's lives.

WMNST 522. Women: Madness and Sanity (3)  
Prerequisite: Three upper division units in women's studies.  
Comparative study of women's movements worldwide, including organizations, issues and initiatives. Women's diverse social/political strategies within local, national, and global contexts. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

WMNST 530. Women's Movements and Activism (3)  
Prerequisite: Three upper division units in women's studies.  
Comparative study of women's movements worldwide, including organizations, issues and initiatives. Women's diverse social/political strategies within local, national, and global contexts. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

WMNST 535. Lesbian Lives and Cultures (3)  
Prerequisite: Three upper division units in women's studies.  
Comparative study of women's movements worldwide, including organizations, issues and initiatives. Women's diverse social/political strategies within local, national, and global contexts. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

WMNST 540. Women and the Environment (3)  
Prerequisite: Three upper division units in women's studies.  
Women environmental activists and authors including those in diverse communities, settings, and alliances (Native American, British colonial, Asian, American environmental movements, urban environmental justice).

WMNST 545. Women and Sports (3)  
Prerequisite: Three upper division units in women's studies.  
Diverse women's creation of and involvement in recreational and competitive sports, mid-1800s to present to include impact of medical experts' views, homophobia, disability, individual elite athletes, team sports, economic viability, and changes since Title IX.

WMNST 560. Women in Muslim Societies (3)  
Prerequisite: Three upper division units in women's studies.  
Socio-political status of women in Muslim societies in Middle East, North Africa, and Asia; women in the Qur'an; Muslim women's movements.

WMNST 565. Women: Health, Healing, and Medicine (3)  
Prerequisite: Three upper division units in women's studies.  
Relationship of women to "modern" and "traditional" health care/health systems in history, culture, and global contexts. Major themes in history, culture, and contemporary debates in feminist scholarship.

WMNST 570. Gender, War, and Peace (3)  
Prerequisite: Three upper division units in women's studies.  
Interdisciplinary exploration of women's relation to war, peace, and militarism. Women's peace activism and beliefs about motherhood; women's roles in armed conflicts; effects of war on women; military policy and beliefs about masculinity.

WMNST 572. Women and Violence (3)  
Prerequisite: Three upper division units in women's studies.  
Forms of violence against and by women. Processes which shape women's resistance to, and collusion in, social, economic, political, and sexual violence.

WMNST 580. Women, Development, and the Global Economy (3)  
Prerequisite: Three upper division units in women's studies.  
Women's roles as agents and recipients of global economic and political change focusing on women's empowerment, work, health, and the environment. Topics include women's movements worldwide and non-governmental organizations.

WMNST 581. Women's Experiences of Migration (3)  
Prerequisite: Three upper division units in women's studies.  
Gender analysis of impact of international migration on women's lives. Identity formation, trauma, language, gender roles, and sexuality in life narratives of immigrant and refugee women. Economic and legal issues affecting immigrant and refugee women.

WMNST 582. Feminist Science and Activism (3)  
Prerequisite: Three upper division units in women's studies.  
Feminist science studies to examine role of public in creating and challenging scientific knowledge. Case studies of activism and science. May include HIV/AIDS, the environment, sex differences, women's health, and technology.

WMNST 590. Feminist Thought (3)  
Prerequisites: Six upper division units in women's studies.  
Readings of feminist theory in historical perspective, with attention to contemporary debates in feminist scholarship.

WMNST 596. Topics in Women's Studies (1-3)  
Prerequisite: Consent of instructor.  
Advanced topics in women's studies. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

WMNST 597. Research Project (3)  
Prerequisites: Six upper division units in women's studies and consent of instructor.  
Individual research project.

WMNST 598. Women's Studies Internship (3) Cr/NC  
Prerequisites: Three upper division units in women's studies and consent of instructor.  
Application of women's studies theories and scholarship to community service and activism. Internship includes 120 hours of work in local public and private agencies serving women and girls. Maximum credit six units.

**GRADUATE COURSES**  
Refer to the Graduate Bulletin.