CURRICULAR GOALS

The undergraduate students at Saint Mary’s College face the challenge of choosing a suitable sequence of courses—their personal curriculum—from the various sets of undergraduate courses offered by the College. The choices made can be deeply personal and have profound consequences for the life of each individual student. Every student can be confident that any course of study the College offers is guided by and consistent with the College mission statement.

The spirit of the liberal arts, especially in the practice of genuine inquiry, initiates students into the examined life and enables them to contribute meaningfully to community life. Each curriculum gives the student access to the results of inquiry, engages the student in particular methods of inquiry, and strengthens the student’s own powers of inquiry.

SUBSTANTIVE GOALS

The curriculum offers students the serious pursuit of knowledge of God, the natural world, self and others, life and love, political and moral order, goods and values, culture and cultures, art, history, and knowledge concerning knowledge itself. The graduate will have also explored and weighed the ethical and religious claims of Jewish and Christian scriptures, or the insights of Roman Catholic theology or church history, or contributions to human spirituality from diverse persons and peoples.

DISCIPLINARY GOALS

The curriculum requires that students demonstrate:

• Growing mastery of a theoretical or a practitioner’s way of understanding the world.
• Experience with a wide range of academic disciplines.
• Increased sophistication in thinking from multiple disciplinary perspectives.
Program of Study

INSTRUMENTAL GOALS
The curriculum challenges students to demonstrate the ability to:
• Define concepts, distinguish ideas, reason inferentially, detect and critique fallacy, appreciate and evaluate analogy.
• Accurately understand diverse genres of spoken and written English, speak clearly and persuasively, and write effective, grammatical English prose;
• Engage in meaningful communication in a language other than English;
• Generate correct, rule-governed calculations, and follow sequential mathematical reasoning concerning quantity and pattern;
• Emphatically appreciate productions or the ways of life of diverse world cultures;
• Carry out relevant observations, identifications, categorizations and measurements to test or illustrate a theory accounting for select physical phenomena;
• Access, evaluate, and appropriately use sources of information;
• Employ relevant academic and professional technology for modeling and manipulating data, finding correlations and predicting outcomes;
• Recognize the influence of culture, language, and history on thought and ways of thinking;
• Cooperate in the collaborative learning of a truth-seeking and knowledge-making community.

In order to assure that these goals—and thus student needs—are met, the College carefully assesses new programs and courses and regularly reviews existing major departments and programs.

I. MAJOR PROGRAMS
The major program consists of two interlocking components: a general education requirement, and a major field of study.

GENERAL EDUCATION REQUIREMENT
The general education requirement, a broad introduction to a diversity of academic areas, consists of 12 courses from three specified groups: Religious Studies (two courses), Collegiate Seminar (four courses), and Area requirements (six courses). Additionally, all students participate in the January Term, a one-month course outside of their major discipline that provides opportunities for students and allows for an intensive pursuit of an area of interest. All students, at some point in their program, normally take two courses from the Department of Religious Studies. Freshmen must take one Collegiate Seminar in both the fall and spring terms. Transfer students ordinarily complete at least one Collegiate Seminar for each year of attendance, and must complete at least one course in Religious Studies. Students normally take one January Term for each year of study. The Area requirements seek to provide students with academic experience in the areas of the humanities, empirical science, and social sciences. On the principle that study of a foreign language provides an introduction to other ways of thinking and conceiving of the world and facilitates communication with people of other cultures, Saint Mary’s has established a language proficiency requirement which provides that students must demonstrate a proficiency in a second language which is equivalent to that achieved by completion of three terms of college-level second language study. Recognizing also the need to enhance awareness of the increasing importance of the global community, Saint Mary’s College has established a diversity requirement which stipulates the completion of one course devoted to the study of the history, traditions and/or culture of peoples of non-European origin.

All students must take the Collegiate Seminars in chronological order: one freshman seminar in both fall and spring terms; one additional seminar in sophomore year, fall or spring term; one additional seminar in junior year, fall or spring term; regardless of ultimate graduation plans. For transfer students the Seminar requirement is determined at entrance and normally amounts to one Seminar for each year or partial year of attendance at Saint Mary’s College. Transfer students are assigned to Seminar 130 and 131. International students whose native language is not English take the first Collegiate Seminar (130) in their sophomore year and then (sophomore or junior year) Seminar 131. Seminar courses 144 and 145, if taken beyond the Collegiate Seminar requirement, apply towards the Area A requirement.

2. Theology and Religious Studies: Students must complete two courses in Theology and Religious Studies. Please note that TRS 01 or its equivalent is a prerequisite to all upper division classes in Theology and Religious Studies. The College ordinarily waives one religious studies course for students who transfer with 16+ course credits. Students may apply Theology and Religious Studies courses beyond those required to their Area A (Humanities) requirement.

3. Area Requirements: Six courses. All students must take two courses in Area A and two courses in Area C. One course must be taken in Area B Mathematics, and one course in Area B Science. Most courses in the disciplines of A, B and C fulfill the Area requirement, including courses required for a minor field of study. Courses which do not fulfill an Area requirement are:
1. those taken to complete other general education requirements;
2. practice-oriented, studio, activity, or other specified department courses which are so indicated in this catalog;
3. any course in the major field of study, (however, courses required for the major which are in a related field may fulfill an Area requirement. Students whose major field of study is in Area B complete the Area B requirement by fulfilling the major requirements.) Students pursuing alternative plan majors should consult their advisor regarding the satisfaction of Area requirements with courses in the major plan of study. Area requirements for transfer students are determined for them at entrance and generally amount to no more than one course for each term of enrollment at Saint Mary’s College.

Area A — Humanities (two courses) Art History and non-studio courses only; Communication; English; Languages (Classical and Modern); Performing Arts; Philosophy; Religious Studies; Women’s Studies
Area B — Mathematics (one course) Mathematics; Computer Science
Area B — Science (one lab course) Biology; Chemistry; Environmental and Earth Sciences; Physics and Astronomy
Area C — Social Sciences (two courses) Anthropology and Sociology; Economics; History; Politics; Psychology; Women’s Studies (by petition)
4. Written English Requirement: At least two courses. English 4, Composition, and English 5, Argument and Research, taken consecutively in the first year of attendance, constitute the English composition requirement. English 4 is prerequisite to English 5.

All students, both freshmen and transfer, unless otherwise notified, must take the Saint Mary’s College Writing Placement Exam before enrolling in an English class. The results of the Writing Placement Exam will determine a student’s placement in Composition.

Students may be exempted from English 4 by scoring 4 or above on the AP exam in Composition or Literature.

There is no exemption from English 5.

The English composition requirement for non-native speakers of English is SIS 4, Composition for Non-Native Writers, and SIS 5, Argument and Research, taken consecutively in the first year of attendance. All non-native English-speaking students, both freshmen and transfer, regardless of visa status, must take the Saint Mary’s College Writing Placement Exam. The results of the Writing Placement Exam will determine a student’s placement in SIS. A score of 600 on the TOEFL exempts a student from SIS 4. There is no exemption for SIS 5.

5. American Culture and Civilization (SIS 15): Required for all international students who did not complete their entire secondary education in the United States. This requirement is to be satisfied during the first term of enrollment at the College. This course may be waived by the SIS Placement Committee for transfer students who enter with junior standing.

6. Language Proficiency Requirement: Students shall demonstrate proficiency in a second language in one of the following ways:
   a) by completing three years of the same language (modern or classical) in secondary school with a grade point average of 3.0 or higher;
   b) by scoring at least a 3 on the College Entrance Examination Board Advanced Placement (CEEB AP) exam in language;
   c) by achieving a TOEFL score of at least 527 (197) (for international students who are non-native speakers of English);
   d) by achieving an intermediate level score on the Foreign Language Placement Exam;
   e) by successfully completing a third term modern or classical language course (course 3) or its equivalent at Saint Mary’s College or another post-secondary institution.

Courses taken to satisfy the language requirement cannot be applied towards the Area A requirement. Courses taken in another language or beyond the language requirement, do satisfy Area A.

Students who have taken the CEEB AP exam in language and scored at least a 3 receive course credit as follows: a score of 3 gives credit for course 4; a score of 4 gives credit for courses 4 and 10; a score of 5 gives credit for courses 10 and 11.

At present, Saint Mary’s College offers the following modern languages: French, German, Italian, Japanese, and Spanish; and the classical languages Greek and Latin. Students may also demonstrate proficiency in another language, including American Sign Language, by arrangement with the Department of Modern Languages.

All entering students who do not meet the requirement by one of the ways cited above should take the Foreign Language Placement exam prior to course scheduling.

7. Diversity Requirement: Students shall complete one course focused on the history, traditions, and/or culture(s) of a people or peoples of non-European origin. A course taken to fulfill this requirement may also satisfy an Area, major or minor, or general education requirement. In special circumstances where there is no other alternative available, a student may petition through the Registrar’s office to have a January Term course satisfy the requirement. Approval of the petition is subject to the evaluation of the January Term director. A list of courses that routinely satisfy the requirement is available from the Registrar’s Office and from the end of the curriculum section, on page 163. Additional courses in a given semester may have content appropriate to the requirement. Students may petition through the registrar to have such a course satisfy the requirement.

8. One January Term course for each year of full-time attendance: Students may only enroll in one full credit course and one .25 credit course during the January Term. (Students in the part-time enrollment program are encouraged to take January Term courses. Any part-time student who wishes to be excused from this requirement must petition the dean of the School of Liberal Arts to do so.)

9. 17 upper-division courses.

Program of Study

MAJOR FIELD OF STUDY

Defined as a group of coordinated courses ordinarily including at least two preparatory courses at the lower-division level and at least eight courses at the upper-division level. Certain majors may require additional background course work in related fields. The regular major groups available to students in the various curricula of the College are listed elsewhere in this Catalog. A student may declare or change majors on the appropriate petition form available in the Registrar’s Office. A student being graduated with a double major will receive only one degree even if the majors are in two different schools.

Students choose a major field of study, an in-depth concentration in a specific academic area, and elective courses according to their interests. (Those who have not determined a program or major field of study at entry are encouraged to take introductory courses in various fields and to settle on a major field of study only as their interests develop a sharper focus. Ordinarily, students must declare their major field of study by the commencement of their junior year.)

MINOR FIELD OF STUDY

The College also offers the option of a minor field of study, defined as a combination of at least five courses from a discipline other than that of the major field, at least three of which must be upper division.
II. ALTERNATIVE MAJORS

SPLIT MAJORS
Combines work in two departments, must be approved by the chairs of the departments concerned and by the registrar. Such majors ordinarily comprise nine upper-division courses (six courses in one field and three in another), in addition to the lower-division prerequisites of both departments.

INTERDISCIPLINARY MAJOR
Includes the following: International Area Studies major, e.g., European Studies; Latin American Studies, Student-Directed Studies (see director of International Area Studies); American Studies (see chair, Department of History); Health Science major (see Health Science advisor, School of Science); Health and Human Performance major (see chair, Department of Kinesiology); Cross-Cultural Studies major (see dean, School of Liberal Arts).

INDIVIDUALIZED MAJOR
A student who believes that his/her academic needs and purposes would be better served by a distinctive program of studies may present an individualized major plan. Besides fulfilling requirements for a major, this plan must satisfactorily lead the student toward the goal of liberal education which the College sees as essential for all of its graduates. Students wishing to pursue an individualized major must submit their proposal to the chair of the Educational Policies Board for approval. The chair may consult board members and appropriate department chairs before giving approval.

III. LIBERAL AND CIVIC STUDIES PROGRAM
See program description and requirements in this catalog under Liberal and Civic Studies Program, p. 114.

IV. INTEGRAL PROGRAM
See program description and requirements in this catalog under Integral Program, p. 105

V. 3+2 ENGINEERING PROGRAM
For the special requirements of the 3+2 Engineering Program see in this catalog, p. 88.

VI. PRE-PROFESSIONAL CURRICULA
Programs for pre-law students, and for students intending to enter the medical professions, are described under the heading Pre-professional Curricula (page 147). Students planning careers in business will find information under the heading School of Economics and Business Administration. For those planning careers in elementary or secondary school teaching, the College offers a variety of graduate credential programs described in a separate bulletin, as well as undergraduate work described under the School of Education. In addition, several departments offer subject matter preparation programs. These programs allow a student, who successfully completes them, to waive the subject matter competency test for a teaching credential.

VII. 2+2 PRE-NURSING PROGRAM
See course descriptions and requirements in this catalog under Nursing, p. 131.
Below is a brief summary of some of the College’s policies that apply to students. The complete policies are included in handbooks and publications of the College.

**NON-DISCRIMINATION POLICY**

In compliance with applicable law and its own policy, Saint Mary’s College of California is committed to recruiting and retaining a diverse student and employee population and does not discriminate in its admission of students, hiring of employees, or in the provision of its employment benefits to its employees and its educational programs, activities, benefits and services to its students, including but not limited to scholarship and loan programs, on the basis of race, color, religion, national origin, age, sex/gender, marital status, ancestry, sexual orientation, medical condition or physical or mental disability. The student Section 504 and ADA coordinator is Jeannine Chavez-Parfitt, director, Academic Support and Achievement Programs, (925) 631-4358, who on behalf of the College, is responsible for evaluating and working with qualified students regarding requests for reasonable accommodations. All questions regarding the College’s non-discrimination policy and compliance with it and the various laws, and any complaints regarding alleged violations of College policy, should be directed to Emily Elliott, director of Human Resources, who serves as the Equal Employment Opportunity Compliance Officer for the College and the College’s employee ADA coordinator, (925) 631-4212.

A full statement of the College’s Non-Discrimination, Retaliation and Amorous Relationship policies can be found in the Student, Staff and Faculty Handbooks.
FAMILY EDUCATION RIGHTS AND PRIVACY ACT OF 1974

Annually, Saint Mary’s College informs students of their rights and obligations under the Family Education Rights and Privacy Act of 1974. This Act, with which the institution seeks to comply fully, was enacted to protect the privacy of educational records, including but not limited to disciplinary actions, to assure the right of students to inspect and review their educational records, to protect student privacy and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. A policy statement, which explains in detail the procedures to be used by the College for compliance with the provisions of the act, is available in the Office of the Registrar and on the College’s website.

SEXUAL HARASSMENT

Sexual harassment is a form of discrimination and, as such, is prohibited by law and by the policy of Saint Mary’s College of California. The College will not tolerate such conduct. Student complaints will be promptly investigated and students determined to have violated the College’s policy prohibiting such conduct will be subject to the imposition of discipline, which may include suspension, termination, expulsion, and/or other appropriate remedial steps. In addition, the College’s Student Handbook includes a statement of the College’s policy prohibiting sexual assault and misconduct.

Examples of sexual harassment:
Unwelcomed sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature may constitute sexual harassment when:
1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual’s educational advancement and benefits;
2. Submission to or rejection of such conduct by an individual is used as the basis for academic decisions affecting that individual; or
3. Such conduct has the purpose or effect of unreasonably interfering with an individual’s academic performance or creating an intimidating, hostile or offensive, educational or living environment.

A full statement of the College policy and procedures concerning sexual harassment, can be found in the Faculty, Staff and Student Handbooks. Deans, directors and department heads are urged to inform students, staff and faculty of Saint Mary’s College policy on sexual harassment and to inform students of procedures for bringing and responding to campus complaints. At any time, any student may contact the director of Human Resources, who has the general responsibility for the implementation of these policies, when a student complaint involves a College employee or vendors, or the associate dean for Student Life if a student complaint involves another student.

DISABLED STUDENT SERVICES

Services are available to qualified students with temporary or permanent disabilities including, but not limited to, mobility limitations, endurance difficulties, visual impairments, hearing impairments, learning disabilities, and any other documented physical, psychological, health or emotional impairment and other physical or mental conditions that qualify as a disability and which impedes the student’s equal opportunity to participate with other students at Saint Mary’s College of California. For further information, contact the student ADA and Section 504 coordinator for disabled student services, Jeannine Chavez-Parfitt at (925) 631-4358.
Any course listed in this catalog with a prerequisite assumes a grade of C– or better in the prerequisite course, unless specified otherwise by the department or program in its course listings.

Courses numbered 1 to 99 are lower division; courses numbered 100 to 199 are upper division; courses numbered 200 to 599 are graduate. Course numbers which are hyphenated (e.g., Accounting 160-161) indicate that the course is continued from the previous term, and that the first part is normally prerequisite to the second part. Credit is given for each part.

If a course is a practice-oriented, studio, or activity course, or for other reasons is not acceptable as a course which fulfills an Area requirement, it is marked: * Does not satisfy an Area requirement.

Final information concerning course offerings and class schedules will be issued at the time of registration for each term. (January Term courses are listed separately in a special catalog published each fall.) The College reserves the right to cancel any course for which there is inadequate enrollment.
Curriculum Accounting

ACCOUNTING

While confirming the discipline’s technical content, the Department of Accounting also endeavors to present accounting as a liberal discipline. When discussing accounting rules and standards, the emphasis is given to fundamental underlying principles and the conceptual framework of the discipline. In explaining complex standards, the department considers the economic consequences of accounting rules and pronouncements. In all accounting courses, it also seeks to strengthen students’ skills of analysis, synthesis, and oral and written communication.

Finally, ethics and computer technology are integrated throughout the accounting curriculum.

FACULTY
Virginia G. Smith, M.B.A., M.S., C.P.A., Adjunct, Chair
Fred E. Anderson, Jr., M.B.A., C.P.A., Professor Emeritus
Erica Bains, Lecturer
Mark Bichsel, M.B.A., M.P.A., Adjunct
Joseph Lupino, M.B.A., C.P.A., Associate Professor
Anne Smith, Ed.D., Associate Professor
Suneel Udpa, Ph.D., Professor
Stanford White, M.B.A., C.P.A., Professor Emeritus

LEARNING OUTCOMES
When they have completed the Accounting Program, students will be able to:

• DEMONSTRATE the ability to construct, analyze and audit financial statements, including the balance sheet, the income statement, the statement of cash flows and disclosures required by generally accepted accounting principles.

• DEMONSTRATE a beginning understanding and awareness of federal income tax law, general business law and business ethics.

• COMMUNICATE effectively in writing and orally with diverse peers and faculty.

• DEMONSTRATE skills in using electronic spreadsheets for financial reporting and analysis, databases, computer hardware and software, sufficient to meet expectations of an entry-level employee at a national CPA firm.

• ENGAGE in his/her community as a good citizen through involvement with professional, political, social and community organizations.

• PASS the Uniformed Certified Public (CPA) examination.

MAJOR REQUIREMENTS

BUSINESS CORE

LOWER DIVISION
Acct 1 Financial Accounting
Acct 2 Managerial Accounting
Econ 3 Principles of Microeconomics
Econ 4 Principles of Macroeconomics
BusAd 40 or Math 4 Business Statistics or Introduction to Probability and Statistics

UPPER DIVISION
Acct 160 Intermediate Accounting 1
Acct 161 Intermediate Accounting 2
Acct 162 Advanced Accounting
Acct 164 Auditing
Acct 168 Tax Accounting
Acct 191 Accounting Information Systems
Acct 194 Financial Statement Analysis
BusAd 120 Law and Business

ELECTIVES
Choose three from the following:
Acct 165 Cost Accounting
Acct 167 Govt/Non-Profit Accounting and International Accounting
Acct 169 Advanced Tax Accounting
Acct 170 Selected Issues in Accounting
BusAd 121 Advanced Topics in Business Law
BusAd 124 Marketing
BusAd 131 Organization Theory
BusAd 181 Ethical, Social, Political Issues in Business (or Bus Ad 182)
Economics 3 and 4 also fulfill the Area C—Social Sciences requirement (two courses).
Math 4 also fulfills the Area B—Mathematics requirement (one course).

Students should consult faculty advisors for assistance in selecting additional courses to fulfill the 36-course (or the equivalent for transfer students) requirements for graduation, based on their particular career goals and personal interests. Recommended courses for Accounting majors in business/economics disciplines include: BusAd 124 Marketing; BusAd 131 Organization Theory; BusAd 132 Operations Management; Econ 130 Money, Credit, and Banking; and Econ 136 Investments.

Accounting majors are also encouraged to take courses offered by departments in the Schools of Liberal Arts and Science. Students may not transfer more than two upper-division courses from another institution for credit in the accounting major (or minor).
MINOR REQUIREMENTS
A student may earn only one minor in the School of Economics and Business Administration. The requirements for a minor in accounting are: Accounting 1 and 2, Economics 3 and 4, Intermediate Accounting 160 and 161, Accounting 194 Financial Statement Analysis and one additional upper-division accounting course.

PREREQUISITE GRADE
Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

SUGGESTED ACCOUNTING MAJOR PROGRAMS — OPTION A
For students who elect to major in accounting during freshman year. Most courses are only offered in one term per year. It is the responsibility of the student to ensure that he/she takes all required courses in the term in which they are offered.

SUGGESTED ACCOUNTING MAJOR PROGRAMS — OPTION B
For students who elect to major in accounting during the sophomore year. Most courses are only offered in one term per year. It is the responsibility of the student to ensure that he/she takes all required courses in the term in which they are offered.

COURSES
LOWER DIVISION

1. Financial Accounting
Introduces students to the basic structure of financial accounting. Topics include the accounting model, the adjustment process, accounting for elements of the income statement and balance sheet, statement of cash flows, and interpretations of financial statements. The course presents both a preparer’s as well as a user’s perspective. The course is taught in a computer classroom using a general ledger accounting program.
2 Managerial Accounting

Focus is on understanding costs and cost behavior and the use of cost information for planning, evaluation, and control decisions. Students learn how a business manager uses management accounting information to solve problems and manage activities within an organization. The course is taught in a computer classroom, using the spreadsheet program Excel. Prerequisite: Accounting 1.

UPPER DIVISION

160 Intermediate Accounting I

The first in a two-course series in intermediate financial accounting, designed to deepen the students' understanding of financial reporting practices and principles. The topical coverage includes an in-depth treatment of the elements of the income statement and the assets and liabilities section of the balance sheet. Attention is given to examples of current reporting practices and to the study of the reporting requirements promulgated by the Financial Accounting Standards Board. Prerequisite: Accounting 1.

161 Intermediate Accounting 2

Second in a two-course series in intermediate financial accounting. The topical coverage includes an in-depth analysis of stockholder's equity, earnings per share calculations, investments, and the revenue recognition principle. In addition four special topics are examined: accounting for income taxes, accounting for pensions, accounting for leases, and the statement of cash flows. Prerequisite: Accounting 160.

162 Advanced Accounting

The first part of this course covers the five chapters from Intermediate Accounting: Intangibles, Pensions, Leases, Accounting Errors and Statement of Cash Flows.

The second part of this course covers business combinations, the equity and cost methods of accounting for investments in common stock and consolidated financial statements. The course begins with the basic understanding of the different types of business combinations and the different methods of accounting. It then builds on this conceptual foundation and adds complexities commonly encountered in practice as the course proceeds.

The course format, assignments, objectives, pedagogy, and grading criteria are designed to deepen the students’ understanding of financial reporting practices and principles. For each topical area, the course stresses the theoretical and logical basis of the accounting methods applied. Placing emphasis on concepts and underlying principles, the course ensures that the student will achieve a better understanding of “why” in addition to “how” certain procedures are used in particular circumstances. Also, by emphasizing principles and concepts, the course strives to promote improved analytical thinking and problem-solving proficiency.

164 Auditing

This course integrates the theory and practice of auditing. Special emphasis is given to current issues facing the profession. Includes coverage of professional standards, ethics, evaluation of internal control, consideration of risk, gathering of audit evidence, sampling, consideration of fraud factors, IEDP auditing, liability issues, and overview of other assurance services. Includes a case study. Prerequisite: Accounting 160 and 161. Senior standing.

165 Cost Accounting

An advanced course designed to provide students with a better appreciation of cost accounting and its role in business decision-making and performance evaluations. The course is structured around three basic topics: (1) costing of products and production operations; (2) use of cost information in performance evaluation and cost control; and (3) use of cost information in managerial decision-making. The course emphasizes applications of the concepts using complex problems and “real world” cases. Prerequisite: Accounting 161.

167 Governmental and Non-Profit Accounting

This course provides a conceptual and practical understanding of accounting and financial reporting for state and local governments and non-profit organizations. Prerequisite: Accounting 161.

168 Tax Accounting

Examines current federal taxation as related to individuals. The topical coverage includes determination of individual income tax liability, gross income inclusions and exclusions, capital gains and losses, deductions and losses, and bad debts, depreciation, and property transactions. A research report, an oral presentation, and a computer project are required. Prerequisites: Accounting 160 and 161.

169 Advanced Tax Accounting

Examines current federal taxation as related to corporations. S Corporations, partnerships, gifts, estates, and trusts. The topical coverage includes determination of corporate tax liability, corporate distributions, acquisitions and reorganizations, tax issues relating to partnerships and S corporations, gifts and estate taxes, and taxation of trusts and estates. A research report, an oral presentation, and a computer project are required. Prerequisite: Accounting 168.

170 Selected Issues in Accounting

In this seminar-type class students read and discuss authoritative pronouncements from the Financial Accounting Standards Board, releases from the American Institute of Certified Public Accountants and the California Society of CPAs, as well as current newspaper and journal articles. A variety of current issues relative to accounting standards and professional employment in accounting are discussed, such as emerging international accounting standards, ethical issues, forensic accounting, peer review, fraud managed earnings, market reaction to accounting information, corporate governance and new developments at the SEC. Prerequisite: Accounting 162.

191 Accounting Information Systems

Examines the communication, information, and networking technologies used by companies with a focus on accounting and financial systems. In addition, contemporary information technology issues such as file processing; data management concepts; LAN technology; and system design, implementation, operation and control are discussed. Students are exposed to spreadsheet programs, database and accounting package software using cases and examples. Prerequisites: Accounting 1 and 2.

194 Financial Statement Analysis

Required of all accounting majors; this capstone course is structured to integrate concepts and principles learned in fundamental and intermediate accounting courses. The case course is taught primarily using “real world” cases and financial statements. The course is structured so that students get the “big picture,” i.e., they appreciate the different uses of accounting information; they understand how other aspects of business affect accounting and they are aware of the complexity of the environment and understand how accounting fits into such a system. Prerequisites: Accounting 160 and 161, senior standing.
At the intersection of biological science, humanities and social science, anthropology brings a social, cross-cultural, historical, and multi-ethnic dimension to the liberal arts curriculum. Anthropology provides students with a theoretical and analytical framework with which to function in an increasingly global, complex and interdependent world.

Fundamental to anthropology is the experience of conducting field work. Living with and studying in cultures around the world, anthropologists seek to discover universals as well as document differences among human groups. Department faculty has done field work in Italy, Polynesia, Ecuador, Peru, Bolivia, Guatemala, China, the Philippines, South Africa and the United States.

Anthropology’s subject matter ranges from pre-history to the study of contemporary cultures in the United States and throughout the world. Our faculty’s expertise includes household archaeology, maritime archaeology, indigenous rights, urbanization, gender, globalization, religion, virtual societies, identity, immigration, colonialism and post-colonial society. Because it teaches us about other people’s lives, traditions and values, anthropology prepares us to understand and appreciate our own multicultural society.

American anthropology comprises four sub-disciplines: cultural anthropology, archaeology, physical anthropology and linguistics. Our program emphasizes the holistic attributes of traditional anthropology as well as a commitment to the application of anthropological insights to contemporary social issues such as human rights, cultural resource management, and political and economic injustices.

The cross-cultural nature of the anthropology major develops research and analytical skills well-suited to students interested in careers in both international and domestic business, teaching at all levels, public and mental health, counseling, social work, international non-profit agencies, law and law enforcement, museum curatorship, and archaeological and anthropological research.

Students can take advantage of the exchange course program to enroll in anthropology and archaeology courses at the University of California, Berkeley, as well as Mills College and California State University East Bay at Hayward. The department offers a field placement/internship program with neighboring institutions such as social service agencies and businesses. Students are encouraged to study a foreign language and to study abroad. The chair can advise students on suggested programs.

FACULTY
Cynthia Van Gilder, Ph.D., Associate Professor, Chair
James Allan, Ph.D., Lecturer
Dana Herrera, Ph.D., Assistant Professor
Jennifer Heung, Ph.D., Assistant Professor
Lynn M. Meisch, Ph.D., Professor
Paola Sensi-Isolani, Ph.D., Professor
Margo Winer, Ph.D., Professor

LEARNING OUTCOMES
When students have completed the anthropology program they will be able to:
• APPRECIATE the great diversity of human cultures and the interrelatedness of economic, socio-political and religious systems.
• APPROACH cultural diversity with thoughtfulness and sensitivity.
• EXAMINE their own lives in social and cultural context and assess how their lives are affected by the specific time and place in which they live.
• UNDERSTAND anthropological theory and methods and how they are applicable in and beyond academia.
• EMPLOY critical reading, thinking, and writing skills that will allow them to understand and meaningfully contribute to an increasingly complex, multicultural, and interdependent world.
• EXPRESS themselves with confidence and clarity in both written and oral communication.
• WORK INDEPENDENTLY collecting and analyzing primary and secondary data, producing research papers in accordance with the ethical and professional standards of the American Anthropological Association.
Curriculum Anthropology

Major Requirements
The anthropology major comprises 13 lower- and upper-division courses. Students have the choice of majoring in anthropology or anthropology with an archaeology concentration.

While all courses are to some extent interdisciplinary, unless otherwise designated, odd numbers have an emphasis on anthropology, while even numbers have an emphasis on sociology.

A grade of C- for coursework is required to count toward the major or minor. In addition, the minimum acceptable grade is C for the capstone courses Anthropology 130: Anthropological Theory and Anthropology 132: Research Methods.

Lower-Division Courses for Both Anthropology and Anthropology with an Archaeology Concentration

Anthropology 1 Introduction to Social and Cultural Anthropology
Sociology 2 Introduction to Sociology
Anthropology 5 Introduction to Archaeology
Biology 7 Introduction to Biological Anthropology (course description is included in Biology listings)

Upper-Division Courses for Anthropology

I. Anthropology 121 World Cultures
   Anthropology 130 Anthropological Theory
   Anthropology 132 Research Methods
   Sociology 134 Contemporary Social Issues

   II. Five additional upper-division courses, three of which must be anthropology courses, two of which may be sociology courses.

Upper-Division Courses for Anthropology with Archaeology Concentration

I. Anthropology 121 World Cultures
   Anthropology 126 Field Experience
   Anthropology 129 World Prehistory
   Anthropology 130 Anthropological Theory
   Anthropology 132 Research Methods
   Sociology 134 Contemporary Social Issues

   II. Three additional upper-division anthropology courses, one of which must be an archaeology course.

Minor Requirements
A grade of C- is required for coursework to count toward the minor.

Anthropology
The minor in anthropology requires two lower-division courses (Anthropology 1: Introduction to Social and Cultural Anthropology, and either Anthropology 5: Introduction to Archaeology or Biology 7 Biological Anthropology), and four upper-division anthropology courses of the student’s choosing.

Archaeology
The archaeology minor requires three lower-division courses (Anthropology 1: Introduction to Social and Cultural Anthropology, Anthropology 5: Introduction to Archaeology, Biology 7: Introduction to Biological Anthropology) and three upper-division archaeology courses. One of these courses must be Anthropology 129: World Prehistory; a second must be an upper-division archaeology course; the third may be any upper-division anthropology course.

Ethnic Studies
The Anthropology Department offers a minor in ethnic studies. The minor allows a focus on two of the under-represented ethnic groups in the United States, provides theoretical background on issues of ethnicity, and is interdisciplinary in nature. The minor requires the following courses: Anthropology 1 or Sociology 2, and Sociology or Anthropology 112; two courses from Anthropology 119, Anthropology or Sociology 123 (courses may be repeated for credit as content varies); either Sociology 116 or History 136; Politics 110, and one upper-division course in History, English, or Modern Languages that covers either of the two ethnic groups which are a part of a student’s focus, i.e., English 153, 154; Spanish 150; History 140, 141; Psychology 7, 165.

Courses

Lower Division

I. Introduction to Social and Cultural Anthropology
A study of the nature of culture and diversity of societies. This course, which focuses on cultures in Asia, Oceania, Africa and the Americas, introduces the beginning student to some of the main areas of anthropology: kinship, gender, the world system, fieldwork, magic and religion, social change, and the political system of societies throughout the world.

5 Introduction to Archaeology
Students are introduced to the ancient cultures of the world that existed before written records (i.e., prehistory). Cultures from every world area are studied, including the Aztec Empire, Mycenaean Greece, Mesopotamia, the Celts, and the Inca Empire. Additionally, students gain an understanding of the methods and theories of contemporary archaeology through lecture, discussion, and hands-on activities. (Please note: Students are encouraged to enroll in Anth 7, but it is NOT required.)

7 Conservation of Archeological Materials (25)
Students work in our archaeology lab with various artifact collections. Students sort and catalogue, analyze various classes of artifacts to identify manufacturing techniques, temporal characteristics and cultural affiliations. Basic conservation methodology is also introduced.
UPPER DIVISION

All upper-division courses have a prerequisite of any one of the following lower-division anthropology or sociology courses. These courses include: Anthropology 1: Introduction to Social and Cultural Anthropology, Anthropology 5: Introduction to Archaeology, Biology 7: Introduction to Biological Anthropology, Sociology 2 or consent of instructor.

111 Kinship, Marriage, and Family
For more than one century anthropological research has focused on households, kinship relations and families across cultures and through time. This course provides students with a historical and theoretical perspective on the anthropological study of kinship, focusing also on various issues that directly relate to the state of marriage and family throughout the world.

112 Race and Ethnicity
An examination of the major theoretical underpinnings of “race” and “ethnicity” as negotiated identities. Race as a culturally constructed model is examined in a variety of international geopolitical regions, including the United States.

113 Childhood and Society
Focusing on children in Western and non-Western cultures and drawing on ethnographies from cultures around the world, the chronological sequence of childhood from birth to coming of age is followed. Topics include changing notions of childhood, social and gender development, the marking of rites of passage, adolescence, education and the status of children.

114 Urban Studies: The Culture of the City
By 2030, two out of three people will live in an urban world, with most of the explosive growth occurring in developing countries. This course in urban anthropology draws from ethnographic cases throughout the developed and developing world. It examines the complex structural and cultural forces that shape the lives of those who dwell in cities by studying how urban culture is produced and reproduced under the influences of industrialization, colonialism, and globalization.

117 Religion, Ritual, Magic, and Healing
The course examines religious beliefs, spirituality, and ritual in global cultures. It takes a comparative approach to Western and non-Western beliefs in the supernatural and examines the influences of industrialization, colonialism, and globalization.

118 Health and Illness
Medical anthropology explores the interaction between health, culture and disease, emphasizing the importance of understanding issues of health and sickness cross-culturally. Medical anthropologists also look at the roles of health care professionals, patients, and medical settings addressing the relationships between health care systems and political and economic systems.

119 Native American Cultures
“Native American” is a label applied to all of the indigenous peoples of the Western Hemisphere. This course gives students the opportunity to study a subset of Native American cultures in depth. Although the geographic focus of the course rotates, it always includes a discussion of both the traditional lifeways and contemporary social issues of the focus cultures. May be repeated for credit as content varies.

121 World Cultures
Each World Culture course concentrates on the cultural, historical, political, religious and geographic factors that shape the lives of people living today in a particular area or country, i.e., Central and South America, the Middle East, Asia and Sub-Saharan Africa, India, China, Polynesia, Western Europe, the Philippines, etc. May be repeated for credit as content varies.

122 Ethnic Groups in the United States
Each course in this series looks at a different American ethnic group, i.e. African-American, Filipino-American, Hispanic, Scandinavian, etc. While addressing the past, emphasis is placed on the contemporary period, with each course focusing on the social, cultural and historical experiences of each group. Areas covered are assimilation and resistance, distribution in the social and power structure, family systems and cultural values, labor and migration, role of religion, status of women, etc. May be repeated for credit as content varies.

123 Gender and Culture
While sex differences are biological, gender encompasses the traits that culture assigns to and inculcates in males and females. This course studies the latter: the interplay between gender and culture. It takes an inclusive and cross-cultural perspective, with a focus on men and women, nonhuman primates, industrial and non-industrial societies and differing cultural contexts such as ethnic group membership and socio-economic status.

126 Field Experience
Guided by an anthropology professor of the student’s choice, this course provides students with the opportunity to gain hands-on experience conducting anthropological or archaeological analysis in the field. Among other sites, students can select supervised work in archaeological digs, community agencies, government bureaus, museums, and political or industrial organizations.
127 Historical Archaeology: Material Culture and Ethnicity
Historical archaeology is characterized by its use of both written resources and archaeological materials (such as architecture, domestic artifacts, and art) to understand the past. Historical archaeologists have been particularly successful in illuminating the lives of people and groups who did not have the ability to write their own stories in ink, such as enslaved African-Americans, Indians living at California missions, the poor, and women and children. Focusing primarily on the period of time since European exploration and colonization of the world began. Please note: Successful completion of Anth 5 is recommended, but NOT required.

129 Prehistoric Archaeology: Ancient Cultures
Ninety-nine percent of human cultural development took place before the advent of written records, and therefore archaeology is the primary source of knowledge of these cultures. This course focuses on the practices of prehistoric people, such as how they made stone tools, decorated cave walls, organized their villages, domesticated plants, and built monuments like Stonehenge. Special attention is given to topics such as gender, kinship, religion, and art. Please note: Successful completion of Anth 5 is recommended, but NOT required.

130 Anthropological Theory
Anthropological theory is dynamic; it reflects the social climate of the times and is the product of a gradual accumulation and testing of knowledge and ideas. From the reading of primary texts, this course provides students with an overview of the development of anthropological theory from the late 19th century to the present, pushing students to grapple with fundamental questions about what it means to be a human being and a member of society. Emphasis is placed on explaining what is essential about particular theoretical frameworks, how they can be used, and why they should be studied. Students must have completed Anth 1: Introduction to Social and Cultural Anthropology and Anth 5: Introduction to Archaeology. This course should be taken in the junior or senior year.

131 Cultural Geography and Global Societies
Cultural geography studies the way people shape and give meaning to their environment and allows us to look at the fascinating variety of human activity in the world—the human landscape. Geographic knowledge is vital to understanding national and international issues that dominate daily news reports. This course examines the relevance of geographic methods and concepts to social science topics such as agricultural patterns and practices, ethnic traditions and conflicts, gender, health, migration, political economy, poverty, religion, resource utilization, social change and urban planning.

132 Anthropological Research Methods
The ethnographic method, developed by anthropologists one hundred years ago, is the hallmark of anthropological research. In this course students master specific exercises that represent some of the most commonly used data-collection techniques for ethnographic research. While the major focus will be on qualitative methodology, students are also exposed to quantitative methods such as surveys and focus groups. Students must have completed Anth 1: Introduction to Social and Cultural Anthropology and Anth 5, Introduction to Archaeology. This course should be taken in the junior or senior year.

133 Senior Thesis
Continuation of Research Methods course where honor students undertake individual research, culminating in the senior project. This should be taken in the senior year.

135 Special Topics
Special topics in anthropology include such issues as multiculturalism, criminology, food and culture, visual anthropology, sexuality, popular culture, etc. May be repeated for credit as content varies.

195 Special Study Internship
This course is usually taken by an upper-division student who wishes to complete his/her education with related work experience and is maintaining at least a C average. In addition to work experience (6-8 hours per week), outside research and a term project are usually required. Sponsorship by an anthropology faculty member and approval of the department chair is required.

197 Independent Study
This course entails independent study or research for students whose needs are not met by courses available in the regular departmental offerings. The course usually requires the writing of a term project. Sponsorship by an anthropology faculty member and approval of the department chair is required.

199 Special Study—Honors
This course is only available to upper-division majors with a B average or higher and entails independent study or research under the supervision of an anthropology faculty member. Approval of the department chair is required.
For the ancient Greeks, an artist was *demiorgos* or “the one who works for the people.” In Renaissance Italy, an artist was identified as a skilled craftsman who was inspired by God to create fantastic images and objects. During the Enlightenment, art was a symbolic carrier of ideas. Today, artists are free to work in the public sphere or in the studio and exhibit on city streets or in museum galleries, creating works of art that address a vast array of human experiences.

The Department of Art and Art History offers a program of study for majors and non-majors in the history and practice of visual art. Courses in a variety of subject areas inspire students to consider and create art within a social, cultural, religious, and aesthetic context. The focus of both interrelated fields is the diverse history of art and its status in contemporary society.

The departmental faculty encourages students to embrace the liberal arts tradition with respect to critical thinking, self-discovery, and personal expression. The coursework in the history of art presents the rich tradition of art within the Catholic faith, while also inviting students to experience the artistic production of many other cultures and time periods. In accordance with our Lasallian teachings, art history and studio art coursework place special emphasis on the role that art has played and can play in encouraging positive social change.

A degree from the Department of Art and Art History has provided alumni with an appreciation of visual art as a way of knowing. It has also afforded them a base from which to enter fields as diverse as advertising, business, journalism, law, religious studies, and many other fields in the humanities.

Through independent study, the department also prepares students to further their studies at the graduate level in museum studies, studio art, art history, art therapy, and other related fields.

The department offers two emphases for majors:
Bachelor of Arts: Art History Emphasis
Bachelor of Arts: Studio Art Emphasis

Both art history and studio art students undertake an inclusive series of lower-division courses in visual art production and history. These courses are intended to give a general overview of the variety and breadth of visual art production. On the upper-division level, art history students are required to take courses that consider the history of visual art in its specific social, cultural, religious, and aesthetic context. In so doing, students gain a clear understanding of the role of art as way of telling the human story.

Students choosing the studio art emphasis can select from courses in a variety of media including painting, drawing, sculpture, photography, and more experimental new media. These upper-division classes, while allowing for further individual exploration, place higher standards on the concepts in, and execution of, students’ artistic production. As in art history, the emphasis is on making art that reflects its particular social, cultural, religious, and aesthetic context. Acknowledging the importance of direct contact with diverse artistic practices, students in both emphases are encouraged to travel abroad, either through January Term or a semester program.

The senior thesis for art history students involves an in-depth study of works of art in the permanent collection of the Hearst Art Gallery. For their senior project, studio art majors are required to create a cohesive body of artwork to be included in the Hearst Art Gallery spring exhibition. Students will contribute to the organization, selection, and hanging of their work in this thesis exhibition. They are also required to write a comprehensive, well-researched artist statement to accompany their work in the show.

SMC students in good standing are eligible to apply to spend the spring semester of their junior year studying art history at La Salle University in Philadelphia or the College of Santa Fe. Participation must be approved by the program’s selection committee, the department chair and the dean.
FACULTY

Anna Novakov, Ph.D., Associate Professor of Art History, Chair
Art History and Women’s Studies

Costanza Dopfel, Ph.D., Associate Professor of Modern Languages
Medieval and Renaissance Art History

Jeff Kelley, M.F.A., Lecturer
Asian Art History, Curatorial Studies and Contemporary Art

Lynn Meisch, Ph.D., Professor of Anthropology
Pre-Columbian Art History and Textiles

Roy Schmalz, M.F.A., Professor of Studio Art
Painting and Drawing

LEARNING OUTCOMES

When they have completed the program of study with an art history emphasis students should be able to:
• COMPLETE a senior thesis — an in-depth study of one or more works of art in the permanent collection of the Hearst Art Gallery.
• ACKNOWLEDGE and be able to discuss the diverse history of art and its status within a social, cultural, religious, and aesthetic context.
• UNDERSTAND the role that art has played and can play in encouraging positive social change.
• DEMONSTRATE a foundational knowledge of facts and accepted art historical terminology through the successful application of art historical terminology and factual information to critical discussions.
• ENGAGE, in oral and written work, the similarities and differences between works of art from different periods and cultures including how people’s lives, throughout history, have been influenced by visual art production.
• IDENTIFY a variety of art historical methodologies that include the use of biography, stylistic analysis, iconography, social history, and feminism.

When they have completed the program of study with a studio art practice emphasis students should be able to:
• MOUNT a cohesive exhibition of their artwork and produce a comprehensive thesis document discussing the ideas, techniques, and influences in their artwork.
• DEMONSTRATE an understanding of and facility for the use and application of several different media especially that of their preferred medium.
• ARTICULATE their artwork’s content and intention and visually manifest those ideas.
• DEVELOP an ability for objective self-critique and demonstrate an understanding of their place within a larger art historical context.
• EVALUATE clearly different forms of art by other artists in their writings and class discussions.
• DEMONSTRATE a foundational knowledge of contemporary and historic artists, particularly those working in their preferred medium. This is evidenced by their writings on art and during critiques and class discussions.

MAJOR REQUIREMENTS

LOWER DIVISION

ART HISTORY
AH 1 Survey of World Art, Ancient Near East to the Gothic Era
AH 2 Survey of World Art, Renaissance to the 19th Century
AH 25 Survey of Asian Art
And a choice of three of the following courses
ART 10 Beginning Sculpture: Form and Concept
ART 12 Beginning Design: Visual Literacy
ART 20 Beginning Painting
ART 30 Beginning Drawing
ART 40 Beginning Metalwork
ART 50 Digital Media
ART 60 Beginning Ceramic Sculpture
ART 70 Printmaking

STUDIO ART
AH 1 Survey of World Art, Ancient Near East to the Gothic Era
AH 2 Survey of World Art, Renaissance to the 19th Century
AH 25 Survey of Asian Art
And a choice of three of the following lower-division courses
ART 10 Beginning Sculpture: Form and Concept
ART 12 Beginning Design: Visual Literacy
ART 20 Beginning Painting
ART 30 Beginning Drawing
ART 40 Beginning Metalwork
ART 50 Digital Media
ART 60 Beginning Ceramic Sculpture
ART 70 Printmaking

UPPER DIVISION

ART HISTORY
AH 117 Art Criticism, 1900 to the Present
AH 118 Art since 1930
AH 199 Senior Special Study
And a choice of five upper-division courses
AH 111 Philosophy of New Media Art
AH 144 Issues in Ancient Art
AH 145 Issues in Renaissance and Baroque Art
AH 165 History of American Art, From the Pueblo Cultures to the Abstract Expressionists
AH 166 The Artist in 20th Century Society
AH 194 Special Topics in Art History

STUDIO ART
AH 117 Art Criticism, 1900 to the Present
AH 118 Art since 1930
AH 199 Senior Special Study
And a choice of five upper-division courses
ART 110 Advanced Sculpture: Material Culture
ART 112 Advanced Design: Collage
ART 120 Advanced Painting
ART 130 Advanced Drawing: Beyond Looking
ART 140 Advanced Metal Work
ART 150 Experiments in New Media
ART 160 Advanced Ceramic Sculpture
ART 170 Multiple Narratives
MINOR REQUIREMENTS

LOWER DIVISION

ART HISTORY
AH 1 Survey of World Art, Ancient Near East to the Gothic Era
AH 2 Survey of World Art, Renaissance to the 19th Century
AH 25 Survey of Asian Art
A choice of one lower-division studio art course:
ART 10 Beginning Sculpture: Form and Content
ART 12 Beginning Design: Visual Literacy
ART 20 Beginning Painting
ART 30 Beginning Drawing
ART 40 Beginning Metal Work
ART 50 Digital Media
ART 60 Beginning Ceramic Sculpture
ART 70 Printmaking
And a choice of three upper-division courses:
AH 111 Philosophy of New Media Art
AH 117 Art Criticism, 1900 to the present
AH 118 Art since 1930
AH 144 Issues in Ancient Art
AH 145 Issues in Renaissance and Baroque Art
AH 165 History of American Art, From the Pueblo Cultures to the Abstract Expressionists
AH 166 The Artist in 20th Century Society
AH 194 Special Topics in Art History

STUDIO ART
AH 1 Survey of World Art, Ancient Near East to the Gothic Era
AH 2 Survey of World Art, Renaissance to the 19th Century
And a choice of two lower-division courses:
ART 10 Beginning Sculpture: Form and Content
ART 12 Beginning Design: Visual Literacy
ART 20 Beginning Painting
ART 30 Beginning Drawing
ART 40 Beginning Metal Work
ART 50 Digital Media
ART 60 Beginning Ceramic Sculpture
ART 70 Printmaking
And a choice of three upper-division courses:
ART 110 Advanced Sculpture: Material Culture
ART 112 Advanced Design: Collage
ART 120 Advanced Painting
ART 130 Advanced Drawing: Beyond Looking
ART 140 Advanced Metal Work
ART 150 Experiments in New Media
ART 160 Advanced Ceramic Sculpture
ART 170 Multiple Narratives

COURSES

LOWER DIVISION

ART HISTORY
1 Survey of World Art, Ancient Near East to the Gothic Era
This course is the first part of a two-part survey of world art. The class looks at visual art and architecture from the Code of Hammurabi to Chartres Cathedral in France. Students will study the diverse cultural high points that have illuminated the past and that continue to fuel contemporary cultural production. Fee $20.

2 Survey of World Art, Renaissance to the 19th Century
This course is the second part of a two-part survey of world art. This class introduces students to the history of art from the early Renaissance to the late 19th century. Paintings, sculpture, and architecture from diverse cultures will be presented in their historical, social, religious, and stylistic context. Fee $20.

25 Survey of Asian Art
This course surveys the architecture, painting, and sculpture of India, China, and Japan. Particular attention is given to technique, style, content, and the role of art in Asian society and culture. Fee $20.

STUDIO ART
10 Beginning Sculpture: Form and Concept
An introduction to specific three-dimensional design problems using basic sculptural materials such as cardboard, plaster, wood, clay and found materials. Students will study the myriad formal concerns that comprise sculpture: form, structure, negative and positive space, balance, symmetry, texture, weight, tension, proportion and scale. Each material will be reviewed for its relationship to longevity, weight, effectiveness, and meaning. Practical, sculpture-related drawing will also be introduced. Fee $60.
* Does not satisfy an Area requirement.

12 Beginning Design: Visual Literacy
As an increasing number of images and messages are delivered to us through the media, it has become crucial to understand how to decipher these images and to learn to create our own. The purpose of visual literacy is to construct a basic system for recognizing, making, and understanding art and other types of visual messages. In order to gain an understanding of some of the essential characteristics of visual expression and to gain literacy in this language, this class will examine basic two-dimensional design elements and techniques as well as the psychological implications of creative composition. Fee $60.
* Does not satisfy an Area requirement.

20 Beginning Painting
This fundamental course emphasizes traditional painting techniques and materials, focusing on composition, value, color, and surface for both abstract and realistic work. Students will be introduced to several painting mediums and painting-related drawing techniques in the form of problem-solving exercises. Exploration and discovery is emphasized over results. There will be slide presentations, museum and gallery visits, and critiques as necessary. Fee $60.
* Does not satisfy an Area requirement.
Curriculum Art and Art History

30 Beginning Drawing
This course is an introduction to the basic materials and techniques of drawing. Using still-lives, landscape, models, and the students’ own imagination, drawing exercises focus on line, space, contour, composition, value, proportion, and perspective. As students sharpen their ability to see and depict the world around them, we introduce more challenging issues of abstraction, content, and process. Fee $60.
* Does not satisfy an Area requirement.

40 Beginning Metal Work
This course is designed to introduce students to simple metal tool and techniques such as hot and cold metal forging, sheet metal forming and fastening, and an introduction to the use of simple hand machine tools. By semester’s end, each student should be familiar with, and capable of using, all hand and power tools related to metal. Fee $60.
* Does not satisfy an Area requirement.

50 Digital Media
This class is an exploration of digital imaging tools and techniques and introduces students to basic concepts, practices, and skills in the time-based arts and technological media (PhotoShop, Illustrator, Powerpoint and Final Cut Pro). The creative issues involved in working in this media are emphasized through in-class discussions of contemporary film, video, and digital work. This course is for students interested in working with the moving image, sound, digital imaging and photography, and/or other interactive forms. Fee $60.
* Does not satisfy an Area requirement.

60 Beginning Ceramic Sculpture
This course is an introduction into various technical and conceptual issues related to ceramic sculpture. It trains students to visualize and interpret all types of forms and will ask them to explore a range of creative and technical problems particular to the ceramic idiom. Students will explore coil forms, hand building, extruding, and mold making, as well as simple staining, painting, and decorating techniques. There will be guest lecturers, demonstrations, and visits to artists’ studios. Fee $60.
* Does not satisfy an Area requirement.

70 Printmaking
An introduction to the medium of printmaking, this class explores the process of monoprint, dry-point etching, linoleum and woodcut as well as other non-traditional techniques. The course also examines the use of tools, techniques, and machinery used in printmaking for their application to the students’ images and ideas. Fee $60.
* Does not satisfy an Area requirement.

90 Special Topics in Studio Art
An introduction to studio art practice. The medium and materials vary from semester to semester and may include photography, photojournalism, video, installation art, site-specific and public projects, digital media, textiles, soft sculpture. Student assessment and evaluation is accomplished through group critiques, class discussions, peer and self-evaluations, short writings on art, and sketchbook and portfolio reviews.
This class is open to all interested students without prerequisite, though prior completion of at least one lower-division studio class is recommended. May be repeated for credit as content varies.

UPPER DIVISION

ART HISTORY

111 Philosophy of New Media Art
This course looks at contemporary new media art. Texts about video, installation, digital art, film, and photography are discussed. Special emphasis is placed on the role of technology in our perception of public space. Fee $20.

117 Art Criticism, 1900–the Present
This course is an exploration of the history of critical writing about art. A broad sampling of 20th-century texts from art historians, critics, philosophers, social scientists, and artists are brought together for discussion and reflection. Fee $20.

118 Art since 1930
This course focuses on the major stylistic movements in Europe and the United States from the Great Depression to the Digital Age. Topics covered include existentialism, the Beat Generation, pop art, politics and postmodernism, and art in cyberspace. Students are encouraged to develop an understanding of the trends and debates in contemporary art. Fee $20.

144: Issues in Ancient Art
This upper-division course explores diverse cultures in the ancient world. Topics, which vary from year to year, include the early history of Asia and the Pacific, Africa, Mesoamerica, and Europe. The connections between visual art, sacred architecture, and spirituality are emphasized. Fee $20.

145: Issues in Renaissance and Baroque Art
This course traces the development of Christian and secular themes in architecture, sculpture, and painting. Individual artists are considered in light of their influence on the history of art. Special emphasis is placed on the relationship between religion and visual art during this period. Fee $20.

146: History of American Art, From the Pueblo Cultures to the Abstract Expressionists
This course introduces students to the tradition of visual art in America. Students will be exposed to the diversity of artistic production as revealed in the ancient earthworks and cities of the Mississippian cultures, colonial portraiture, post-war abstract painting and other visual art production. Fee $20.

166: The Artist in 20th Century Society
This course explores the history of visual art, social reform, and twentieth-century culture. Special consideration is given to issues of class, gender, and race when discussing modern visual art practice. Fee $20.

194 Special Topics in Art History
The topic of this course varies from semester to semester. Each course focuses on a different area of study within art history. Special emphasis is placed on the history of non-European art. May be repeated for credit as content varies. Fee $20.
STUDIO ART

110 Advanced Sculpture: Material Culture
Since the use of collage in paintings by Pablo Picasso, and the revelation of "readymade" art objects by Marcel Duchamp, artists have been free to select and use almost anything as an art material. This course is for advanced students who want to expand their knowledge and application of non-traditional materials toward more complex and poetic expression. We explore a variety of permanent and ephemeral materials and methods. The emphasis will be on determining the appropriate material needed to reinforce the concept of the work and on problem-solving the use of that material. Fee $60.
* Does not satisfy an Area requirement.

112 Advanced Design: Collage
Collage is design exploded. It combines all of the elements of two and three-dimensional design in a form free from the constraints of traditional technique. For contemporary artists, collage is not just a way of working, but a way of thinking. This course is intended to introduce students to the many concepts and techniques of the collage genre and to begin to understand the pervasiveness of the technique in contemporary art practice. During the semester, students will make several different types of collages including a three-dimensional sculptural assemblage and a short video piece. Fee $60.
* Does not satisfy an Area requirement.

120 Advanced Painting
Further study of painting methods in a variety of traditional and non-traditional materials and techniques. This course challenges students' comfort with their craft and emphasizes the development of personal issues in their work. To gain a better understanding of the state of the contemporary art scene, students are encouraged to keep current through readings, attending art lectures and exhibitions. During class, there will be slide presentations, museum and gallery visits, and critiques as necessary. Fee $60.
* Does not satisfy an Area requirement.

130 Advanced Drawing: Beyond Looking
Since the Renaissance, artists have looked for ways to depict the world around them in a more realistic way. In this century, some artists have sought another kind of artistic clarity, reaching into the subconscious to explore an uncharted, inner world. If drawing is visual thought, this course aims to expand thinking through the study and application of many graphic methods such as frottage, transfer, automatism, blind drawing, and collaboration and chance procedures. Fee $60.
* Does not satisfy an Area requirement.

140 Advanced Metal Work
Further exploration of metal tools and techniques as they relate to advanced sculptural practice. Fee $60.
* Does not satisfy an Area requirement.

150 Experiments in New Media
This course actively promotes the concept of artist as citizen while it addresses the more difficult to define genres of art such as film, video, installation, text, sound art, public art, and site-based work. We take a multidisciplinary approach to investigating the history and challenges of these forms, and apply them to individual and group projects based on current social, environmental, or political issues. Depending on world events and public opportunities, each class will be unique, sometimes creating projects on campus or engaging with the local community, applying our skills to media criticism or political activism. Fee $60.
* Does not satisfy an Area requirement.

160 Advanced Ceramic Sculpture
Clay is the prima material of the arts. Dirt is the oldest and most basic material for making sculpture: terra cotta, fired ceramics, concrete, sand carving, etc. We will explore this ubiquitous material in its many forms (mud, sand, clay, concrete), paying particular attention to its unique plasticity and impermanence. Advanced Ceramic Sculpture will also look at the roots of the medium and study certain time-based and process-oriented artwork such as African mud sculptures, Tibetan sand painting, sculptural topiary, the work of Andy Goldsworthy, Walter DeMaria, Kathy Spence, James Croak, and many other sculptors of the 20th century. The class emphasizes idea and process and will be project-based, encouraging bold exploration of the medium to advance personal expression. Fee $60.
* Does not satisfy an Area requirement.

170 Multiple Narratives
Printmaking is a replicative media. There are many others, such as two-dimensional and time-based digital work, and photography. Within any of these media, images can be created as either unique works, multiples, or as variations through a range of processes. Depending on the instructor, this course will offer an opportunity to work in one of these media with an emphasis on the construction of a visual narrative. Students are expected to find an educational, humanitarian, or social institution and develop a visual narrative that reflects an understanding and personal perspective regarding the chosen institution. At the conclusion of the course, the students will present a body of work with a statement that communicates a developed idea and personal viewpoint. Fee $60.
* Does not satisfy an Area requirement.

193 Visiting Artists Workshop
Through examining their own visual art production in a workshop environment, students learn about contemporary art practices from innovative visiting artists. Issues in new media art and visual literacy are discussed and tested in theory and practice. Students will be expected to create a limited portfolio in the new media. May be repeated for credit every semester. * Does not satisfy an Area requirement.

ART HISTORY AND STUDIO ART

195 Department Seminar in Special Topics
An in-depth critical examination of a topic or topics in contemporary visual art practice and theory. The course consists of directed readings as well as the weekly production of both written and visual works of art. At the conclusion of the semester students are expected to present their seminar projects in a group installation in Gallery 160. This course is open to art and art history majors. Departmental minors must obtain permission of the chair to enroll. May be repeated for credit as content varies.

197 Special Study
An independent study or research course for students whose needs are not met by the regular course offerings of the department. Permission of the faculty member and department chair required.

199 Senior Special Study
As a capstone to their studies, seniors in both art history and studio art are required to work independently with a departmental faculty member in order to complete a thesis or final project that displays their ability to think, read, and write about art as well as create works of art which express their own beliefs and interests. This course is limited to seniors in the major. Permission of the faculty member and department chair required.
Curriculum Biochemistry

BIOCHEMISTRY

The Biology and Chemistry departments jointly offer a major in biochemistry to serve students who have interests in both biology and chemistry. Majoring in this important interdisciplinary field of biochemistry will prepare students for a variety of options upon graduation: employment in the biotechnology, pharmaceutical, or similar industries; graduate work in biochemistry or many related fields; entry into professional schools such as medicine or dentistry; or teaching at the K-12 level. Using a balance of theoretical and experimental work, the curriculum attempts to provide students with a solid understanding of fundamental concepts, the ability to reason through unfamiliar problems, the tools to investigate a topic in depth, and the communication skills that are needed to share information with others.

By majoring in biochemistry, students will fulfill many learning outcomes that can be arranged under three broad categories: 1) Obtain a solid foundation in fundamental biochemical concepts; 2) Acquire the tools to independently investigate a topic; 3) Develop habits of critical thinking and communication that can reinforce many of the College’s core curriculum goals.

FACULTY STEERING COMMITTEE
Kenneth J. Brown, Ph.D., Professor
Allan Hansell, Ph.D., Professor
Jeffrey S. Sigman, Ph.D., Associate Professor

ADMISSION REQUIREMENTS
Students planning a major in biochemistry must present credits in one year of chemistry, one year of physics, and four years of mathematics, and should have at least a B average in these subjects. Students with a good high school record but lacking credit in any of these subjects should remove any deficiencies in summer school. Students majoring in a science should be particularly alert to the language proficiency requirement (see Program of Study, p. 39).

MAJOR REQUIREMENTS
This major is interdisciplinary, bridging the two fields of biology and chemistry, so the lower-division requirements are nearly the same as those for the two respective major programs. The lower- and upper-division courses in this major are listed on the Biology and Chemistry Department pages (See page 62 and 72 respectively).

LOWER DIVISION
The following lower-division courses are required for the biochemistry major: Biology 1, 1L, 2, 2L; Chemistry 8, 9 (lab), 10, 11 (lab); Mathematics 27, 28; Physics 10/11 and 20/21 or Physics 1/2 and 3/4, and Chemical Literature 89.

UPPER DIVISION REQUIREMENTS
There is a core of upper-division courses for this major which include two semesters of Organic Chemistry (Chem 104 and 106); Biochemistry (Bio 135), Advanced Topics in Biochemistry (Bio/Chem 136), and Molecular Biology (Bio 137). Students are also required to take either Physical Chemistry (Chem 138) or Physical Chemistry (Chem 114 and 115). For additional laboratory skill development, students are required to take either Separation and Identification (Chem 108) or Instrumental Chemical Analysis (Chem 118). For upper-division electives, students may choose two courses from the following categories listed below.

Upper-division electives: Select two of the following categories (a, b, c or d):
  a) Biology 105 - Genetics
  b) One of the following:
     Biology 102 - Embryology and Development
     Biology 127 - Systemic Physiology
     Biology 130 - Microbiology
     Biology 132 - Cell Biology
     Biology 139 - Immunology
  c) Chemistry 130 - Advanced Inorganic Chemistry
     or
     Chemistry 111 - Advanced Organic Chemistry
  d) Chemistry 114 - Physical Chemistry I

Research: Students are strongly encouraged to participate in research, either during a summer or during the academic year.

1 Required for students with more of a biological interest and chemistry students who wish to take Biology 105: Genetics

2 Students wishing to meet the ACS curriculum requirements for the biochemistry major must take two semesters of Physical Chemistry (Chem 114 and 115) and Advanced Inorganic Chemistry (Chem 130).

PREREQUISITE GRADE
Any course listed in this major with a prerequisite assumes a grade of C– or better in the prerequisite course. The lower- and upper-division courses in this major are listed on the Biology and Chemistry Department pages (See page 62 and 72 respectively).
Biology Curriculum

Biology

The Biology Department offers a full range of courses designed to introduce undergraduate students to the major areas of modern biological science. The primary goals of the department are to prepare students for advanced study and research in biology and related sciences, for postgraduate study in medicine, dentistry, and the other health professions, and for careers in education, industry, agriculture, government service, and veterinary medicine. Students interested in the health professions should check the Pre-Professional section (p. 147) of the catalog for additional information. In addition, the Biology Department provides Area B courses and non-major biology courses in which students who are not science majors can learn science as a way of knowing through the study of various aspects of the life sciences and their effect on society.

Faculty
Gerard M. Capriulo, Ph.D., Fletcher Jones Professor, Chair
Carla C. Bossard, Ph.D., Professor
Lawrence R. Cory, Ph.D., Professor
Margaret F. Field, Ph.D., Associate Professor
Allan K. Hansell, Ph.D., Professor
Wendy Lacy, Ph.D., Adjunct Associate Professor
Jacob F. Lester, Ph.D., Professor
Gregory R. Smith, M.S., Professor
Douglas J. Long, Ph.D., Associate Professor

Learning Outcomes

Students who graduate with a major in biology will be able to:

- DEMONSTRATE a solid knowledge in all three major areas of biology: molecular and cellular; organismal; and ecology and evolutionary.
- ANALYZE logically and critically scientific information.
- APPLY knowledge they have already mastered from current and previous courses to the exploration of new areas of inquiry.
- COMMUNICATE skillfully through written and oral reports.
- USE biological methodology competently for laboratory research.
- INTEGRATE an awareness of ethical issues with their understanding of and work in biology.

Admission Requirements

Applicants planning to undertake the biology major must present credits for one year of chemistry and four years of mathematics. One course in biology, one year of physics, and three years of a second language are strongly recommended. Students with less than a B average in high school science, mathematics and languages or with any course deficiency should seek the advice of the Admissions Office and the Biology Department before beginning their studies. A diagnostic chemistry examination is required of all students beginning a science curriculum at Saint Mary’s. This examination is administered by the Department of Chemistry before the start of classes each fall and is designed to detect important deficiencies in a student’s background. In some cases, the student may be advised to correct any deficiencies before undertaking the biology major curriculum. This can often be done within a four-year stay at Saint Mary’s but may require summer school attendance.

Major Requirements

Lower Division

Biology Major

Mathematics 27-28; Chemistry 8, 9 (lab), 10, 11 (lab); Physics 10, 11, 20 (lab), 21 (lab), or Physics 1, 2 (lab), 3, 4 (lab); and Biology 1, 1L (lab), Biology 2, 2L (lab).

Lower division requirements for split majors must be determined by consultation between the student and his/her advisor and approved by the chairs of the departments involved.

Upper Division

Biology Major

Chemistry 104, 105 (lab), 106, 107 (lab) The biology major must include seven upper-division biology courses of which at least five must have a laboratory component. In order to develop a broad background in biology and to experience major areas of study within the disciplines, biology majors are required to take both courses from Group I and at least one course from Groups II, III, and IV. The remainder of the seven required may come from any group.

Group I Genetics and Ecology: Biology 105, 125
Group II Organismal: Biology 100, 102, 110, 113, 122, 127, 144, 146, 153
Group III Cellular/Molecular: Biology 130, 132, 135, 137, 139
Group IV Evolution and Ecology: Biology 113, 115, 120, 142, 152, 153
Group V Electives: Biology 116, 119

Faculty advisors should be consulted on a regular basis to assist in selecting courses and arranging specific curricula relating to fulfillment of requirements, particular career goals, and personal interests.

All split majors with biology as the predominant area must be arranged by petition. They must have a clear emphasis, a direction, and show relatedness among the courses chosen. The specific upper-division courses selected for any split major must be arranged between the student and his/her advisor and be approved by the chairs of the departments involved.
**SUGGESTED BIOLOGY MAJOR PROGRAM**

A suggested four-year program of study for a major in biology is available from any Biology Department member. Note that all freshmen are required to complete two Collegiate Seminars in the first year, one each in the fall and spring terms. Two additional Collegiate Seminars must be completed before graduation, two Theology and Religious Studies courses, and other College requirements as specified in the Program of Study (see p. 39). Students majoring in science should be particularly alert to the language proficiency requirement. Students may select courses of their choice for remaining electives. It is important to note that certain upper-division courses are offered in alternate years.

**MINOR REQUIREMENTS**

The minor in biology requires Chemistry 8, 9 (lab), 10, 11 (lab), and Biology 1, 1L (lab), 2, 2L (lab).

Any three upper-division biology courses, two of which must have a laboratory component. Note that all courses have prerequisites. The specific upper-division courses selected for the minor must be arranged between the student and his/her advisor and be approved by the chairs of the departments involved.

**JANUARY TERM**

Frequently, faculty members in the Biology Department offer courses during the January Term. Since it is the policy of the department to provide a variety of learning experiences during this term, the following kinds of courses are often offered: (1) Seminars designed to probe special areas of current interest in the biological sciences through readings in the primary literature, preparation of reports, and class discussions; (2) Field courses, based either on campus or at a field site, that provide experience in the study of natural ecosystems; (3) Directed research into topics in experimental or field biology of interest to faculty and students; (4) Independent study courses either on campus or by special arrangement at universities or research institutions. It is the general policy of the department that courses taken during the January Term cannot be used to fulfill biology majors’ credit.

**PREPARATION FOR MEDICINE, DENTISTRY, AND OTHER HEALTH PROFESSIONS, AND VETERINARY MEDICINE**

See the section in this catalog under Pre-Professional Curricula (p. 147).

**PREREQUISITE GRADE**

Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

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**COURSES**

**LOWER DIVISION**

1. **Introductory Biology for Majors: Cell and Molecular Biology and Genetics**

   This is the first semester of a two-semester sequence designed for biology majors and others requiring a rigorous treatment of the subject. It is designed to prepare students for in-depth, upper-division work in areas related to cell and molecular biology and biochemistry and genetics. Three hours of lecture per week. Prerequisites: Chemistry 8, 9 (lab), 10 and 11 (lab) with grades of C– or better. Must be currently enrolled in Biology 1L.

2. **Introductory Biology for Majors: Evolution and Organism**

   This is the second semester of a course designed for biology majors and others requiring a rigorous introductory treatment of the subject. This course is a systematic introduction to all forms of life, covering all three domains (formerly five kingdoms), from bacteria and protozoa, through fungi, plants, and animals. To account for life’s unity and diversity, the guiding principle for the course is the concept of evolution. Biology 2 builds upon the cellular and molecular foundation given in Biology 1 (which is pre-required for Biology 2), and assumes knowledge of hereditary principles, both Mendelian and molecular. Through the study of the molecular evidence, morphology, physiology, development, and behavior of each type of organism, we provide a broad understanding of the evolutionary origins and phylogenetic relationships of all forms of life. Required for biology majors and prerequisite to ALL upper division courses. Three hours of lecture per week. Prerequisites: Chemistry 8, 9 (lab), Chemistry 10, 11 (lab), Biology 1, 1L, with a grade of C– or better. Must be concurrently enrolled in Biology 2L.

2L. **Evolution and Organisms Laboratory**

   Laboratory to accompany Biology 2. One laboratory per week for four hours. Must be currently enrolled in Biology 2L. Laboratory fee $175.

5. **Concepts in Evolutionary Biology**

   This question-oriented course designed for non-majors explores how science works through an examination of the concepts of the theory of evolution by natural selection, which is considered to be the unifying theme of the biological sciences. Three lecture hours and one lab per week. Fulfills Area B requirement. Laboratory fee $175. Offered in alternate years.

6. **Human Genetics: Issues and Applications**

   An introduction to the basic concepts and technologies of genetics as they apply to humans and the ethical issues that arise as a result of the application of those principles. Students will engage these areas through lectures, discussions, guest presenters, videos and hands-on laboratory experiences. Intended for students in any major regardless of background. Six hours of lecture/discussion/laboratory per week. Fulfills Area B requirement. Laboratory fee $185 (includes reader). Offered in alternate years.
7 Introduction to Biological Anthropology
Study of the variation and evolution of the human species and its place in nature. Molecular, Mendelian and population genetics serve as a basis to discussions of natural selection and how that affects biological and physiological adaptation. The emphasis of this course is directed toward why we see broad variations among Homo sapiens and how these variations affect humans in their life cycle, health and culture. Three lecture hours and one three-hour lab per week. Laboratory fee $175.

10 Introduction to Biology
Study of the chemistry of life, the organization of cell and the molecular processes inside of cells. This course emphasizes the genetic basis of life and includes an introduction to biotechnology. Designed for 2+2 Pre-Nursing students as a prerequisite for microbiology, human anatomy and human physiology. Three hours of lecture per week. Must be accompanied by Biology 11.

11 Introduction to Biology Laboratory
Laboratory to accompany Biology 10. Includes techniques for studying organic molecules, cell biology and genetics. One lab per week for three hours. Laboratory fee: $175.

15 Human Anatomy
Study of the gross and microscopic structure of the human body. This course, emphasizing the structural relationships and functional aspects of gross anatomy, proceeds from the cell to tissues to organs. A strong high school science background is recommended. Three hours of lecture per week. Concurrent enrollment in Biology 16 is required for enrollment in Biology 15. Limited to majors in biology, health science, kinesiology, and nursing or by consent of instructor. Does not qualify for Area B.

16 Human Anatomy Laboratory
Laboratory to accompany Biology 15. Laboratory will be taught from dissected human material, models and microscopic slides to allow students to learn from direct experience. One three-hour lab per week. Must be concurrently enrolled in Biology 15. Laboratory fee $175.

25 Human Physiology
Study of the function of the major organs and organ systems of the human body. This course, emphasizing regulation and integration, proceeds from general cell function to an overview of the controlling mechanisms and finally to the individual systems. A strong high school science background is recommended. Three hours of lecture per week. Concurrent enrollment in Biology 26 is required for enrollment in Biology 25. Limited to majors in biology, health science, kinesiology, and nursing or by consent of instructor. Does not qualify for Area B.

26 Human Physiology Laboratory
Laboratory to accompany Biology 25. The laboratory consists of experiments and demonstrations designed to incorporate principles of physiology. One three-hour lab per week. Must be concurrently enrolled in Biology 25. Laboratory fee $185 (includes lab manual).

40 Introductory Microbiology
The biology of microorganisms including bacteria, viruses, and fungi, with emphasis on those forms of medical importance to man. Three hours of lecture per week. Must be concurrently enrolled in Biology 41.

41 Introductory Microbiology Laboratory
Laboratory to accompany Biology 40. Includes techniques for culture, isolation, characterization, and identification of microorganisms. One lab per week for three hours. Must be concurrently enrolled in Biology 40. Laboratory fee $175.

50 General Biology
A one-semester introduction to the basic principles and concepts of biological science. Designed for students not majoring in biology. Three hours of lecture per week. Must be concurrently enrolled in Biology 51. Fulfills Area B requirement.

51 General Biology Laboratory
Laboratory to accompany Biology 50. One lab per week for three hours. Must be concurrently enrolled in Biology 50. Laboratory fee $175.

52 The Symbiotic Universe
An interdisciplinary science course which in addition to inter-science syntheses forges into areas of theology, philosophy, the social sciences, and the nature of good and evil. It is designed for both non-science and science majors, and fulfills an Area B requirement. The course explores original ideas concerning the role played by symbiosis in the origin of the universe, the earth, and life on earth, and in the development of the earth’s ecosystems. It argues that phases of creation are organized around the principles of symbiotic mutualism. It suggests that such cooperation is dictated by the laws of physics and therefore was established at the moment of creation. This universal thread of symbiosis is evident in the formation of atoms, elements and matter, chemical interactions, star and planetary systems, and simple to complex life forms. It drives evolution from the primordial soup to cells, multicellular organisms, populations, communities and ecosystems, and human societies as well. One lab per week for three hours. Laboratory fee $175.

55 Ocean World
An introductory course that examines the ocean world and its inhabitants. Topics include physical and chemical properties of sea water; tides and currents; geological principles; coastal and open ocean habitats; life in planktonic and benthic communities; coral reef, hydrothermal vent and mangrove ecosystems. Three hours of lecture per week. One lab per week for three hours. Fills Area B requirement. Laboratory fee $175.

80 Human Biology
This is a course to connect basic biology concepts using the human as an illustrative example. Basic scientific processes and the concepts of human biology will be explored through lecture and laboratory exercises. Topics will include science and society, the chemistry of living things, structure and function of cells, genetics, anatomy and physiology of the organ systems, reproduction, cancer, aging, evolution, human impacts, and environmental issues. Open to all students interested in discovering the scientific process and the concepts of human biology. One three-hour lab per week. Fills Area B requirement.

81 Human Biology Laboratory
Laboratory to accompany Biology 80. One lab per week for three hours. Must be concurrently enrolled in Biology 80. Laboratory fee $175.
88 Biology of Women
Biology of Women is an introduction to the structure, physiology, and genetics of women across the life span. The first half of the course will explore the genetic, hormonal, and developmental basis of gender. We will study physiology and development from conception, through puberty, pregnancy, and aging. The latter part of the course will deal with specific health concerns of women and focus on predominantly or uniquely gender-related illnesses and their physiologic basis. The laboratory is intended to demonstrate the varied processes of science and the scientific method using women’s biology as the basic subject material. Open to men and women. Fulfills area B requirement. Laboratory fee $175.

89 Biology of Women Laboratory
Laboratory to accompany Biology 88. One lab per week for three hours. Must be concurrently enrolled in Biology 88. Laboratory fee $175.

UPPER DIVISION
Each upper-division course has prerequisites of Biology 1, 1L and 2, 2L with a grade of C– or better in each of these prerequisites.

100 Comparative Anatomy
The course examines vertebrate form and function through the topics of vertebrate evolution, functional morphology, and development, along with the study of soft tissues, organ systems, and skin. Three lecture hours and two labs per week. Laboratory fee $175. Offered in alternate years. Prerequisites: Biology 1, 1L and Biology 2, 2L.

102 Developmental Biology and Embryology
Explores the processes and patterns of fertilization and embryonic development of animals with an emphasis on mechanisms controlling cell differentiation and morphogenesis. Three lecture hours and one lab per week. Prerequisites: Biology 1, 1L and Biology 2, 2L and Chemistry 104, 106. Laboratory fee $175. Offered in alternate years.

105 Genetics
Principles of biological inheritance in animals, plants, and including some consideration of classical, molecular, population and human genetics. Three hours per week of lecture and one lab per week; for four hours. Prerequisites: Biology 1, 1L and Biology 2, 2L. Laboratory fee $175.

110 Parasitism and Symbiology
A comprehensive course in parasitology, focusing on the many facets of symbiosis common to every level of biology. It embraces the three basic types of intimate interrelationship between different species of organisms: parasitism, mutualism and commensalism. This course examines an array of interactions in all three types of interrelationships, at many levels of interdependency. All five kingdoms, from bacteria, protists, and fungi to plants and animals, are studied. Three lecture hours and one lab per week. Prerequisites: Biology 1, 1L and Biology 2, 2L. Laboratory fee $175. Offered in alternate years.

113 Marine Biology
Examines marine life in terms of physiological, evolutionary, systematic and ecological principles. Topics covered include: marine procaryotes, unicellular eucaryotes and the multicellular eucaryotes (i.e., the invertebrates, vertebrates and marine plants). The organization of and interrelationships among marine organisms and their environments are considered from an ecosystem perspective. Shallow and deep benthic, intertidal, estuarine, coastal water, coral reef and open ocean systems are examined in detail. Three lecture hours and one lab per week. Prerequisites: Biology 1, 1L and Biology 2, 2L. Laboratory fee $175. Offered in alternate years.

115 Theory of Evolution
Historical development of evolutionary theories. Modern concepts concerning the process of organic evolution, including population genetics, natural selection, and the origin of species. Topics on macroevolution, including adaption and extinction. Three hours of lecture per week. Prerequisites: Biology 1, 1L and Biology 2, 2L. Biology 105 highly recommended. Offered in alternate years.

116 History and Philosophy of Biology
Development of the major concepts of biology from antiquity to the modern era, with a consideration of what these developmental sequences show about the nature of the scientific process. Three hours of lecture per week. Prerequisites: Biology 1, 1L and Biology 2, 2L.

119 Research Design and Biostatistics
Principles of experimental design, sampling methodologies, data collection and analysis are discussed, along with practical applications of these area in biological experimentation. Course includes use of computers. Three lecture hours and one lab per week. Prerequisites: Biology 1, 1L and Biology 2, 2L. Laboratory fee $175.

120 Vertebrate Zoology
Advanced study of the vertebrates, with attention to phylogeny, morphology, and natural history of the major vertebrate groups. Laboratory and field work emphasize taxonomy of local forms, methods of study, and special projects. Three lecture hours and one lab/field period per week. Prerequisites: Biology 1, 1L and Biology 2, 2L. Laboratory fee $175. Offered in alternate years.

122 Comparative Animal Physiology
The functions of the major organ systems of vertebrate and invertebrate animals. Emphasis on general principles of function as exemplified in the major animal phyla. Three lecture hours and one lab per week. Prerequisites: Biology 1, 1L and Biology 2, 2L. Chemistry 104, 106. Laboratory fee $175. Offered in alternate years.
125 General Ecology
An examination of the classical and emerging concepts of ecology from a primarily but not exclusively descriptive perspective. Topics include: comparative study of marine, freshwater and terrestrial systems; global warming; population ecology; the decomposition cycle; nutrient cycling; concepts related to niche theory; fitness, competitive exclusion, natural selection, and evolution. Prerequisites: Biology 1, 1L and Biology 2, 2L. Laboratory fee $175. Offered in alternate years.

127 Systemic Physiology
Fundamental principles of general mammalian physiology combined with physiology of organ systems; including integrative and homeostatic mechanisms. Emphasis is on human physiology with examples taken from mammalian systems. Application of these principles to interpretation of disease is included. Laboratory includes human and mammalian experiments with emphasis on instrumentation and interpretation of results. Three lecture hours and one lab per week. Prerequisites: Biology 1, 1L and Biology 2, 2L, Chemistry 104, 106. Laboratory fee $175.

130 Microbiology
An introduction to the structure, physiology, and genetics of microorganisms with focus on bacteria and viruses. The application of fundamental knowledge about these organisms to problems of medical microbiology is included. Laboratory involves application of bacteriological techniques to the study of taxonomy, physiology and genetics of bacteria and viruses. Three hours of lecture and two two-hour labs per week. Prerequisites: Biology 1, 1L and Biology 2, 2L, Chemistry 104, 106. Laboratory fee $175. Offered in alternate years.

132 Cell Biology
A special topics course in which selected areas of current interest in cell biology are studied. Choice of topic varies (e.g., membrane structure and function, nerve and muscle, control of cell division, cellular immunology). Emphasis is placed on experimental methods and answering the question “How do we know what we know?” Lab includes extensive exposure to cell culture methods. Three hours of lecture and one lab per week. Prerequisites: Biology 1, 1L and Biology 2, 2L, Chemistry 104, 106. Laboratory fee $175. Offered in alternate years.

135 Biochemistry
An introduction to the metabolism of proteins, lipids, and carbohydrates. Consideration is given to the properties of enzymes and enzyme catalyzed reactions in the cell. Applications to human function, disease, and diet are included. Three hours of lecture and one lab per week. Prerequisites: Biology 1, 1L and Biology 2, 2L, Chemistry 104, 106. Laboratory fee $185.

137 Molecular Biology
An introduction to the structure and function of the genetic apparatus. This course is a study of what genes are and how they operate, and includes recent discoveries in the areas of DNA, RNA, and protein synthesis in both prokaryotes and eucaryotes. Laboratory includes both discussion and practice of techniques used in genetic engineering. Three hours of lecture and one lab per week. Prerequisites: Biology 1, 1L and Biology 2, 2L, Chemistry 104, 106. Laboratory fee $185.

139 Immunology
An introduction to the immune system: its components, how it functions, how it is regulated and how it is protective. The immune response and our ability to react to such a diversity of molecules with specificity are discussed in detail. In addition, the immuno-logic basis for tissue/organ transplant rejection, disease prevention vaccines and cancer immunotherapy are presented. Three hours of lecture and one lab period per week. Prerequisites: Biology 1, 1L and Biology 2, 2L, Chemistry 104, 106. Laboratory fee $175.

142 California Flora and Communities
Survey of selected plant communities of California. Includes a dual emphasis on field recognition of important plant families and genera of these communities and an understanding of the relationship of the component species to their environment. Three lecture hours and one lab per week. Prerequisites: Biology 1, 1L and Biology 2, 2L. Laboratory fee $175. Offered in alternate years.

144 General Botany
The study of plant biology at an advanced level, including topics in the structure and development, reproductive patterns, taxonomy, identification, phylogeny, and distribution of major plant groups. Three lecture hours and one lab per week. Prerequisites: Biology 1, 1L and Biology 2, 2L. Laboratory fee $175. Offered in alternate years.

146 Plant Ecophysiology
The functional aspects of plant life and the relation of plants to their physical, chemical, and biological environment. Emphasis on the vascular plants. Three lecture hours and one lab/field period per week. Prerequisites: Biology 1, 1L and Biology 2, 2L. Laboratory fee $175. Offered intermittently.

152 Conservation Science
Conservation biology is a field of biological science that draws upon the principles of ecology, genetics and evolution in an effort to understand the patterns and processes underlying the biological diversity of our planet. The course examines the current status of our scientific understanding of biodiversity, threats to biodiversity resulting from human activities, and strategies to conserve and restore the integrity of the earth’s biological systems. Course activities include case studies, computer modeling and field trips. Three hours of lecture and one lab/field period per week. Prerequisites: Biology 1, 1L and Biology 2, 2L. Laboratory fee $175. Offered in alternate years.

197 Special Study
An independent study course for students whose needs are not met by courses available in the regular offerings of the department. Permission of the instructor and the department chair required. Laboratory fee, when appropriate, $175.

199 Special Study—Honors
A research course for upper division majors with a B average in biology. Permission of instructor and department chair required. Laboratory fee, when appropriate, $175.
Curriculum Business Administration

BUSINESS ADMINISTRATION

The major in business administration is designed to broadly educate students in the business sciences. Students receive excellent preparation for professional management positions in financial services, manufacturing operations, consumer marketing, human resources, and strategic planning. The major also prepares students for graduate school in business administration or law school. In addition, the department offers an honors concentration in financial services and a marketing concentration for those who wish to add focus and intensity to their program. The department also offers an international concentration for students who are interested in a career with international exposure.

LEARNING OUTCOMES

• COMMUNICATION SKILLS: Develop graduates whose oral and written communications are clear, persuasive and professionally delivered.
• RESEARCH & QUANTITATIVE SKILLS: Develop graduates with statistical skills to analyze and generate viable solutions for complex business problems.
• STRATEGIC MANAGEMENT SKILLS: Develop graduates able to formulate integrative strategic plans that enable an organization to manage change effectively and enhance its performance.
• FUNCTIONAL AREA SKILLS: Develop graduates able to apply principles of financial, marketing, and operations management to solve business problems.
• POLITICAL / LEGAL / ETHICAL SKILLS: Develop graduates able to make business decisions that are legally and ethically responsible and reflect the interests of all stakeholders.
• MANAGEMENT / HUMAN RESOURCES SKILLS: Develop graduates who understand human behavior in organizations, appreciate diversity, and are able to apply organizational and management theory to become effective leaders and productive team members.
• GLOBAL CONTEXT OF BUSINESS: Develop graduates able to understand and successfully apply knowledge of complex cultural, economic, financial, and institutional factors in the global business environment.
• INFORMATION TECHNOLOGY SKILLS: Develop graduates able to manage the hardware, software, and personnel issues that information technology raises for organizations.

MAJOR REQUIREMENTS

Business Administration majors must take Accounting 1 and 2, Economics 3 and 4, Math 3 or 27 (or the sequence of Math 13-14), and BusAd 40 prior to the junior year. A grade of C– or better must be earned in each of these courses. All of these lower-division courses must be completed prior to enrolling in the upper-division courses for the major.

A student majoring in business administration must maintain a cumulative grade point average of at least 2.0 both in the major and overall. The majority of the courses required for the major must be taken at Saint Mary's College. The following upper-division courses, if required for the student's program, must be taken at Saint Mary's College: Business Administration 100 (A,B,C), 121, 125, 126, 140, 181, 182.
LOWER DIVISION
The following 6 courses, which should be completed by the end of the sophomore year:
Accounting 1, 2
Economics 3, 4
BusAd 40 Statistics
Mathematics 3 or 27 or the sequence of Math 13-14

UPPER DIVISION
Total upper-division requirements: 9 courses
The following 7 core courses:
BusAd 120 Law and Business
BusAd 123 Financial Management
BusAd 124 Marketing or BusAd 125 Marketing of Financial Services
BusAd 131 Organization Theory
BusAd 132 Operations Management
BusAd 140 Strategic Management
BusAd 181 Ethical, Social, Political Issues in Business or
BusAd 182 Business, Economics, and Catholic Social Ethics
And one elective requirement from the following:
Economics 105 Micro-Economic Theory
Economics 106 Macro-Economic Theory
BusAd 121 Advanced Legal Topics in Business
BusAd 126 Advanced Marketing
BusAd 127 Business Communication
BusAd 175 Management Information Systems
BusAd 180 International Business
Or an approved course from another department.

Students who entered Saint Mary’s College during the 2004-2005 academic year are subject to the major requirements set forth in the 2004–2005 College catalog.

Students who entered Saint Mary’s College during the 2005-2006 academic year have the option of meeting the following upper-division requirements instead of the program of upper-division courses set forth above:
BusAd 120 Law and Business
Economics 106 Macro-Economic Theory
BusAd 123 Financial Management
BusAd 124 Marketing
BusAd 131 Organization Theory
BusAd 132 Operations Management
BusAd 140 Strategic Management
BusAd 181 Ethical, Social, Political Issues in Business or
BusAd 182 Business, Economics, and Catholic Social Ethics
And one elective requirement from the following:
BusAd 121 Advanced Legal Topics in Business
BusAd 126 Advanced Marketing
BusAd 175 Management Information Systems
BusAd 180 International Business
Economics 105 Micro-Economic Theory or an approved course from another department.

MINOR REQUIREMENTS
A student may earn only one minor in the School of Economics and Business Administration. The requirements for a minor are: Accounting 1, 2; Economics 3, 4; BusAd 40, 120, 123, 124; two additional upper-division business administration courses.

SUGGESTED BUSINESS ADMINISTRATION MAJOR PROGRAM
Some courses are offered only in one term of the year. It is the responsibility of the student to ensure that he/she takes all required courses in the term in which they are offered. Since the upper-division courses for majors (see Upper Division, above) require Economics 3, 4; Accounting 1, 2; BusAd 40, Math 3 or 27 (or the sequence of Math 13-14), students are expected to complete these lower-division courses in their freshman and sophomore years. Waiver of prerequisites or class standing requires the approval of the department chair. Students may not transfer for credit in the major more than two upper-division courses.

It is expected that majors will complete at least BusAd 120, 123, and 124 prior to their senior year. It is recommended that majors will complete Bus Ad 181 or 182 prior to their senior year.

Majors must take BusAd 140 in the spring term of their senior year. BusAd 140 is not offered in the fall term. All lower division requirements, plus BusAd 120, BusAd 123, BusAd 124, BusAd 131, BusAd 132, and BusAd 181 (or 182) must be completed prior to enrolling in BusAd 140.

CONCENTRATIONS
The marketing concentration, international concentration, and the honors concentration in financial services have certain special requirements. (See descriptions of these programs on the pages that follow.)

MARKETING CONCENTRATION
A central purpose of the marketing concentration is to enable undergraduate students to acquire a thorough knowledge and understanding of the broad context in which marketing decisions should be made. Thus, in addition to taking specific marketing courses and other business-related courses, the curriculum includes an interdisciplinary component, intended to familiarize students with external macro-environmental conditions and other factors that must be taken into account in order to formulate sound strategic marketing plans.

A minimum major grade point average of 2.5 in a business administration program will be required for admission to the concentration. It will be necessary to maintain a GPA of at least 2.8 in order to graduate in the concentration.

TOTAL COURSE REQUIREMENTS FOR MAJOR: 15 COURSES
Curriculum Business Administration

LOWER DIVISION
Same requirements as business administration major, but should be completed by the end of the sophomore year.

UPPER-DIVISION CORE REQUIREMENTS
BusAd 181 Ethical, Social, Political Issues or BusAd 182 Business, Economics, and Catholic Social Issues
BusAd 180 International Business
BusAd 123 Financial Management
BusAd 132 Operations Management
BusAd 124 Marketing or BusAd 125 Marketing of Financial Services
BusAd 126 Advanced Marketing
BusAd 142 Strategic Marketing Management (capstone course)
Communication 116 (Advertising) or Communication 117 (Public Relations)

INTERDISCIPLINARY ELECTIVES
Choose two courses from the following with at least one course chosen from psychology, anthropology, or sociology:
Philosophy 10 Plato and Philosophical Inquiry
Philosophy 11 Aristotle and Philosophical Method
Psychology 1 Introduction to Personal-Social Psychology
Psychology 160 Social Psychology (Prerequisite: Psychology 1)
Anthropology 1 Introduction to Social and Cultural Anthropology
Sociology 2 Introduction to Sociology
Anthropology 112 Race and Ethnicity (Prerequisite: Anthropology 1 or Sociology 2)
Anthropology 121 World Cultures (Prerequisite: Anthropology 1 or Sociology 2)
Another approved upper-division Anthropology or Sociology course
Economics 105 Micro-Economic Theory.

See the chair of the Department of Business Administration for further information or to apply for admission.

INTERNATIONAL CONCENTRATION
The international concentration is designed for students whose career view extends beyond U.S. borders. It provides an opportunity to study other countries, languages, and cultures, and includes the experience of living abroad.

The concentration requires completion of the business administration major courses, plus BusAd 180, International Business. Additional requirements are:
• Two cross-cultural courses.
• Two regional specialty courses.
• Three college terms in a foreign language.
• One term of the junior year abroad.

The additional courses can normally be counted for Area A requirements or January Term credit. A listing of approved courses is available from the coordinator of the international concentration. The foreign language courses, together with Accounting 1, 2, and BusAd 40, should be completed prior to the start of the junior year.

A major grade point average of at least 2.5 in a business administration program is required for admission to the concentration; a major GPA of at least 2.8 is required to graduate in the concentration.

See the coordinator of the international concentration or the chair of the Department of Business Administration for further information or to apply for admission.

HONORS CONCENTRATION PROGRAM IN FINANCIAL SERVICES
An honors concentration is offered to all qualified business administration majors. The program is designed for students motivated to explore critical business disciplines in greater depth, focus, and intensity. The program utilizes the financial services industries as its integrating theme and is intended to prepare students for professional careers in a variety of fields, including finance, as well as for graduate study in business, law, and other disciplines. Admission requires a major grade point average of at least 2.75 in a business administration program or special permission of the department chair.

A minimum GPA of at least 2.75 in the major is required in the Concentration. Students achieving at least a 3.0 GPA shall receive Department Honors in the Concentration. Students should note that if they do not achieve at least a 2.75 GPA, they should have taken Business Administration 132 Operations Management as required for the major in Business Administration.

LOWER DIVISION
Same requirements as business administration major, but should be completed by the end of the sophomore year.
Business Administration Curriculum

UPPER DIVISION

Core required courses
BusAd 100 (A,B,C) Senior Honors Forum
BusAd 123 Financial Management
BusAd 125 Marketing of Financial Services
BusAd 181 Ethical, Social, and Political Issues in Business
Economics 106 Macroeconomic Theory
Economics 130 Money, Credit and Banking or Economics 136 Investments

Students are advised to take BusAd 123, BusAd 125, and BusAd 181 (or 182) in their junior year.

ELECTIVE REQUIREMENTS
Choose one
BusAd 120 Law and Business
BusAd 131 Organization Theory
BusAd 132 Operations Management
BusAd 180 International Business

PREREQUISITE GRADE
Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

COURSES

LOWER DIVISION

20 Introduction to Business
A general survey and introduction to the functional areas of organization, accounting, production, personnel, marketing, and finance. Orientation to business fields, careers, and opportunities. Not open to upper division majors.

40 Business Statistics
Introduction to statistical concepts used to assist in making decisions under conditions of uncertainty. Topics include the collection and analysis of data, probability and probability distributions, hypothesis testing, linear regression, and correlation. Not open to freshmen. This course may not be taken for credit in addition to Mathematics 4 or Psychology 3.

UPPER DIVISION

BusAd courses numbered 100 or above are open to juniors and seniors only. BusAd majors who seek to enroll in these courses must have completed all lower division BusAd major requirements as well as any specified upper division prerequisites. Non-majors should consult the chair.

100 A, B, C Senior Honors Forum
A yearlong capstone course, principally for the honors concentration in financial services. The course integrates the major functional areas of business viewed in the broader context of strategic management and decision-making from a long-term perspective. The course utilizes the framework of strategic planning and long-term business and social implications, focused by in-depth analytical techniques.

The course includes direct application of the skills and theories developed in consulting and/or research assignments. Teams operate in the field with Bay Area business, government, and other institutions addressing problem-solving in actual practice with and for “clients.”

BusAd 100 A,B,C, to be taken in the senior year, is required for students in the honors concentration in financial services and may be taken by other majors with permission of the department chair. It provides three upper-division credits in the major and enrollment is required in each of the senior-year terms (fall, January Term, and spring). The courses must be taken in one academic year, beginning with the fall term. Prerequisites: BusAd 123, 125, 181 or 182; Economics 106. All must be completed prior to beginning BusAd 100 A,B,C or permission from the instructor must be obtained.

120 Law and Business
Introduces students to the history, philosophies, and structure of the U.S. legal system, then focuses on the central elements of that system to which they are likely to be exposed during their business careers. Provides them with an understanding of contract principles, business torts, white-collar crime, business organization structures, and other related topics.

121 Advanced Legal Topics in Business
This course offers an analysis of how business managers can effectively operate their businesses in an environment of ever-increasing involvement of the legal system in business affairs. Discusses the origins of the various statutory and regulatory schemes and how they relate to public policy, covering such areas as securities regulation, insider trading, intellectual property rights, anti-trust legislation, fair competition practices, environmental protection, trade unions, employment regulations, product safety and consumer protection. Prerequisite: BusAd 120.

123 Financial Management
A study of the organization and financial administration of business enterprise. The course includes such topics as financial analysis, value and value theory, risk analysis, investment decisions, corporate finance and theory, working capital management and related topics.

124 Marketing
The principles of major areas of marketing decision-making that confront organizations. Topics include the utilization of marketing information systems as well as the formulation and implementation of integrated product, pricing, distribution, and promotion strategies.
125 Marketing of Financial Services
A study of the principles of marketing as applied to service firms. Special emphasis is placed on major areas of marketing decision-making that confront financial services businesses. Topics covered include the utilization of marketing information systems as well as the pricing, distribution, and promotion of services. This course may not be taken for credit if BusAd 124 has been taken. This course meets the BusAd 124 requirement.

126 Advanced Marketing
A detailed treatment of marketing research, strategic marketing planning and the development of fully integrated marketing programs. Topics include market analysis, marketing mix strategies, product positioning, market segmentation, and related social and ethical issues. Prerequisites: BusAd 124 or 125. BusAd 126 is not offered in the spring term.

127 Business Communication
This course emphasizes the kinds of communication students can expect in complex organizations with multiple audiences. Grounded in competitive, course material includes in-depth categorical editing, organizational strategies for informative and persuasive writing and speaking, construction and presentation of arguments, and use of executive summaries.

131 Organization Theory
A study of the structure, functioning, and performance of organizations, and the impact of psychological and sociological variables on the behavior of groups and individuals within them. Discussions include theories of motivation, leadership, decision-making, power and influence, group dynamics, corporate cultures, ethics, technology, global structures, and diversity management.

132 Operations Management
This course studies the design, implementation and evaluation of processes in the business firm. Processes are a collection of activities that convert inputs into outputs of goods and services that create value for customers. Value is represented by factors such as lower costs together with improved quality and is intended to give the firm a competitive advantage. Strategies are presented to solve the operational problems associated with creating value. Emphasis is given to factors having a significant impact on processes, such as globalization, supply chains, technology, information and data flows, and cultural, geopolitical or environmental challenges.

140 Strategic Management
A capstone course which must be taken in the spring term of the senior year; it integrates the major functional operating areas of business firms viewed within the broader context of strategic management, i.e., the process of managerial decision-making and actions that determine the long-run performance of business organizations. Prerequisites: BusAd 120, 123, 124, 131, 132 and 181 (or 182). This course may not be taken for credit if BusAd 100 is taken. BusAd 140 is not offered in the full term.

142 Strategic Marketing Management
A capstone course, principally for the marketing concentration, that must be taken in the spring term of the senior year. The course integrates all aspects of the process of strategic marketing planning, inclusive of utilizing data collected from marketing information systems, market- ing research to inform an organization’s strategic marketing plan. The course examines each component of a strategic marketing plan, including targeting, positioning, pricing and promotional strategies. Topics also include the integration of the firm’s strategic marketing plan with the organization’s overall mission and strategic plan. Prerequisites: Completion of the concentration’s two interdisciplinary electives as well as: BusAd 181 (or 182), 123, 124 (or 125), 126, 132, and 180. This course may not be taken for credit if BusAd 100 or BusAd 140 is taken. BusAd 142 will not be offered in the full term.

175 Management Information Systems
An overview of business applications of information technology. How networked computers, data, technical specialists, and managers combine to form an information system. The role of information systems in marketing, finance, production, and other areas. Ways to create and use information systems.

180 International Business
The special opportunities and risks firms face as a result of the rapid globalization of business. The economic, cultural, and institutional factors that must be considered; the marketing, financial, managerial, and strategic considerations that lead to success.

181 Ethical, Social, and Political Issues in Business
This course examines the social, political, and ethical contexts of business structures and practices. Students gain greater awareness of social and public policy issues affecting the firm and learn to use moral reasoning to make business decisions that are both economically and ethically sound.

182 Business, Economics, and Catholic Social Ethics
An alternative version of BusAd 181. Covers the same subject matter, but adds Catholic social thought to the framework studied.

195 Internship
Work-study program conducted in an appropriate internship position under the supervision of a faculty member. Normally open to junior and senior students only. Permission of instructor and department chair required.

197 Special Study
An independent study or research course for students whose needs are not met by the regular courses in the curriculum. Permission of the instructor and department chair required.

199 Special Study—Honors
An independent study or research course for upper-division majors with a B average in business administration. Permission of the instructor and department chair required.
The Chemistry Department seeks to offer a versatile academic program that will prepare students for a variety of options upon graduation: employment in industry, graduate work in chemistry or related fields, entry into professional schools such as medicine or dentistry, or teaching at the K–12 level. Using a balance of theoretical and experimental work, the curriculum attempts to provide students with a solid understanding of fundamental concepts, the ability to reason through unfamiliar problems, the tools to investigate a topic in depth, and the communication skills that are needed to share information with others.

The department recognizes that since chemistry is a discipline whose primary focus is the underlying substance of the universe, it is important both independently and in relation to other fields of study. For these reasons the department strives to connect the curriculum to other disciplines and real-world examples whenever possible, and to routinely offer courses to meet the needs of students who are not science majors.

FACULTY
Jeffrey S. Sigman, Ph.D., Associate Professor, Chair
Kenneth J. Brown, Ph.D., Professor
Steven J. Bachofer, Ph.D., Professor
Valerie A. Burke, Ph.D., Assistant Professor
Joel D. Burley, Ph.D., Associate Professor
John S. Correia, Ph.D., Professor, Emeritus
Patricia Jackson, Ph.D., Adjunct
Alexander J. Pandell, Ph.D., Adjunct
Michelle L. Shulman, Ph.D., Associate Professor

LEARNING OUTCOMES
The learning outcomes for the Chemistry Department are organized into five general categories:
• TOOLS for learning
• FUNDAMENTAL knowledge and conceptual understanding
• INVESTIGATIVE skills
• COMMUNICATION skills
• SOCIETAL AWARENESS and concerns

ADMISSION REQUIREMENTS
Students planning a major in chemistry must present credits in one year of chemistry, one year of physics, and four years of mathematics, and should have at least a B average in these subjects. Students with a good high school record but lacking credit in any of these subjects should remove any deficiencies in summer school. Students planning a science major should be particularly alert to the language proficiency requirement (see Program of Study, p. 39).

MAJOR REQUIREMENTS
The student with an interest in Chemistry can pursue one of two options in Chemistry or pursue a Biochemistry major (See Biochemistry major, p. 58) which integrates material from the fields of Chemistry and Biology. The department offers the standard Chemistry major and Chemistry major with an environmental concentration.

SUGGESTED CHEMISTRY MAJOR PROGRAM
A suggested four-year program of study for a major in chemistry is available from any Chemistry Department member. Note that all freshmen are required to complete two Collegiate Seminars in the first year, one each in the fall and spring terms. Two additional Collegiate Seminars must be completed before graduation, and other College requirements are specified in the Program of Study (see p. 39).

LOWER DIVISION
The following lower division courses are required for the two majors in chemistry: Chemistry 8, 9 (lab), 10, 11 (lab), 89; Mathematics 27, 28. Each major has additional lower division requirements as follows: For the standard chemistry major, Mathematics 29 and Physics 1, 2 (lab), 3, 4 (lab) must also be completed. For the chemistry major—environmental concentration, students must also take: Physics 1, 2 (lab), 3, 4 (lab) or Physics 10, 20 (lab), 11, 21 (lab) and Biology 1 (with lab), 2 (with lab).

The Biochemistry major has very similar requirements (See Biochemistry major, p. 58).
Curriculum Chemistry

UPPER DIVISION
The two Chemistry majors include the following core of upper division courses: Chemistry 104, 106, 114, 115, 130. Each major concentration has additional upper division requirements as follows:

For the standard chemistry major, students must take Chemistry 108, 110, 111 or 119, 118, 197 or 199.

For the environmental concentration, students must take Chemistry 108 or 118, 119, and any one other upper division chemistry course. Also required are Biology 125 and either Biology 113, 146, or 152.

MINOR REQUIREMENTS
The minor in chemistry requires Chemistry 8, 9 (lab) and 10, 11 (lab), and any three upper division chemistry courses excluding Chemistry 104 and 106.

PREREQUISITE GRADE
Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

COURSES
LOWER DIVISION COURSES
2 Principles of Chemistry
An introduction to topics in organic chemistry and biochemistry for those students with an interest in the life sciences. Students may not enroll in this course until they have been sufficiently counseled as to whether it is appropriate to their needs. This course is designed for Nursing students only. Four lectures per week. Prerequisite: one year of high school chemistry, one year of algebra.

3 Principles of Chemistry Lab (.25)
To accompany Chemistry 2. A simplified introduction to experimentation in chemistry. One lab per week. Laboratory fee required.

8 General Chemistry I
A study of the fundamental principles of chemical science and the chemistry of the more common elements and their compounds. Four meetings per week. Prerequisite: High school chemistry.

9 General Chemistry Lab I (.25)
Laboratory to accompany Chemistry 8. Must be taken concurrently with that course. An introduction to experimentation in chemistry. One lab per week. Laboratory fee required.

10 General Chemistry II
A continuation of Chemistry 8. Four meetings per week. Prerequisites: Chemistry 8 and Chemistry 9.

11 General Chemistry Lab II (.25)
Laboratory to accompany Chemistry 10. Must be taken concurrently with that course. One lab per week. Prerequisites: Chemistry 8 and Chemistry 9. Laboratory fee required.

20 Concepts in Chemistry
A course especially designed to acquaint the non-science student with science as a way of thinking and to introduce important chemical concepts and their relation to human activities. Three lectures and one lab per week. Laboratory fee required.

89 Chemical Literature (.25)
A systematic investigation of the literature of chemistry and allied fields. One meeting per week.

UPPER DIVISION COURSES
Chemistry 8, 9 (lab), 10, and 11 (lab) with grades of C– or better are prerequisite to all upper division courses. Chemistry 104 and 106 are prerequisite to Chemistry 108, 110, 111 and 130, 135, 136, and 138. Except for Chemistry 104 and 106, the following courses are taught only in alternate years. Chemistry 197 and 199 are offered as needed.

104 Organic Chemistry I
An introduction to the concepts of structure and reactivity of organic compounds. Four lectures and one lab per week. Chemistry 104 is offered only in the fall term. Laboratory fee required.

106 Organic Chemistry II
A continuation of Chemistry 104. Four lectures and one lab per week. Chemistry 104 is prerequisite to Chemistry 106, which is offered only in the spring term. Laboratory fee required.
108 Theory and Practice of Separation and Identification
A study of the separation, purification, and identification of compounds using chemical, chromatographic, and spectroscopic techniques. Two lectures and two labs per week. Laboratory fee required. Offered in alternate years.

110 Special Topics in Chemistry
An exploration of important areas in modern chemical research involving various elements of the discipline. The course includes reading and discussion of journal articles and may include use of the computer for molecular modeling, information retrieval, and analysis of data, depending on the selected topics. A prime learning objective of this course is to assist the student to use other instructional materials besides textbooks. Prerequisites: Chemistry 89 and Chemistry 130. Offered in alternate years.

111 Advanced Organic Chemistry
An in-depth examination of the important mechanisms of organic reactions, the methods used to study them, and the relationship between structure and reactivity. Three lectures per week. Offered in alternate years.

114 Physical Chemistry I
A study of chemical theory, specifically thermodynamics, chemical kinetics, and quantum mechanics. Three meetings and one lab per week. Prerequisites: Mathematics 27, 28. Chemistry 114 is offered only in the fall term. Laboratory fee required. Offered in alternate years.

115 Physical Chemistry II
A continuation of Chemistry 114. Three lectures and one lab per week. Chemistry 114 is prerequisite to Chemistry 115 which is offered only in the spring term. Laboratory fee required. Offered in alternate years.

118 Instrumental Chemical Analysis
A study of the principles used in the design and construction of instruments and their applications in chemistry. Two lectures and two labs per week. Laboratory fee required. Offered in alternate years.

119 Environmental Chemistry
A study of the theory and practice of water, air, and soil chemistry with emphasis on the problem areas within our environment. Three lectures and one lab per week. Laboratory fee required. Offered in alternate years.

130 Advanced Inorganic Chemistry
A study of the structures, reactions, and relationships of the elements and their compounds. Three lectures per week. Offered in alternate years.

135 Biochemistry (cross listed with Biology)
A study of the biochemical principles with an emphasis on enzymes and metabolism, of biochemistry. Three lectures and one lab per week. Laboratory fee required. Offered every year. Prerequisites: Biology 1, 1L, 2, and 2L.

136 Advanced Topics in Biochemistry (cross listed with Biology)
A further study of the biochemical principles with an emphasis on macromolecular structures, membrane related topics (structure, transport, signal recognition and transduction, and other topics not covered in Biochemistry. Three lectures and one lab per week. Laboratory fee required. Offered every year. Prerequisite: Biochemistry 135 (Bio 135).

138 Biophysical Chemistry
A study of the physical chemical aspects of biochemistry. Three lectures per week. Offered in alternate years. Prerequisites: Mathematics 27, 28.

197 Special Study
Laboratory research in chemistry, under the direction of a faculty advisor. Results from the research project will be summarized in the form of a written thesis and an oral or poster presentation. Prerequisites: senior standing and the consent of the faculty advisor. Laboratory fee required.

199 Special Study—Honors
Laboratory research in chemistry, under the direction of a faculty advisor. Results from the research project will be summarized in the form of a written thesis and an oral or poster presentation. Prerequisites: senior standing, a 3.0 GPA (minimum) in chemistry coursework, and the consent of the faculty advisor. Laboratory fee required.
Curriculum Classical Languages

CLASSICAL LANGUAGES

The specific aim of the Classical Languages Department is to provide a sufficient training for those majoring in classics to enable them to enter graduate studies in classics or various related fields of philosophy, ancient history, and archaeology (for example). The courses are broad enough in concept to satisfy the general cultural appetites of the college student, apart from any interest in further study.

Historically, the department has worked closely with the Integral Program: the lower-division Greek courses are identical to the language tutorial courses for the first two years.

Entering freshmen and transfer students will be placed in courses suitable to the level of their preparation.

FACULTY
John A. Dragstedt, Ph.D., Professor, Chair
Rali Christo, Ph.D., Adjunct
Michael Riley, Ph.D., Professor
Brother S. Dominic Ruegg, FSc, Ph.D., Professor Emeritus

LEARNING OUTCOMES
The learning outcomes for the Classical Languages Department fall under five headings:
1. COMMAND of grammar, syntax and morphology
2. READING knowledge of Greek and Latin
3. INCREASED communication skills
4. FAMILIARITY with classical scholarship
5. BROADENED awareness of historical linguistics

MAJOR REQUIREMENTS

LOWER DIVISION

CLASSICS MAJOR
By arrangement.

GREEK MAJOR
Greek 3 and 4 or an acceptable equivalent are prerequisite to all upper-division courses, except for Greek 163 and 166.

LATIN MAJOR
Latin 3 and 4 or an acceptable equivalent are prerequisite to all upper-division courses, except for Latin 163.

UPPER DIVISION

CLASSICS MAJOR
Eight upper-division courses combining study of Latin and Greek.

GREEK MAJOR
Eight upper-division courses focused on Greek.

LATIN MAJOR
Eight upper-division courses focused on Latin.

MINOR REQUIREMENTS
The minor in Latin requires Latin 101, 102, 110, and two electives in Latin.
The minor in Greek requires Greek 101, 102, 106, and two electives in Greek.

PREREQUISITE GRADE
Any course listed in this department with a prerequisite assumes a grade of C- or better in the prerequisite course.

COURSES

LOWER DIVISION

GREEK
1 Elementary Greek
Beginner’s course. Morphology, syntax, introduction to the reflective and scientific analysis of language. (Cross-listed as Integral 51.)

2 Elementary Greek
Continuation of Greek 1. Reading of texts of Plato and Aristotle. Prerequisite: Greek 1. (Cross-listed as Integral 52.)

3 Intermediate Greek
Reading of selected authors, study of various types of discourse. Reading of Plato, Aristotle, lyric poetry, and drama. Discussion of logic, rhetoric, and dialectic. Prerequisite: Greek 2. (Cross-listed as Integral 53.)

4 Intermediate Greek
Continuation of Greek 3. Prerequisite: Greek 3. (Cross-listed as Integral 54.)

LATIN
1 Elementary Latin
Beginner’s course. Morphology, syntax, exercises in composition and translation.

2 Elementary Latin
Continuation of Latin 1. Prerequisite: Latin 1.

3 Intermediate Latin
Reading of prose. Deepened study of language. Prerequisite: Latin 2.

4 Intermediate Latin
Reading of poetry. Prerequisite: Latin 3.
UPPER DIVISION

GREEK

101 Plato
A reading of a shorter and a longer dialogue with consideration of the contemporary background, and the range of philological and philosophical questions. A number of the dialogues that are lesser-known are read and considered in translation. An attempt is made to view the totality of Plato’s work and life.

102 Homer
A study of epic dialect and technique of composition; methods of historical and literary interpretation. The nature of myth and a comparison of the diverse forms of ancient epic in various cultures are topics.

103 Greek Historians
The history of Greek historiography is studied by examples of the methods of Herodotus, Thucydides, Xenophon and Polybius from their texts.

105 Greek Orators
Why rhetoric was the major science of antiquity is investigated. Examples are taken from the canon of Attic orators.

106 Greek Dramatists
Greek playwrights are studied in as broad a representation as possible: the tragedians, Aristophanes and Menander.

107 Aristotle
A study of Aristotle’s scientific method and its relationship to metaphysics as exemplified in the Physics and Metaphysics, as well as of his concept of dialectic as opposed to that of Plato.

110 New Testament Greek
A sampling of Hellenistic Greek is studied as background, and the course then concentrates upon the Gospels and Paul in selection.

115 Greek Lyric Poets
Special attention is accorded Pindar. The history of Greek lyric is studied in examples.

160 Greek Literature in Translation
Texts of epic, dramatic, lyric, and historical and philosophical genres are presented and discussed, and their relationships to modern literature considered.

163 Greek History and Civilization
A study of the religious, social, political, and economic conditions of Ancient Greece (2000-250 B.C.) through history and archaeology. Selected ancient authors are read in their historical context. The course is the first half of a study of ancient history. (Cross-listed as History 181.) Offered in alternate years.

166 Classical Archaeology
A study of the topography and monuments of Greece and Rome. Methods of archeological research.

199 Special Study—Honors
An independent study or research course for upper-division majors with a B average in Greek. Permission of the instructor and department chair is required. Course normally requires Greek composition. On an individual basis, students work with composition textbooks in order to submit for revision their own renderings into Classical Greek.

LATIN

101 Cicero
The full variety of Cicero’s texts is sampled, and he is located within the history of the Roman Republic.

102 Roman Historians
A study of representative texts of Sallust, Livy and Tacitus, with attention to the widest range of interpretative problems.

103 Patristic Latin
Texts of Tertullian, Augustine and Boethius are read, with special attention to Confessions.

104 Roman Comedy
A study of the plays of Plautus and Terence, with attention to contemporary social history and the traditions of the stage.

108 Horace
A study of Horace’s major lyrics, with admission of various methods of interpretation for discussion.

109 Roman Law
The nature and history of Roman law is studied in translation. Its theoretical and historical relation to common law is examined.

110 Virgil
The entire corpus of Virgil’s writing is sampled. Philosophical and literary problems are examined.

161 Latin Literature in Translation
Texts of all genres are considered. Historical background and mythological tradition are presented as well as connections to modernity.

163 Roman History and Civilization
A study of pre-Roman Italy and the growth of Rome into a worldwide empire (1000 B.C.-450 A.D.) through history and archaeology. Selected ancient authors are read in their historical context. The course is the second half of a study of ancient history. (Cross-listed as History 182.) Offered in alternate years.

199 Special Study—Honors
An independent study or research course for upper-division majors with a B average in Latin. Permission of instructor and department chair is required.
Curriculum Collegiate Seminar

COLLEGIATE SEMINAR

The faculty of the Collegiate Seminar program is drawn from all departments of the College.

Since 1941, the Collegiate Seminar program has played a key role in the undergraduate academic experience at Saint Mary’s College. In introducing students to the great writings that have shaped the thought and imagination of the Western world, the program aims to develop in students skills of analysis, critical thinking, interpretation and communication that will help them read and discuss significant works with increased understanding and enjoyment. More specifically, the program brings students into direct contact with the works of great minds—poets, philosophers, scientists, historians—to help them understand the ideas that have shaped the present. In addition, the Collegiate Seminar program sees these encounters as opportunities to cultivate habits of careful and disciplined reading so that students can discover for themselves the meanings embodied in any works that they may read, not just those drawn from the Great Books canon.

The Collegiate Seminar program involves all undergraduate students and faculty throughout the schools and academic departments of the College. For both students and faculty, engagement in the Collegiate Seminar program transcends individual disciplines and programs of study. The program is based on a genuine sense of collegiality and reflects the basic identity of the College as an intellectual community. It offers students and faculty of different departments the opportunity to meet and to interact. Though given to different ways of seeing and thinking, students and faculty join to share a common experience—the reading and discussion of the same great texts.

Classes meet around a seminar table in small groups so that each person can participate actively in the discussion. The faculty discussion leader establishes questions about the texts in order to challenge the students to develop, through the process of discussion, defensible interpretations of their own. Discussion entails the stating of opinions and the uncovering of assumptions; students present evidence to support their position or to defend it against objections; they respond to other students’ views, exposing contradictions and clarifying ambiguities. Via substantial writing assignments, students continue their inquiry into the texts, developing a thesis supported by cogent analysis based on textual evidence. Through engagement in discussion and writing, students are encouraged to read actively, to think critically, to listen well, to converse in a spirit of cooperation, and to reflect upon and refine their ideas and opinions, developing skills they can use throughout their lives. All freshmen take Seminar 20 in fall and 21 in spring and are expected to complete 122 during the sophomore year and 123 during the junior year. All transfer students enroll in Seminar 130 and 131 and additional seminars as required.

COLLEGIATE SEMINAR GOVERNING BOARD

Charles Hamaker, Ph.D., Professor, Mathematics, Director of the Collegiate Seminar Program
Deanne Kruse, M.A., Program Manager
Catherine Marie Davalos, M.F.A., Associate Professor, Performing Arts
Rebecca Engle, Ph.D., Adjunct, Performing Arts
Brother Martin Fallin, FSC, M.A., Lecturer
José Feito, Ph.D., Associate Professor, Psychology
Robert Gardner, AFSC, M.A., Adjunct, Liberal and Civic Studies
Barry Horwitz, M.A., Adjunct, English and Drama
Jessica Kintner, Ph.D., Professor, Physics and Astronomy
Joan Peterson, Ph.D., Professor, School of Education
Edward Porcella, Ph.D., Associate Professor, Integrated Liberal Arts
Virginia Smith, M.B.A., Adjunct, Accounting
Grete Stenerson, Lecturer
Michael Wolensky, Ph.D., Lecturer

LEARNING OUTCOMES

As a result of their participation in the Collegiate Seminar program, students will:

• DEVELOP increased appreciation for great books as demonstrated by their habit of seeking out good reading.
• GROW in their understanding of some great ideas of humankind and of the problems and dilemmas that people have struggled with over the millennia.
• GROW in their intellectual curiosity.
• GROW in their appreciation and understanding of different ways of knowing (e.g., philosophical, literary, historical, scientific, artistic, etc.).
• DEVELOP simultaneously a tolerance for ambiguity and a desire for clarity, recognizing that ideas and human life are complex and not easily explainable.
COURSES

20 Greek Thought
Homer, The Odyssey
Aeschylus, Agamemnon, Libation Bearers, Eumenides
Sophocles, Oedipus Rex, Antigone
Thucydides, Peloponnesian Wars
Aristophanes, Lysistrata
Plato, Meno, Apology, Crito, Phaedo
Aristotle, Nicomachean Ethics
Euclid, The Elements
Anonymous, Two Athenas (artworks)
Sappho, poems
Euripides, Bacchae

The reading list is current but subject to modification. From some texts, selections are read.

21 Roman, Early Christian, and Medieval Thought
Marcus Aurelius, Meditations
Lucretius, On the Nature of the Universe
Virgil, The Aeneid
Plutarch, Life of Caiusius, Life of Mark Anthony
Genesis, I–6
Gospel of Mark
St. Augustine, Confessions
Marie De France, “Prologue,” “Guigemar,” and “Equitan”
St. Thomas Aquinas, Summa Contra Gentiles
de Pizan, The Book of the City of Ladies
Dante, The Divine Comedy; “The Inferno”
Chaucer, Canterbury Tales, “The Wife of Bath’s Tale,” “The Merchant’s Tale”
Hildegard of Bingen, Scivias; “Illumination” (art)
Rumi, selected poems
Prerequisite: Seminar 20.
The reading list is current but subject to modification. From some texts, selections are read.

122 Renaissance, 17th- and 18th-Century Thought
Machiavelli, The Prince
Luther, On Christian Liberty
Bartolome de las Casas, Devastation of the Indies
Cervantes, Don Quixote
Shakespeare, King Lear
Galileo, The Starry Messenger
Descartes, Discourse on Method
Hobbes, Leviathan
Swift, Gulliver’s Travels
Sor Juana Ines de la Cruz, “Letter to Sor Filotea De La Cruz”
Voltaire, Candide
Rousseau, Discourse on Inequality
Jefferson, The Declaration of Independence, Notes on the State of Virginia
Wollstonecraft, A Vindication of the Rights of Woman
Alphra Behn, Oroonoko
Lippi, “La Vergine Col Figlio” (art)
Prerequisite: Seminar 21 or 131 and sophomore standing
The reading list is current but subject to modification. From some texts, selections are read.

123 19th- and 20th-Century Thought
Newman, The Uses of Knowledge
Darwin, on the Origin of Species
Whitman, Leaves of Grass, selection
Marx, Wage-Labour and Capital
Weber, The Protestant Ethic and the Spirit of Capitalism
Neruda, Selected odes
Kafka, Metamorphoses
Thoreau, Walking
Freud, Introductory Lectures on Psychoanalysis, Civilization and Its Discontents
Ibsen, A Doll’s House
Woolf, A Room of One’s Own
Picasso, “Guernica” (art)
Unamuno, St. Emmanuel The Good, Martyr
Garcia Marquez, Love and Other Demons
Malcolm X, “The Ballot or the Bullet”
Martin Luther King, Letter from Birmingham Jail
Toni Morrison, Beloved
Nietzsche, Genealogy of Morals
Prerequisite: Seminar 122 and junior standing.
The reading list is current but subject to modification. From some texts, selections are read.

126 Three Traditions
Readings from the three founding traditions of the college—liberal arts, Catholic, and Lasallian. Readings are selected to sketch the trajectories of three traditions that individually and collectively animate the institution’s goals. The texts will examine intersections and collisions created by the attempt to unify the three. Prerequisite: Seminar 20 or 130.

130 Transfer Seminar I

131 Transfer Seminar II

144 Multicultural Thought
Selected readings from 20th-century multicultural authors of the United States, especially from California. Readings continue the dialogue with authors from previous seminars, give renewed attention to questions raised in those contexts, and address contemporary issues as well. Prerequisite: Seminar 20 or 130.

145 World Traditions
Readings from the traditions of Asia, Africa, and the Middle East that raise basic human questions of courage, compassions, loyalty, and wisdom. These works from around the world are selected to extend the themes and ideas from both the Western Tradition sequence and the Multicultural Thought seminar to a truly global conversation. Prerequisite: Seminar 20 or 130.

190 Co-Leader Apprenticeship (.25)
A course designed for specially selected, experienced seminar students assigned to assist a faculty member as student co-leader for a specific seminar class. As co-leaders, students participate as discussion facilitators and models in a seminar they have already completed. Meetings with assigned seminar faculty by arrangement. May be repeated for credit.

192 Introduction to Methods and Field Experience in Elementary Level Discussion Groups (.25)
Prerequisite: Seminar 122
For course description, see Liberal and Civic Studies on p. 114.
Curriculum Communication

COMMUNICATION

Recognizing that the mission of Saint Mary’s College is to instill a liberal arts, Catholic, and Lasallian character into all areas of the College community, the goal of the Department of Communication is to incorporate these traditions into a curriculum that identifies the process of communication as a primary means by which we construct social reality, recognize and analyze social processes, and effect social change. We see the content of the field as complex and interdisciplinary, and thus seek to pursue the continuing goals of improving the effectiveness of our communication, enhancing creativity and productivity in ourselves and others, promoting a sense of social reality that is fair and just for all members of society, and ensuring the continuation of critical contemplation as a means of strengthening and enriching the social good. We therefore encourage ethical and systematic inquiry into a broad range of areas, including mass and alternative media, rhetoric, interpersonal, communication, new media and digital culture, organizational communication, visual studies, ethics, intercultural communication and cultural studies.

Communication, as an academic field, draws upon the arts, the social and natural sciences, and the professions. The communication faculty have interdisciplinary backgrounds that enrich the academic and cultural environment of the department. The curriculum is both conceptual and applied with core courses preparing the student for an in-depth exploration of one or more areas of inquiry.

FACULTY
Ellen Rigsby, Ph.D., Associate Professor, Chair
Shawny Anderson, Ph.D., Associate Professor
Margaret Dick, Ph.D., Assistant Professor
Richard Edwards, Ph.D., Assistant Professor
Sue Fallis, Ph.D., Associate Professor
Rev. Michael A. Russo, Ph.D., Professor
Scott Schönfeldt-Aultman, Ph.D., Assistant Professor
Kusum J. Singh, Ph.D., Professor
Edward E. Tywoniak, M.F.A., Ed.D., Associate Professor

MAJOR REQUIREMENTS
Students who major in communication take a total of 11 courses, seven of which are required and four electives. Of the four electives, two must be upper-division application courses denoted by the word “Application” after the title.

CORE COURSES
Lower division Communication 2, 3, 10.
Upper division Communication 100, 110, 111, and 196.
Four courses, two of which are application courses denoted by the word “Application” after the title.

MINOR REQUIREMENTS
Students who minor in communication take a total of six courses, three of which are required and three electives. Of the three electives, one must be an upper-division application course denoted by the word “Application” after the title.

CORE COURSES
Lower division Communication 2 and 3.
Upper division Communication 100.
Plus three upper-division electives (one of which is an upper-division application course).

PREREQUISITE GRADE
Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

COURSES

LOWER DIVISION

2 Communication and Social Understanding
This course intends to acquaint students with ways of critically assessing the everyday communication practices and texts (spoken, visual, and mediated) which construct and transmit social knowledge. Introduces students to issues such as language, meaning, rhetoric, persuasion, definition, mediation, representation, visual culture, social knowledge, understanding the “self,” the relationship between culture and communication, the social construction of reality, and the assessment of the influence of mass communication. Students will participate in in-depth discussions based on primary texts of communication theory and produce analytical projects that demonstrate their grasp of course content.

3 Communication Inquiry
This seminar-styled course utilizes core communication texts as the basis of discussion for key questions that define the discipline of communication. Students read primary, seminal texts from authors and theorists in the field to better understand how we construct culture, society and the self through the various types of interpersonal and mediated forms of communication.

10 Argument and Advocacy
This course is a study of and engagement with public dialogue. Students look at the process of public dialogue (in both local and national settings), and examine how advocacy-based organizations engage the community in a dialogic process. As students observe (and possibly participate in) public hearings, they’ll consider such questions as: What was working? What didn’t work? What kind of public space is this and how does this contribute to the kind of dialogue that takes place here? How is authority enacted? Who has a voice and who doesn’t? What is it that creates polarized (divisive) outcomes and prevents people from reaching a decision?
Communication Curriculum

UPPER DIVISION REQUIREMENTS
Not open to first-year students.

100 Communication Theory
This course provides students with a review of major theories applicable to communication among individuals, within organizations, in politics and in the elite and mass media. Through readings and discussion of seminal core texts, students are encouraged to judge for themselves the strong and weak portions of alternative concepts, models and theoretical concepts, as well as to evaluate the empirical methods from which these theories are derived.

110 Quantitative Methods
An introduction to communication research approaches that allow us to generalize our understanding to specific instances. For example, we might wish to investigate the influence of mediated political message characteristics or voting behavior or how nonverbal cues influence the formation of romantic relationships. The course provides an overview of research designs, sampling, data collection, and data analysis for the empirical construction of these knowledge bases. Prerequisite: 2, 3, 10. Transfer students need permission of the chair.

111 Qualitative Methods
This course introduces students to qualitative methodology and offers students an opportunity to design and practice qualitative methods. Topics addressed will include origins of qualitative methodology, ethnography, participant observation, interviewing, formulating research questions, collection and analysis of data, writing the literature review, and authoring the qualitative-grounded essay. Prerequisites: 2, 3, 10. Transfer students need permission of the chair.

196 Senior Capstone
Senior standing required. Students conceptualize and conduct their own research methodological approach (including performative or narrative) addressing a socially significant communication issue under the approval and supervision of an instructor. Students are encouraged to explore a question/issue that will represent the culmination of their undergraduate experience and reflect their finest work as a college student. At the conclusion of the term, students will present their work to interested members of the college community. Prerequisite: 100, 110, 111. Transfer students need permission of the chair.

UPPER DIVISION ELECTIVES
Two of the 4 must be upper-division application courses, denoted by the word “Application” after the title.

105 International Communication
A review of our “global village,” which is dangerously divided not only by power struggles and interest conflicts but by message flows that create confusion and justified or unjustified suspicion. Special attention is given to the role of the United Nations (and its specialized agencies dealing with communication) as a vital mode of cross-cultural communication among the leaders of nations, and to the role of the media in defining global policy issues.

107 Political Communication
The interplay of the press, politics and public policy is a key feature in understanding our democracy today. This course examines the role of communication, information, and media technologies in the electoral and legislative processes. Special attention is given to how the Internet and other media have altered the political landscape.

109 Visual Communication
In this course, students study visual culture, learn to do visual analysis, and explore key ideas in visual communication including visual methodologies, such as compositional interpretation, semiotics, discourse analysis, and psychoanalytic analysis. Possible topics include exploration of the visual components of gay window advertising, video games, video camera technology, photography, film, television, news, the body, comics, theme parks, and museums. Other possibilities include discussing art, representations of race, and taking a walking visual tour of campus.

110 Intercultural Communication
An exploration of intercultural communication within various national contexts, though primarily U.S.-based. The courses will include an examination of the roles of identity, history, power, language, cultural values, nonverbal communication, migration, cultural space, popular cultural communication, and relationships. Students will also become familiar with intercultural communication theories and with approaches to studying intercultural communication. Seeks to provide a basis for comprehending the relationship between culture and communication and for understanding cultural practices, differences, and similarities.

112 Interpersonal Communication
Upper-level course treating major theories and concepts in interpersonal communication. Lecture, discussion, readings, and activities integrating concepts such as nonverbal communication, listening, intimate relationships, family relationships, interracial relationships, conflict, conflict management, forgiveness, negotiation, gender, perception and self-concept, technology’s role in communication, as well as relationship development, maintenance, struggles, and termination.

116 Advertising and Civic Engagement [Application]
This course is designed to give students an understanding of both the theory and practice of advertising through the medium of civic engagement projects. The first half of the course will allow you to study the underlying theories of the practice of advertising; in the second half, students will have the opportunity to apply these theories as they generate and possibly implement advertising campaigns for on-campus clients.

117 Using Public Relations for Social Change [Application]
This course provides an in-depth understanding of the theories of public relations and the ways in which they are practiced throughout our society, both in the marketplace and in the political realm. Emphasis is on application of these theories in student-authored projects that focus on civic engagement in the community. This course affords students the opportunity to research, plan, execute, and evaluate a public relations campaign.

118 Media Law
This course examines the function of the laws regulating media and communication and explores how legal, political, social, administrative, economic, and technological factors contribute to determining public policy on media issues. Of primary concern is the First Amendment’s relationship to intellectual property, torts, and telecommunication law.
Curriculum Communication

122 American Journalism [Application]
An introduction to the craft of news writing and reporting in print and electronic news media. Historical development of newspapers, journals, blogs, and magazines — in print, on television/radio, and online; emphasis on journalism as a profession and ethical conduct.

123 Sports Journalism
American culture, its contexts and celebrations have moved from the sports page to the front page. This course explores the history, literature and practice of sports journalism in print, TV/radio, and new media. Students will examine issues of gender and ethics, develop editorial criteria for sports coverage, and learn the "best practice" in writing for print and broadcast. Prerequisite: 122.

125 Introduction to Media, Technology, and Culture
This introductory core course focuses on the critical and technical concepts and skills necessary for understanding communication practices in the 21st century. The course emphasizes three aspects of digital literacy: computer literacy, information literacy and visual literacy. As the digital revolution has become commonplace, this course places today's communication technologies in a broader historical context. The course involves both theory and practice. Students will be required to create multimedia projects, as well as learn key theories about digital communication strategies and approaches in a global, networked digital age. This course is the prerequisite to all upper-division media application courses.

132 Audio Production [Application]
Recognizing the importance of the sonic arts in contemporary forms of media, this course introduces students to: (1) basic acoustical theory, (2) musical concepts as related to media production, (3) aesthetic and technical elements of sound design, (4) audio field recording, and (5) non-linear audio editing and post-production techniques. Prerequisite: 125.

133 Video Production [Application]
This course introduces students to the basics of digital video production. Topics covered include: (1) introduction to film language and sound design, (2) video camera basics and video-production workflow, (3) cinematography and lighting, (4) non-linear video editing, and (5) post-production techniques. Prerequisite: 125.

143 Advanced Media Production I [Application]
This course is a continuation of media skills and concepts developed in 132 and 133. These are upper-division media courses that delve into areas of specialization and advanced applications in media production. Possible topics include web design, digital photography, motion graphics, video game design, animation, DVD authoring, and advanced audio engineering. Prerequisite: 132 or 133.

144 Advanced Media Production II
This course is a continuation of media skills and concepts developed in 143. These are upper-division media courses that delve into areas of specialization and advanced applications in media production. Possible topics include web design, digital photography, motion graphics, video game design, animation, DVD authoring, and advanced audio engineering. Prerequisite: 143.

147 Persuasion
This course examines the theory and practice of persuasive communication in a variety of forms ranging from public relations campaigns to visual media, political debate, film, fiction, religion, and music. Course emphasizes the utility of classical and modern rhetorical frameworks for understanding contemporary persuasive efforts in a broad range of contexts, as well as other persuasive theories, including Robert Cialdini's influence theory, Sherif's social judgment theory, and Miller's information processing theory.

158 Film
This course examines film history and film theory through the lens of communication. As a dominant mode of communication and as a major art form, the study of film itself ranges from theatrically-based Hollywood films to digital cinema. This course emphasizes the centrality of film to the visual imagination and the development of visual culture.

161 Communication and Social Justice [Application]
This course engages the power of communication as a transformative act. In the pursuit of social justice, communication can be a tool, a weapon and a witness on behalf of community service, social change and political struggle. The role of communication in relation to social justice is not just studied abstractly, but passionately practiced and embodied through real-world projects and first-hand experiences. This course involves a service-learning component.

163 Seminar in Special Topics
These are topical, special interest courses exploring an area of study or particular problem in the field of communication. Topics cover the range of communication theory, rhetoric and persuasion, law and public policy, and visual media.

170 Communication Management [Application]
The development of techniques and strategies for formal rhetorical argument as applied to informal and formal group processes in contemporary businesses. Includes communication management within multicultural settings, discussion and analysis of organizational needs assessment, communication auditing, and decision-making.

190 Student Media Practicum (.25)
One quarter academic credit may be applied to student participation in radio, video, visual, film, journalism, internship, digital media, public relations, advertising or independent study. Macken Collegiate Forensics Program may be taken for full or fractional credit.

*Does not satisfy an area requirement.

195 Internship
Work in an appropriate internship position in the field of communication, under the supervision of a faculty member. Normally open only to communication majors in the senior year, with approval of the department chair and supervising instructor. Majors may qualify with a B average or better.

*Does not satisfy an area requirement.

197 Special Study
An independent study or research course for upper-division majors with a B average or better in communication courses. Permission of the instructor and department chair required.


COMPUTER SCIENCE

See Mathematics and Computer Science (p. 118).

CROSS-CULTURAL STUDIES

Students who intend to pursue careers or graduate work in such fields as bilingual education, community services, or international relations, or who wish to broaden their program of studies, may petition to establish an interdisciplinary major in Cross-Cultural Studies. Such a major must include courses from at least three disciplines and consist of nine upper-division courses with at least two chosen from each of the three disciplines. Lower-division courses will depend upon the various disciplines chosen.

For information regarding the composition of the interdisciplinary cross-cultural major, students should contact the chairs of the appropriate departments that form the major. The major must be approved by these department chairs and by the dean of the School of Liberal Arts.

Appropriate courses might be chosen from the departments of Anthropology/ Sociology, Economics, English, History, Modern Languages, Philosophy, Politics, and Psychology.
ECONOMICS

Economics is often called the “science of choice.” The economics major helps develop clear, rational problem-solving skills useful in business, government, and everyday life. Additionally, the economics major provides an understanding of economic institutions and policies today and as they have developed over time.

The major in economics leads to either a bachelor of science or a bachelor of arts, depending on the student's area of interest. The bachelor of science major is a quantitatively oriented program that provides excellent preparation for graduate studies and careers in economics or business administration. The bachelor of arts major is a social science–oriented program that is ideal for students planning professional studies and/or careers in law, teaching, business, or the public or nonprofit sectors.

The courses required for both majors combine a core of economic theory with the opportunity for students to explore a wide range of applications and/or to pursue in-depth a personal interest area in economics. For exposure to the breadth of economics, the department recommends that majors choose their elective economics courses to include one from each of the following groups:

A. Micro-economic issues, applications and policy (Economics 135, 150, 152, 170, 180)
B. Macro-economic issues, applications and policy (Economics 130, 136)
C. International Perspectives (Economics 160, 190, 192)
D. Historical and institutional perspectives (Economics 111, 160)

The appropriate group for Economics 100, 195 and 197 will vary with chosen course focus.

Economics majors desiring a more concentrated focus or preparing for a career in law should consult with an economics advisor for assistance in selecting elective courses in economics and the allied disciplines.

The economics minor is an excellent complement to many majors such as politics, history, mathematics, communication, accounting, and business administration. The minor provides students with a core of economic theory and a sampling of the many fields of economics.

LEARNING OUTCOMES

When students have completed the economics major, they will be able to:

- **ACCESS** and interpret existing published economic research and economic data.
- **SUMMARIZE** and explain economic issues, concepts and debates effectively.
- **ANALYZE** and explore economic issues critically, and design, conduct, and report on original economic research.

FACULTY

William C. Lee, Ph.D., Professor, Chair
Roy E. Allen, Ph.D., Professor
Ravi Bhandari, Ph.D., Assistant Professor
Kara T. Boatman, Ph.D., Associate Professor
Jerry J Bodily, Ph.D., Professor
Kristine L. Chase, Ph.D., Professor
Richard H. Courtney, Ph.D., Associate Professor
Joan U. Hannon, Ph.D., Professor
Hugh J. McAllister, Ph.D.
David T. Mitchell, Ph.D., Adjunct
Asbjorn Moseidjord, Ph.D., Professor
Donald W. Snyder, Ph.D., Professor
Theodore Tsukahara, Ph.D., Professor

INTERNSHIPS

Students who want to combine study with practical experience in economics should contact the department in advance for information on a variety of opportunities available in both the private and public sectors. Course credit for internships may be available through enrollment in Economics 195.

HONORS

Majors who maintain at least a B average in economics may qualify to complete an honors thesis in their senior year. Honors thesis candidates normally begin the thesis project in Economics 120 or 142 and, with permission of the instructor and department chair, complete it in Economics 199.

Majors and minors who maintain a GPA of 3.0 overall and 3.0 (3.25 for minors) in their economics courses will be considered for induction into and a lifetime membership in the Saint Mary’s chapter of Omicron Delta Epsilon, the internationally recognized Economics Honors Society.
MAJOR REQUIREMENTS

LOWER DIVISION

BACHELOR OF SCIENCE DEGREE
Principles of Micro-/Macro-Economics (Economics 3, 4)
Statistics (may be satisfied by BusAd 40, Politics 100, Mathematics 4 or Psychology 103)
Mathematics 27 and 28 or 27 and 30

BACHELOR OF ARTS DEGREE
Principles of Micro-/Macro-Economics (Economics 3, 4)
Statistics (may be satisfied by BusAd 40, Politics 100, Mathematics 4 or Psychology 103)
One of the following: Mathematics 3, 27, or any upper-division mathematics course except Mathematics 101.

UPPER DIVISION

BACHELOR OF SCIENCE DEGREE
Economics 102, 105, 106, 141, 142, and four additional full-credit upper-division courses in economics, not to include Economics 199.
Majors desiring a more concentrated focus or preparing for a career in law should consult with an economics advisor for assistance in selecting elective courses.

BACHELOR OF ARTS DEGREE
Economics 102, 105, 106, and 120. Five additional full-credit upper-division courses in economics (not to include Economics 199). Majors desiring a more concentrated focus or planning a career in law should consult with an economics advisor for assistance in selecting elective courses in economics and the allied disciplines. Bachelor of arts majors who have completed the appropriate prerequisites in math and statistics may include Economics 141-142 among their upper-division economics elective courses.

Two courses from among the following allied disciplines:
Anthropology: 114, 123, 130
History: 104, 105, 117, 134, 136, 137, 151, 154, 161, 162, 172
Philosophy: 108, 113, 115, 116
Politics: 101, 104, 106, 107, 110, 111, 114, 120, 130, 135
Sociology: 120, 124, 134

Waivers of prerequisites or class standing require the approval of the department chair.

Some upper-division courses (including the required courses 120, 141, and 142), may be offered in alternate years only. The student must determine, prior to his/her registration for the junior year, in a conference with his/her advisor, which courses are currently being given in alternate years so that he/she will have an opportunity to complete all required courses in a timely manner.

MINOR REQUIREMENTS

A student may earn only one minor in the School of Economics and Business Administration. The minor in economics requires successful completion of seven courses: Principles of Micro/Macro Economics (Economics 3, 4); Statistics (may be satisfied by BusAd 40, Politics 100, Mathematics 4 or Psychology 103); Micro/Macro-Economic Theory (Economics 105, 106); and two additional full-credit upper-division economics courses, which may not include more than one from group B (Economics 130, 136).

Minors desiring a research experience in economics may include in their upper-division economics electives Economics 120 or (with the appropriate math and statistics prerequisites) Economics 141-142.

PREREQUISITE GRADE
Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

COURSES

LOWER DIVISION

3 Principles of Micro-Economics
Introduction to the concepts and tools of micro-economic analysis. Micro-economics is concerned with individual economic units including representative consumers, firms, and markets. Topics include resource allocation, income distribution, and price, wage, and quantity determination in competitive and noncompetitive markets. Micro-economic analysis, based in models of the rational decision-making behavior, is applied to selected current economic issues.

4 Principles of Macro-Economics
Introduction to the concepts and tools of macro-economic analysis. Macro-economics is concerned with the relationship between major economic aggregates including firms, households, and government. Topics include the determination of the level of aggregate economic activity, inflation, and unemployment, as well as government’s ability to achieve a full employment, non-inflationary Gross Domestic Product using fiscal and monetary policy. Macro-economics is applied to current economic issues including economic growth, business cycles, the government budget, and the policies of the Federal Reserve.

10 Economics and Society
A non-technical, introductory approach to micro- and macro-economics principles and issues designed for students with little or no background in economics who desire to learn what it’s about. Students are introduced to the tools, terminology, and analytical methodology of economics through their application to a number of real-world social, political, and economic issues. Economics 10 does not substitute for Economics 3 or 4, and may not be taken by those who have completed Economics 3-4 (previously 1-2).
Offered in alternate years.
**Curriculum Economics**

**UPPER DIVISION**

**Principles of Micro-/Macro-Economics** are prerequisite to all upper-division courses except Economics 100, 111, 150, and 180.

**100 Issues and Topics in Economics**

Analysis of a selected theme, topic, issue, era, or region not covered by the regular course offerings of the department. Subject of the course will be announced prior to registration each semester when offered. Course will not be offered each semester but may be repeated for credit as content varies.

**102 Development of Economic Thought**

The course explores the historical and theoretical foundations of economic theory, with an emphasis on the classical political economists of the 18th and 19th centuries through a critical reading and analysis of the original works of important economic thinkers like Adam Smith, David Ricardo, Karl Marx and John Maynard Keynes. The course seeks to understand the relevance of these early economists to modern economic theory and issues.

**105 Micro-Economic Theory**

An intermediate-level analysis of the motivation and behavior of producers and consumers under alternative market structures. Particular emphasis is placed on price determination and resource allocation, as well as the application of theory to real-world issues. Prerequisite: Mathematics 3 or equivalent.

**106 Macro-Economic Theory**

An intermediate-level analysis of the aggregate interrelationship between consumers, business, government, and the foreign sector in the determination of national income, employment, price levels, and economic growth rate. Particular emphasis is placed on policy alternatives available to mitigate unsatisfactory performance of these variables. Prerequisite: Mathematics 3 or equivalent.

**111 Economic History of the United States**

Historical view of the development of the United States economy with particular emphasis on economic growth, income distribution, and structural and institutional change in the 19th and 20th centuries. Course themes include the evolution of market structures, business organization, trade and technology; the history of American living standards, income distribution and poverty; immigration, race and gender roles; business cycle history; the changing role of government and the rise of the American-style welfare state. Students are provided an historical perspective on the origins of current economic issues. Offered in alternate years.

**120 Research Seminar**

This seminar is designed to develop the student’s ability to do economics research. Methods of economics research are examined and each student conducts a research project, from the initiation of the concept to be examined through hypothesis testing and evaluation of test data, under the guidance of the instructor. Offered in alternate years.

**130 Money, Credit, and Banking**

A description and analysis of the role of money, credit and financial institutions in a modern economy. Special emphasis is placed on the financial markets and the banking system in the United States. The course examines the structure and impact of the Federal Reserve System on financial markets, interest rates, inflation and the economy in general, as well as the role of central banks in the world financial markets. Prerequisite: Economics 106 or consent of instructor.

**135 Public Finance**

An analysis of government taxing and spending activities using theoretical, empirical, and institutional material. Topics include optimal provision of collective goods, cost-benefit analysis, tax incidence, policies aimed at efficient level of externalities such as pollution, income redistribution, models of democratic and bureaucratic decision-making, and the design of government procurement contracts. Offered in alternate years.

**136 Investments**

Description and analysis of the securities markets (bonds, stocks, etc.) from the viewpoint of the private investor. The student is introduced to asset valuation theories as well as the basis of portfolio selection. Particular emphasis is placed on the trade-off between risk and return, both for the individual assets and in a portfolio context. Prerequisite: BusAd 40 or equivalent.

**141-142 Methods of Quantitative Analysis**

The first part of this two-semester sequence explores the ways in which economists use mathematical techniques—especially linear (matrix) algebra and differential calculus—to represent and “solve” a wide range of theories, problems and hypotheses. Applications include the firm’s profit maximization and the consumer’s optimization of utility. Prerequisite: Math 27-28 or Math 37-38 and Economics 105.

The second part of the sequence is about how economists use statistical data to estimate and predict relationships between different economic variables. The goal is to have students become educated consumers and producers of econometric analysis; the former by studying how other economists make use of econometric methods in their work, and the latter by doing estimations (running regressions) themselves using statistical software packages. Students will conduct an in-depth econometric research project on the topic of their choice. Prerequisites: BusAd 40 or equivalent and Economics 141. Offered in alternate years.
150 Environmental and Natural Resources Economics
All economic activity involves an exchange with the natural environment. Natural resources are used in production and consumption and then returned to the environment in some form of waste. The class focuses on how a market economy actually handles these exchanges and develops criteria for judging the economy’s performance in this regard. Important questions include the following: Are we exhausting our natural resources? Will we run out of cheap energy? What is the appropriate balance between economic standard of living and environmental quality? Can we rely on market forces to achieve the appropriate balance or do we need government intervention?
Offered in alternate years.

152 Labor Economics
An extension and application of micro-economic theory to analysis of labor market processes that determine the allocation of human resources, as well as the level and structure of wages, employment and working conditions. The course devotes considerable attention to the public and private institutions (e.g., labor laws and unions) and sociological forces (e.g., prejudice and discrimination) that interact with demand and supply forces. Labor market models that take account of economic, sociological, and institutional forces are used to explain recent trends and patterns in the level and distribution of wages, employment, working conditions, and union membership. The models are also used to analyze the impact on labor markets of changes in trade, technology, immigration, family structures, and social norms; and to evaluate the efficiency and equity effects of government, business, and union policies.
Offered in alternate years.

160 Comparative Economics Systems
The production and distribution of goods and income and the material welfare of people—the longtime concerns of economics—can be achieved in many different ways. This course examines capitalism, socialism, traditional village economies, and other ways to organize economic activity. Case studies from around the world will include less developed as well as developed countries, China, Russia, Latin America, the Middle East, and Africa. The course also examines the new globally integrated economy, based significantly on the U.S. model, and how it impacts various regions of the world.
Offered in alternate years.

170 Industrial Organization
Industrial organization is the study of firms, markets and strategic competition. The course will examine how firms interact with consumers and on one another, primarily using the tools of game theory. Topics include competitive strategies, price discrimination, antitrust policy, mergers, and advertising. Upon completion of the course, students should be able to examine real-world mergers and other firm strategies with a critical eye and predict market outcomes and consumer impacts. Prerequisites: Economics 3, Economics 105 or consent of instructor.
Offered in alternate years.

180 Sports Economics
Economic principles are used to analyze issues in the professional and amateur sports industries. Topics include league history and structure, labor issues, stadium financing, player salaries, competitive balance and the role of the NCAA. The economic perspective helps students better understand the industry and its economic, social, and cultural significance. Prerequisite: Economics 3.
Offered in alternate years.

190 International Economics
An analysis of what determines the patterns of merchandise and services trade between countries, as well as an in-depth study of international financial markets. Special topics to be covered include: protectionism, economic reforms in Eastern Europe and China, the Third World debt crisis, and the future international trade environment.
Offered in alternate years.

192 Economic Development
A broad overview of the leading topics in development economics, with an emphasis on the application of economic theory to problems of economic development in Latin America, Africa, and Asia and the practical policy issues and debates. Topics include the definition and measurement of economic development, macro-economic theories of growth and structural change, poverty and inequality, population, human capital, agriculture and rural development, migration, environment, trade, debt, liberalization and structural adjustment, foreign investment and foreign aid.
Offered in alternate years.

195 Internship
Work-study program conducted in an appropriate internship position, under the supervision of a faculty member. Normally open to senior students only. Permission of instructor and department chair required.

197 Special Study
An independent study or research course for students whose needs are not met by the regular courses in the curriculum. Permission of instructor and department chair required.

199 Special Study—Honors
Independent study and research in an area of interest to the student culminating in a written thesis presenting the issue, methods of analysis, and research findings. Normally open only to seniors with at least a B average in economics who have completed Economics 120 or Economics 141-142 with a grade of B or better. (Seniors may be allowed to concurrently enroll in Economics 142 or 120 and 199). Permission of instructor and department chair required.
Curriculum Education

EDUCATION

The School of Education offers undergraduate courses in education as preliminary preparation for a career in teaching and as part of a liberal education for the citizen and prospective parent. Visits to local schools provide opportunities for students to examine education as a possible career. Each January Term a supervised field experience in early childhood, elementary and secondary schools is available to undergraduates to help them clarify their career choices. Upper division students (juniors and seniors) may be admitted to certain graduate level courses with the approval of the appropriate program director. Ordinarily, a maximum of four education courses is permitted toward the undergraduate degree. Such courses may be applied toward teacher certification requirements, and may be counted toward a master’s degree if not needed to fulfill undergraduate degree requirements. Students who plan to teach should consult with a School of Education advisor early in their undergraduate years to ensure that they understand the State of California requirements (academic and professional) for the various teaching credentials. (This applies both to elementary and secondary teaching and to special education.) Early advising may prevent costly mistakes in programming.

The prospective elementary teacher ordinarily majors in Liberal and Civic Studies or the Integral Program. The prospective secondary teacher generally majors in a field that he or she plans to teach in secondary schools. Saint Mary’s College currently offers approved teaching majors (subject matter preparation programs) in art, biology, English, French, government, history, mathematics, physical education and Spanish. Students planning to earn a teaching credential should take a course in Health (Kinesiology 12), the United States Constitution (History 17), and cardiopulmonary resuscitation.

FACULTY

Nancy Sorensen, Ph.D., Professor, Dean of the School of Education
Ernest Baumgarten, Ph.D., Associate Professor
Marguerite Dawson Boyd, Ph.D., Professor, Director, Reading Language Arts Program
Gerald J. Brunetti, Ph.D., Professor
Keith Campbell, Ph.D., Associate Professor
Patricia Chambers, M.A., Associate Professor, Coordinator, Early Childhood Education and Montessori Education Programs
Victoria B. Courtney, Ed.D., Professor
Carolyn Daoust, Ph.D., Associate Professor
Nancy Dulberg, Ed.D., Assistant Professor
Laurie Edwards, Ph.D., Professor
Michael Fanning, Ed.D., Adjunct, Interim Director, Educational Leadership
Coffelle Fleuridas, Ph.D., Professor
Sharon Gegg, M.A., Lecturer
John Gerdtz, Ph.D., Adjunct
Barbara Grant, Ph.D., Associate Professor, Academic Chair, Multiple Subject
Laura Heid, Ph.D., Professor, Director, Graduate Counseling
David Krapf, Ed.D., Associate Professor, Program Director, Credential Programs and Director, Special Education Programs
Kaelyn Lad, Ph.D., Associate Professor
Elaine Rose Lovejoy, Ph.D., Professor
Suzanne Marston, Ed.D., Associate Professor
Mary Kay Moskal, Ed.D., Assistant Professor
Gemma L. Nierman, Ph.D., Adjunct
Mary Parish, Ed.D., Adjunct, Associate Dean
Katherine D. Perez, Ed.D., Professor
Joan Peterson, Ed.D., Professor, Academic Chair, Single Subject
Rosemary Peterson, Ph.D., Professor
Donald Phelps, M.Ed., Lecturer
Heidimarie Rambo, Ph.D., Adjunct
Celeste Schneider, Ph.D., Adjunct
Joan Skolnick, Ed.D., Professor
Carole Swain, Ph.D., Professor
Suzi Thomas, Ph.D., Adjunct

TEACHERS FOR TOMORROW

Incoming freshman students, as well as qualifying sophomores and juniors, who are committed to becoming elementary teachers may apply for the Teachers for Tomorrow (TFT) program. This program enables students to integrate education coursework and field experiences in elementary schools with their undergraduate course of study. They earn their bachelor’s degree at the end of four years and their multiple subject credential at the end of their fifth year. Students may also pursue a Master of Arts in Teaching (MAT) degree in their fifth year by fulfilling additional coursework and research components. For further information, please see Liberal and Civic Studies Program, p. 114.

MONTESSORI PROGRAM

Undergraduates who are interested in teaching may participate in the Montessori Teaching Certificate Program. The College has a Montessori laboratory that is fully equipped with Montessori materials. The Liberal and Civic Studies Program undergraduate major includes a minor in Montessori thought, which offers courses from the Certificate Program leading to early childhood or elementary certification by the American Montessori Society. This coursework prepares the student for career opportunities in a variety of early educational settings. It is a prerequisite to the paid internship which takes place at the graduate level and leads to the awarding of international certification. Programs must be planned with the coordinator of Montessori Education Programs and the Liberal and Civic Studies advisor. No specific majors or examinations are required for Montessori certification. Courses for the Montessori thought minor may be selected, in consultation with the student’s advisor and the Montessori Education coordinator; from among the following courses:

EDUC 119, Field Experience in Early Childhood, Child in the Family and Community
EDUC 144, Cognitive Development
ECE 163, Elementary Mathematics
ECE 164, Language and Reading Development
ECE 165, Curriculum Foundations
MONT 161, Philosophical Perspectives
ELECTIVES
ECE 131, Positive Discipline/Classroom Management (.5)
ECE 167 and 168, Creative Arts I and II (.25 each)
MONT 111, Field Experience (.25)
MONT 112, Field Experience (.25)

The School of Education publishes a separate bulletin for its graduate programs. Write School of Education, Saint Mary’s College of California, P.O. Box 4350, Moraga, CA 94575-4350, or phone (925) 631-4700.

COURSES

LOWER DIVISION

EDUC 30 Foundations of Academic Achievement I (.5)
A three-week summer residential program that provides entering students with an academic, social and motivational orientation to life at Saint Mary’s College. In a series of “info-searches,” students discover the resources for solving day-to-day student problems. Instructors emphasize the keys to academic success: good note-taking, test-taking, vocabulary-building, essay-writing, and informal public-speaking skills.

EDUC 31 Foundations of Academic Achievement II (.25)
Designed to help first-year students develop specific skills necessary for a successful college experience, this course is specially tailored to the needs of High Potential Program students. It is a sequel to the summer orientation program. During weekly sessions, students discuss the importance of time management, communication skills (oral and written), reading comprehension, critical thinking, interpersonal skills, and self-esteem development. Prerequisite: EDUC 30.

EDUC 32 Foundations of Academic Achievement III (.25)
The course addresses a number of skills college students, particularly those from “under-represented” populations, tend to overlook when pursuing an advanced degree, e.g., composing an effective résumé and cover letter and developing interview and other job-related skills. The course text follows the journey of a student of color who experiences personal and professional success at a predominantly white middle-class institution. Students submit an expository essay in the form of a personal assessment of their first-year experience at SMC. Prerequisite: EDUC 31.

EDUC 40 College Survival 101 (.25)
Many students begin college with unclear assumptions about what it takes to be successful. This course encourages freshmen and first-year transfer students to undertake the journey of learning more about themselves as students in the classroom, as student leaders, as individuals adjusting to residential living with a diverse student body. Weekly discussions focus on helping freshmen to better understand the learning process and to acquire the basic academic survival skills that are key to mastery of the college experience. Readings, journal writing and field trips required.

EDUC119 Child, Family, Community – A Field Experience in Early Childhood (1)
This class offers an opportunity for undergraduates to work with young children (third grade and below) in a school or early childhood setting. Seminar discussions focus on your future role as parents, public policy makers and educators. In addition to future considerations you will be facing, the course provides an introduction to the teaching and childcare profession and also satisfies the State of California Multiple Subject Credential requirement for fieldwork before entering credential programs. How various programs (Montessori, Traditional, etc.) address children’s needs and parental responsibilities in making childcare choices are considered. This section satisfies the Children’s Center Permit requirement for an ECE course on Child and the Family and Community.

EDUC 122 Field Experience in Education
An opportunity for undergraduates interested in education to participate in a school or other education setting as tutors, aides, coaches, etc., depending on the students’ interests and abilities. Students are responsible for arranging their own placements in the San Francisco Bay Area. Placements must be approved by the instructor. Course activities also include readings and seminar discussions pertinent to the education experience as well as completion of a journal and other written assignments.

EDUC 124 Introduction to Methods of Teaching Mathematics and Science in the Elementary Schools (.25)
Open to sophomore students in the Teachers for Tomorrow Program, this course builds on the students’ experiences in math and science and their observations of children as learners. Using readings, activities and other assignments, the course introduces the student to how elementary school children’s understanding of mathematics and science develops, and to the pedagogical implications of this developing understanding. The course also provides an overview of the content of the elementary mathematics and science curricula. Students enrolled in this course must be taking or have taken at least one required science course and the second required mathematics course during this term.

EDUC 144 Cognitive Development
An in-depth study of theories and research in cognitive development, especially Piaget. Emphasis on the relation of intellectual development to the total development of the child. Required for the Montessori minor and AMS certification. Field trips, research, and observations required.
EDUC 160-161 Resident Advisor Training (25)
A program of in-service education for resident advisors, providing theory and practical skills in procedural issues, emergency and first-aid techniques, paraprofessional counseling and crisis intervention skills, alcohol and drug abuse, and other pertinent matters. Combined with practical experience in residential living. Open only to current resident advisors.

EDUC 162-163 Advanced Resident Advisor Training (25)
A continuation of the resident advisors in-service education program providing for further skill development and exploration of relevant issues associated with the position. An integration of student developmental theory, paraprofessional student affairs and counseling skills, and personal growth opportunities through training and practical experience in residential living. Open only to current resident advisors who have completed one year of experience and EDUC 160, 161.

EDUC 173 Effective Helping
This course introduces students to Robert Carkhuff’s Human Resources Development Model, and focuses on specific interpersonal helping skills that have shown to result in positive client relationships. Application of this model to divergent cultures and lifestyles is emphasized. The course uses experiential learning activities, lecture and discussion.

EDUC 197 Special Study
An independent study or research course for the undergraduate whose needs are not met by the other courses in the curriculum. Requires submission of a proposal, acceptance of supervision responsibilities by a School of Education instructor and approval of the dean. Montessori Thought (Leads to Montessori Teaching Certificate Program).

ECE 131 Positive Discipline and Classroom Management (5)
Understanding and implementing positive techniques leading to self-discipline on the part of the child. Introduction to professional responsibilities and classroom management techniques based on Deikurs, Gordon, Montessori, Wood, and Clark. Field work and seminars.

ECE 159 Practical Life Curriculum (1)
Understanding the philosophical and theoretical foundations of the Montessori practical life curriculum and its relation to fostering independence, responsibility, and self-esteem. Preparing the environment and creating materials. The value of task analysis in creating curriculum. (See ECE 165)

ECE 160 Conceptual Curriculum (1)
Understanding the philosophical and theoretical foundations of sensorial, concrete experiential learning using the Montessori sensorial curriculum. Providing keys to the understanding of concepts through the use of concrete representations of abstractions. The Aristotelian discarding of matter by means of the Three-Period Lesson. (See ECE 265)

ECE 163 Mathematics: Conceptual Learning
Montessori mathematical materials, their function, and use in the child’s learning experience with emphasis on conceptual learning through self-discovery. Progression from the concrete to the abstract with comparison to current mathematical methodologies. Relating the materials to their theoretical structures and the development of logichomathematical thought.

ECE 164 Language and Reading Development
Theories of language acquisition; development of oral and symbolic language; and the integration of reading theories with contemporary educational thought. Comprehensive review including the use of the language experience approach, phonics and linguistic approaches to the development of pre-reading, reading, and writing skills and the role of multicultural literature in promoting inclusive classrooms. (Emphasis on writing-to-read progression.) Montessori language materials, their function and use in child learning experience.

ECE 165 Curriculum Foundations
Understanding the philosophical and theoretical foundations of practical life and sensorial curriculum. The importance of teaching daily living skills to foster independence and responsibility and education of the senses as basis for future abstract learning. Note: This course combines course components of ECE 159 and ECE 1260, for 1 credit each, if taken separately.

ECE 166 Study of the Sciences: Natural, Physical and Social (1)
An integration of Montessori curriculum areas within the study of the natural and social sciences: physical and political geography, geology, physics, astronomy, history, peoples of the world, zoology, and botany. Multicultural and ecological issues are emphasized within the context of the inter-relatedness of all of life.

ECE 167 Creative Arts I (25)
Integrating musical experiences, including increasing auditory awareness and discrimination, and rhythmic movement activities into the total environment.

ECE 168 Creative Arts II (25)
Facilitation of children’s creative explorations in visual, graphic and manipulative art experiences using a wide variety of media. Includes application of Montessori philosophy and methodology to ECE art curriculum.
**MONT 111 Advanced Field Observations in Early Childhood Education** (25)
Development of observation skills and an introduction to a variety of children's environments. Observations in various settings (public and private, infant/toddler, ECE and elementary school programs, day care, and child care centers, etc.) Exploration of skills and techniques of observation and descriptive, analytical reporting, Fieldwork and seminar required.

**MONT 112 Advanced Field Observations in Early Childhood Education** (25)
Development of observation skills and an introduction to a variety of children’s environments. Observations in various settings (public and private, infant/toddler, ECE and elementary school programs, day care, and child care centers, etc.) Exploration of skills and techniques of observation and descriptive, analytical reporting, Fieldwork and seminar required.

**MONT 161 Montessori Philosophy in a Cultural Context** (1)
This course examines the philosophical foundations of Montessori education in a developmental context and within the further context of the family and the community. Along with, and embedded in the Montessori philosophy, students will consider the psychology of parenting and practices, parent-teacher relationships, locating community and professional resources and the critical value of full inclusion.

**CROSS CULTURAL PROGRAMS**

**CLAD 510 Lector-Escritura for the Bilingual Child**
The course covers instructional delivery in bilingual classrooms, methodology for the teaching of reading and writing in Spanish, and factors to consider in the selection of materials for instruction and assessment. Course prepares teachers for BCLAD Test 4.

**CLAD 520 Latino Origins and Heritage**
A literature-based course focusing on the origin and heritage of Latinos. An examination of the social, religious, and political values of the culture and the similarities and differences between Latin American nations. Cross-listed with Spanish 161.

**EDUCATION**

**EDUC 210 Learning, Development and Cognition in a Social Context**
Psychological principles and major learning theories applied in education and counseling. Stages of growth focusing on biological, psychological, and social development, and education of the whole child. Synthesis of affective and cognitive perspectives, right/ left hemisphere brain function, language development and interaction, and sex-role socialization from birth through adult phases. Developmental issues and their effects on individuals and families in schools and marriage, family, child counseling settings. (Separate sections are given for Multiple and Single Subject Credential programs.)

**ELEMENTARY EDUCATION**

**(MULTIPLE SUBJECT CLAD EMPHASIS)**

**ELCD 253 Teaching Reading in Elementary Schools**

**ELCD 345 Curriculum and Instruction: Social Science and the Humanities**
Methods and curriculum with social science emphasis for the self-contained classroom, including cross-cultural teaching, group process, integrated curriculum, classroom management, creating learning environments, critical thinking and planning. Development of integrated thematic curriculum.

**410 Culture/Equity and Language/Equity**
This course covers the nature of culture, ways to learn about students’ cultures and ways teachers can use cultural knowledge to enhance student learning. Cultural contact and cultural and linguistic diversity in California and the United States are examined. A major focus is the role of languages within the classroom and school in relation to learning, and the impact of these on issues of equity, self-esteem and empowerment. Historical perspectives and social issues are explored in relation to issues of power and status as they are manifested in the classroom and school culture.
Curriculum 3+2 Engineering Program

3+2 ENGINEERING PROGRAM

Through the 3 + 2 Engineering Program, Saint Mary’s offers students the benefits of a liberal arts education while allowing them to pursue an engineering degree. Students spend their first three years at Saint Mary’s taking physical science, mathematics, humanities, and social science courses. The final two years are completed at an engineering school approved by the program’s director. Saint Mary’s has transfer agreements with two engineering schools: University of Southern California in Los Angeles and Washington University in Saint Louis. These agreements assure that, once you have completed the required courses at Saint Mary’s, you will be able to complete the course work at those schools in two years. In addition Washington University guarantees admission to our students who have a grade point average of 3.25 or above. Upon completion of all academic requirements students are granted two degrees; a bachelor of arts from Saint Mary’s College and a bachelor of science in engineering from the university they have chosen for completing the final two years of the program.

FACULTY

Chris Ray, Ph.D., Director; Associate Professor of Physics and Astronomy

LEARNING OUTCOMES

After completing the Engineering Program at Saint Mary’s, students will have a working knowledge of the physical world and mathematics and a developed ability to reason and communicate. These gains will allow the students to succeed in the specialized engineering courses taken after transferring and to work effectively as an engineer upon graduation.

REQUIREMENTS

Students must satisfy the following requirements at Saint Mary’s: Three years of study with the completion of 27 transferable course credits and a cumulative grade point average of 3.0 or better.

Completion of the following courses:
- Mathematics 27, 28, 29, 134
- Computer Science 21
- Physics 1, 2 (lab), 3, 4 (lab), 60
- Chemistry 8, 9 (lab), 10, 11 (lab)
- English 4, 5
- Collegiate Seminar 20, 21, 131
- Religious Studies (one course)
- Area A, Humanities (two courses)
- Area C, Social Sciences (two courses)
- Math/Science electives (four courses)

Other courses may be required or recommended for entrance into particular engineering majors. The student must consult with the 3 + 2 Engineering Program director regarding his/her course of study.
当学生完成英语课程的学习时，他们应该能够做到：

• **ENGAGE** in informed, active reading, bringing to bear a broad base of literary, historical and cultural knowledge.

• **READ** critically a wide range of literary texts, with an awareness of the theoretical assumptions behind various interpretive strategies, and of the ability to choose appropriate methods of inquiry and to formulate clear questions.

• **APPLY** a variety of reading strategies, combining critical detachment with the intellectual, imaginative, and emotional engagement necessary for appreciation.

• **WRITE** clear, well-reasoned prose in a variety of situations (academic, professional, social) for a variety of audiences, being able to support an argument with appropriate, thoughtfully analyzed evidence.

• **CONVERSE** articulately about texts and interpretations, understanding that interpretation is often a dialogic, collaborative process.

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• **CONVERSE** articulately about texts and interpretations, understanding that interpretation is often a dialogic, collaborative process.

**ENGLISH AND DRAMA**

**FACULTY**

David J. DeRose, Ph.D., Professor, Chair
Chester Aaron, M.A., Professor Emeritus
Marilyn Abildskov, M.F.A., Associate Professor
Carol L. Beran, Ph.D., Professor
Edward Biglin, Ph.D., Professor
Clinton Bond, Ph.D., Professor
Glenna Breslin, Ph.D., Professor
Janice Doane, Ph.D., Professor
Graham W. Foust, Ph.D., Assistant Professor
Brother Ronald Gallagher, FSc, Ph.D., Associate Professor
Wesley Gibson, M.F.A., Assistant Professor
Robert E. Gorsch, Ph.D., Professor
Rosemary Graham, Ph.D., Professor
Sandra Anne Grayson, Ph.D., Professor
Brenda L. Hillman, M.F.A., Professor
Barry D. Horwitz, M.A., Adjunct
Jeaninne M. King, Ph.D., Assistant Professor
Kathryn Koo, Ph.D., Assistant Professor
Carol S. Lashof, Ph.D., Professor
Lisa Manter, Ph.D., Associate Professor
Molly Metherd, Ph.D., Assistant Professor
Rafael Alan Pollock, Ph.D., Professor Emeritus
Naomi Schwartz, M.A., Adjunct
Christopher J. Sindt, Ph.D., Associate Professor
Mary Doyle Springer, Ph.D., Professor Emerita
Norman Springer, Ph.D., Professor Emeritus
Phyllis L. Stowell, Ph.D., Professor Emerita
Lysley Tenorio, M.F.A., Assistant Professor
Denise Witzig, M.A., Adjunct
Ben Xu, Ph.D., Professor

**LEARNING OUTCOMES**

当学生完成一个英语课程的学习时，他们应该能够做到：

• **ENGAGE** in informed, active reading, bringing to bear a broad base of literary, historical and cultural knowledge.

• **READ** critically a wide range of literary texts, with an awareness of the theoretical assumptions behind various interpretive strategies, and of the ability to choose appropriate methods of inquiry and to formulate clear questions.

• **APPLY** a variety of reading strategies, combining critical detachment with the intellectual, imaginative, and emotional engagement necessary for appreciation.

• **WRITE** clear, well-reasoned prose in a variety of situations (academic, professional, social) for a variety of audiences, being able to support an argument with appropriate, thoughtfully analyzed evidence.

• **CONVERSE** articulately about texts and interpretations, understanding that interpretation is often a dialogic, collaborative process.

**MAJOR REQUIREMENTS**

**LOWER DIVISION**

English 19, 29

这些课程必须按照顺序进行。

English 19 是 English 29, 103 和 104 的先修课程。English 29 是 English 167, 168, 和 170 的先修课程。

**UPPER DIVISION**

English 103, 104, 175

一个课程从以下文学批评课程：

167, 168, 170

一个课程从以下美国文学概览课程：

150, 151, 152

一门课程在 English 或 American 文学之前 1800

一门课程在 English 或 American 文学之前 1900

四门额外的英语课程。没有一门课程可以是下一级。

该部门推荐学习外语。特别是计划攻读更高学位的学生应咨询各自的顾问关于修读其他语言（例如，德语，意大利语，法语，西班牙语，拉丁语和希腊语）。

A major in dramatic arts is available through the Department of Performing Arts. Requirements for this major include electives chosen from among English 182, 183, 184, 185.

**TEACHING CREDENTIAL IN ENGLISH**

The major in English has been accepted, with certain modifications, as meeting the subject matter preparation requirements of the State of California for a teaching credential. Completion of the approved program waives the Praxis and SSAT examinations. It is still necessary to take a sequence of education courses. At Saint Mary’s, these are available at the graduate level (some may be taken during the senior year). It is important that those thinking of a teaching career consult both the coordinator of the Subject Matter Preparation Program in English and the director of the Single Subject Credential Program in the School of Education to make sure that all the prerequisites for the credential are fulfilled.
**MINOR REQUIREMENTS**

**ENGLISH MINOR**
A minor in English requires English 19, 29, and 175; and three upper-division English electives.

**CREATIVE WRITING MINOR**
The creative writing minor is designed for students who wish to explore their creative potential as writers. The creative writing minor is an excellent place for students who wish to gain a greater appreciation of the art of writing, who may wish to pursue a career in writing or journalism, or who simply wish to develop their academic or business writing skills by applying the techniques offered in creative writing classes to their writing at large.

A minor in creative writing requires English 19, 25, and two semesters of 26; and a total of three upper-division courses from among the following:
- English 100: Advanced Composition (may be repeated for credit as content varies)
- English 102: Creative Writing Workshop (may be repeated for credit in fiction, poetry, creative non-fiction, drama, and screenwriting).

**PREREQUISITE GRADE**
Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

**COURSES**

**LOWER DIVISION**

**3 Practice in Writing**
Designed to enable students to bridge the gap between their present level of writing competency and that expected of students entering English 4. Focus on developing and organizing ideas, constructing complex sentences, and enhancing proofreading and editing skills. Team-taught to allow individualized instruction. Enrollment in each section limited to 15. Grade of at least C– prerequisite to enrollment in English 4.
* Does not satisfy an area requirement.

**4 Composition**
Students write analytical, expository, and persuasive essays; they also study examples of good writing. Students are expected to produce thoughtful, lively essays characterized by a clear thesis, adequate development of ideas, careful organization, coherent paragraphs, and sentences that employ the conventions of standard written English.

English 4 teaches a writing process from developing ideas through careful revision. Instructors often employ a peer-editing approach, in which students present their work to classmates, who respond with suggestions for improvement. This procedure teaches critical reading skills and helps students to become effective editors of their own and others’ writing. A grade of at least C– is prerequisite to enrollment in English 5.
* Does not satisfy an area requirement.

**5 Argument and Research**
Students continue to develop the rhetorical and critical thinking skills they need to analyze texts and to structure complex arguments. In addition, the course gives students practice in exploring ideas through library research and in supporting a thesis through appropriate use of sources. Students write and revise three or more essays, at least one of which is a substantial research essay that presents an extended argument.
* Does not satisfy an area requirement.

**19 Introduction to Literary Analysis**
A course to introduce skills of analysis and interpretation that will help students to understand and enjoy works of literature and to articulate their understanding in discussion and essays. Special attention is given to literary terms and conventions and to the problems involved in writing about works of literature. Required for English majors, this course begins the major and is prerequisite to English 29, 103 and 104.

**23 American Voices**
An introduction to some of the many voices that constitute the diverse literary cultures of the United States. Readings may include novels, poems, short stories, slave narratives, Native American chants, or diaries and letters organized around a theme or issue. Examples of possible offerings: The Immigrant Experience, Race and Sexuality in America, The City in American Literature, American Autobiography, or Growing up in America.

**25 Creative Writing: Multi-Genre Studies**
An introduction to the critical and creative techniques and vocabularies of the major genres of creative writing — poetry, fiction, non-fiction, playwriting, and screenwriting. Students will be introduced to the craft and the skill-sets of these genres while learning to explore their own written voice in a workshop-style environment.

**26 Creative Writing Reading Series** (.25)
Students enrolled in this course attend the public events of the Creative Writing Reading Series, have an opportunity to meet visiting writers, and discuss the writing and performances of the readers in the series. (Course may be repeated for credit. Students in the Creative Writing Minor must take this course twice.)

**29 Issues in Literary Study**
An introduction to the disciplinary concerns relevant to the study of English and American literature. Through critical reading and discussion of literary texts, students engage with the following topics: canonical status, modes of reading, the goals of interpretation, the role of the reader and political criticism. Prerequisite: English 19. This course is a prerequisite for English 167, 168 and 170.
UPPER DIVISION

100 Advanced Composition
Designed to help hesitant writers who would like to become confident, and competent writers who would like to become masterful. Students read exemplary prose of various kinds and write, discuss, and revise their own essays. Emphasis—on the research paper, the critical essay, the personal essay, the journalistic article—may vary. Prerequisite: English 4 and 5.

101 Writing-Tutor Workshop (.25)
Training in the art of helping fellow students develop, organize, and articulate their ideas in writing. Students develop tutoring skills through practice and discussion in a workshop setting.

102 Creative Writing
Offerings rotate among poetry, fiction, screenwriting, and playwriting. May be repeated for credit as genre varies.

103 British Literature I
Chronological study of British literature from the Middle Ages to 1700, including Chaucer, Shakespeare, and Milton, with attention to close reading and historical context. Prerequisite: English 19. English 103 is not prerequisite to English 104.

104 British Literature II
Chronological study of British literature from the Neoclassic, Romantic, Victorian, and Modern periods, with attention to close reading and historical context. A variety of lyric, dramatic, narrative, and satiric works by authors such as Pope, Blake, Wordsworth, Austen, Keats, Mary Shelley, Dickens, Woolf, Yeats, and T.S. Elliot are covered. Prerequisite: English 19. English 103 is not prerequisite to English 104.

105 Children’s Literature
Intensive readings in imaginative literature for children, with emphasis on the period from the 19th century to the present. Topics include history, enduring themes, forms of fantasy, conventions, and relationship to adult literature.

110 Linguistics
An introduction to the scientific study of language. Language as a system: phonetics, phonology, morphology, syntax, semantics, and discourse. Language in context: language in relation to history, culture, social class, region, ethnicity, and gender. Language considered biologically: language as a uniquely human characteristic, brain development, first- and second-language acquisition, and animal communication systems.

111 Topics in Linguistics
Study of specialized topics in linguistics, e.g., language and thought, language acquisition, second-language acquisition, sociolinguistics, and language and literature.

115 Chaucer
Studies in the poetry of Chaucer with emphasis on the Canterbury Tales; a study of Chaucer’s language directed toward the ability to read the poetry with ease and understanding.


Curriculum English and Drama

143 Studies in Restoration and 18th-Century Literature
Study of British literature from 1660 to 1800, focusing on the period as a whole or some aspect of it. Examples of possible offerings: Tory Satirists; Johnson and His Circle; Prose Precursors and Novels: Pre-Romantic Poetry; the Emergence of the Professional Woman Writer.

144 Studies in 19th-Century Literature
Study of British literature from 1800-1900, focusing on the period as a whole or on some aspect of it. Examples of possible offerings: Romantic Poetry; Victorian Poetry; the Social Problem Novel; The 1840s — Poetry, Prose, Essays; the “Woman Question” in the 19th Century.

150 American Literature Before 1800
Study of American prose, poetry, and fiction of the 17th and 18th centuries with particular attention to the representation of cultural diversity. Readings may include Native American literature, Puritan journals and poetry, prose by the Founding Fathers, and “domestic” novels by women.

151 American Literature 1800–1900
Study of American prose, poetry, and fiction of the 19th century from the Transcendentalists to 1900, with particular attention to the representation of cultural diversity. Readings may include the literary traditions of Native Americans, African-Americans, immigrants, and women.

152 20th-Century American Literature
Study of American prose, poetry, and fiction of the 20th century, with particular attention to the representation of cultural diversity. Readings may include writers representing modernism, the Harlem Renaissance, the Jazz Age and the Great Depression, the literary traditions of Chicano-, Hispanic-, and Asian-Americans.

153 American Ethnic Writers and Oral Traditions
Study of the literary or oral imaginative achievement of an American ethnic or cultural group such as Native Americans, Asian-Americans, American Jews, specific black cultural groups, Hispanic-Americans or Chicano communities.

154 Studies in African-American Literature
Study of some aspect of the African-American literary tradition. Examples of possible offerings are: Oral Tradition and Slave Narratives, African-American Novelists, the Harlem Renaissance, Contemporary African-American Poets, etc. May be repeated for credit as content varies.

160-161 Development of English Fiction
Studies in the origin and development of the English novel with attention to foreign influences. (English 160 is not prerequisite to 161.)

162 The American Novel
Studies in the range of varieties of the American novel.

163 The Other English Literature
Studies in literature in English outside the English and American traditions. Examples: the Commonwealth Novel, the African Novel in English, Writers of the Caribbean, and Canadian Literature. May be repeated for credit as content varies.

167 Literary Criticism
Readings in the development of critical theory from Aristotle to Coleridge. Prerequisite: 29.

168 Literary Criticism
Readings in 19th- and 20th-century criticism and aesthetics. Prerequisite: 29.

170 Problems in Literary Theory
Intensive study of the varying problems in literary theory. Examples of recent course offerings: Metaphor, Symbol, and Myth; Philosophy in Literature; Historical Perspectives in the Study of Literature; Perspectives in Comparative Literature; and Comparing Literary Kinds. May be repeated for credit as content varies. Prerequisite: 29.

171 Literary Movements
Study of groups of writers related by time, place or interest. Examples of possible offerings are: The Metaphysical Poets, Modernism, the Bloomsbury Group, Negritude, American Expatriates, Surrealism, Feminist Literature, the Tory Satirists. May be repeated for credit as content varies.

173 Women Writers
Intensive study of some aspect of literature by women. Examples of possible topics are: 19th-century British Novelists; Contemporary Women Poets; and American and Canadian Short Story Writers. May be repeated for credit as content varies.

175 Shakespeare
Close study of selected major plays and poems with attention to developing the ability to read the plays with ease and to experience them with pleasure. May be repeated for credit as topic varies.
180 Milton
Study of the minor poems, of Paradise Lost and Paradise Regained, and of representative prose works such as the Areopagitica. Attention will be given to Milton’s life and times.

182 The Drama
Critical appreciation of ancient, modern, and contemporary forms of drama. May include film and television. Attention is given to plays as works designed for performance. Emphasis on the structure and forms of dramatic texts.

183 Topics in Drama
Intensive study of a group of plays as products of their times and places. Examples of possible offerings are: Theater of the Absurd, Women Playwrights, Mythic Drama, Expressionist Drama, Restoration Drama. The plays are considered as works designed for theatrical production. May be repeated for credit as topic varies.

184 Contemporary Drama
Introduction to current plays by American and British playwrights. Attention is given to plays as works designed for theatrical production.

185 Individual Dramatist
Intensive study of the major works of one important dramatist. Some attention to background, biography, and criticism, as well as to the plays as works designed for theatrical production. May be repeated for credit as content varies.

190 Advanced Seminar
A seminar open to both juniors and seniors with at least a 3.3 average in the major. The seminar is designed through consultation between students and faculty.

197 Special Study
An independent study or research for students whose needs are not met by courses available in the regular offerings of the Department of English. Permission of the instructor and the department chair required.

198 Senior Honors Thesis (Independent Study)
Directed reading and research under the supervision of a department faculty member, culminating in the writing of an academic thesis. Senior standing required. Course admission by application with department chairperson.

199 Special Study—Honors
An independent study or research course for upper-division majors with a B average in English. Permission of the instructor and department chair required.

MASTER OF FINE ARTS PROGRAM IN CREATIVE WRITING
The MFA Program in Creative Writing is a two-year course of study in the genres of fiction, nonfiction, and poetry. The program takes as its central mission the education and formal training of serious writers and is distinguished by its commitment to the writer as an intellectual functioning within a cultural context.

Combining work in writing, craft, and literature, the MFA program requires completion of a creative master’s thesis and ten courses, including intensive writing workshops, craft seminars and literature courses.

COURSES

200 Modernism and Modernity
211 Fiction Workshop
212 Poetry Workshop
214 Nonfiction Workshop
221 Tutorial in Fiction
222 Tutorial in Poetry
224 Tutorial in Nonfiction
231 Contemporary Fiction
232 Contemporary Poetry
234 Contemporary Nonfiction
250 Alternate Genres
261 Craft Seminar in Fiction
262 Craft Seminar in Poetry
264 Craft Seminar in Nonfiction
280 Teaching Internship
290 Thesis

Students are admitted to the program primarily on the strength of a manuscript of original work submitted with the application, which will be judged according to its literary merit and its indication of the author’s readiness to study writing and literature on a graduate level.

For further information, contact the MFA Program in Creative Writing, P.O. Box 4686, Saint Mary’s College, Moraga, CA 94575-4686, or phone (925) 631-4088 or (925) 631-4762.
Curriculum  Environmental Science and Studies Programs

ENVIRONMENTAL SCIENCE AND STUDIES PROGRAMS

The Environmental Science and Studies programs instill in students knowledge from many disciplines. This knowledge is applied to the study and management of the environment. Students examine the structure, function, and dynamics of ecosystems, the interaction between physical and living systems, and how human enterprise is adversely affecting environmental quality. They explore how environmental degradation and pollution can be lessened or prevented by the application of sound management principles derived from ecological theory. In the study of the environment, students obtain the satisfaction of working toward an understanding of the natural systems around them, the opportunity to acquire the skills necessary to participate in the solution of serious environmental problems and the insights essential to a successful search for rational alternatives to present forms of ecosystem mismanagement. The programs foster critical thinking and holistic ways of knowing, and offer a variety of specific approaches—from the experimental protocols of the natural sciences to ones that are similar to those of the social sciences and humanities. It seeks to achieve a balance between the empirical and normative aspects of environmental study. The bachelor of arts program involves less scientific rigor than the bachelor of science and places more emphasis on the social sciences, humanities and the arts.

The location of Saint Mary’s College, near urban and suburban centers as well as a diversity of natural areas including tidal, freshwater, estuarine, and marine systems; a delta; mountains; lakes; deserts; forests; valleys and scrub lands, allows access to an impressive array of study sites ranging from the relatively undisturbed to the severely impacted. Internships are available to offer first-hand experience in a variety of fields.

FACULTY
William E. Perkins, Ph. D., Director of Environmental Science and Studies Program
Roy Allen, Ph.D., Professor of Economics (Natural Resource Economics and Human Ecology)
Steven Bachofer, Ph.D., Professor of Chemistry (Environmental Chemistry)
Carla C. Bossard, Ph.D., Professor of Biology (Plant Science, Ecology, Terrestrial Systems)
Michael Black, Ph.D., Professor of Political Science
Glenna Breslin, Ph.D., Professor of English (Nature Writing)
Joel D. Burley, Ph.D., Associate Professor of Chemistry (Atmospheric Chemistry, Environmental Chemistry)
Gerard M. Capriulo, Ph.D., Fletcher Jones Professor of Biology (Marine Science, Ecology, Invertebrates)
Lawrence R. Cory, Ph.D., Professor of Biology (Evolution, Environmental Perturbations)
John Ely, Ph.D., Associate Professor of Sociology and Anthropology (Society and the Environment)
Brian Jersky, Professor of Mathematics (Biostatistics)
Philip Leitner, Ph.D., Professor of Biology (Desert Ecology, Animal Physiological Adaptations)
Gretchen Lemke-Santangelo, Ph.D., Professor of History (U.S. Environmental History)
Douglas Long, Ph.D., Adjunct in Biology (Animal Behavior)
Lidia R. Luquet, Ph.D., Associate Professor of Mathematics (Environmental Systems and Biological Modeling)
Asbjorn Moseidjord, Ph.D., Associate Professor of Economics (Environmental Economics)
Micah Muscolino, Ph.D., Assistant Professor of History (Environmental History of China and War)
Ronald P. Olowin, Ph.D., Professor of Physics and Astronomy (Geosciences, Environmental Modeling Astronomy)
Roy Wensley, Ph.D., Professor of Physics and Astronomy (Computational and Ecosystem Modeling)

LEARNING OUTCOMES
When students complete the Environmental Science and Studies programs, they will be able to:

• RECALL and synthesize the knowledge derived from biology, chemistry, physics, earth science, economics, and political science to better understand the earth’s environment.
• COMPREHEND environmental problems from multiple perspectives.
• EVALUATE the credibility of varying sources of information on environment.
• DISPLAY cognizance of ethical considerations and be mindful of them when constructing solutions to environmental problems.
• RECOGNIZE the interconnectedness of earth’s ecosystems and human dependence on them.
• COMMUNICATE skillfully, in organizing and presenting a seminar, in writing a scientific report of research findings, and in designing a visual presentation regarding environmental findings.
• KNOW how to find information from library sources, original scientific literature, and from the Internet on environmental topics.
• DEMONSTRATE competence in using the basic types of equipment utilized in gathering information on the environment.
• RECOGNIZE processes and patterns of environmental interactions.
Environmental Science and Studies Programs  Curriculum

CURRICULUM AND COURSE REQUIREMENTS
The Environmental Science and Studies programs have two avenues of study: one, a less scientifically rigorous program, leading to the bachelor of arts degree and the other, to the bachelor of science degree which offers two areas of concentration: the environmental biology and earth sciences concentration and the environmental chemistry concentration.

The bachelor of science major requires completion of 18 courses; the bachelor of arts requires completion of 14. Also, the Environmental Science and Studies program hosts an ongoing seminar series with three presentations per year, coordinated by the program director. This series includes broad areas of interest related to the environment, from poetry to science, and will include field trips to sites of interest on occasion. All majors in the program will be required to attend at least six of these special events in addition to their course requirements. All environmental science and studies majors will also be required to do either a research internship or a senior research thesis (such as the ongoing summer research program in the School of Science) or a senior project.

ENVIRONMENTAL SCIENCE MAJOR
ENVIRONMENTAL BIOLOGY AND EARTH SCIENCE CONCENTRATION
Required: 18 courses and senior project

TEN REQUIRED LOWER-DIVISION COURSES
Math 27 Calculus 1 or Math 13 and 14 to equal Math 27
Math 28 Calculus 2
Phys 10-11 General Physics 1 or Phys 1-2 General Physics 1
Phys 20-21 General Physics 1 or Phys 3-4 General Physics 2
Biol 90-91 Diversity
Biol 92-93 Cell and Molecular
Chem 8-9 General Chemistry 1
Chem 10-11 General Chemistry 2
EES 40 Geology and the Earth or EES 100 Hydrology
EES 92 Environmental Science

EIGHT UPPER-DIVISION COURSES
Five required courses
Biol 119 Research Design and Biostatistics
Biol 125 Ecology
Econ 150 Environmental Economics or Econ 4 Macro-economics or Econ 100 Issues and Topics in Economics
EES 110 Geographic Info Systems or Chem Environ Chem
Pol 135 Environmental Politics or Pol 136 Environmental Law and Regulation

Three electives from the following
Biol 113 Marine Biology
Biol 114 Marine Ecology
Biol 142 Cal Flora
Biol 144 General Botany
Biol 146 Plant Ecophysiology
Biol 152 Conservation Science
Biol 197/199 Independent Research
EES 100 Hydrology
EES 140 Environmental Geology
Senior Project
EES 197 Special Studies

ENVIRONMENTAL CHEMISTRY CONCENTRATION
Required: 18 Courses and a Senior Project

TEN REQUIRED LOWER-DIVISION COURSES
Math 27 Calculus 1 or Math 13 and 14 to equal Math 27
Math 28 Calculus 2
Phys 10-11 General Physics 1 or Phys 1-2 General Physics 1
Phys 20-21 General Physics 1 or Phys 3-4 General Physics 2
Biol 90-91 Diversity
Biol 92-93 Cell and Molecular
Chem 8-9 General Chemistry 1
Chem 10-11 General Chemistry 2
EES 40 Geology and the Earth or EES 100 Hydrology
EES 92 Environmental Science

EIGHT UPPER-DIVISION COURSES
Six required courses
Biol 125 Ecology
Chem 104 Organic Chemistry 1
Chem 106 Organic Chemistry 2
Chem 108 Separation & Ident or Chem 118 Instrumental Chem
Chem 119 Environmental Chemistry
Pol 135 Envir. Politics or Pol 136 Envir. Law and Regulation

Two of the following
Biol 114 Marine Ecology
Biol 135 Biochemistry
Biol 144 General Botany
Biol 146 Plant Ecophysiology
Biol 152 Conservation Science
Chem 130 Advanced Inorganic Chemistry
Chem 197 or 199 Independent Research
EES 100 Hydrology
EES 110 Geographic Information Systems
EES 140 Environmental Geology
Senior Project or Research Internship
EES 197 Special Studies
ENVIRONMENTAL STUDIES MAJOR

Required: 14 courses and a senior project

Five required courses
- Biol 90-91 Diversity
- Biol 125 Ecology
- Chem 20 Concepts in Chem or Chem 2-3 Principles in Chem
- EES 92 Environmental Science
- Politics 100 Research Methods or AnthroSoc 132 Research Methods or Biol 119 Research Design and Biostatistics

Three electives from the following:
- Biol 55 Ocean World
- EES 40 Geology and the Earth
- Biol 113 Marine Biology
- Biol 142 Cal Flora
- Biol 144 General Botany
- Biol 146 Plant Ecophysiology
- Biol 152 Conservation Biology
- EES 100 Hydrology
- EES 140 Environmental Geology

Six electives from the following:
- Biol 52 Symbiotic Universe
- Bus 181 Ethical, Social and Political Issues in Business
- Econ 100 Issues and Topics in Economics
- Econ 150 Environmental Economics
- Eng 140 Nature Writing
- EES 110 Geographic Information Systems
- Hist 130 Environmental History
- Hist 150 Latin American Environmental History
- Lib Study 122 Nature and the Sacred
- Phil 117 Philosophy of Nature
- Phil 170 Environmental Ethics
- Pol 135 Environmental Politics
- Pol 136 Environmental Law and Regulation
- Sociology 134 Society and the Environment

Senior project
- EES 197 Special Studies or other departmental 197 courses

ENVIRONMENTAL SCIENCE AND STUDIES PROGRAM — MINORS

MINOR IN ENVIRONMENTAL STUDIES

Eight courses

- Biol 90-91 Diversity
- Chem 20 Concepts in Chemistry or EES 60/61
- Biol 125 Ecology
- EES 92 Environmental Science

Four social science/humanities courses from the major electives

MINOR IN ENVIRONMENTAL SCIENCE

Six courses

- Biol 90-91 Diversity
- EES 92 Environmental Science

One of the following
- EES 40 Geology and the Earth
- EES 100 Hydrology
- Chem 20 Concepts in Chemistry or EES 60/61

One of the following
- Biol 113 Marine Biology
- Biol 142 Cal Flora
- Biol 144 Botany
- Biol 146 Ecophysiology

Two of the following
- Biol 119 Research Design and Biostatistics
- Biol 125 Ecology
- Biol 142 Cal Flora
- Biol 152 Conservation Science
- EES 110 Geographic Information Systems

MINOR IN EARTH SCIENCE

New environmental science and studies minor for those students who desire greater exposure to the earth sciences.

Five Courses

- EES 40 Geology and the Earth
- EES 50 Historical Geology
- EES 100 Hydrology
- EES 110 Geographic Information Systems
- EES 140 Environmental Geology
ENVIRONMENTAL AND EARTH SCIENCE

The School of Science offers several courses that cover various aspects of earth science and a number of interdisciplinary courses dealing with issues critical to earth’s environment and human society. These courses are valuable to those with an interest in environmental or earth science topics that will increase their basic understanding of the earth and its environment and for those whose careers would benefit from such understanding. Environmental and earth science used to be called natural science.

FACULTY
Steven Bachofer, Ph. D., Professor
Carla C. Bossard, Ph. D., Professor
Gerard M. Capriulo, Ph. D., Professor
William E. Perkins, Ph. D., Adjunct Professor

COURSES

LOWER DIVISION

40 Geology and the Earth
A general introductory course in earth sciences, with emphasis on physical geology and its effect on the environment. The earth's structure, composition and physical features create the geological environment for mankind. The physical environment such as climate also has an effect on the geological environment, and both in turn can affect the living environment of societies on the earth through the processes of earthquakes, landslides and floods. Some of the major environmental problems facing mankind today are discussed from their geologic perspective. Offered in the fall semester with three hours of lecture per week. No prerequisites, but must be accompanied by Environmental and Earth Science 41.
* This course fulfills the Area B lab science requirement.

41 Lab
Lab to accompany Environmental and Earth Science 40. One lab per week for three hours. Local field trips are part of the course. Laboratory fee: TBA.

50 Historical Geology
A general introductory course in earth sciences, with emphasis on historical geology leading to an understanding of the geologic record of life (paleontology) and environments (stratigraphy). The course starts with a discussion of the historical development of geologic ideas that lead to an understanding of the major earth systems. Plate tectonics, mountain building and structural deformation, the basic elements of stratigraphy, and sedimentary environments are discussed along with correlation and dating techniques. The second segment of the course focuses on the biosphere, reviewing the diversity of six kingdoms of life and their historic fossils. The fossil record is then integrated with the geologic record, as well as the general stratigraphy and paleontology for the various geologic eras and periods of the earth's history. Offered in the spring semester with three hours of lecture per week. No prerequisites, but must be accompanied by Environmental and Earth Science 51. * This course fulfills the Area B lab science requirement.
Curriculum Environmental and Earth Science

51 Lab
Lab to accompany Environmental and Earth Science 50. One lab per week for three hours. Local field trips are part of the course. Laboratory fee: TBA.

60/61 Urban Environmental Issues
This general science education course will be taught as a part of a learning community. Two courses will be explicitly linked on the redevelopment of brownfields and Superfund sites. Students must enroll in both the linked courses and should discover the science is more interesting since it is presented in context. Students in the Environmental Science and Studies Program may find this course particularly useful. A significant portion of the student's grade will depend on his or her input to classroom discussions and the student team project. The student teams should research a few possible sites at one location (dependent on class enrollment). As the class progresses, we will invite in some guest speakers representing government agencies, community outreach organizations, and possibly developers to allow students to explicitly hear from individuals representing the different perspectives involved in a redevelopment area. The class will have also both group and full-class discussions. This course fulfills the Area B lab science requirement with a weekly three-hour lab section. An important goal is to give back to the community while we study these redevelopment activities.

92 Introduction to Environmental Science
Physical, chemical, biological, and cultural dimensions of environmental problems are examined in this course. It surveys the historical roots of these problems and then considers components such as population pressure, air and water pollution, global change, desertification, deforestation, biodiversity loss, habitat destruction, land use planning, energy and other resource utilization, acid rain, global warming, and public health. An introduction to ecological principles is provided. Course fulfills the Area B requirement. Must be accompanied by Environmental and Earth Science 93.

93 Lab
Lab to accompany Environmental and Earth Science 50. One lab per week for three hours. Local field trips are part of the course. Laboratory fee: TBA.

UPPER DIVISION

100 Hydrology—Rivers and Groundwater
An introduction to hydrology, with specific emphasis on rivers and streams as well as groundwater. In the first half of the course, we examine all the facets of the water cycle, properties of water and issues related to surface water problems. In the second half, we work more closely with groundwater issues. Darcy's Law and subsurface flow problems. Groundwater contamination and general water quality issues will also be discussed. Special emphasis will be given to the hydrology of northern California. Offered every other year in the spring term. Three hours of lecture per week. No lab, but problem sets. Prerequisites: Area B math course or permission of instructor.

110 Geographic Information Systems
Maps have been used for thousands of years, but it is only within the last few decades that the technology has existed to combine maps with computer graphics and databases to create geographic information systems, or GIS. GIS are used to display and analyze spatial data, which are tied to a relational database. This connection is what gives GIS its power: maps can be drawn from the database and data can be referenced from the maps. When a database is updated, the associated map can be dynamically updated as well. GIS databases include a wide variety of information: geographic, economic, social, political, environmental and demographic. Although these systems started in the earth sciences, they have rapidly expanded into the business and government arenas to the point where today, over 80 percent of the applications are found in city planning, business evaluations, marketing, rapid response systems and a plethora of other activities. In the class and lab exercises, students learn to use ArcView 9.1, one of the standard GIS application programs, and identify and solve basic mapping problems. Examples include database generation, map generation, interpretation of environmental and marketing data, the analysis of these data for pattern recognition and final presentation graphics. By the end of the course, a student should be a competent user of ArcView 9.1. Offered every other year in the fall term with three hours of lecture and a three-hour lab. Prerequisites: Area B math course or permission of the instructor. Laboratory fee: TBA.

140 Environmental Geology — Natural Disasters
A course that concentrates on natural disasters and major environmental issues. Concerned with how the natural world operates, and in so doing destroys humans and their works. We examine specific geologic hazards (volcanoes, earthquakes, floods etc.) and explore how one might either predict their occurrence or ameliorate their results. We later examine some the major environmental issues facing the world, culminating with an extended examination of climatic change. Man's influence on each of these areas will be examined in some detail. Offered every other year in the spring term. Three hours of lecture and three-hour lab. Prerequisites: Area B math course or permission of the instructor. Laboratory fee: TBA.
HEALTH SCIENCE

The School of Science offers an interdisciplinary major in health science. This program provides a solid foundation in natural science and human biology. The health science major is appropriate for students who intend to pursue careers in physical therapy, occupational therapy, medicine, or dentistry, as well as in other health care professions requiring a strong science background. The student must meet with the director of health science to design a course of study that will meet his/her individual needs and interests. The health science major usually includes the courses listed below:

LOWER DIVISION
- Biology 15, 16 (lab); 25, 26 (lab); 92, 93 (lab); 94, 95 (lab)
- Chemistry 8, 9 (lab); 10, 11 (lab)
- Mathematics 27, 28
- Physics 10, 20 (lab); 11, 21 (lab)
- Psychology 10

In addition, a minimum of seven upper-division courses are to be taken from the Psychology, Kinesiology, Biology, and Chemistry departments. It is recommended that students take these seven courses from different disciplines. The choice of upper division courses must be approved by the director of health science.

Students who want to prepare for careers in such fields as human performance and athletic training may undertake an interdisciplinary program of study through the Kinesiology Department. For information, contact the chair of that department.
Curriculum  History

HISTORY

In offering a disciplined study of the past, the History Department attempts to provide perspective on a wide variety of issues that arise out of the tensions societies have to face in every generation—tensions between freedom and authority, between reason and faith, between free will and impersonal forces. The department aims to promote the ability to read critically and to write coherently, and it also attempts to meet the needs of students with varying objectives: the history major, the student from another department seeking a broader background for his or her own discipline, or the student who is simply curious about a specific age, society, or problem. In each course the history faculty seeks to cultivate understanding rather than simply memorization of facts, in the belief that the experience gained through systematic analysis of historical issues equips students not only for the teaching of history or for advanced study in history and related fields but also for the study of law, journalism, or library science; for the pursuit of careers in local, state, or national public service; and for business positions that demand literate, imaginative, and resourceful people.

The department also participates in interdisciplinary majors in area studies: American Studies, Latin American Studies, and European Studies. For requirements in American Studies, consult with the department chair. For Latin American and European Studies, see International Area Studies, p. 107.

LEARNING OUTCOMES

When students fulfill the requirements of the history major they will be able to:

• THINK historically, read critically, write coherently, and speak persuasively.
• SITuate major historical events within their proper chronological, geographical, thematic, and comparative context.
• CONNECT and integrate historical knowledge, grasp the ethical and moral dimensions of history, and appreciate the complex, often multi-causal origins of past events.
• IDENTIFY and interpret a wide variety of historical sources, both primary and secondary.
• EXPLAIN the value and application of historiography and various historical methods, approaches and theories.
• EVALUATE and critically assess the validity of historical evidence and interpretations.
• USE primary and secondary sources to construct sophisticated, persuasive, and logical interpretations of historical problems and events.

MAJOR REQUIREMENTS

LOWER DIVISION

History 1, 2, or 4, 5; 17, 18. (History 1, 2 is the World History sequence; History 4, 5 is the Western Civilization sequence. Students may combine History 1 and 5 or History 2 and 4, but may not combine History 1 and 4 or History 2 and 5.)

UPPER DIVISION

Students majoring in history must complete eight upper-division history courses, including:

One course in specific problems of research and writing (History 103) and one course in either historical interpretation (History 104) or historical theory (History 105).

Two upper-division courses in two of the following areas of concentration and one in a third area of concentration (at least one area of concentration must be in Asian, African, or Latin American history).

United States: History 130 (when applicable), 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142
Latin America: History 150 (when applicable), 151, 152, 153, 154, 155
Medieval Europe: History 110 (when applicable), 111, 112, 113
Modern Europe: History 110 (when applicable), 113, 114, 115, 116, 117, 118, 119
Africa: History 170 (when applicable), 171, 172
Asia: History 160 (when applicable), 161, 162

An upper-division elective, chosen from any of the History department’s courses.

Students intending to work toward advanced degrees should consult with their advisor about foreign language preparation.
History Curriculum

TEACHING CREDENTIAL IN SOCIAL SCIENCE
The major in history, with a special distribution of courses and with the addition of certain courses in anthropology, economics, politics, and sociology, has been accepted as meeting the subject matter preparation requirements of the State of California for a teaching credential in Social Science. Completion of the approved program waives the CSET Social Science Exam. It is still necessary to pass the CBEST exam and to take a sequence of education courses. At Saint Mary’s these are available at the graduate level (some may be taken during the senior year). It is important that students thinking of a teaching career consult both the coordinator of the Subject Matter Preparation Program in Social Science in the Department of History and the director of the Single Subject Credential Program in the School of Education to make sure that all the pre-requisites for the credential are fulfilled.

MINOR REQUIREMENTS
The minor in history requires the following
Any two lower-division history courses; History 103, 104 or 105; two additional upper-division courses, each to be in a different area of concentration.

PREREQUISITE GRADE
Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

COURSES

LOWER DIVISION

1 World History
An introduction to history through the study of world societies, from the Paleolithic age to the seventeenth century, focusing on the development and interaction of the major civilizations of the Middle East, the Mediterranean world, East Asia, Latin America, Africa, India and Southeast Asia, and North America. Readings are based on primary sources and differing historical interpretations.

2 World History
An introduction to history through the study of world societies from the 17th century to the present day, focusing on the themes of modernization, industrialization, imperialism, Third World development, and cultural exchange. Readings are based on primary sources and differing historical interpretations.

4 History of Western Civilization
An introduction to history through the study of Western Civilization from its origins in the Mediterranean world to the age of discovery in 15th-century Europe. Readings include primary sources as well as works dealing with issues of interpretation.

5 History of Western Civilization
A study of Europe’s political, social, economic, and cultural evolution from the 16th century to the present, focusing on major aspects of modernization through reading and discussion of primary documents and differing historical interpretations.

17 History of the United States
A survey course in American history which begins with the European discovery of the New World and ends with the era of Reconstruction following the Civil War. The approach is chronological, with emphasis on major historical interpretations.

18 History of the United States
A survey course in American history which begins with the end of Reconstruction and moves forward to the present day. The approach is chronological, with emphasis on major historical interpretations.

24 SSMP Advising/Portfolio (.25)
A quarter-credit activity course that supports freshmen, sophomores, and first-semester juniors who are enrolled in the Single Subject Matter Preparation Program in the Social Sciences (SSMPP). It includes advice of course scheduling, assistance with self-assessment portfolios, instruction in pedagogy and classroom technology, guidance with lesson plans and assessment, and help with career planning.

UPPER DIVISION

100 Problems and Issues in World History
Analysis of a selected theme, problem, era, or region not covered by regular course offerings of the department. Topics are announced prior to registration each semester.

103 Proseminar in Historical Research
This seminar develops the student’s ability to do historical research by focusing on a specific historical problem or development through intensive, systematic use of a wide range of sources. Each student carries out a research project under the guidance of the instructor. The topic of every proseminar is announced and described prior to registration each semester.

104 Historical Interpretation
This seminar introduces students to questions of historical methods; its content focuses on major methodological controversies and interpretations within a specific area of history, to be determined by the instructor. Examples of such areas include interpretive issues of the Middle Ages, the Third Reich, or the New Deal. Prerequisites may vary according to the topic and instructor.
Curriculum History

105 Modern Approaches to History
A study of the development of history as a scholarly discipline beginning with fundamental questions of method and research, followed by analysis of major controversies stemming from contemporary approaches to historical research and to public history. In addition, resident historians discuss the problems they encounter in their research and writing.

110 Problems and Issues in European History
Analysis of a selected theme, problem, era, or region not covered by the regular offerings of the department. Topics are announced prior to registration each semester.

111 Early Medieval Europe
A study of the early development of medieval society and institutions, emphasizing the formative influences of classical, Christian, and Germanic culture in the creation of the Middle Ages. The course traces the Middle Ages from A.D. 300 to 1000, considers such issues as medieval monasticism and the papacy, the rebirth of empire under Charlemagne, the origins of feudal society, and the effects of Byzantine culture and the rise of Islam upon the Latin West. Offered in alternate years.

112 The High and Later Middle Ages
A study of the years A.D. 1000 to 1450, that period in which the seeds of medieval culture, sown during the 700 preceding years, come into full flower—the age of the Crusades and chivalry, Romanesque and Gothic architecture, St. Francis, St. Thomas, and Dante. The course is divided into thematic sections treating the relationship between the Christian and Muslim worlds, papal-imperial politics, social and economic changes, the rise of the universities, and the waning of the Middle Ages. Offered in alternate years.

113 The Age of the Renaissance
An exploration of the rise of humanism in Europe between 1350 and 1550. The course focuses upon the educational and artistic movements that began in Italy and spread north to the rest of Europe. Attention is given to providing a social and political context for the cultural achievements of the period. Renaissance culture will be examined in light of its classical and medieval roots. Offered in alternate years.

114 The Reformation Era
A survey of 16th-century European society, emphasizing social and political changes brought about by widespread religious reforms. Attention is given to key Reformation figures, such as Desiderius Erasmus, Martin Luther, John Calvin, Ignatius of Loyola, and Theresa of Avila. The course will also explore the impact of the printing press on Europe and the spread of capitalism. Offered in alternate years.

115 Enlightenment and Revolution
Beginning with an examination of the political, social, economic, and intellectual aspects of the old regime, this course analyzes 18th-century challenges to that regime. The ideas of the philosophers, the upheavals of popular revolution in France, and the spread of revolutionary institutions by Napoleon’s conquests are major issues for reading and discussion. Offered in alternate years.

116 19th-Century Europe
A survey of the formation of modern European society from the French Revolution to the outbreak of World War I, emphasizing political, diplomatic, social, and ideological responses to industrialization, urbanization, and nationalism. Offered in alternate years.

117 20th-Century Europe
A survey of European society from the outbreak of World War I to the present. Major themes include the failures of international stability, the problems of technological society, the effects of the Russian Revolution, the rise of fascism, the phenomenon of decolonization, and the development of the European Community, World War II and the Holocaust, the Cold War, in the aftermath of the collapse of the Soviet system. Offered in alternate years.

118 History through Fiction: 19th-Century Europe
This course uses as its main source a selection of the abundant fiction produced by observers of the political, social, technological, and cultural revolutions that transformed European society in the 19th century. Class discussion analyzes the fictional realms they created and considers the extent to which their visions reflect social and historical reality, and the indications of the political and social perspectives they contain. Offered in alternate years.

119 Germany: From The Third Reich to the Present
What made the triumph of Nazism in Germany possible and how complete was its downfall? This course examines many facets of these questions including Germany’s historical tradition, Hitler’s life, the nature of the Nazi dictatorship, Germany’s role in World War II, and the evolution of the two Germanys through the Cold War and its European role since the reunification of 1990. Offered in alternate years.

124 Advising/Portfolio (.25)
This quarter-credit activity course supports juniors and seniors who are enrolled in the Single Subject Matter Preparation Program (SSMPP). It provides SSMPP students with advising assistance, supervision of internship experiences, instruction in pedagogy and classroom technology, guidance on lesson plans and assessment, and assistance with credential program and graduate school admissions.

130 Problems and Issues in American History
Analysis of a selected theme, problem, era, or region not covered by the regular offerings of the department. Topics are announced prior to registration each semester.
131 Colonial History of the United States
A study of three “experimental” societies in the New World: the “holy experiment” of the Quakers in Pennsylvania, the Puntan “city on a hill” in Massachusetts, and the plantation society of the Anglicans in Virginia. Emphasis is placed on religious, cultural, social, and political developments within the colonies, with due attention to the British imperial and mercantile systems.
Offered in alternate years.

132 The American Revolution and the Early Republic
A study of the American Revolution, the Confederation period, the ratification of the Constitution, and the Federalist decade. Emphasis is placed on intellectual, political, economic, military, and diplomatic history, as well as on major historical interpretations of the periods covered.
Offered in alternate years.

133 Era of the Civil War and Reconstruction
An examination of American society and politics from the Age of Jackson to the end of Reconstruction. Major focus is on the Civil War as the great crisis of national unity: the economic, political, social, and cultural forces that brought it on, and the new nation that emerged in its aftermath.
Offered in alternate years.

134 Recent History of the United States
A study of the Twenties, the origins of the Great Depression, the New Deal, America during World War II, and the postwar periods including the Civil Rights Movement, Watergate, the Reagan revolution, and the Bush and Clinton years. Emphasis is placed on social, cultural, and literary history. The course concentrates on domestic developments rather than on foreign affairs.
Offered in alternate years.

135 United States Foreign Relations: 1898 to the Present
An examination of the nation’s foreign affairs from the rise of imperialism in the late 19th century through the challenge of war and peace in the twentieth century. U.S. policy is considered as the result of both domestic and foreign economic, political, and psychological influences.
Offered in alternate years.

136 Immigration and Ethnic Relations in American History
A study of immigrant groups in the United States from the Revolution to the present, assessing their response to and impact upon American society. Topics to be discussed include the foreign background of immigration, the problems of adjustment, assimilation and mobility in comparative perspective, ethnic politics and culture, nativism, Black migration, and the “melt- ing pot” vs. “cultural pluralism” description of America.
Offered in alternate years.

137 United States History in Comparative Perspective
This course integrates American history into an international framework of analysis by exploring similarities and differences between the United States’ historical development and that of other nations. Topics include comparative approaches to indigenous cultures, colonization, revolution and nationalism, political systems, the frontier, slavery and race, reform, immigration, industrialism, and the welfare state.
Offered in alternate years.

138 American Culture since the Civil War
This course draws upon sources from American popular and high culture since the Civil War in order to examine key ideas, attitudes, and forms of expression in 19th- and 20th-century America and suggests their relationship to the changing social context.
Offered in alternate years.

139 History of Women in America
A study of the changing roles and status of American women from the Colonial period to the present. Topics considered include work and family life, the legal status of women, education, reform movements, and the campaigns for suffrage and women’s rights.
Offered in alternate years.

140 African-American History: 1619 to 1865
A study of the role and contribution of African-Americans in the development of United States history from the colonial era to the Civil War. The course analyzes the concept and practice of slavery, the place of the African-American in the U.S. Constitution, the American colonial and post-colonial economy and the Black peoples, the factors that caused the Civil War and American domestic socio-political history.
Offered in alternate years.

141 African-American History: 1865 to the Present
A study of the political and social consequences of African-American emancipation from the Reconstruction era onward. The course emphasizes the African-American search for positive ways to implement constitutional and democratic principles. It also analyzes the importance and impact of “protest” as a socio-political phenomenon and culminates with the study of new forms of activism in the African-American community.
Offered in alternate years.

142 California
A study of California from its pre-contact beginnings to the present; its transformation from an Indian society to an ignored Spanish outpost, to Mexican domination, and finally to one of the fastest-growing states in the nation. The course deals with problems of change and growth as the Golden State enters the next century.
Offered in alternate years.

150 Problems and Issues in Latin American History
Analysis of a selected theme, problem, era, or region not covered by the regular offerings of the department. Topics are announced prior to registration each semester.
151 Contemporary Latin America
A survey of the history of the continent in the 19th and 20th centuries, focusing on the elusive search for democracy, the development of capitalism, and the various alternatives proposed by reformist and revolutionary movements and government over the decades.
Offered in alternate years.

152 Latin American Revolutions
A comparative study of the history of the major revolutionary movements and governments of Latin America in the 20th century—Mexico, Cuba, Chile, and Nicaragua—focusing on their origins, the composition of the participants, the international context of their development, and the goals, successes, and failures involved.
Offered in alternate years.

153 Latin America: Race and Society
The course traces the African heritage of Latin America, putting special emphasis on the Caribbean, Brazil, the Pacific coast of Central America and Venezuela, and the small countries of Surinam and Guyana. It examines the origins of the African population of Latin America, their contribution to the culture and economy of the region, and the continuing struggle against racism and discrimination.
Offered in alternate years.

154 Latin America and the United States
Over two centuries, relations between Latin America and the United States have varied from mutual admiration to distrust. Tracing these relations from the Monroe Doctrine to the present involvement of the United States in Central America, the course explores the questions: How has Latin America reacted to the United States’ pursuit of its national interests and security in the region? What degree of success has the United States achieved in its objectives?
Offered in alternate years.

155 Latin American Environmental History
An introduction to the history and relations between humans and their environment in Latin America from the pre-Columbian era, through the colonial period and independence, and into the 20th century. Special emphasis is placed on Mexico, Brazil, and Central America to explore topics such as agriculture and environment, war and ecology, the history and fate of the tropical rainforests, industrialization and environmental destruction, development and conservation, and sustainable alternatives in the 21st century.
Offered in alternate years.

160 Problems and Issues in Asian History
Analysis of a selected theme, problem, era, or region not covered by the regular offerings of the department. Topics are announced prior to registration each semester.

161 Modern Japan
The course begins in 1603 with the establishment of the Tokugawa Shogunate and ends with present-day Japan. Emphasis is placed on political, economic, cultural, and social history. Special attention is given to the “Japanese character,” as it evolved historically. A major theme of the course is Japan’s success in modernizing or Westernizing.
Offered in alternate years.

162 Modern China
The course begins in 1644 with the establishment of the Qing (Manchu) Dynasty and ends with present-day Communist China. Emphasis is placed on political, economic, cultural, and social history. The main themes of the course are China’s struggle to modernize, and reaction and revolution in late 19th- and 20th-century China.
Offered in alternate years.

170 Problems and Issues in African History
Analysis of a selected theme, problem, era, or region not covered by the regular offerings of the department. Topics are announced prior to registration each semester.

171 African History to 1850
A study of human origins in Africa, Black migration, the expansion of Islam in Africa, the slave trade, and the rise of ancient kingdoms of Ghana, Mali, Zulu. The course searches for and establishes the cultural identity of Africa before slavery, and the influence of ancient Egyptian, Nubian, and Meroe cultures on subsequent sub-Saharan civilization.
Offered in alternate years.

172 African History Since 1850
A study of the major themes of state building, Islamic revolutions, colonialism, nationalism and pan-Africanism, the role of the military in recent decades, African decolonization and economic development in the context of the modern world. The course emphasizes the development of African contemporary culture in comparison with that of select nations and regions of the developed world.
Offered in alternate years.

197 Special Study
An independent study or research course in an area not offered by the department. Permission from the instructor and department chair is required.

199 Special Study—Honors
An independent study or research course for upper-division majors with at least a B average in history. Permission from the instructor and the department chair is required.
INTEGRAL PROGRAM

The Integral Program of liberal arts is founded on the wager that it is still possible to appreciate and to evaluate all the main kinds of human thinking. It is thought that students in the Program can learn enough of the technical languages of the natural sciences, mathematics, literary criticism, social sciences, philosophy, and theology to follow arguments in those disciplines. The Program is not an honors curriculum but is intended rather for those drawn to a comprehensive view of education, of the liberal arts.

The Program is divided into the seminar and the tutorials: Language, Mathematics, Laboratory, and Music. During the fourth year, seniors are asked to marshal their experiences from seminar and tutorials to write a major essay and then defend it before the tutors and other students. The tutors are drawn from the various departments of the larger college.

The Program had its origin in a two-year study beginning in the fall of 1955 and financed with a grant from the Rosenberg Foundation. Brother Sixtus Robert Smith, FSC, and James L. Hagerty of the faculty joined with consultants from Saint John’s College, Annapolis, and from the University of California and Stanford, to establish this “college-within-a-college.”

The first graduates were the class of 1960. From the beginning, a confident grasp of fundamental truths, a healthy skepticism toward passing dogma, and a reliance on reasoned deliberation has marked the graduates of the Program.

TUTORS
Theodore Tsukahara, Ph.D., Economics, Director
Brother Kenneth Cardwell, FSC, Ph.D., Rhetoric
Theodora Carlile, Ph.D., Dramatic Art
Rali Christo, Ph.D., Classics
Steven Cortright, M.A., Philosophy
Alexis Dovai, Ph.D., Theology
John Albert Dragstedt, Ph.D., Classical Languages
Jose Feito, Ph.D., Psychology
Lewis Jordan, Ph.D., Integral Studies
Denis Kelly, M.A., Classics
Brother T. Brendan Kneale, FSC, Emeritus
Joseph Lanigan, Ph.D., Emeritus
Jacob Lester, Ph.D., Biology
Brother Donald Mansir, FSC, Ph.D., Theology
Brother Raphael Patton, FSC, Ph.D., Mathematics
Rafael Alan Pollock, Emeritus
Edward Porcella, Ph.D., Philosophy
Michael Riley, Ph.D., Classical Languages
James Sauerberg, Ph.D., Mathematics
David J. Smith, B.A., English
Roy Wensley, Ph.D., Physics
Brother Martin Yribarren, FSC, Ph.D., Music

REQUIREMENTS

As a separate curriculum, the Program offers a bachelor’s degree proper to it. The degree is granted for the successful completion of the eight seminars, the eight tutorials in mathematics, the eight in language, the four laboratories, a tutorial in music, and the senior essay. Note that the College requires further the successful completion of four January courses and sufficient electives to bring the total to 36 courses.

Those completing the first two years of the Program have fulfilled all requirements of the College in general education, except English and two January courses.

PREREQUISITES

Each course in the Program beyond the first semester depends in an obvious way entirely on the courses taken earlier, making it impossible to join the Program later than the freshman year. In extraordinary cases, a remedial course in January may allow a freshman entrance in February.

Any course in this Program with a prerequisite assumes a grade of C– or better in the prerequisite course.
C O U R S E S

SEMINARS

11–12 Freshman Seminar
Homer, Aeschylus, Herodotus, Sophocles, Euripides, Aristophanes, Plato, Aristotle and Euripides.

113–114 Sophomore Seminar
The Law and Prophets, Psalms, Gospels and selected Epistles, Virgil, Lucretius, Tacitus, Plotinus, Epictetus, Augustine, Anselm, Aquinas, Dante, Chaucer, Rabelais, Machiavelli, Luther, Montaigne and Shakespeare.

115–116 Junior Seminar

117–118 Senior Seminar
Goethe, Austen, Bernard, Hegel, Flaubert, Marx, Dostoevski, Kierkegaard, Melville, Twain, Tolstoi, Nietzsche, William James, Freud, Proust, Joyce, Heidegger, and a selection of modern authors.

196 Senior Essay (.25)
The writing and defense of an essay under the direction of a tutor chosen by the student. This course is directed by the leader of the Senior Seminar.

TUTORIALS

31–32 Freshman Mathematics
The Elements of Euclid, the Timaeus, introduction to the Almagest of Ptolemy.

133–134 Sophomore Mathematics
The Almagest, the Conic Sections of Apollonius, selections from On the Revolutions of Copernicus and the Epitome of Kepler.

135–136 Junior Mathematics
The Geometry of Descartes, Principia Mathematica of Newton, an introduction to calculus.

137–138 Senior Mathematics
The Theory of Parallels of Lobachevski, the Essays on Numbers of Dedekind, and Relativity by Einstein.

51–52 Freshman Language
Grammar and expression: introduction to Greek vocabulary, morphology and syntax, the nature and function of parts of speech, phrases and clauses. Thought and the author’s language: exercises taken from Herodotus, Plato, Sophocles, Thucydides, the New Testament, Aristotle, Euripides and Sophocles.

53–54 Sophomore Language
Logic and dialectic: analysis and translation of Greek authors, with emphasis on dialectical investigation in the Phaedo, the Theaetetus, the Sophist, the Phaedrus and Prior Analytics.

155–156 Junior Language
English and American poetry and rhetoric. Close reading and discussion of a comedy, a tragedy and a romance of Shakespeare, poems of Wordsworth, Keats, Dickinson, Stevens, Yeats; the political rhetoric in Jefferson, Lincoln and Martin Luther King, Jr.; works on prejudice by Melville, Hawthorne, Douglass and O’Connor.

157-158 Senior Language
Dialectic ancient and modern: caution on its limits, the Philebus and Parmenides, Aristotle’s Ethics and Metaphysics, Aquinas’ On the Principles of Nature and On Being and Essence, Kant’s Critique of Pure Reason and Hegel’s Phenomenology and Logic.

71-72 Freshman Laboratory

74 Music I
Introduction to basic terminology, notation, diatonic scale, rhythm and chords, reading of early texts on music and group participation in making music. Fee: $75.

174 Music II
An optional extension to the Music I class for more careful treatment of theory and performance. This course is not required for the degree.

175-176 Junior Laboratory
Topics include classical mechanics, optics, pneumatics, chemistry and genetics. Readings from Galileo, Newton, Huygens, Torricelli, Boyle, Black, Priestley, Lavoisier, Avogadro, Darwin, Mendel and Morgan. Fee: $75 per term.
INTERNATIONAL AREA STUDIES

The international area studies (IAS) major is designed for students preparing for an increasingly global environment through multidisciplinary study of a region of the world. The course of study integrates several academic disciplines, language proficiency, cultural literacy, and residential experience abroad.

The major has been created for the independent student. It requires maturity and a sense of adventure and is designed for those who look forward to living in a larger world. It appeals to those who have an inquiring mind and a desire to experience a different culture. This is a highly individualized major, aimed both to satisfy students’ interests and to prepare them for positions of responsibility.

Students work closely with a faculty advisor throughout the course of their program. Advisors help each student organize the details of their personalized program.

MAJOR REQUIREMENTS

REGION SELECTION
Students select a region of the world in which they have a particular interest. Three choices are available: Europe, Latin America, and student-defined region such as Asia/Pacific or Africa that is selected by the student with the approval of the director of international area studies.

LOWER DIVISION
Students must complete the following five courses:
- Anthropology 1: Introduction to Social and Cultural Anthropology
- Economics 3: Principles of Micro-Economics
- Economics 4: Principles of Macro-Economics
- History 2: World History
- Politics 1: Introduction to Comparative Politics

UPPER DIVISION
- IAS 100: Cultural Geography and Global Societies
- IAS 196: Independent Study – Senior Thesis

Students must also select four of the suggested courses in the following interdisciplinary areas that focus on their chosen region: anthropology, economics, literature and art, history, and politics. Students must see a faculty board member for a list of approved courses.
**Curriculum International Area Studies**

**DEPARTMENTAL CONCENTRATION**
In addition to the above courses, international area studies majors must complete the requirements of a minor chosen from anthropology, economics, history, modern languages, or politics. The choice of minor will define two separate directions: one, with a minor in economics or politics, for those students who are interested in pursuing a graduate degree in international relations; the other, with a minor in anthropology, history, or modern languages, for those students who want to either pursue a graduate degree in their minor discipline or who are interested in working in an international environment.

**MINIMUM GPA**
A minimum GPA of 3.0 is required for declaring an International Area Major.

**CAREER OPPORTUNITIES**
Graduates will be in a position to work for the ever-growing number of international agencies, organizations and businesses. Increasingly, language proficiency and overseas experience are requirements for jobs. Employers seek persons experienced and qualified to function in another language and culture.

Others go on to graduate school in international business, international study, or in their minor field. Most major universities have graduate area studies programs that offer a natural next step for students interested in further developing their expertise.

Beyond career advancement, many students will find that the immersion in another culture expands their understanding of the human experience and permanently enriches their lives.

Any course listed for this major that requires a prerequisite assumes a grade of C- or better in the prerequisite course. In addition, C is the minimum acceptable grade in IAS 100 and IAS 196 for credit toward the major.

**CORE COURSES**

**100 Cultural Geography and Global Societies**
This course exposes students to the breadth and excitement of the field of geography. Cultural geography studies the ways people shape and give meaning to their environment and allows us to look at the fascinating variety of human activity in the world — the human landscape. Geographic knowledge is vital to understanding national and international issues that dominate daily news reports. This course examines the relevance of geographic methods and concepts to social science topics such as agricultural patterns and practices, architecture, ethnic traditions and conflicts, gender, health, migration, population, political economy, poverty, religion, resource utilization, social change and urban planning.

*Prerequisite: Anthropology 1.*

This course may only be completed at Saint Mary’s College.

**196 Independent Study: Senior Thesis**
As a culmination of their studies, students are required to work independently with a faculty member in order to complete a senior thesis. The thesis should display a student’s ability to conduct independent research, write and critically think about salient issues related to their chosen minor and region. Sponsorship by an IAS board member (associated with the student’s minor) and approval by the program chair is required. This course should be taken in the senior year.

This course may only be completed at Saint Mary’s College.
KINESIOLOGY

FACULTY
Deane Lamont, Ph.D., Associate Professor, Chair
James Farris, M.S., Adjunct
Sue Johannessen, M.A., Lecturer
Craig Johnson, Ph.D., Associate Professor
William Manning, M.A., Lecturer
Derek Marks, Ph.D., Assistant Professor
Steve Miller, Ph.D., Associate Professor
Mark Nagel, Ed.D., Lecturer
Sharon Otto, Ph.D., Adjunct
Robert Thomas, M.A., Lecturer
Megan Toma, M.S., ATC, Lecturer

LEARNING OUTCOMES
Graduates of the Department of Kinesiology will:
• KNOW the field’s subdisciplines, their theoretical bases, and research agendas.
• UTILIZE hard-copy and computer-based subject indexes in research.
• ANALYZE, interpret, synthesize, and integrate scholarly material.
• ENGAGE in cogent in-depth dialogue concerning the value of the field to contemporary society through analyses of historical and current issues.
• MAKE professional decisions grounded in sound philosophical and theoretical principles.
• WORK cooperatively with others.
• COMMUNICATE effectively their ideas in both the oral and written form.
• QUALIFY in basic first aid and CPR techniques.

MAJOR REQUIREMENTS
The kinesiology major at Saint Mary’s College is a four-year course of study leading to a Bachelor of Arts degree. The major is designed for students with interests in the field of human movement. The major requires rigorous study of the human being in motion. We examine the whole person—anatomically, physiologically, biomechanically, psychologically, sociologically, and historically—across the lifespan. Our domains are health, exercise, sport, athletics, leisure, and physical education.

Students select one area within which to study: teacher education or sport and recreation management or health and human performance.

A minimum 2.0 GPA within the major is required for graduation. Any course listed in this department with a prerequisite assumes a grade of C- or better in the prerequisite course. All department courses require a passing grade to count toward graduation.

TEACHER EDUCATION
This emphasis is designed for students who plan to obtain a teaching credential in physical education. The courses provide students with the requisite knowledge for teaching and coaching careers in the public and private schools.

Students in the teacher education track are required to complete the following coursework:

LOWER DIVISION
Kinesiology 2, 4 (one aquatic class), 5 (one dance class), 6 (two different individual/dual activity classes, not intercollegiate sports), 7 (two different team activity classes, not intercollegiate sports), 10, 11, 12, 15. Biology 15/16 (lab), Biology 25/26 (lab).

UPPER DIVISION

SPORT AND RECREATION MANAGEMENT
This emphasis serves students interested in leadership roles in the fields of sport, fitness, and athletics. Coursework provides the philosophical grounding and administrative skills necessary for success in these domains.

Students in the sport and recreation management track are required to complete the following coursework:

LOWER DIVISION
Kinesiology 2, three different Kinesiology activity classes (in addition to Kinesiology 2), Kinesiology 10, 12, 15. Accounting 1, Economics 3.

UPPER DIVISION
Curriculum Kinesiology

HEALTH AND HUMAN PERFORMANCE
This is a course of study constructed to meet the needs of students with varied career and graduate school goals, e.g., sports medicine, exercise physiology, health education, community health, and physical therapy. The interdisciplinary coursework is designed in consultation with a faculty advisor to meet the individual interests of the student.

Students in the health and human performance track are required to complete the following coursework:

LOWER DIVISION
Kinesiology 10, 15, Biology 15/16 (lab), Biology 25/26 (lab).

UPPER DIVISION
Kinesiology 110 and one of the following: Kinesiology 111, 112, or 114.

A minimum of six additional upper-division courses are required. These courses are selected from the offerings of the Department of Kinesiology and those of other academic units such as: anthropology and sociology, biology, chemistry, communication, and physics and astronomy. These classes should be relevant to the health and human performance emphasis. Coursework samples are available from the Department of Kinesiology.

MINOR REQUIREMENTS
There are five areas of study that lead to a kinesiology minor:

COACHING EMPHASIS

SPORT & RECREATION MANAGEMENT EMPHASIS
Kinesiology 10, 105, 108, 111, 114, 121.

ATHLETIC TRAINING EMPHASIS
Kinesiology 15, 102, 109, 110, 112, 119.

HEALTH EDUCATION EMPHASIS
Kinesiology 10, 12, 107, 109, 110, 118.

TEACHING CONCEPTS EMPHASIS
Kinesiology 10, 11, 103, 116, 117, 125.

COURSES

LOWER DIVISION

2 First Aid and CPR (25)
The study and practice of first aid and cardiac pulmonary resuscitation (CPR) methods and techniques. The course provides certification in American Red Cross Standard First Aid and CPR.

4–8 Activity Courses (25)
The Department of Kinesiology offers a broad range of exercise and sport classes. Course content is directed toward developing in students: 1) a knowledge base relative to personal health that will encourage regular and safe exercise over the lifespan, and 2) the requisite motor skills to enable enjoyable participation in various sport modes.

4 Aquatics
Instruction and participation in activities such as lifesaving, swimming, and water polo.

5 Dance
Instruction and participation in various dance forms: ballet, jazz, modern, tap, and ballet folklorico.

6 Individual/Dual Activities
Instruction and participation in activities such as archery, badminton, golf, gymnastics, martial arts, personal defense, racquetball, and tennis.

7 Team Activities
Instruction and participation in activities such as basketball, softball, indoor soccer, outdoor soccer, and volleyball.

8 Fitness Activities
Instruction and participation in activities such as aerobics, body conditioning, fitness walking, circuit training, and weight training.

10 Introduction to Kinesiology
A course designed to introduce students to the philosophical positions and sociological paradigms that concern the human body in motion. Particular attention is devoted to the corporeal actions known as play, game, sport, athletics, and exercise. Students are familiarized with the field’s subdisciplines and career opportunities.

11 Concepts of Movement
A course designed to provide an understanding of motor skill analysis presentation. Specific topics include: growth and motor development, motor learning concepts, biomechanical analysis, theories of learning, and designing movement experiences and tasks.

12 Health and Fitness Education
A survey course that examines the major components of personal health. Topics include: tobacco use, alcohol abuse, STDs, unintentional injuries, and the consequences of sedentary lifestyles. Physical activity and its link to the concept of “wellness” over the lifespan is a major focus. (Satisfies California State Teaching Credential requirement.)
14 Outdoor Education
Students analyze the present uses of the out-of-doors by local, state, and federal government agencies; educational institutions; and the for-profit private sector. Class participants develop the skills necessary to live comfortably and move efficiently in the wilderness. A particular emphasis of the course is environmental conservation. Students will be exposed to the principles of risk and safety management and wilderness first aid.

15 Measurement and Evaluation in Kinesiology
A study of measurement techniques utilized in the field’s subdisciplines. The theory and statistical techniques of test interpretation are also studied. Investigation into the field’s research literature is a major component of the course. Prerequisite: Kinesiology 10.

UPPER DIVISION

102 Structural Biomechanics
The study of human movement from the point of view of the physical sciences. Fundamentals of human motion are examined from the anatomical, physiological, and biomechanical perspectives with an emphasis on motor skill application. Prerequisites: Kinesiology 10 and 15 (or for non-majors, permission of the instructor), Biology 15, 16.

103 Physical Education in the Elementary School
A study of the theoretical basis for designing movement experiences for children of elementary-school age. Special emphasis on recent trends in movement dealing with the elementary-school child. Satisfies Montessori Program requirements.

105 Facility Planning and Management
A study of the organization and supervision of recreation facilities and leisure practices and trends. Specific attention is paid to programming in educational institutions and municipalities. Prerequisite: Kinesiology 10 and 15 (or for non-majors, permission of the instructor).

107 Nutrition for Sport and Physical Activity
This course integrates the scientific foundations of nutrition and exercise. Special topics include optimizing physical fitness and performance through diet, the use of ergogenic aids, weight loss and gain techniques, eating disorders, and sport-specific nutrition planning. Prerequisite: Kinesiology 10 and 15.

108 Legal and Administrative Issues
A course designed to consider administrative policies related to the directing and organizing of physical education, intramural, and athletic programs. Topics include management procedures, laws and legal concerns, and the promoting and justifying of the programs. Prerequisite: Kinesiology 10 and 15 (or for non-majors, permission of the instructor).

109 Care and Prevention of Athletic Injuries
A course of study that examines the prevention, evaluation, and treatment of athletic injuries. This class is particularly useful for students interested in careers in athletic training and physical therapy. The athletic training needs of the school-based physical educator are also a focus. Prerequisites: Kinesiology 10 and 15 (or for non-majors, permission of the instructor), Biology 15, 16.

110 Exercise Physiology
A study of physiological parameters and mechanisms that determine the adaptations of the physiological systems of humans in response to exercise; i.e., exercise metabolism, work, and fatigue; development of strength and flexibility; cardiorespiratory effects of exercise and training; sport activity in extreme environmental conditions — high altitudes, heat, cold; measurement of factors determining sport fitness. Prerequisites: Kinesiology 10 and 15 (or for non-majors, permission of the instructor).

111 History of Health, Sport & Exercise
A survey of the physical culture of selected past civilizations, including Sumeria, Egypt, Greece, Rome, and Mesoamerica. The course examines the rise of “modern” mass sport in Britain and North America, the modern Olympic Games, American intercollegiate athletics, and the roles of U.S. women and minorities in sport. Prerequisite: Kinesiology 10 and 15 (or for non-majors, permission of the instructor), upper-division standing.

112 Sport and Exercise Psychology
This course is an introduction to the foundations of psychology in the sport and physical activity domain. Students examine current theories, empirical research, and practices related to sport and exercise psychology. Topics include motivation, group dynamics, leadership, performance enhancement, exercise adherence, and moral/social development. Prerequisite: Kinesiology 10 and 15 (or for non-majors, permission of the instructor).

114 Sociology of Sport and Physical Activity
An examination of a variety of contemporary social issues as they relate to sport and physical activity from a multitude of different sociological perspectives. Particular attention is paid to how sport functions as a socializing agency and interacts with other primary social institutions to both perpetuate societal value sets and create social change. Prerequisite: Kinesiology 10 and 15 (or for non-majors, permission of the instructor), upper-division standing.
115 Fitness Assessment and Exercise Prescription
A course of study that examines the principles of exercise prescription and physical fitness assessment. This course includes the use of field and laboratory tests to appraise physical fitness levels, designs of individualized physical fitness programs, and evaluation of exercise programs. Prerequisite: Kinesiology 110 (or for non-majors, permission of the instructor).

116 Analysis of Teaching Concepts
An in-depth analysis of selected concepts in the teaching-learning process in physical education. Professional literature is discussed, evaluated, and related to actual learning environments.

117 Human Motor Performance
A neuropsychological approach to understanding the sensory and perceptual mechanisms that allow for efficient physical activity. An examination of various factors that affect human development, motor performance, and motor learning (motor development, timing, practice, transfer, etc.). Prerequisite: Kinesiology 10 and 15 (or for non-majors, permission of the instructor).

118 Issues in Community Health
Investigates the history, concepts, and institutions that constitute the field of community health. A particular focus is the urban situation in the United States. The demographic, socio-economic, and epidemiological conditions of our cities are examined. Issues around interpersonal violence, the high cost of health care, and unhealthy behaviors will be examined. Students are expected to experience and report on the operations of an on or off-campus community health institution.

119 Therapeutic Exercise and Physical Therapy Modalities
The study of concepts and current methods of rehabilitation in sports medicine. Concepts include: flexibility, muscular strength and endurance, plyometrics, closed-kinetic chain exercise, and functional progression in rehabilitation. Further topics include uses of cryotherapy, hydrotherapy, thermal agents, electrical agents, mechanical agents. A problem-solving approach to their uses is central to the course. The class visits local physical therapy clinics. Prerequisites: Biology 15, 16; Kinesiology 10 and 15 (or for non-majors, permission of the instructor).

120 Advanced Athletic Training
A class in advanced recognition and evaluation of athletic injuries. This course covers general evaluation techniques applicable to all injuries and studies the most common injuries to each body area. Other topics include neurological signs and symptoms, emergency procedures, and guidelines for referral to a physician. Prerequisites: Biology 15, 16; Kinesiology 10 and 15 (or for non-majors, permission of the instructor).

121 Sport and Recreation Management
Analyzes the concepts and methods of administering sport and recreation service organizations. Course components include general management, legislative authorization and controls, financial management and accountability, human resource management, risk management, effective programming, and facility design and operations. Prerequisite: Kinesiology 10 and 15 (or for non-majors, permission of the instructor).

123 Theory and Analysis of Team Sports
Designed to give students an understanding of skill techniques, skill analysis, and the development of appropriate practice progressions in basketball, flag football, soccer, ultimate frisbee, and volleyball. Field experience/observations are required throughout the course.

124 Theory and Analysis of Lifetime Sports
Designed to give students an understanding of skill techniques, skill analysis, and the development of appropriate practice progressions in tennis, badminton, golf, aquatics, and outdoor education activities. Field experience/observations are required throughout the course.

125 Theory and Analysis of Fitness and Movement
This course teaches students to utilize scientific principles in designing programs that develop flexibility, muscular strength and endurance, and cardiovascular endurance. The course also develops an understanding of requisite skill techniques, skill analysis, and the development of appropriate practice progressions for fundamental movement skills, rhythmic activities, tumbling/educational gymnastics, and personal defense. Field experience/observations are required throughout the course.

195 Internship
Work practice in the field of physical education, sport management, recreation, or sports medicine. The internship experience is planned in close consultation with and supervised by a Department of Kinesiology faculty member. Prerequisite: Kinesiology 10 and 15.

197 Special Study
An independent study or research course for students whose needs are not met by the Department of Kinesiology’s regular class offerings. Permission of instructor and department chair are required. Prerequisite: Kinesiology 10 and 15.

199 Special Study—Honors
An independent study or research course for upper-division majors with a B average or better. Permission of instructor and department chair are required. Prerequisite: Kinesiology 10 and 15.

The January Term
Faculty members from the Department of Kinesiology have taught a broad range of courses in the January Term. These elective courses have included The Yosemite Experience, Women in Sport and Culture, Outdoor Education, and The Quest for Optimal Wellness. Select activity courses are offered in every January Term.

MASTER OF KINESIOLOGY IN SPORT STUDIES
The Department of Kinesiology offers a Master of Arts degree in sport studies. At the intellectual center of our program is the study of human beings engaged in physical activity. The curriculum is designed to assure that graduate students are exposed to classical and contemporary knowledge in the component areas of the field. The liberal arts tradition of Saint Mary’s College is reflected in the program’s seminar-style classes, a commitment to the development of responsible independent thought and ethical action, and attention to student needs.

The program is primarily summer-based. Graduate students attend three-six-week summer sessions (beginning in June each year) and two regular-semester evening classes. Thirty units of coursework are required before students qualify to take the comprehensive examinations (offered at the end of each summer session). A thesis option is also available.
LEARNING OUTCOMES
Upon completion of the graduate program, students will be able to:

• **IDENTIFY** and explain relevant theories, research, and practices in the disciplines of psychology, sociology, philosophy, law, administration, and physiology as they relate to sport and physical education.

• **DISTINGUISH** between poor and good research in the above-mentioned subdisciplines.

• **DESIGN** research studies to address important questions in each of the subdisciplines within kinesiology.

• **DEMONSTRATE** the necessary library research skills and computer literacy in a review of literature on a chosen topic for each subdiscipline.

• **RECOGNIZE** and utilize effective leadership practices.

• **ANALYZE** critically various philosophical perspectives on moral/ethical issues.

• **DEMONSTRATE** mastery of the law as it relates to the profession.

• **DESIGN** effective and efficient physical training regimens that incorporate psychology, physiology, and motor learning principles.

• **IDENTIFY** and reflect upon specific values and beliefs that are important to personal success in their chosen career.

• **EVALUATE** standardized tests in the field (cognitive, affective, physical, and psychomotor) and administer these tests when appropriate.

• **DEMONSTRATE** effective communication skills—both written and verbal.

GRADUATE PROGRAM CURRICULUM

280 Colloquium (every summer)
During the first week of each summer session, a group of leading scholars and professionals is invited to campus to address the department’s graduate students. The four-day colloquium focuses on one of the following contemporary issues in our field:

• Females in exercise and sport

• Improving human performance

• Ethnicity and race as factors in the college athletic experience

• Character development through sport and physical education

200 Introduction to Graduate Study and Research (first-summer course)
This course is an introduction to science and research in kinesiology. It is designed to foster an understanding of the research employed in the subdisciplines. It is also intended to prepare the student to write comprehensive literature reviews. Ethical issues in research are discussed, the qualities of good research are reviewed, and students learn how to critically analyze the empirical research in our field.

205 Philosophical Foundations of Kinesiology (first-summer course)
This course is an introduction to the basic foundations of philosophy as they relate to the sport and physical activity domain. The course is designed to promote an understanding of the nature of philosophy and the major schools of philosophical thought. Topics include the importance of philosophy to physical education and athletics; various teaching and coaching philosophies; ethical issues in sport and physical activity (e.g., drug use); and close examinations of contemporary social issues associated with race, ethnicity, and gender.

230 Supervision and Legal Aspects (second-summer course)
This course focuses on proactive risk management for teachers, coaches, and administrators that will minimize their organizations’ legal liability. Topics include an overview of the legal system; tort liability through negligence in supervision; facility care and maintenance; and hiring. These topics will be examined primarily in the context of the case law in California courts.

270 Psychological Analysis of Sport and Exercise (second-summer course)
This course is an exploration of the psycho-social dimensions of physical activity. Current theories and empirical research are discussed in an effort to understand the mental aspects of sport and exercise. Topics include goal orientation, motivational climate, self-esteem, arousal regulation, performance-enhancement techniques, leadership, and character development through sport.

220 Administration of Kinesiology (third-summer course)
This course is designed to give students an understanding and appreciation of the administrative process as it applies to school and college physical education and athletic programs. Current literature in the areas of business and management are discussed. Topics include developing administrative styles; diversity issues as they relate to effective management of human resources; revenue acquisition and budget development; media relations; intrarogorganizational competition; sponsorship acquisition and retention; marketing; and event management.

275 Applied Exercise Physiology (third-summer course)
This course is a study of the physiological adaptations that the body makes to exercise. Current theories and empirical research are applied to the response of acute exercise and the chronic adaptations that occur in the metabolic, cardio-respiratory and musculoskeletal systems. This provides the basis for constructing suitable conditioning programs for sport and exercise participation. In-class laboratories are designed to present measurement techniques and evaluate physical fitness.

201c Comprehensive Examinations (end of third summer)
A full day culminating experience for the graduate program’s students.

224 Human Motor Performance (evening course)
This course is an overview of the neurophysiological foundations of motor behavior in the sport and physical activity domain. Current theories, empirical research, and applied practices in the areas of coaching, psychology, pedagogy, and motor-skill development are discussed. Topics include motor program theory, facilitating an ideal learning environment, and the roles of the learner and the instructor in motor-skill acquisition.

278 Sociohistorical Aspects of Health, Sport, and Leisure (evening course)
This course is an overview of the neurophysiological foundations of motor behavior in the sport and physical activity domain. Current theories, empirical research, and applied practices in the areas of coaching, psychology, pedagogy, and motor-skill development are discussed. Topics include motor program theory, facilitating an ideal learning environment, and the roles of the learner and the instructor in motor-skill acquisition.

201c Comprehensive Examinations (end of third summer)
A full day culminating experience for the graduate program’s students.
LIBERAL & CIVIC STUDIES PROGRAM

Students in the Liberal and Civic Studies (L&CS) Program take four L&CS core courses. All other courses required for this program are offered by other academic departments of the College.

The L&CS Program is a broad integrative course of study that seeks the education of the whole person. In addition to traditional academic goals, the program emphasizes cultural awareness, civic and environmental responsibility, self-assessment, ethical values, critical inquiry, and active citizenship. The arts, academics, and social issues are integrated through service-learning experiences and coursework.

As an interdisciplinary program, L&CS fosters the development of a disciplined mind, one that is aware of the great ideas of the past, examines ideas across disciplines, and strives to understand the important issues of our times from multiple perspectives. In support of the Lasallian mission of Saint Mary’s College, L&CS also promotes compassionate understanding of others and a sense of community that bridges diverse cultures and transcends national boundaries. The L&CS governing board believes that this program is particularly conducive to the development of well-educated individuals who are uniquely prepared to take on the role of responsible citizenship in a democracy.

The three guiding principles of the L&CS Program are breadth, depth, and integration. Breadth is provided through a balance of required and optional courses in the humanities, social sciences, natural sciences, mathematics, language, and kinesiology; depth is provided through a chosen minor/concentration in one of Saint Mary’s departmental disciplines; integration is provided through the eight key courses required of all L&CS students: four Collegiate Seminar courses and four L&CS courses (Culture and Civic Responsibility, Environmental Responsibility in a Global Community, Assessment and Portfolio [.25], and Education, Democracy, and Active Citizenship).

To fulfill its mission, the L&CS Program has three different tracks which are described below.

CIVIC TRACK

This four-year track is for those undergraduate students who are interested in a broad and general liberal arts program. The civic track in the Liberal & Civic Studies Program is an excellent choice for students who wish to pursue a creative and rigorous program of interdisciplinary studies as preparation for a future career in law, social work, public service, counseling, communications, business, or for future academic work at the graduate level.

EDUCATION TRACK

The education track is a four-year program designed for students who wish to become elementary teachers. The students in this track are provided with knowledge in a variety of disciplines to support their subject matter preparation and completion of the CSET (California Subject Examinations for Teachers). At the end of the four years, students earn a B.A. in liberal and civic studies and continue their preparation for teaching by entering a credential program of their choice.

TEACHERS FOR TOMORROW

Incoming freshman students and qualifying sophomores who are committed to becoming elementary teachers, may apply for the Teachers for Tomorrow (TFT) Program. This special program enables students to integrate education coursework and field experiences in elementary schools with their undergraduate course of study. Students proceed through the TFT Program as cohort groups, taking many of their courses and having all of their field experiences with other members of their cohort.

TFT students fulfill most of the same requirements as students of the L&CS Program education track; additional courses in education and field experiences replace some of the elective courses they might normally take. They earn their bachelor’s degree at the end of four years and their multiple subject credential at the end of their fifth year. Students may also pursue a Masters of Arts in Teaching (MAT) degree in their fifth year at Saint Mary’s by fulfilling additional coursework and research components. To be admitted to the program, incoming freshman students must demonstrate a strong academic record in high school, including at least three years of successful study of a single foreign language. Sophomores applying to the TFT Program must also demonstrate a strong academic record in their undergraduate work and the ability to complete program requirements within the normal graduation time frame. Students are encouraged to complete foreign language requirements before admission.

Prospective students must apply separately to the TFT Program by contacting the Liberal and Civic Studies Program to obtain an application.
FACULTY
Kathryn Porter, Ph.D., Professor of Mathematics and Computer Science, Director of the L&CS Program
Gloria Eive, M.A., Adjunct, L&CS and Collegiate Seminar
Robert Gardner, M.A., Adjunct, L&CS and Collegiate Seminar
Marsha Newman, Ph.D., Professor of L&CS
Deepak Sawhney, Ph.D., Associate Professor of L&CS

GOVERNING BOARD OF THE LIBERAL & CIVIC STUDIES PROGRAM
Stephan J. Bachofer, Chemistry
Gerald J. Brunetti, Education
Patricia Chambers, Montessori Thought
Nancy Dulberg, Education
Gloria Eive, Liberal & Civic Studies
James R. Farris, Anthropology
Robert Gardner, Collegiate Seminar Program
Dana Herrera, Anthropology
Brother Charles Hilken, History
Jeannine M. King, English
Susan Marston, Education
Marsha Newman, Liberal & Civic Studies
Keith H. Ogawa, Psychology
Kathryn F. Porter, Mathematics
Deepak Sawhney, Liberal & Civic Studies
Lori Spicher, Modern Languages

LEARNING OUTCOMES
The L&CS Program is committed to developing in its students the following understandings, abilities, and habits of mind:

- HABITS of critical inquiry that promote the understanding of written and visual texts and important issues in the larger society.
- AN AWARENESS of the interrelatedness of diverse fields of study.
- AN UNDERSTANDING of the interrelatedness of human communities and of the racial, ethnic, class, and gender diversity of the people who occupy them. Self-awareness, including an understanding of the relationship between personal and social values, and the implications of these values in the realm of action.
- AN AWARENESS of issues related to the natural environment and of humanity’s role in that environment.
- AN AWARENESS of the role of the arts in expressing human uniqueness and sameness.
- DEMOCRATIC skills of written and verbal expression, as well as cooperation, negotiation, and goal-setting.
- AN APPRECIATION of education as a tool of individual and social progress.
- AN UNDERSTANDING of the connections between personal, local, and global issues.
- AN UNDERSTANDING of the powers of personal choice and of individual responsibility.

MAJOR REQUIREMENTS
L&CS 121 Culture & Civic Responsibility
L&CS 122 Environmental Responsibility in a Global Community
L&CS 124 Assessment and Portfolio (.25 credit)
L&CS 130 Democracy & Active Citizenship OR
L&CS 131 Education, Democracy & Active Citizenship

In the depth and breadth requirements listed below, education track students sometimes have specific course requirements, as noted, but may make certain substitutions with the approval of their advisors and the program director. TFT students follow the TFT track requirements.

English: English 4, 5

Religious Studies: One lower-division and one upper-division course.

January Term: A January Term course is required of all students for each academic year in attendance at Saint Mary’s College. During one January Term, students preparing to be elementary teachers are required to take Education 122: Field Experience in Education. Prerequisite: L&CS 121.

Anthropology or Sociology: Any course that has a diversity focus (race, gender, global).

Fine or Performing Arts: One course in the history, philosophy, or aesthetics of art, drama, dance, or music; one studio production or presentation course (may be for .25 credit).

Foreign Language: Students are required to complete sufficient college-level courses in a language other than English to achieve demonstrable intermediate-level competency (equivalent to four terms of college-level work). Students with native ability in a language other than English may have this requirement waived by demonstrating oral, written, and reading skills equivalent to at least intermediate college-level work (four completed terms).

Kinesiology: One full-credit course. Education and TFT track students take Kinesiology 103: Physical Education in the Elementary School.

History: Any full-credit course. Students preparing to be elementary teachers take United States history.

Life Science: One course and lab. Students preparing to be elementary teachers take Biology 50-51: General Biology

Mathematics: Two courses in mathematics or computer science. Students preparing to be elementary teachers take Mathematics 1 and 101, or Mathematics 27 and 101 or Mathematics 27 and 28.

Physical Science: One course and lab.

Psychology: Psychology 10 plus Psychology 139 or Education 144. TFT students are required to take Education 144. Students who minor in psychology may take Psychology 1 and 140 instead of Psychology 10 and 139.
Curriculum Liberal & Civic Studies Program

MINOR

Students select a minor from established departmental minors or approved interdisciplinary minors. All L&CS students must complete a minimum of four upper-division courses in their minor even if the department requires fewer than four. Whenever possible, the minor must include a course with a multicultural or global focus.

Students should plan their minor with the assistance of their faculty advisor.

For more information on the Liberal & Civic Studies Program, please see our website at www.stmarys-ca.edu/liberal_civic/

PREREQUISITE GRADE

Any course listed in this program with a prerequisite assumes a grade of C– or better in the prerequisite course.

COURSES

121 Culture and Civic Responsibility

This course is the first required upper-division course that students take after they have declared liberal and civic studies as their program of study. The course introduces students to program themes, including “the Great Conversation,” diversity (issues of race, class, and gender), the arts, and service learning. Lectures and discussions are complimented by a cultural workshop, a visit to Glide Memorial Church, and attendance at art events. Students are required to devote time each week to a service-learning project, write essays, intellectual integrations, and a self-assessment. Class sessions are supplemented by a biweekly activity lab. Prerequisites: English 4, and level 2 of foreign language.

122 Environmental Responsibility in a Global Community

Taken the semester immediately following L&CS 121 whenever possible, this course focuses on the natural world in which we live, and the complex interrelationship between human activities, the values which determine these activities, and behavior toward our environment. Different societies’ belief systems and attitudes toward the natural world are examined, as well as the holistic interconnectedness of our physical, biological, and social structures, with the goal of identifying environmental issues and solutions. Students are required to devote time each week to a service-learning project, write essays, intellectual integrations, and a self-assessment. Class sessions are supplemented by a biweekly activity lab. Prerequisites: L&CS 121, English 5, Collegiate Seminar 20/130.

124 Assessment and Portfolio (25)

Students take this course in the semester immediately before L&CS 130/131. The course, which consists of eight sessions, assists students in preparing their portfolios and themselves for their assessment interview which occurs in the latter part of the semester. Prerequisite: L&CS 122.

126 Praxis: Art (25)

127 Praxis: Community Service (25)

128 Praxis: Environmental and Public Policy (25)

129 Praxis: REACH Program (25)

The Praxis courses are a series of four optional, .25-credit courses. Offered every semester, these courses enable students to involve themselves in explorations of the arts, community service, or environmental or public policy. In addition to field work, (e.g., attending plays or museums, doing community service, working in student government, environmental projects, or in a political campaign, students meet to discuss their experiences and produce a culminating paper or project. These courses may be repeated for credit as content varies.

130 Democracy and Active Citizenship

This is the capstone course of the Liberal and Civic Studies Program. It involves a careful examination of the assumptions upon which democracy is based and the work of citizen groups who are addressing America’s social problems, from education and government to human services, jobs, and the media. The course also examines the possible challenges that the current generation will face in the future. Students complete a research project that is designed to integrate their minors with their service-learning work, and culminates in a formal paper and group presentation to the SMC community. This course has a biweekly activity lab. Prerequisites: L&CS 124 and the senior assessment interview.

131 Education, Democracy, and Active Citizenship

This is the capstone course of the L&CS Program for the students in the Teachers for Tomorrow Program. As in L&CS 130, democracy and citizenship are examined with the unique challenges that the current generation will face in the future. Students are required to devote time each week to a service-learning project, write essays, intellectual integrations, and a self-assessment. Class sessions are supplemented by a biweekly activity lab. Prerequisites: L&CS 124 and the senior assessment interview.

192 Text-Based Discussion in the Elementary Classroom (25)

This is a field-based course designed for students enrolled in the Teachers for Tomorrow Program. This course trains and gives students hands-on experience in facilitating seminar-style, text-based discussion groups for young children. After two introductory training workshops, students will first observe and then co-lead such discussion groups on-site in an elementary- or middle-school classroom. Students will learn about and practice an educational style that develops critical skills, speaking, reading, and thinking in open discussion. Prerequisite: Collegiate Seminar 122 or 131.
GRADUATE LIBERAL STUDIES PROGRAM

The Graduate Liberal Studies Program at Saint Mary’s College extends the Catholic, Lasallian, and Liberal Arts mission to part-time adult students who wish to earn a Master of Arts degree. A primary aim of the program is to liberate the student’s mind and heart to explore the meanings of existence, to seek fundamental principles, and to live in the light of discovered truths. The program’s interdisciplinary curriculum draws from disciplines as diverse as literature, the arts, philosophy, theology, and the natural and social sciences, and it is intended to help students achieve an integration of perspectives that goes beyond conventional disciplinary boundaries. While the program will be valuable to students in any career path, its ultimate intent is to provide students with an opportunity for personal intellectual enrichment in the liberal arts tradition. The program’s faculty members hope that the curriculum will empower students to think clearly and articulate ideas effectively.

The degree of Master of Arts in Liberal Studies requires completion of 36 units including a six-unit final project. The curriculum consists of 10 theme-based courses plus the Integrating Seminar. To satisfy degree requirements, students must complete the Introductory Seminar, the Integrating Seminar, eight three-unit courses from the Graduate Liberal Studies curriculum, and the final project. In place of one of the eight courses, students may elect to take a directed three-unit Independent Study Course that can be used for travel or scholarly research in connection with the final project or other special interest. The Integrating Colloquium provides a capstone experience in which students synthesize what they have learned throughout the curriculum and focus their interests in the topic they choose to explore in a final project. The final project may take several forms, including a research thesis, a creative work, or an applied project. Using the seminar method that is the hallmark of a Saint Mary’s education, the curriculum strengthens the student’s capacity for critical thinking, ethical inquiry, and interdisciplinary problem solving. Seminars are currently held on weekday evenings on campus in Moraga and average between 10 and 12 students. (Note: a new Saturday format is being designed and is not offered to new students for the fall 2007 term.) Our faculty members are drawn from departments across the College and provide to our students a truly interdisciplinary educational experience.

CURRICULUM

LIBST 201 Introductory Seminar: It’s About Time
LIBST 202 The Self: Visions of the Self
LIBST 203 Nature: Perspectives on Nature
LIBST 204 Society: The Quest for Community: Rethinking the American Dream
LIBST 205 The Sacred: Ways of Being Religious
LIBST 206 Ways of Knowing: Interpretive Frameworks
LIBST 207 Ethics: Work, Leisure, and the Good Life
LIBST 208 Crossing Boundaries: Race, Gender, Class, and the American Experience
LIBST 209 The Technological Age: Science, Technology, and Human Values
LIBST 210 The Creative Process: Imaginative Living in a Complex Age
LIBST 211 The Integrating Seminar: Your Capstone Experience
LIBST 212 The Final Project

For information on the Master of Arts in Liberal Studies, write Graduate Liberal Studies Program, P.O. Box 4647, Moraga, CA 94575-4647, or phone (925) 631-4021.
Curriculum Mathematics and Computer Science

MATHEMATICS AND COMPUTER SCIENCE

Mathematics is a liberal art fundamental to a true education. It trains students in analytical thinking, and courses are offered with application to the natural and social sciences. Graduates of the department are active in an extraordinarily wide range of careers. The department offers both an arts and a science degree. There is a degree program for prospective secondary teachers and a degree program with a concentration in computer science.

A minor in mathematics and split majors with other disciplines are available.

FACULTY
Kathryn F. Porter, Ph.D., Professor, Chair
Benjamin Davis, Ph.D., Associate Professor
Charles R. Hamaker, Ph.D., Associate Professor
Chris Jones, Ph.D., Associate Professor
Brother Brendan Kneale, FSC, M.A., M.S., Associate Professor Emeritus
Adam Lucas, Ph.D., Assistant Professor
Lidia R. Luquet, Ph.D., Associate Professor
Michael Nathanson, Ph.D., Assistant Professor
Brother Raphael Patton, FSC, Ph.D., Professor
Jane R. Sangwine-Yager, Ph.D., Professor Emeritus
Jim Sauerberg, Ph.D., Professor

LEARNING OUTCOMES
When they have completed a mathematics major, students will be able to:
• COMMUNICATE mathematical ideas and concepts correctly and clearly in both oral and written forms using mathematical reasoning and terminology and symbolic representation.
• PREPARE and undertake scholarly investigations and activities and take responsibility for pursuing their own learning.
• FIND and use appropriate mathematical literature resources.
• DETERMINE when and how to apply technology appropriately.
• DEMONSTRATE knowledge of a variety of applications of mathematics both within the mathematical field and to other academic areas of study.
• APPRECIATE the breadth and beauty of mathematics as well as the intellectual rigor involved.
• OBTAIN immediate employment or entrance to graduate or certification programs.

MAJOR REQUIREMENTS
A student wishing to major in mathematics should have a strong interest in the field and normally a background of four years of high school mathematics (two years of algebra, one year of geometry, and one year of analysis or equivalent). Students majoring in science should be particularly alert to the language proficiency requirement (see Program of Study, p. 39). Mathematics majors fulfill their Area B mathematics requirement with the courses required for the major.

LOWER DIVISION
Mathematics 27, 28, 29, 30. Computer Science 21 and 102 are required for majors concentrating in computer science.

UPPER DIVISION
There are eight upper-division mathematics courses required, including Math 111-112, Math 150, and Math 193. Math 101 may not be included towards the major.

A student wishing to concentrate in computer science must take nine upper division departmental courses (excluding Math 101) including the four listed above, either Math 128 or Math 140, Computer Science 102, and two additional upper division computer science courses. A concentration in computer science should be declared by the end of the sophomore year and upon completion of Computer Science 102.

A candidate for the Bachelor of Science degree must take in addition either Physics 1-4 and two further courses from the following disciplines: biology, chemistry, computer science (except Computer Science 1), and physics; or Chemistry 8-11 and two further courses from the same list of disciplines. Students should contact the mathematics and computer science department for descriptions of split majors with mathematics.

TEACHING CREDENTIAL
All students in California planning to enroll in a teaching credential program in mathematics after earning their undergraduate degree are required to demonstrate subject matter competency in mathematics prior to admission to a credential program. Students at Saint Mary’s College exhibit this competency by taking and passing the CSET (California Subject Exam for Teachers) in mathematics. Students interested in becoming a secondary mathematics teacher are advised to complete the following courses to prepare for the CSET while fulfilling the mathematics major.
Mathematics and Computer Science Curriculum

LOWER DIVISION

Math 27, 28, 29, 30

UPPER DIVISION


The California Commission on Teacher Credentialing (CCTC) also requires students to obtain “pre-professional field experience” before entering a credential program. This requirement is satisfied by the course EDUC 122: Field Experience, offered in the January Term at SMC. Students are required to contact the School of Education in September of their sophomore or junior year to meet with the faculty member teaching the section of EDUC 122 designated for secondary education. Students should also speak with a representative of the School of Education to learn of any other requirements of the state of California for prospective secondary teachers.

SUGGESTED MATHEMATICS MAJOR PROGRAM

A suggested four-year program of study for a major in mathematics is available from any department member. Freshmen should take Math 27-28. Candidates for the Bachelor of Science should enroll in Physics 1, 2, 3, 4 or Chemistry 8, 9, 10, 11 in the freshman year. Failure to take these courses in the freshman year may make it impossible to complete the major in four years. Students wishing to concentrate in computer science may take Computer Science 21, 102 in the freshman or sophomore year.

MINOR REQUIREMENTS

The minor in mathematics requires Math 27, 28 (Math 29 and/or Math 30 are recommended), and three upper division courses in mathematics, excluding Math 101.

PREREQUISITE GRADE

Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

COURSES

LOWER DIVISION

1. Fundamental Mathematical Concepts I

This course provides prospective teachers with part of the background needed for teaching the content of contemporary elementary mathematics programs. The topics include problem solving, the historical development of major mathematical concepts, sets and functions, rational and irrational numbers and their operations, and number theory. Prerequisites: One year each of high school algebra I, II, and geometry or equivalent. * Does not satisfy an Area B mathematics requirement. Offered every fall.

3. Finite Mathematics

Topics selected from linear equations and matrices, linear programming, Markov chains, game theory, and graphs. The emphasis is on applications to life, management, and social sciences. Prerequisites: One year each of high school algebra I, II, and geometry or equivalent. Offered every fall.

4. Introduction to Probability and Statistics

Combinations and permutations, descriptive and inferential statistics, probability and probability distributions, hypothesis testing, regression, and correlation. Applications in a variety of practical settings. This course may not be taken for credit in addition to Business Administration 40 or Psychology 3. Prerequisites: One year each of high school algebra I, II, and geometry or equivalent. Offered every semester.

10. The Art and Practice of Mathematics

A reflective examination of basic mathematical ideas and patterns. Through participation in the discovery and development of mathematical ideas the student will view the subject as a vehicle for human creativity. The course traces the historical and contemporary role of appropriate mathematical topics. Prerequisites: One year each of high school algebra I, II, and geometry; English 5 and Collegiate Seminar 20 or 120. Offered every semester.

13-14. Calculus with Elementary Functions I, II

A survey of polynomial, trigonometric, logarithmic and exponential functions combined with differential calculus of functions of one variable and mathematical reasoning. This calculus sequence is intended for students who need to strengthen their precalculus skills. The sequence Math 13-14 is equivalent to Math 27. Prerequisites for Math 13: one year each of high school algebra I, II, and geometry or equivalent. Math 13 or equivalent is prerequisite to Math 14. * Math 13 alone does not satisfy an Area B mathematics requirement. Offered every fall.
Curriculum Mathematics and Computer Science

27-28 Calculus I, II
Differential and integral calculus of functions of one variable, mathematical reasoning, infinite series, and introductions to differential equations and differential calculus in several variables. Prerequisites for Math 27: one year each of high school algebra I, II, and geometry or equivalent. Math 27 or equivalent is prerequisite for Math 28. Offered every semester.

29 Calculus III
A rigorous treatment of limits for functions of one and several variables, differentiation and integration of functions of several variables, coordinate systems, vectors, line and surface integrals, Green’s, Stokes’ and the divergence theorems. Prerequisites: One year of high school trigonometry and Math 28 or equivalent. Offered every fall.

30 Linear Algebra with Logic
Propositional logic, matrices, simultaneous linear equations, linear transformations, vector spaces, bases, determinants, eigenvalues, and Gram-Schmidt orthonormalization. This course emphasizes techniques of mathematical proof. Prerequisites: Any one of these pairs: Math 27-28, Math 27 and CS 21; CS 21 and CS 102 or equivalent. Offered every spring.

UPPER DIVISION

Math 101, 134 and 193 are offered annually, while the other upper division courses are offered on a biannual rotation. Contact the departmental chair for the schedule.

101 Fundamental Mathematical Concepts II
This course is a continuation of Math I and focuses on geometry and measurement, patterns, probability, descriptive statistics, and introductory computer concepts using the computer language LOGO. Prerequisites: One year each of high school algebra I, II, and geometry or equivalent: Math I or 27 or equivalent.

* Does not satisfy an Area B math requirement.

111-112 Abstract Algebra I, II
Groups, rings, modules, vector spaces, fields, and Galois theory. Prerequisites for Math 111: Math 29 and 30 or equivalent. Math 111 is prerequisite to Math 112.

113 Probability and Statistics
Discrete and continuous random variables, expectation and variance, independence, distributions, and the Central Limit Theorem. Survey of statistical methods: estimation, sampling, hypothesis testing, linear regression, and confidence intervals. Prerequisites: Math 28 or equivalent.

115 Number Theory
Results studied include the Fundamental Theorem of Arithmetic, the Euclidean algorithm, Fermat’s Little Theorem and Euler’s generalization, Diophantine equations and the Law of Quadratic Reciprocity. Prerequisites: Math 28 or equivalent.

128 Numerical Analysis
Finite differences, interpolation methods, numerical solutions to transcendental and differential equations, matrix inversion, polynomial approximations and numerical integration, includes computer methods. Prerequisites: programming ability, and Math 29 or 30 or equivalent.

130 Abstract Geometry
Selection of topics which may include projective geometry, Euclidean and affine groups and axiomatic geometry and classical problems. Prerequisites: Math 30 or equivalent.

134 Differential Equations
Ordinary differential equations, existence and uniqueness theorems, some numerical methods, Laplace transforms, series solutions, linear systems with constant coefficients. Partial differential equations, separation of variables, Fourier series. Prerequisites: Math 29 or Math 27, 28 and 30, or equivalent.

140 Combinatorics and Discrete Mathematics
This course focuses on discrete structures and their relations. Topics may include counting techniques, relations, graph theory, and logic. Prerequisites: Any one of these pairs: Math 27 and Math 28; Math 27 and CS 21; CS 21 and CS 102 or equivalent.

150 Advanced Calculus
A rigorous review of the theory of single variable calculus, topology of n-space, integration and differentiation, improper integrals, differential forms, the theorems of Stokes and Gauss. Prerequisite: Math 29 or equivalent.

160 History of Mathematics
A selection of readings and problems tracing the evolution of the field. Prerequisite: Math 28 or equivalent.

185 Complex Variables
Differentiation and integration of analytic functions of a complex variable, power series, residues, conformal mappings. Prerequisite: Math 29 or equivalent.

193 Senior Seminar
An in-depth critical examination of a topic or topics in contemporary mathematics. The course consists of directed reading, presentations, research, and the writing of a final essay under the supervision of the instructor. At the conclusion of the semester students are expected to present their work at a departmental colloquium of faculty and students. The essay is evaluated by a committee consisting of the faculty supervisor and two other faculty chosen in consultation with the student. Prerequisites: Math 111 or 150 or consent of instructor. Senior standing required.

197 Special Study
Independent research of topics not covered in listed courses. Permission of the chair is required.

199 Special Study—Honors
Independent study or research for majors with at least a B average in mathematics. Permission of the chair is required.
COMPUTER SCIENCE

The courses in computer science emphasize fundamental principles and computer structure. They introduce students to the design and applications of computer systems, and prepare students to use computers as tools in solving complex problems.

A student wishing to complete a degree involving computer science should have a strong interest in at least one area of application of computer science.

Normally, a student is expected to have a background of four years of high school mathematics (two years of algebra, one year of geometry and one year of analysis or equivalent).

LEARNING OUTCOME

When they have completed a Computer Science split major, students will be able to:
• COMMUNICATE computer science ideas and concepts correctly and clearly both in oral and written forms using scientific reasoning, terminology and symbols.
• PREPARE and undertake scholarly investigations and activities, and take responsibility for pursuing their own learning.
• FIND and use appropriate computer science literature resources.
• DETERMINE when and how to apply computer science techniques in problem solving.
• DEMONSTRATE knowledge of the connections between computer science and his or her chosen concentration.
• OBTAIN immediate employment, or entrance to graduate or certification programs.

SPLIT MAJOR REQUIREMENTS

A major involving computer science is a split major (see A Major Field of Study, p. 41, under Program of Study) with computer science as the secondary discipline, and the primary discipline one of the following: Accounting, Biology, Business Administration, Chemistry, Economics and Physics. The courses constituting the split are chosen by the student in consultation with the chairs of the involved departments.

Students completing a split major involving computer science fulfill their Area B-Mathematics requirement with the courses required as part of the major.

LOWER DIVISION

Computer Science 21 and Mathematics 27 or 30. It is highly recommended that students also take Mathematics 28. The lower division prerequisites of the primary discipline.

UPPER DIVISION

Computer Science 102. Three additional approved upper division courses in computer science. (Math 128 or Math 140, but not both, may be substituted for one of these upper division courses).

MINOR REQUIREMENTS

The requirements for the minor are Computer Science 21-102, Mathematics 27, either Mathematics 28 or 30 and three additional upper division courses.)
Curriculum Mathematics and Computer Science

COURSES

LOWER DIVISION

1 Introduction to Computers
This course examines the various roles computing equipment plays in our society. Historical, legal, artistic, and ethical aspects are discussed, as well as current trends and future possibilities. Hands-on experience with a computer is included. Some programming is required. Cannot be passed by waiver exam.

21 Programming
An introduction to problem-solving concepts and program design. Topics covered include top-down design with a structured programming language, bottom-up testing, control statements, and structured data types. No prior knowledge of programming is required. The language for the course is C++; students with knowledge of another programming language will find the course valuable. Course is taught each Fall. Prerequisites: one year each of high school algebra I, II, and geometry or equivalent. Offered each fall semester.

UPPER DIVISION

Ma/CS 102 is offered annually; other Ma/CS upper division courses are offered on a biannual rotation. Consult the department chair for the schedule.

102 Advanced Programming
A continuation of Computer Science 21. Consult with the departmental chair for the schedule. Topics include recursion, an introduction to data structures, analysis of algorithms, and object-oriented programming. Programming style and large program development are emphasized. Course will be given annually, while the other upper division courses are given on a biannual rotation. Consult with the departmental chair for the schedule. Prerequisites: Computer Science 21 or an equivalent C++ based course.

110 Computer Systems
Computer structure and machine languages, assembly language macros, file I/O, program linkage and segmentation. Prerequisites: Computer Science 102 or equivalent.

120 Formal Languages
Language definition structure, control and data flow, run-time considerations, interpretable languages, lexical analysis, and parsing. Prerequisites: Computer Science 102 and Math 140 or equivalent.

153 File Processing
Environment and sequential access, data structures and random access. Prerequisites: Computer Science 102 or equivalent.

174 Analysis of Algorithms
Basic notions of the design and efficiency of computer algorithms, non-numerical algorithms for sorting and searching, and numerical algorithms. Underlying data structures are examined. Prerequisites: Computer Science 102, Math 28 or equivalent.

190 Topics in Computer Science
This course presents connections among different disciplines which apply the principles of computer science. The theme varies from year to year. Students are required to complete a significant project involving their secondary discipline. Prerequisites: CS 102, the lower division requirements of the secondary discipline and at least one upper division course in the secondary discipline.

197 Special Study
Independent study in topics not covered in listed courses. Permission of the chair is required.

199 Special Study—Honors
Independent study or research for majors in mathematics with a concentration in computer science or a split major in computer science, with at least a B average in the major. Permission of the chair is required.
Modern Languages Curriculum

MODERN LANGUAGES

A knowledge of foreign languages facilitates communication with people of other cultures and provides an introduction to other ways of thinking and of conceiving of the world. The study of another language, its people, its culture, and its literature invites students to examine the universal aspects of the human condition.

Second languages are increasingly important in careers. Many facets of American life have become international. The involvement of American business with foreign countries is continually expanding, and language versatility can be crucial to success. The United States itself is now a multicultural arena, which makes knowing a second language an exciting and necessary element of professional, educational, social, and community endeavors. Students interested in graduate school should keep in mind that many fields require knowledge of a second language. Language study is an integral part of such majors as International Business, Communications, and Liberal and Civic Studies.

The Department of Modern Languages offers courses in French, German, Italian, Japanese, and Spanish. There is a major in Spanish and French, and a minor in East Asian Studies, German Studies and Italian Studies. Courses in modern languages in translation, including culture and civilization courses in translation, are grouped separately below, following the individual language listings.

Saint Mary’s College proposes that all of its graduates should have knowledge and understanding of another culture and its language (see below, language proficiency requirement). To this end, the department has created a lower division curriculum whose learning outcomes meet criteria established by the American Council on Teaching of Foreign Languages. All students will demonstrate intermediate language skills: speaking, listening reading and writing in the target language. Instruction balances a solid grammatical foundation with practical training in both classroom and multimedia settings which include exposure to culture and geography.

FACULTY

Costanza G. Dopfel, Ph.D., Associate Professor, Chair
David Bird, Ph.D., Assistant Professor
Maria Grazia De Angelis, M.A., Adjunct
Jane Dilworth, Ph.D., Adjunct
Valerie Gómez, Ph.D., Professor Emerita
Joan Halperin, Ph.D., Professor Emerita
Caralinda Lee, Ph.D., Candidate, Adjunct
Claude-Rhéal Malary, Ph.D., Associate Professor
Catherine Marachi, Ph.D., Associate Professor
Alvaro Ramirez, Ph.D., Associate Professor
Maria Luisa Ruiz, Ph.D., Assistant Professor
Lori Spicher, Ph.D., Associate Professor
Frances Sweeney, Ph.D., Professor
Naoko Uehara, M.A., Adjunct
Maureen Wesolowski, Ph.D., Emerita

LEARNING OUTCOMES

After completing levels 1–3, students will be able to:

• ENGAGE successfully in basic conversation (e.g. ask and answer questions in everyday social situations).
• READ and understand simple texts.
• WRITE short compositions using past, present, and future tenses appropriately.

Students graduating with an Italian Studies Minor, German Studies Minor, or Asian Studies Minor will be able to:

• CONVERSE using the present, past, and future tenses in everyday situations.
• DEMONSTRATE satisfactory reading and writing skills.
• ENGAGE the target culture through various disciplines, including politics, economics, anthropology, history, literature, and art.

FOREIGN LANGUAGE PLACEMENT EXAM

Incoming students are required to take the Foreign Language Placement Exam unless they successfully completed three years of the same language during high school with a grade point average of 3.0 or higher. For Spanish, French and German languages, the placement exam should be taken on line at www.stmarys-ca.edu/orientation prior to attending orientation. For other languages offered at SMC, including Italian, Japanese, Latin and Greek, an exam will be conducted with a professor during the first week of classes in order to determine the appropriate course in which to enroll.

MAJOR REQUIREMENTS

Students may major in French or Spanish.

LOWER DIVISION

Courses 1, 2, 3, 4, 9/10, 11 (or their equivalents). Students intending to major in the department must present evidence by examination or otherwise that their preparation includes the equivalent of the courses enumerated above. Courses 1, 2, 3, 4, 9/10, 11 normally consist of four one-hour class meetings per week.
**Curriculum Modern Languages**

**UPPER DIVISION**

The course listings are alternated regularly so as to furnish the major with the widest coverage in his/her field. Except for modern languages in translation courses, all upper division courses are conducted in the foreign language. Courses in translation are not normally taken for credit towards the major.

For the French and the Spanish major, there are two options for upper division coursework. Option A, for students not going on for further study in the language, requires nine upper division courses. Option B, for those intending to do graduate work, requires 10.25 upper division courses. See p. 130 for the relevant lists of courses.

The split major in which Spanish is the predominant field of study requires a minimum of seven courses: Spanish 9 or 10 and Spanish 11, and six upper division courses which must include Spanish 101, 102, 120, 121, and two electives. A student exempted from the lower division requirement must include another upper division elective. The split major in which Spanish is not the predominant field requires Spanish 9 or 10, and Spanish 11, and three upper division courses, one of which must be Spanish 101 or 102. A student exempted from the lower division requirement must include another upper division elective.

An interdisciplinary major in Latin American Studies is available to students of Spanish.

**PREPARATION FOR GRADUATE WORK**

Students wishing to continue toward an advanced degree in either French or Spanish should note that a broad foundation in Latin is essential. A minimum of one year of college Latin is strongly recommended. M.A. degrees in French and Spanish normally require a reading knowledge of an additional modern language. Accordingly, the prospective graduate student is urged to begin this language preparation in his/her undergraduate years.

The majors in French and Spanish have been accepted, with certain modifications, as meeting the subject matter preparation requirements of the state of California for a teaching credential. Completion of the approved program waives the Praxis and SSAT Examinations. It is still necessary to take a sequence of education courses. At Saint Mary’s these are available at the graduate level (some may be taken during the senior year). It is important that those thinking of a teaching career consult the advisor of the subject matter preparation program in the Department of Modern Languages and the director of the single subject credential program in the School of Education to make sure that all the prerequisites for the credential are fulfilled.

**MINOR REQUIREMENTS**

**FRENCH**

The minor in French requires a total of 7.25 courses: French 4, 10, 11 (or equivalent). 15; either 101 or 102; three additional upper division courses.

**SPANISH**

The minor in Spanish requires a total of seven courses: Spanish 4, Spanish 9 or 10, and Spanish 11 (or their equivalent); either 101 or 102; three additional upper division courses. Students exempted from Spanish 10–11 are required to complete the 101–102 sequence.

**LANGUAGE STUDIES MINORS**

**EAST ASIAN STUDIES MINOR (JAPANESE LANGUAGE)**

The East Asian Studies Minor requires a total of 8.75 courses, divided as follows: 4.50 lower division courses (Japanese 1, 2, 3, 4 or equivalent); a minimum of one conversation course and one culture course (.25 credits each): Japanese 6, Japanese 7; 4.25 upper division courses focusing on aspects of East Asian culture, literature, film, history, politics, art, music, etc. (including ML 198, a .25 capstone course).

**GERMAN STUDIES MINOR**

The German Studies minor requires a total of 8.75 courses, divided as follows: 4.50 lower division courses (German 1, 2, 3, 4 or equivalent); a .25 credit conversation course, taken at least twice: German 6; 4.25 upper division courses focusing on aspects of German culture, literature, film, history, politics, art, music, etc. (including ML 198, a .25 capstone course).

**ITALIAN STUDIES MINOR**

The Italian Studies Minor requires a total of 8.75 courses, divided as follows: 4.50 lower division courses (Italian 1, 2, 3, 4 or equivalent); a minimum of two conversation courses (.25 credits each): Italian 6, Italian 60, and Italian 106; 4.25 upper division courses focusing on aspects of Italian culture, literature, film, history, politics, art, music, etc. (including ML 198, a .25 capstone course).

**PREREQUISITE GRADE**

Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

**COURSES**

**LOWER DIVISION**

**FRENCH**

1. Elementary French

For students with no prior knowledge of French. With instruction in basic grammar structures and communication strategies, students begin to develop reading, writing, listening, and speaking skills.

* Does not satisfy an Area requirement.
2  Continuing Elementary French  
For students with one or two years of secondary study of French (or the equivalent). This course continues the development of reading, writing, listening and speaking, emphasizing conversation on everyday topics.  
Prerequisite: French 1 or equivalent.  
* Does not satisfy an Area requirement.  

3  Intermediate French  
For students with two or three years of secondary study of French (or the equivalent). This course continues the development of reading, writing, listening and speaking, fostering confidence in conversation and composition across a variety of subjects. Prerequisite: French 2 or equivalent.  
* Does not satisfy an Area requirement.  

4  Continuing Intermediate French  
For students with three or four years of secondary study of French (or the equivalent). This course offers an abbreviated review of primary structures and concentrates heavily on developing communicative ability through readings, music and visual resources. For students who have completed an overview of basic grammar and are ready to combine and apply their language skills in most settings. Prerequisite: French 3 or equivalent.  

6  Conversation  
Conversational practice for students enrolled in first- or second-year French. Meets once a week. May be repeated for credit.  
* Does not satisfy an Area requirement.  

10  Conversation-Composition  
This course prepares students for upper division work by developing fluency in speaking and writing. Curriculum includes study and discussion of selected texts by contemporary French authors, with emphasis on the short story; discussion and debate of contemporary issues; written composition. A sound knowledge of French grammar is expected although particular features of the language are reviewed. Required for French majors and minors. Also open to students from other disciplines who wish to improve their mastery of the language. Prerequisite: French 4 or equivalent.  

11  Introduction to Literature  
Introduction to literary analysis. This course requires close reading of texts and emphasizes extensive reading about literature. Examination of the notion of genre, narrative devices, structure, etc. Required of majors and minors. Prerequisite: French 4 and/or 10, or equivalent.  

15  Phonetics  
A practical course designed to instill correct pronunciation habits early in the student’s career. Required for all majors and minors, except by special exemption.  
* Does not satisfy an Area requirement.  

17  Introduction to Business French  
For students with a minimum of one year of high school French or the equivalent. The course familiarizes students with French business practices and vocabulary, aspects of the French economy, and cultural differences between France and the U.S. By building on students’ knowledge of the language, the course develops the practical communication and comprehension skills needed to interact in French in professional situations. Class meets one-and-a-half hours weekly.  

60  French Civilization for Travel Courses  
In preparation for study in France, students are required to take this course on the history, geography and political structures of France.  
* Does not satisfy an Area requirement.  

GERMAN  
1  Elementary German  
For students with no prior knowledge of German. With instruction in basic grammar structures and communication strategies, students begin to develop reading, writing, listening and speaking skills.  
* Does not satisfy an Area requirement.  

2  Continuing Elementary German  
For students with one or two years of secondary study of German (or the equivalent). This course continues the development of reading, writing, listening and speaking, emphasizing conversation on everyday topics. Prerequisite: German 1 or equivalent.  
* Does not satisfy an Area requirement.  

3  Intermediate German  
For students with two or three years of secondary study of German (or the equivalent). This course continues the development of reading, writing, listening and speaking, fostering confidence in conversation and compositions across a variety of subjects. Prerequisite: German 2 or equivalent.  
* Does not satisfy an Area requirement.  

4  Continuing Intermediate German  
For students with three or four years of secondary study of German (or the equivalent). This course offers an abbreviated review of primary structures and concentrates heavily on developing communicative ability through readings, music and visual resources. For students who have completed an overview of basic grammar and are ready to combine and apply their language skills in most settings. Prerequisite: German 3 or equivalent.  

6  Conversation  
Development of oral skills involving daily life and contemporary issues. May be repeated for credit.  
* Does not satisfy an Area requirement.  

197  Special Study  
An independent study or research course for students whose special needs cannot be met by regular courses offered by the department. Permission of the instructor and department chair required.  

198  Language Studies Capstone  
An independent project integrating language and culture designed in consultation with an instructor in a student’s language studies area.
Curriculum Modern Languages

ITALIAN

1 Elementary Italian
For students with no prior knowledge of Italian. With instruction in basic grammar structures and communication strategies, students begin to develop reading, writing, listening and speaking skills.
* Does not satisfy an Area requirement.

2 Continuing Elementary Italian
For students with one or two years of secondary study of Italian (or the equivalent). This course continues the development of reading, writing, listening and speaking, emphasizing conversation on everyday topics. Prerequisite: Italian 1 or equivalent.
* Does not satisfy an Area requirement.

3 Intermediate Italian
For students with two or three years of secondary study of Italian (or the equivalent). This course continues the development of reading, writing, listening and speaking, fostering confidence in conversation and composition across a variety of subjects. Prerequisite: Italian 2 or equivalent.
* Does not satisfy an Area requirement.

4 Continuing Intermediate Italian
For students with three or four years of secondary study of Italian (or the equivalent). This course offers an abbreviated review of primary structures and concentrates heavily on developing communicative ability through readings, music and visual resources. For students who have completed an overview of basic grammar and are ready to combine and apply their language skills in most settings. Prerequisite: Italian 3 or equivalent.
* Does not satisfy an Area requirement.

6 Conversation (25)
Conversational practice using the vocabulary and basic grammatical structures of Italian 1, 2 sequence. Topics include cooking, pastimes and hobbies, politics, the family, travel, fashions, Italian film, sports, art, etc. Meets one hour per week. May be repeated for credit.
* Does not satisfy an Area requirement.

60 Italian Civilization for Travel Courses (25)
In preparation for travel in Italy, students will be introduced to various aspects of contemporary Italian culture, art, and history in order that they can better appreciate the country and its people. The course will cover such topics as social manners, means of transportation, personal safety, laws and legal rights, medical resources, money, and food. Students will also learn basic Italian language skills.

106 Advanced Conversation (25)
Conversation on contemporary issues. Meets once a week. Recommended for minors in Italian Studies and those students who have studied in Italy. May be repeated for credit.
* Does not satisfy an Area requirement.

197 Special Study
An independent study or research course for students whose special needs cannot be met by regular courses offered by the department. Permission of the instructor and department chair required.
* Does not satisfy an Area requirement.

198 Language Studies Capstone (25)
An independent project integrating language and culture designed in consultation with an instructor in a student’s language studies area.

Note: Upper division courses in Italian are offered as Modern Languages in Translation.

JAPANESE

1 Elementary Japanese
This course provides a foundation for further Japanese study. Students learn basic grammar and sentence structure and the two phonetic alphabets, as well as common Japanese expressions and vocabulary.
* Does not satisfy an Area requirement.

2 Continuing Elementary Japanese
Continuation of Japanese 1. Extends the study of basic grammar and topically specific vocabulary, and introduces some Kanji characters. Prerequisite: Japanese 1 or equivalent.
* Does not satisfy an Area requirement.

3 Intermediate Japanese
Introduction of more complex grammatical and idioms, and additional Kanji characters. Emphasis on extending competence in oral and written communication. Prerequisite: Japanese 2 or equivalent.
* Does not satisfy an Area requirement.

4 Continuing Intermediate Japanese
Along with a review of grammar structures, this course gives increased attention to improving communicative skills. Students completing this course are ready to combine and apply their language skills in most settings. Prerequisite: Japanese 3 or equivalent.

6 Conversation (25)
An intermediate course focused on conversational communicative skills. Students practice situationally grounded conversation and develop speech skills through discussion. May be repeated for credit as content varies.
* Does not satisfy an Area requirement.

7 Introduction to Japanese Culture (25)
An introductory survey of interesting aspects of Japanese culture. Taught in English. Students enrolled in Japanese 1 or 2 are expected to take Japanese 7 concurrently with either Japanese 1 or 2. May be repeated twice for credit as content varies.

197 Special Study
An independent study or research course for students whose special needs cannot be met by regular courses offered by the department. Permission of the instructor and department chair required.

198 Language Studies Capstone (25)
An independent project integrating language and culture designed in consultation with an instructor in a student’s language studies area.

SPANISH

1 Elementary Spanish
For students with no prior knowledge of Spanish. With instruction in basic grammar structures and communication strategies, students begin to develop reading, writing, listening and speaking skills. Students who have some prior study of Spanish, but who need to review the basics, should enroll in Spanish 21.
* Does not satisfy an Area requirement.
2 Continuing Elementary Spanish
For students with one or two years of secondary study of Spanish (or the equivalent). This course continues the development of reading, writing, listening, and speaking, emphasizing conversation on everyday topics. Prerequisite: Spanish 1 or equivalent.
* Does not satisfy an Area requirement.

3 Intermediate Spanish
For students with two or three years of secondary study of Spanish (or the equivalent). This course continues the development of reading, writing, listening and speaking, fostering confidence in conversation and composition across a variety of subjects. Prerequisite: Spanish 2 or equivalent.
* Does not satisfy an Area requirement.

4 Continuing Intermediate Spanish
For students with three or four years of secondary study of Spanish (or the equivalent). This course offers an abbreviated review of primary structures and concentrates heavily on developing communicative ability through readings, music and visual resources. For students who have completed an overview of basic grammar and are ready to combine and apply their language skills in most settings. Prerequisite: Spanish 3 or equivalent.

6 Conversation (.25)
Conversational practice for students enrolled in first- or second-year Spanish. Meets once a week. May be repeated for credit.
* Does not satisfy an Area requirement.

9 Spanish for Spanish Speakers
A course designed specifically for Latino students who wish to improve their written language. Differences between written and spoken Spanish are emphasized. Reading and discussion of essays and short stories by Latino and Latin American writers; regular written assignments.

10 Conversation-Composition
This course prepares students for upper division work by developing fluency in speaking and writing. Curriculum includes study and discussion of selected texts by contemporary Spanish authors, with emphasis on the short story; discussion and debate of contemporary issues; written composition. A sound knowledge of Spanish grammar is expected although particular features of the language are reviewed. Required for Spanish majors. Also open to students from other disciplines who wish to improve their mastery of the language. Prerequisite: Spanish 4 or the equivalent.

11 Introduction to Literature
Introduction to literary analysis. This course requires close reading of texts and emphasizes extensive writing about literature. Examination of the notion of genre, narrative devices, structure, etc. Required of majors and minors. Prerequisite: Spanish 9 or 10, or the equivalent.

21 Intensive Elementary Spanish
An accelerated review of first-year college Spanish for students with some prior study of the language. Satisfactory completion of this course (minimum grade C-) gives credit for Spanish 2.

60 Spanish Civilization for Travel Courses (.25)
In preparation for study in Spain, students read about major periods in history and analyze the principal currents in art. In addition this course examines cultural traits of everyday life.
* Does not satisfy an Area requirement.

UPPER DIVISION

FRENCH

100 Advanced Phonetics and History of the French Language
A survey of the evolution of the French language, treating phonology, syntax, lexicon and semantics; detailed analysis of the sounds and speech patterns of modern French.
* Does not satisfy an Area requirement.

101–102 Advanced French Syntax and Composition
This course serves a systematic review of essential aspects of French syntax, with a focus on developing composition skills. Analysis of model texts serves as a means to improving self-expression and written communication.

103 Advanced Composition and Stylistics
Using literary texts as a point of departure, this course concentrates on stylistics in order to help students perfect their own writing style in French.

104 Workshop in Translation
Introduction to the linguistic and aesthetic problems of translation, with emphasis on learning through practice. Focus on various kinds of texts, both literary and technical. Equal emphasis given to translating from French into English (version) and from English into French (thème).

106 Conversation on Contemporary Issues (.25)
Open to students with at least two years of French. Meets once a week. May be repeated for credit.
* Does not satisfy an Area requirement.

121 French Literature: Middle Ages to the Renaissance
Readings in the medieval epic poem (chansons de geste), lyric poetry, and the courtly novel; early religious and secular theater; the first historians; major writers of the Renaissance: Rabelais, Montaigne, Marguerite de Navarre, the poets of the Pléiade.

122 French Literature: Seventeenth and Eighteenth Centuries
Study of the great writers of the age of Classicism: plays by Corneille, Molière, and Racine; the fables of La Fontaine; the ideas of Descartes and Pascal; Mme de Lafayette and the birth of the psychological novel; introduction to the great philosophes of the Age of Enlightenment: Montesquieu, Voltaire, Diderot, Rousseau. The theater of Marivaux and Beaumarchais; romanticism in the novel.

123 French Literature: Nineteenth and Twentieth Centuries
The principal literary movements of the 19th century: romanticism and symbolism in poetry and drama, realism and naturalism in the novel and short story; development of the 20th-century novel, from Proust to the nouveau roman; trends in modern drama, poetry and philosophy.
129 French Literature outside Europe
Literature and culture of French-speaking Africa, Canada, and the Antilles. May be repeated for credit as content varies.

130 Thematic and Stylistic Study of a Single French Author or Genre
May be repeated for credit as content varies.

131 Exploration of a Particular Literary School or Period in French Literature
Offered according to student interest. May be repeated for credit as content varies.

150 Culture and Civilization of France
A study of the relationship between the rich culture of France and its turbulent history. Attention is given to the interchange between artistic or literary expression and the political process.

170 Business French
Introduction to commercial French for students interested in international business and finance. Students who complete this course successfully are prepared to take the internationally recognized Paris Chamber of Commerce examination, the Certificat Pratique.

197 Special Study
An independent study or research course for students whose special needs cannot be met by regular courses offered by the department. Permission of the instructor and department chair required.

198 Honors Essay (.25)
An independent research project for senior French majors completing the Honors program, Option B.

199 Special Study—Honors
An independent study or research course for senior French majors with a B average in French. Permission of the instructor and department chair required.

SPANISH
100 Spanish Phonetics and Dialectology
Students will study the sounds, the intonation, and the rhythm of spoken Spanish as they explore general principles of phonetics and phonology, phonetic transcription, the historical development of the Spanish sound system, and contrasts between modern peninsular and Latin American dialects. The course also addresses the problems English-speaking students face in their acquisition of an acceptable pronunciation of Spanish.

101 Advanced Spanish Syntax and Composition I
This course serves as a systematic review of essential aspects of Spanish syntax with a variety of writing exercises using diverse texts as a point of departure. Students will analyze samples of mass media communication for content and style, including newspaper and magazine articles, essays and editorials, book reviews, film scripts, publicity, and film and theater reviews. In the second half of the term, some emphasis is placed on creative writing.

102 Advanced Writing and Research
In this course, students will further develop their Spanish skills in literary analysis and academic writing, with the opportunity to research and investigate themes related to literature using the library and other research tools. Students will be able to articulate clear theses and be able to support them through primary and secondary research. Topics to be taught include bibliographies, footnotes, and formatting a project using the standard MLA style particular to the foreign languages and literatures.

103 Advanced Spanish Linguistics
This course familiarizes students with the scientific study of the Spanish language. Areas covered include phonetics, phonology, morphology, syntax, semantics, sociolinguistics, bilingualism, and the history of the Spanish language from its roots in Vulgar Latin to its modern dialectal variations.

104 Workshop in Translation
Introduction to the linguistic and aesthetic problems of translation, with emphasis on learning through practice. Focus on various kinds of texts, both literary and technical. Equal emphasis given to translating from Spanish to English and from English to Spanish.

106 Advanced Conversation (.25)
Conversation on contemporary issues. Source materials include newspaper articles, television, and radio programs. Meets once a week. May be repeated for credit.
* Does not satisfy the Area requirement.

120 Spanish Literature: Middle Ages to Eighteenth Century
Introduction and study of the major genres and writers from the Middle Ages to the 18th century, including Cantar de mio Cid, medieval ballads, early lyric and didactic poetry and readings in medieval prose and drama; selections from lyric and mystic Renaissance poetry; the picaresque novel, Golden Age prose and poetry, including Cervantes, Gongora, Lope de Vega and Calderon.
Offered in alternate years.

121 Spanish Literature: Eighteenth Century to the Mid Twentieth Century
Readings from the major writers and literary movements in Spain from 1700 to 1940. An overview of 18th century ideological renewal as manifested in essays, the neoclassic theater and social satire. Nineteenth-century romanticism in poetry and drama. Realism and naturalism in the 19th century novel. The Generation of 1898. Twentieth-century modernism in prose, poetry, and drama.

122 Literature of the Golden Age
Topics covered include the theater of 17th-century dramatists: Lope de Vega, Calderon, Tirso de Molina and others; the poetry of Garcilaso, Herrera, Lope de Vega, Quevedo, Gongora, Fray Luis de Leon, San Juan de la Cruz, Santa Teresa; prose masterpieces such as Cervantes’ Don Quijote and representative selections from his novelas ejemplares.

127 Contemporary Peninsular Literature
Study of major literary trends in poetry, prose, and drama of the 20th century. May be repeated for credit as content varies.
130 Thematic and Stylistic Study of a Single Author or Genre
Intensive study and analysis of a single salient figure or movement in Spanish literature. May be repeated for credit as content varies. Available for variable credit.

140 Latin American Literature I
A study of the foundations of literature of Latin America, from the colonial period through neoclassicism; Mexico’s picaresque novel; the literature of the struggle for independence; romanticism in prose and poetry.

141 Latin American Literature II
A continuation of the study of Latin American literary development: modernism in poetry and prose; Ruben Dario; the novel of the revolution; selections from various genres of the contemporary period: essays, poetry, novels, short stories, and drama. Offered in alternate years.

143 Contemporary Latin American Literature
Study of major literary trends in poetry, prose and drama of the 20th century. May be repeated for credit as content varies.

145 Twentieth-Century Mexican Literature
Major literary currents and primary works of the most prominent writers of the 20th century within the framework of the economic and social changes of the period: the Mexican Revolution and its aftermath; the feminist revolution; political developments. Available for variable credit.

150 Chicano/Chicana Literature
An exploration and analysis of representative works by Chicano/Chicana writers and the vision they present of themselves. Samples of poetry, drama and prose are considered. May be repeated for credit as content varies. Available for variable credit.

160 Culture and Civilization of Spain
Highlights of Spain’s culture against the backdrop of Spanish civilization. Masterpieces of Spanish artistic expression are studied as are the roles of social, religious and political values in the development of Spain’s culture and civilization to contemporary times. Offered in alternate years.

161 Culture and Civilization of Latin America
A literature-based course focusing on the origin and heritage of Latinos. An examination of the social, religious, and political values of the culture, and the similarities and differences between Latin American nations. Cross-listed with Education 520. Offered in alternate years.

162 Culture and Civilization of Mexico
A study of the major historical periods, from pre-Columbian times to the present. Emphasis given to cultural traits particular to Mexico. An overview of art history: Mesoamerican art, the mural movement and contemporary currents.

170 Business Spanish
Composition and translation of Spanish/Hispanic business correspondence to develop familiarity with the Spanish commercial idiom. Reading and oral practice in Spanish using as source material current topics in world trade, economics, banking and industry, with focus on Latin America and Spain.

197 Special Study
An independent study or research course for students whose special needs are not met by the regular course offerings of the department. Permission of the instructor and department chair required.

198 Honors Essay (.25)
An independent research project for senior Spanish majors completing Option B: the Honors program.

199 Special Study—Honors
An independent study or research course for senior Spanish majors with a B average in Spanish. Permission of the instructor and department chair required.

MODERN LANGUAGES IN TRANSLATION
126 Film
Viewing and discussion of French, German, Italian, Spanish, or Latin American films. Each course focuses on a particular genre, director, country or area sharing a common language and culture. May be repeated for credit as content varies.

170 Modern Critical Theory
General introduction to movements or trends in current critical theory, including psychoanalytic (Freudian, Lacanian), postmodernism (deconstructionism), feminist theory, structuralism, semiotics, etc. Discussion of theory is in English. Students’ work is in French or Spanish. English majors accepted with permission of chair of Department of English.

180 Medieval and Early Renaissance Poetry and Music
A study of popular and cultivated poetry of Medieval and Renaissance Europe and the musical expressions in the context of the Medieval and Renaissance world and mind.

181 Renaissance and Baroque Literature of Europe
A study of the literature of 17th-century Europe. May be repeated for credit as content varies.

182 The Romantic Movement in Literature
A study of the literary expressions of the 19th century. May be repeated for credit as content varies.

183 Authors, Genres, and Themes in Western Literature
An investigation of a single author, genre, theme, or topic in Western or Third-World literature. May be repeated for credit as content varies.

184 Topics in Hispanic Literature
Reading and discussion of Hispanic literature in translation. Topics include Hispanic women writers, modern Chicano literature, Hispanic theater in the United States.
Curriculum Modern Languages

198 Language Studies Capstone (25)
An independent project integrating language and culture designed in consultation with an instructor in a student’s language studies area.

The following courses are recommended to majors in Business Administration, Politics, History and Communication:

185 Culture and Civilization of France
A study of the relationship between the rich culture of France and its turbulent history. Attention given to the interchange between artistic or literary expression and the political process, with consequent socioeconomic developments.

186 Culture and Civilization of Italy
Italian culture has been central in the development of western civilization. From it emerged values and institutions that have helped shape every nation adopting that civilization. The aim of this course is to consider the intellectual and artistic manifestations of this important culture in all its brilliant variety.

SUGGESTED FRENCH MAJOR PROGRAMS — OPTION A
A program of study for students who wish to study French but do not plan to continue to graduate school (although it does not preclude further study at a graduate level). This option allows for French as a second major.

<table>
<thead>
<tr>
<th>LOWER DIVISION</th>
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<tbody>
<tr>
<td>French 4, 10, 11 (or equivalent), 15</td>
<td>A total of nine courses distributed as follows: 101, and eight courses in language, literature and culture.</td>
</tr>
</tbody>
</table>

187 Culture and Civilization of Spain
Highlights of Spain’s culture against the backdrop of Spanish civilization. Masterpieces of Spanish artistic expression are studied and the roles of social, religious and political values in the development of Spain’s culture and civilization to contemporary times.

188 Culture and Civilization of Latin America
The study of the culture of the various Latin American nations from pre-Colombian civilizations to the present. Special consideration of manifestations of Latin American artistic expression. An examination of the social, religious, and political values of the culture, and the similarities and differences between Latin American nations.

189 Culture and Civilization of Mexico
A study of major historical periods, from pre-Colombian times to the present. Emphasis given to cultural traits particular to Mexico. An overview of art history: Mesoamerican art, the mural movement and contemporary currents.

SUGGESTED FRENCH MAJOR PROGRAMS — OPTION B
An honors major program for students intending to continue the study of French at graduate school level. A GPA of at least 3.0 in the major is required, as is the recommendation of two instructors.

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<th>LOWER DIVISION</th>
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<tbody>
<tr>
<td>French 4, 10, 11 (or equivalent), 15</td>
<td>A total of 10.25 courses distributed as follows: two language courses (100, 101); eight literature and culture courses, including Modern Languages 170.</td>
</tr>
</tbody>
</table>

SUGGESTED SPANISH MAJOR PROGRAMS — OPTION A
A program of study for students who wish to study Spanish whether or not they plan to continue their studies in graduate school. This option allows for Spanish as a second major.

<table>
<thead>
<tr>
<th>LOWER DIVISION</th>
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<tbody>
<tr>
<td>Spanish 4; Spanish 9 or 10, and Spanish 11 (or their equivalent)</td>
<td>A total of nine courses distributed as follows: 101, 102; either 120 or 121; either 140 or 141; and five upper-division electives in Spanish.</td>
</tr>
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</table>

SUGGESTED SPANISH MAJOR PROGRAMS — OPTION B
This is an honors major program for students intending to continue the study of Spanish at graduate school level. The major requires the student to maintain a GPA of at least 3.5 in the major and be recommended in writing by two professors. This option must be declared by the end of the sophomore year.

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<tr>
<th>LOWER DIVISION</th>
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<tbody>
<tr>
<td>Spanish 4; Spanish 9 or 10, and Spanish 11 (or their equivalent)</td>
<td>A total of 10.25 upper division courses distributed as follows: 100, 101; 102, 120, 121; 140, 141; ML 170, 198; plus two upper-division electives.</td>
</tr>
</tbody>
</table>
2+2 PRE-NURSING PROGRAM

The 2+2 Pre-Nursing Program is an innovative partnership program with Samuel Merritt College in which students study at Saint Mary’s College for two years, completing a rigorous curriculum in science and liberal arts. The successful student receives an Associate of Science (AS) degree from Saint Mary’s College and then transfers to Samuel Merritt College in Oakland, California to complete two years of an excellent theory and clinical-based curriculum, resulting in a Bachelor of Science in Nursing (BSN) degree.

Students thus receive the best in a liberal arts and nursing education with an emphasis on critical thinking, as well as informed and ethical decision-making. The academic foundation of the 2+2 Pre-Nursing and the BSN curriculum prepare the student for the dynamic and challenging health care environment. We offer a supportive, individualized learning atmosphere with a challenging curriculum and exceptional faculty who are passionate about teaching. You are invited to meet faculty online by browsing the faculty biography section on the Saint Mary’s website. For further information, contact the Director, Christa Kell RN, MS. (925) 631-4681, ckell@stmarys-ca.edu

FACULTY
Christa Kell RN, MS., Director
Dr. Margaret Field, Biology
Dr. Wendy Lacy, Biology
Mr. Greg Smith, Biology
Dr. Jeff Sigman, Chemistry
Faculty members from the departments of Psychology, Statistics, and Interpersonal Communication also teach in the program

LEARNING OUTCOMES
When students fulfill the requirements of the 2+2 Pre-Nursing curriculum, they will be able to:
• RESPECT the inherent dignity of individuals and groups
• DEMONSTRATE critical thinking about course materials
• ANALYZE, evaluate and integrate theory, research data and practical experience
• USE effective communication principles in establishing professional empathic relationships with others
• ANALYZE the effects of ethical decisions and social change in health professions
• DEMONSTRATE awareness of the suffering of others and the desire to relieve it

FRESHMEN ADMISSION AND PROGRESSION

ADMISSION CRITERIA
• 2.8 or higher high school GPA in college prep courses only
• Minimum 500 on both verbal and math SAT
• ACT minimum 20 composite score
• Completion of high school chemistry with a C- or better.

PROGRESSION
Freshmen students may declare/progress in the 2+2 major at the end of their first semester if they have passed (with a C- or above) both Introduction to Biology (Bio 10/11) and Introduction to Psychology (Psych 10). A GPA of at least 2.5 by the end of the first semester is also required.

Students must obtain a C- or above in all courses required by the California Board of Registered Nursing (including all science, psychology, English and communication courses). Only one of these courses may be repeated once. Students will meet with the director of the 2+2 Nursing program each semester to review GPA/progression status. Sophomores must have a 2.9 cumulative GPA by the end of their first semester in order to remain in the major.

TRANSFER STUDENT ADMISSION AND PROGRESSION

ADMISSION CRITERIA
• Minimum 3.0 cumulative college GPA and a minimum 2.5 college science GPA.
• Satisfactory (C- or above) completion of an Introduction to Biology course and an Anatomy course. Both of these courses must be UC transferable and include a lab.
• An Introduction to Psychology course is not required but is preferred.

Transfer students may only repeat one course one time. Transfer students must complete a minimum five-course residency requirement at Saint Mary’s (including 2 science courses) to receive the AS degree and will be considered for transfer to Samuel Merritt on a space-available basis. There is no guarantee that space will be available immediately upon completion of the AS degree.

Transfer students are accepted to Saint Mary’s on a competitive/space available basis both semesters, however, more transfer spaces are available in the spring semester.

Students who have completed most of the 2+2 curriculum elsewhere will be encouraged to apply directly to Samuel Merritt.

TRANSFERRING TO SAMUEL MERRITT

Each semester, twenty (20) qualified students are guaranteed admission to Samuel Merritt College. To qualify students must have:
• completed the 2+2 Pre-Nursing curriculum and have maintained a 3.0 cumulative GPA
• satisfactorily passed the NET (Nurse Entrance Exam)
• are current in tuition and other financial obligations

If the number of qualified students exceeds 20, candidates for admission to Samuel Merritt College will be selected based on additional criteria such as testing, GPA and teacher recommendation. An individual student’s time of transfer may occasionally be delayed due to the limited number of places at Samuel Merritt.
## Curriculum 2+2 Pre-Nursing Program

<table>
<thead>
<tr>
<th>FIRST SEMESTER</th>
<th>JAN TERM</th>
<th>SECOND SEMESTER</th>
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<tbody>
<tr>
<td><strong>FRESHMAN YEAR</strong></td>
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<tr>
<td>Colloquial Seminar 20—Greek Thought</td>
<td></td>
<td>Colloquial Seminar 21—Roman Early Christian &amp; Medieval Thought</td>
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<tr>
<td>English 4—Composition</td>
<td>Elective</td>
<td>English 5—Argument &amp; Research</td>
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<tr>
<td>Biology 10/11—Intro. to Biology Psychology 10—Intro. to Psychology</td>
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<td>Chemistry 2/3—Principles of Chemistry</td>
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<tr>
<td>Biology 40/41—Intro. to Microbiology</td>
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<td>Biology 40/41—Intro. to Microbiology</td>
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<tr>
<td><strong>SOPHOMORE YEAR</strong></td>
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<tr>
<td>Biology 15/16—Human Anatomy</td>
<td>Biology 25/26—Human Physiology</td>
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<tr>
<td>Math 4—Intro. to Probability &amp; Statistics</td>
<td>Religious Studies</td>
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</tr>
<tr>
<td>Elective or Educ. 173*</td>
<td>Collegiate Seminar 122</td>
<td></td>
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<tr>
<td>Psychology 139—Human Life Span</td>
<td>Renaissance</td>
<td></td>
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<tr>
<td>Biology 12—Nutrition</td>
<td>Education 173 or Elective</td>
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<td>(.5 course credit)</td>
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</table>

*Students may take these courses in reverse order if they choose.
Transfer students take Colloquial Seminar 130 and 131, but not 20 and 21.

**Declaration of a major/Progression in the Nursing major:** In order to remain in the major freshmen students must:

- Successfully complete Biology 10/11 and Psych 10 (grad C- or above) and obtain a minimum 2.5 GPA during their first semester.
- Achieve a C- or above in all science courses. One course in the curriculum may be repeated only once.
- Students must have a minimum 2.9 by the end of their third semester and a minimum cumulative 3.0 by the end of the two years to be considered for transfer to Samuel Merritt.

**Transfer students** must complete a minimum of five courses in residence, which must include at least two sciences. Transfer course work will be evaluated upon admission. Transfer students should plan on studying a minimum of two semesters at Saint Mary’s. Transfer students take Seminar 130 and 131 in lieu of Seminar 20 and 21.
PERFORMING ARTS: DANCE, MUSIC, AND THEATRE

The Performing Arts Department offers pre-professional training to students interested in pursuing graduate studies and a career in the performing arts, and a unique interdisciplinary approach to the study of dance, music, and theatre within the liberal arts context. Students selecting a Performing Arts major with an emphasis in dance, music, or theatre are required to take a sequence of courses in their specific discipline and breadth courses in the other two areas.

The Performing Arts Department offers:
- three distinct tracks for majors and minors
  1. Performing Arts, Dance emphasis
  2. Performing Arts, Music emphasis
  3. Performing Arts, Theatre emphasis
- a range of performing opportunities
- mentoring by faculty members who are both outstanding teachers and accomplished artists
- frequent opportunities to attend world-class dance, music, and theatre performances
- an opportunity to perform in the first year
- a balanced curriculum with stimulating courses in three areas of concentration
  1. history and criticism
  2. theory and analysis
  3. performance practice

The Performing Arts Department provides students the experience of the arts from the pleasurable to a critical engagement. Team-taught core courses cultivate the skill of careful, thoughtful looking and listening while exploring the distinctive languages of each artform. Upper division courses provide the opportunity to discuss and analyze both acknowledged masterpieces and contemporary works. World-class performances around the Bay Area and contact with professional artists connect classroom learning to live performance. Our students enjoy attending an impressive array of performances at venues including Berkeley Repertory Theatre, Davies Symphony Hall, Yerba Buena Center for the Arts, American Conservatory Theater, San Francisco Opera, and Cal Performances at Zellerbach Hall.

The Performing Arts Department builds performers. Majors and non-majors study together in studio courses and performing ensembles, building technique and performance skills with the guidance of professional teacher-artists. Dancers, vocal and instrumental musicians, and actors—both beginners and more experienced—are challenged creatively and encouraged in their individual development. Theatre technicians are given ample opportunities to develop their skills as stage managers, master electricians, and designers. The capstone of the Performing Arts degree is the senior project, for which students must produce a substantial original research paper or artistic work demonstrating their command of intellectual and artistic skills appropriate to the undertaking.

The Performing Arts Department successfully prepares students for graduate studies and professional performance in both the Bay Area and internationally. Our alumni have been accepted to the graduate programs of Mills College, California Institute of the Arts, CSU Long Beach, CSU Los Angeles, Smith College, and NYU School of the Arts. Others have found their performing arts degree an effective preparation for a career in arts administration, education, media and communications, even law.

The Performing Arts Department encourages students to understand dance, music, and theatre in the context of a long history of works and great ideas that have shaped the world in which we live, thus reflecting a deep commitment to the liberal arts tradition. Students explore humanity’s deepest desires and fears conveyed through the arts. The department requires students to develop critical thinking and communication skills plus performance practice that together are the hallmark of the liberally educated person.
Faculty

Catherine Marie Davalos, M.F.A., Associate Professor, Chair
Mori Achen, M.A., Lecturer
Daniel D. Cawthon, Ph.D., Professor
Cheri Cook, B.A., Lecturer
Reid Davis, Ph.D., Adjunct
Rebecca Engle, M.A., Adjunct
Mary Fettig, B.S., Lecturer
Dawn Foster-Dodson, M.A., Lecturer
Denise Hunter, M.A., Lecturer
Dana Lawton, M.F.A., Adjunct
John Maltester, M.A., Lecturer
Amber Mccall, M.F.A., Lecturer
Randee Paufve, M.A., Lecturer
Lino Rivera, Ph.D., Assistant Professor
Martin Rokesch, Ph.D., Professor
Renee Witon, M.M., Lecturer

Learning Outcomes

When they have completed the Performing Arts Program, students will be able to:

- Employ appropriately the basic technical terms generally used in an art form when discussing individual works, and identify specific elements of the aesthetic, historical, and cultural context of a work of art by comparing it to others from the same context.
- Utilize a cross-disciplinary perspective in the arts and a familiarity with the Great Books/liberal arts tradition to identify the ways performing artists draw inspiration from nature, history, imagination, and the creative ideas and influences of others.
- Recognize similarities in structure (such as elements of phrasing) shared by all three performing arts and be able to articulate the significance of structural elements in the analysis of a work’s form and meaning.
- Engage in critical discourse that transcends personal opinion and acknowledges, respects, and integrates the insights of other students from diverse cultural backgrounds.
- Demonstrate the capacity for sustained and focused rehearsal efforts and for working collaboratively with different directors and performers.
- Perform the works of great choreographers, composers, and playwrights, as well as original/contemporary works of living artists.
- Adapt performance skills both in rehearsal and performance to the technical demands of specific masterworks of various styles and eras, as well as to original/contemporary works.
- Exhibit performance skills beyond the foundational to professional level while effectively negotiating the anxiety/excitement of live performance, and be conversant with advanced techniques of the discipline.

Major Requirements

Dance

1, 14, 22 (25 x 3), 115, 121, 122 (25 x 4), 123, 125, 126 (3x), 135, 198, Jan Term Choreography Class (2). Bio 15/16 recommended for Area B.

Music

1, 11, 12 (25 x 6, including 2 Piano), 14 or 113, 110 (.5), 111, 112 (25 x 4), 114, 115, 117, 118, 119 (.5), 125, 135, 198

Theatre

1, 30, 33, 36 (.5 x 2), 37 (.5 x 2), 38 (.5), 115, 125, 130, 132, 133, 135, 136, 137 (.5); one of 138 (.5), 139 (.5), 140 (.5); and 198

Minor Requirements

Dance

1, 22/122 (25 x 4), 121, 123, 125, 126, Jan Term Choreography class

Music

1, 10, 11, 12 (25 x 2), 114; one of 111, 115, 118; either 14 or 113

Theatre

1, 30, 33 or 133; 36 (.5); 132; 130 or 135; any two of 37 (.5), 38 (.5), 138 (.5), 139 (.5) or 140. (.5)

Prerequisite Grade

Any course listed in this department with a prerequisite assumes a grade of C- or better in the prerequisite course or the permission of the chair to waive that provision.

All Performing Arts courses meet the Area A requirement unless specifically marked otherwise.

Courses

Departmental

1 Perceiving the Performing Arts
Professional artists in the fields of dance, music, and theatre introduce students to the fundamental concepts of their respective disciplines. Students go to Bay Area performances in each artform studied. Team taught.

100 Exploring the Performing Arts
An exploration of different topics relevant to an understanding of the disciplines of dance, music, and theatre and their relationship to each other. Possible topics include historical change (from classical to modern), themes (what’s hot now), and styles (realism, minimalism).

132 Performing Arts in Production (5 – 1.0)
Either half or full credit is available for participation in the technical aspects of a Performing Arts theatre or dance production: elements of stagecraft, costuming, marketing, front of house etc. Required for majors and minors, but open to all interested students.

* Does not satisfy an Area requirement.
DANCE

22/122 Dance Technique and Movement
Studio instruction in ballet, jazz, modern dance, tap, hip-hop, African dance, Ballet Folklorico, Persian dance, Pilates and Yoga.
* Courses are taught at the beginning, intermediate and advanced levels.
* Does not satisfy an Area requirement.

121 Dance History I: Ballet
This course covers the development of dance from its roots in European court dancing through the development of ballet into the beginning of the modern era. Students attend professional dance concerts in the Bay Area.

123 Dance History II: Modern and Contemporary
This course studies the development of modern dance from its roots in ballet to the innovations of the present including hip-hop and dances made for the camera. Students attend professional dance concerts in the Bay Area.

125 Dance in Performance
A course in dance analysis and criticism. Various aspects of dance as a performing art are studied through attendance at dance performances offered in the Bay Area by local companies and national troupes performing on tour. Prerequisite: Performing Arts 1

126 Dance Production
Rehearsal and technique class for the Saint Mary’s College Dance Company, culminating in public performances. Permission of instructor required.
* Does not satisfy an Area requirement.

MUSIC

10 Rock to Bach: Introduction to Music
Students in this class cultivate the ability to listen more deeply. They study the evolution of classical music, jazz, blues, and early rock through exposure to more than three dozen composers—from Bach to Miles Davis to Little Richard.

11 Music Fundamentals
Students learn to read musical notation and study the basic construction of music through scales, key signatures, chords, and the relationship between melody and harmony.

12 Applied Music (25)
Group instruction in musical instruments including voice, piano, guitar, strings, woodwinds, or credit for participation in performance groups (Saint Mary’s Chamber Musicians, Jazz Band, Nightingaels, Gospel Voices of Saint Mary’s). Beginning and intermediate levels. May be repeated for credit every semester.
* Does not satisfy an Area requirement.

14 World Music and Dance
A survey of music and dance from China, Japan, India, Indonesia, Africa, the Middle East, Latin America, and Native American culture. Satisfies both the Diversity and the Area A requirement.

110 Medieval and Renaissance Music (.5)
A brief examination of various aspects of music from the Middle Ages through the 16th century, with a focus on musical forms, vocal and instrumental technique, and performance contexts.

111 Symphonic Music
This course familiarizes students with masterpieces of the orchestral repertoire, while teaching them how to listen with more understanding to the works of Bach, Vivaldi, Handel, Mozart, Beethoven, Brahms, Mahler, and many others. There is a particular emphasis on the music of the 19th century. Students learn not only the development of the symphonic form but also its relationship to the social milieu of the time.

112 Private Music Instruction Lab (25)
Performing Arts majors and minors receive private instruction on any orchestral instrument, guitar, piano, or voice. Please contact Professor Lino Rivera if you have any questions at (925) 631-8216.
* Does not satisfy an Area requirement.

113 Jazz and Blues in America
An examination of the development of jazz and blues in the United States from 19th-century precursors to the present. Major artists and trends are studied through directed listening and analysis of the cultural context from which they arose. Satisfies both the Diversity and the Area A requirement.

114 Music Theory/Ear Training
Students learn basic principles of harmony (chords) and voice-leading, improve their music-reading skills, learn how to notate simple melodies, and identify types of chords and intervals by ear. Ability to read music is required before enrolling in this class. Prerequisite: Perform 11 or permission of instructor.
**Curriculum Performing Arts: Dance, Music, and Theatre**

115 Music in Performance
This course emphasizes the history and aesthetics of music by attending live concerts throughout the Bay Area. Students hear music from all historical periods performed by outstanding orchestras, chamber ensembles, and soloists in a variety of concert halls. Prerequisite: Performing Arts 1.

117 Form and Analysis
Combines the study of chromatic harmony with analysis of scores to determine the unity of form and content in selected compositions: e.g., a Bach fugue, a Mozart concerto, a Brahms symphony, a 20th-century atonal work. Prerequisites: Perfa 114.

118 Twentieth-Century Composers
Students will become familiar with the 20th century’s most important classical music composers such as Stravinsky, Bartok, Copland, Debussy and Cage, as well as the music and aesthetics of living composers.

119 Music and the Enlightenment (.5)
This course examines the evolution of opera, fugue, symphony, and other forms through the works of Bach, Handel, Mozart, Beethoven, and other composers. It explores how the intellectual and political values of the 17th and 18th centuries were conveyed through music.

**THEATRE**

30 Foundations of Theatre I
A survey of major historical developments in theatre, from its ritual origins to the rise of the modern era.

33 Acting I: Principles of Performance
An introduction to the theory, history, and styles of realistic acting with emphasis on personalization, script analysis, and the dynamics of performance.

36 Theatre Masterpieces: World Drama or Modern Drama (.5)
Discussion and analysis of masterworks of dramatic literature. A global perspective showcases playwrights working in diverse styles, eras and traditions. May be repeated for credit as play selection varies.

37 Performance Lab (.5)
Introductory hands-on training in specific performance skills: for example, audition techniques, musical theatre, physical comedy, or voice for the actor. May be repeated for credit as topic varies.
* Does not satisfy an Area requirement.

38 Stagecraft (.5)
The fundamentals of stagecraft from the first rehearsal to the closing of a show, with emphasis on the responsibilities of each member of the production staff. Instruction is given in the use of hand tools, power tools and theatrical equipment, as lab hours are spent building sets and props for a mainstage production.
* Does not satisfy an Area requirement.

130 Foundations of Theatre II: Theatre of American Cultures
An in-depth study of contemporary dramatic literature, focusing primarily on multicultural elements. Students attend professional productions and learn to utilize current performance theories and practices. Prerequisite: Foundations I [Perfa 30] or consent of instructor.

133 Acting II: Characterization and Scene Study
A continuing exploration of the tools and techniques used to bring a character to life onstage. Emphasis is given to the development of the actor's instrument - body, voice, emotion and imagination -- while partner and ensemble exercises build toward the performance of scripted scenes. Prerequisite: Acting I [Perfa 33] or consent of instructor.

135 Theatre in Performance: Bay Area Theatre
A critical engagement with current theatre production and practices. Students attend performances throughout the Bay Area, while studying the contributions made to each production by the playwright, director, designers and actors. Prerequisite: Perceiving the Performing Arts [Perfa 1] or Acting I [Perfa 33] or Foundations I [Perfa 30].

136 Theatre: Special Topics
An intensive study of a selected era, genre or movement particularly rich in theatrical values and works. Topics have included American Musical Theatre, History of Comedy, Gender and Performance, and Documentary Theatre. May be repeated as topic varies.

137 Acting III
Students learn advanced performance skills through specially focused work such as Shakespearean scene study, comic and dramatic monologues, and the challenges of period style. May be repeated for credit as topic varies. Prerequisites: Acting I and II [Perfa 33 and 133] or consent of instructor.

138 Stage Lighting Design (.5)
A concentrated study of lighting for the theatre - from learning the technology and providing basic visibility, to understanding how to “paint” with light while enhancing a production’s emotional and artistic impact. Students participate in the semester’s mainstage production and develop design projects of their own. Prerequisite: Stagecraft [Perfa 38]

139 Design for the Stage (.5)
A concentrated study of stage, costume and prop design for the theatre. Students follow the process of designing for the mainstage production while working on design projects of their own. Special focus is placed on drawing skills, mixing colors and stage terminology. Prerequisite: Stagecraft [Perfa 38]

140 Stage Management (.5)
A course in the responsibilities and functions of a stage manager; from the first rehearsal through opening night and beyond. Students develop the skills to run a show in an efficient and positive manner. Prerequisite: Stagecraft [Perfa 38]
**PHILOSOPHY**

The Department of Philosophy provides an opportunity for every student to continue, in more structured, critical terms, the spontaneous inquiry into basic questions man has raised from the beginning of time—questions about himself, about God, about the world in which he lives, and the way in which he ought to live.

The word “philosophy” itself, love of wisdom, indicates that the search is not concerned with superficial explanations, but probes beyond appearances for fundamental principles and causes.

Hence courses are offered not only to satisfy a major but also to provide an opportunity for students who are interested in a closer examination of one or more areas of philosophical inquiry as a worthwhile supplement and broadening factor to their specialized field of study.

**LEARNING OUTCOMES**

The Philosophy Department seeks to cultivate a unique virtue in its students and faculty. This intellectual virtue we have called the Philosophical Habit of Mind. It consists, at least, of the following abilities:

- An ability to situate oneself in the Western philosophical tradition of ethical and metaphysical questions and reasoning;
- An ability to account to oneself and to others for the bases of one’s actions;
- An ability to reckon with the consequences of one’s own and other’s practical reasoning in various contexts, both personal and political;
- An ability to raise metaphysical questions in various concrete, lived, literary, and political contexts;
- An ability to distinguish and relate the architectonic questions of metaphysics from and to the specialized questions of the sciences and other disciplines;
- An ability to discern the interconnection between various modes of ethical and political reflection and distinct metaphysical positions;
- An ability to pose to oneself the questions raised by the claims of the Christian faith on one’s own ethical and metaphysical reasoning;
- An ability to read new or contemporary works in the ongoing tradition of dialectical philosophy with all these abilities at one’s disposal.

**JOHN F. HENNING INSTITUTE**

The Department of Philosophy hosts the John F. Henning Institute, a center for the study of Catholic social thought, with special emphasis on the question of human work and its centrality to the common good. Students are invited to take part in the Institute’s program of academic conferences and lectures, publications and seminars.

**FACULTY**

Wayne H. Harter, Ph.D., Associate Professor, Chair  
Brother William Beatie, FSc, Ph.D., Professor  
Owen Carroll, Ph.D., Professor  
Steven Corrington, M.A., Professor  
Patrick Downey, Ph.D., Associate Professor  
John A. Dragstedt, Ph.D., Professor  
Joseph Lanigan, Ph.D., Professor emeritus  
Lee A. McBride, Purdue University, Irvine Teaching Fellow  
Edward Porcella, Ph.D., Associate Professor
Curriculum Philosophy

Major Requirements

Lower Division

Philosophy 10 or 11 is required of all students.

Upper Division

The major in philosophy requires eight upper-division courses. The 130-131 and 135-136 sequences are required of all majors. In addition, all majors elect at least one course from Philosophical Topics: 108, 109, 110, 111, 113, 114, 115, 116, 117, 118, 133, 134, and from Authors/Schools: 160, 170, 172, 174, 176, 178, and elect one further course from either category or undertake an approved 197 Special Study or 199 Honors course. In the senior year, candidates for the degree undertake an approved 196/198 Senior Thesis.

Majors planning graduate study are advised to take French or German (for study in modern philosophy), Latin (for study in medieval philosophy), or Greek and Latin (for study in classical philosophy).

Minor Requirements

The minor in philosophy requires one lower (10 or 11), and four upper-division courses (the 130–131 sequence or the 135–136 sequence, and one course from each of the categories, Philosophical Topics and Authors/Schools).

Prerequisite Grade

Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

Courses

Lower Division

5 Practical Logic

A course in the analysis and evaluation of everyday arguments. Recognition of patterns of argumentation, fallacies, and ambiguities in English is stressed. This course aims primarily at refining and disciplining the student's natural ability to think critically. May not be counted for major credit.

10 Plato and Philosophical Inquiry

Study of Plato's Republic or of selected Platonic Dialogues with a view to such questions as: What is philosophy? What is the act of philosophical inquiry? What makes for a philosophical question, or for a philosophical answer?

11 Aristotle and Philosophical Method

Study of selected texts of Aristotle with a view to such questions as: What are the objects, and associated methods, of philosophical inquiry? Are there distinct kinds or divisions of philosophy? In what sense or senses may philosophy qualify as science?

Upper Division

Philosophical Topics

110 Philosophy of Religion

A phenomenological study of man which seeks to discover the essential structure of the human phenomenon of religion through its various manifestations. Consideration is given to the ultimate meaning of human existence and those common principles rooted in man which give rise to religion. The orientation of the course is philosophical and considers religion as involving both man and God.

111 Philosophy of Art

An analysis of doing and making, of truth, good, beauty, the visible and invisible, of figure and finality, as these reveal the intellectual and spiritual universes disclosed by painters, sculptors, poets, etc.

113 Contemporary Problems in Ethics

A study of the ethical aspects of such contemporary problems as personal freedom, personal rights, civil disobedience, and situation ethics.

114 Philosophy of Law

A study of the philosophy of law from Sophocles’ Antigone through the great thinkers of the Middle Ages, giving particular attention to the notion of natural law of Thomas Aquinas.

115 Modern Legal Philosophy

The philosophy of law from Thomas Hobbes and John Locke to Marxism and contemporary legal positivism.
116 Political Philosophy
An investigation of the philosophical development of the notion of the “state;” “man’s relationship to the state;” and “forms of government.”

117 Philosophy of Nature
Rises the question of the possibility of a knowledge of nature which is independent of the quantification and mathematical methods of the “physical” sciences.

118 Theory of Knowledge
A study of the human approach to the nature of being, through an analysis of the works of Sartre, Descartes, Kant, Hegel, Aristotle, and Thomas Aquinas. Particular emphasis on the philosophical method and the practice of reflection.

130-131 Ethics
An investigation of the difference between good and evil and between virtue and vice; of the relationship of virtue to choice, to knowledge, to power, to pleasure, to happiness; of the relationship of the human person to God, to nature, to society; of the relationship of responsibility to freedom and necessity. Texts (130) by Plato and Aristotle, the Bible, and Aquinas and (131) by Machiavelli, Hobbes, Locke, Rousseau, Hegel, Kant and Nietzsche. Philosophy 130 is prerequisite to 131.

133 The Art of Logic
A study of classical logic with reference to primary texts. Logic is approached as the art of attending to and refining the acts of the discursive intellect—definition, predication, and argument (reasoning—in its coming to know). Among the major topics considered: signification, categories, predicables, categorical and complex propositions, syllogistic, induction, formal and informal fallacies.

135-136 Metaphysics
A study, through close reading, discussing and writing, of “metaphysical” texts of (135) Plato and Aristotle (and, through them, of Parmenides and Heraclitus); and (136) of Thomas Aquinas and Hegel (with some attention, as time permits and inclination prompts, to texts of one or more of the following: Descartes, Kant, Wittgenstein, Heidegger). Philosophy 135 is prerequisite to 136.

AUTHORS AND SCHOOLS
160 A Critical Reading of the Principal Works of a Single Major Author or School of Philosophy
Such philosophers will be chosen as Plato, Aristotle, Thomas Aquinas, Descartes, Hume, Kant, Hegel, and Heidegger. A “school” of philosophy, e.g., Empiricism, Rationalism, Idealism, is offered from time to time. May be repeated for credit as content varies.

170 Contemporary Philosophy
A study of a major philosopher or “school” of the contemporary period. Course may be repeated for credit as content varies.

172 Existentialism
Readings and discussions of some of the principal existential philosophers of the Continent, such as Kierkegaard, Camus, Sartre and Heidegger.

174 Greek Philosophy
A study of the full range of Greek philosophical thought from its pre-Socratic origins to its Neoplatonic conclusion. Platonic, Aristotelian, Cynic, Sceptic, Stoic and Epicurean Schools are examined through their texts, in historical context and evolution.

176 Medieval Philosophers
A consideration of the metaphysical and world view of major philosophers of the medieval period such as Saint Augustine and Thomas Aquinas. Course may be repeated for credit as content varies.

178 Renaissance Philosophers
A survey of major thinkers and artists from early 14th century to 16th century. The concern will be with questions of God, man, and the world, and the contrast of the world of the Middle Ages and the beginning of the modern world.

196 Senior Thesis / 198 Senior Thesis—Honors
Candidates for the degree arrange, in the fall or spring of the senior year, a program of reading and research on a topic in modern/contemporary philosophy under a department director, and compose a lengthy Senior Thesis, which is presented publicly at a departmental meeting. Directions for proposing the thesis and a catalog of library resources are available from the chair.

197 Special Study
An independent study or research course for students whose needs are not met by the regular course offerings of the department. Permission of the department chair and instructor required.

199 Special Study—Honors
An independent study or research course for upper division majors with a B average in philosophy. Permission of the department chair and instructor required.


Curriculum Physics and Astronomy

PHYSICS AND ASTRONOMY

Physics in this century has become a complex endeavor reflecting many centuries of experimentation and theory. It is an enterprise conducted by men and women who are stimulated by hopes and purposes that are universal: to understand and describe nature in its most elementary form. Physics and astronomy courses train students to carefully observe physical phenomena and to interpret the phenomena using synthesis, mathematical modeling and analysis. These methods represent a way of knowing that is central to the scientific method. The department is dedicated to teaching students with majors in science as well as general science education in the liberal arts tradition. The physics major is designed for students who wish to pursue graduate study or gain employment in the private/industrial sector or government service. In addition to offering a bachelor of science degree in physics, the Department of Physics and Astronomy also offers an optional degree concentration in astrophysics and a physics minor.

FACULTY
Ronald P. Glowin, Ph.D., Professor, Chair
Jessica C. Kintner, Ph.D., Professor
Chris M. Ray, Ph.D., Associate Professor
Mari-Anne M. Rosario, Ph.D., Assistant Professor
John Waddell, M.S., Associate Professor, Emeritus
Roy J. Wensley, Ph.D., Professor

MAJOR REQUIREMENTS

LOWER DIVISION
Physics 1, 2 (lab), 3, 4 (lab), 60
Mathematics 27, 28, 29
Computer Science 21

UPPER DIVISION
All majors must take six upper division physics courses including Physics 105, 110, 125, 181, and Math 134.
The concentration in astrophysics requires eight upper division courses: the five listed above and Physics 170, 173, and 185.

MINOR REQUIREMENTS
Physics 1, 2 (lab), 3, 4 (lab), 60; Mathematics 27, 28, 29, and three elective upper division physics courses.

PREREQUISITE GRADE
Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

COURSES

LOWER DIVISION

1 Introduction to Physics I
This course is the first in a two-part sequence and is designed for students majoring in physics, chemistry, and mathematics, and for students preparing for an engineering program. The sequence introduces students to topics in Newtonian mechanics, vibrations and oscillations, waves and sound, thermodynamics, electricity, magnetism, simple circuits, and optics (geometrical and wave). Four lectures weekly. Concurrent enrollment in Physics 2 (lab) is required. Prerequisite: Math 27 (may be taken concurrently).

2 Introduction to Physics I Laboratory (25)
Students gain hands on experience with the topics discussed in Physics I. Additionally, students are introduced to methods of experimentation in physics including good measurement techniques, simple data analysis, and scientific writing. Concurrent enrollment in Physics I is required. Laboratory fee required.

3 Introduction to Physics II
Continuation of Physics I. Four lectures weekly. Concurrent enrollment in Physics 4 (lab) is required. Prerequisites: Physics I and Math 28 (may be taken concurrently).

4 Introduction to Physics II Laboratory (25)
Students explore the concepts of Physics 3 in a laboratory setting. Concurrent enrollment in Physics 3 is required. Laboratory fee required.

10 General Physics I
This course is the first in a two-part sequence. The sequence introduces the student to the conceptual framework of physics, and the phenomenology of mechanics, fluids, waves, thermal physics, electricity, magnetism, optics and modern physics. In comparison with the Introduction to Physics sequence this course chooses breadth over depth, and is expected to be more suited to needs of life science students. Prerequisites: Math 28 (may be taken concurrently). Concurrent enrollment in General Physics Lab I is required.

11 General Physics II
Continuation of Physics 10. Prerequisite: Physics 10. Concurrent enrollment in Physics 21 is required.

20 General Physics I Laboratory (25)
Laboratory to accompany Physics 10. Must be taken concurrently with that course. Laboratory fee required.

21 General Physics II Laboratory (25)
Laboratory to accompany Physics 11. Must be taken concurrently with that course. Laboratory fee required.
40 Revolutions in Science
This course is intended to introduce the methods and ideas of science. Students gain an appreciation for the scientific “way of knowing” by learning how phenomena in nature are observed and cataloged, and how general principles are deduced from observations. Concurrent enrollment in Physics 41 is required.

41 Revolutions in Science Laboratory
Laboratory to accompany Physics 40. Must be taken concurrently with that course. Meets every other week. Laboratory fee required.

60 Modern Physics
The discoveries and methods of physics developed in the 20th century will be studied. Relativity, statistical physics, and quantum mechanics are the main topics. Applications including molecular, condensed matter, nuclear and particle physics are stressed. Prerequisite: Physics 3.

90 Introduction to Astronomy
This introductory course presents a comprehensive and balanced view of what is known about the heavens. Aimed at the non-specialist, the course gives a description of astronomical phenomena using the laws of physics. The course treats many standard topics including planets, stars and galaxies to more esoteric questions concerning the origin of the universe and the search for extraterrestrial intelligence. Prerequisites: One year each of high school Algebra I, II, and geometry. Concurrent enrollment in Physics 91 is required.

91 Astronomy Laboratory (25)
Laboratory to accompany Physics 90. Exercises include experiments in a laboratory setting, observations using the campus observatory and telescopes, and field trips to local observatories and/or planetariums. Laboratory fee required.

UPPER DIVISION
Physics 3 and Math 29 are prerequisites for all upper division physics courses.

105 Analytical Mechanics
This course covers the principles of particle dynamics. Topics include rigid body dynamics, Lagrange’s equations, Hamilton’s principle, wave propagation, and normal modes of vibration in oscillating systems.

110 Electricity and Magnetism
Electrical and magnetic concepts are studied using static and dynamical field concepts. Maxwell’s equations are emphasized. Topics include electrostatics, electrodynamics, magnetism, and electromagnetic waves.

115 Thermal and Statistical Physics
This course covers the laws of thermodynamics and statistical physics. Topics include temperature, work, heat transfer, entropy, phase transitions, Maxwell’s relations, the kinetic theory of gases, partition functions, and particle statistics.

125 Quantum Mechanics
Introduction to the theoretical foundations of quantum theory. Using the Schrödinger and Heisenberg formulations of the harmonic oscillator, the hydrogen atom, the theory of quantized angular momentum, and scattering are studied. The concepts of Hilbert space, operators, commutation relations, and the Heisenberg uncertainty principle are included. Prerequisites: Mathematics 134 and Physics 60.

140 Special Topics in Advanced Physics
Focus on variable topics such as particle physics, solid state physics or numerical methods of physics. May be repeated for credit as content varies.

170 Astrophysics
A study of the internal constitution of stars and stellar systems from the point of view of atomic and nuclear physics. The basic equations of Saha and Boltzmann are used to solve the appearance of observed stellar spectra and the differential equations of continuity and state to interpret the physical properties of stellar structures.

173 Cosmology
Using an historical approach, this course studies how humankind has come to understand the origin and structure of the universe. The course begins with studies of ancient cosmologies, such as those from Egypt, Ancient Greece, Pre-Columbian America, and the Orient. This sets the stage for the revolution in understanding brought about by Copernicus, Kepler, Galileo and Newton. This fascinating journey is carried through to the present by studying modern astrophysics including topics such as relativity, black holes, stellar evolution, and the Big Bang.

180 Experiments in Modern Physics
Students discuss and perform the experiments which demonstrate and investigate the principles of twentieth century physics. Experimental topics include the photoelectric effect, the Franck-Hertz experiment, x-ray diffraction, solid state materials, nuclear spectroscopy, and holography. This course meets for two laboratory sessions and one lecture session each week. Prerequisite: Physics 60.

181 Electronics and Instrumentation
Students study the properties of various circuit components and use them in scientific applications. Topics include linear DC and AC circuits, diodes, transistors, operational amplifiers, and photoelectronic devices. Meets for two laboratory sessions and one lecture session each week.

185 Observational Astronomy and Astrophysics
A laboratory course based on the attempt to model, simulate and interpret observational data derived from astronomical observations. Included are interpretations of stellar photographs and spectra, measurements of various stellar parameters and quantities that give rise to our understanding of stars as physical systems. Lab fee is required.

196 Senior Essay (25)
Independent study of a topic beyond the common course content. Open only to majors in the spring term of their junior year or fall term of their senior year. The essay is evaluated by a committee consisting of the faculty supervisor and two other faculty chosen in consultation with the student. Permission of the chair is required.

197 Special Study
Independent study or research of topics not covered in listed courses. Permission of the chair is required.

199 Special Study—Honors
Independent study or research for majors with at least a B average in physics. Permission of the chair is required.
POLITICS

The politics major is designed to provide a systematic understanding of political power, political processes, and political institutions, both in the United States and the world at large. Politics majors gain insight into public affairs; improve their conceptual, analytical, critical and communication skills; and explore normative questions concerning the relation of individuals to governments and of governments to one another. The curriculum offers courses in five fields: American government, political theory, international relations, public administration, and comparative politics. The department advises students to divide their work among the five fields, although a concentrated major may be advised in a particular case. The department also recommends substantial coursework in related disciplines such as economics, history, or philosophy.

The politics major is not designed as a vocational major. It provides a liberal arts education that fosters responsible civic engagement and an appreciation of diverse political cultures and identities. It prepares students for careers in government service, international affairs, secondary school teaching, journalism, community service, and business. It also serves the needs of students who seek postgraduate education in political science, the law, public policy, and international studies. Students seeking a career in the legal profession will find that the Politics Department's law-related courses will prepare them with a broad background and specific tools with which to undertake their legal education.

Students who expect to pursue graduate study in politics should note that knowledge of foreign languages and/or statistics is usually required for a graduate degree. Knowledge of modern languages is also particularly important for careers in international affairs. Department faculty advisors assist students in the selection of appropriate courses.

The department participates in several off-campus programs that allow students to combine study with practical experience in public life. Students may arrange to receive academic credit for internships with local agencies, officials, or political groups. Students interested in American politics can spend a semester studying at American University in Washington, D.C., which includes an internship with a government agency or interest group. A similar arrangement with the California State University in Sacramento provides an opportunity to study California state government. Students majoring in politics may also participate in the Model United Nations Conference held each year at Harvard University.

LEARNING OUTCOMES

When they have completed the Politics program, students will be able to:

• PERFORM the following intellectual tasks effectively:
  – Comprehend texts
  – Express themselves orally and in writing
  – Analyze and interpret evidence
  – Relate theory to practice
  – Recognize assumptions and evaluate arguments
  – Draw inferences and make deductions
  – Engage in collaborative learning and shared inquiry
  – Select appropriate methods to access, evaluate, and use information

• ACQUIRE substantive knowledge allowing them to:
  – Understand essential political terms and concepts
  – Appreciate the historical and cultural context of political events
  – Recognize the causes and outcomes of political conflict
  – Understand the dynamics of political behavior
  – Identify political ideas and belief systems
  – Recognize alternative political groups, structures, regimes and identities
  – Distinguish different levels of political life: individual, local, national, and international

• DEVELOP the following habits of mind:
  – Critical and persistent reflection on questions of importance to their lives
  – Intellectual self-confidence and maturity
  – Appreciation of multiple perspectives and contexts
  – Curiosity and a commitment to life-long learning
  – Civic engagement
MAJOR REQUIREMENTS

LOWER DIVISION
Politics 1, 2, 3

UPPER DIVISION
One course in American Politics, one course in Political Theory, one course in International Politics, and one course in Comparative Politics to be selected only from the corresponding lists below. In addition, students must take six (6) upper-division Politics courses of their choosing.

Group II Political Theory: 111, 112, 113, 114, 115, 116
Group III International Politics: 120, 121, 122, 123, 124, 125
Group IV Comparative Politics: 140, 141, 143, 144, 145, 146, 147, 148, 149

The department faculty recommend that students taking an upper-division course in Comparative Politics complete Politics 1; for International Politics, Politics 1 or 2 is recommended first; for American Politics, Politics 2 is recommended first; and for Political Theory, Politics 3 is recommended first.

MINOR REQUIREMENTS
The minor in Politics requires seven (7) courses: Politics 1, 2, 3; and one course each from the four categories listed above (American Politics, Political Theory, International Politics, and Comparative Politics).

PREREQUISITE GRADE
Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

COURSES

LOWER DIVISION

1 Introduction to Comparative Politics
A comparative survey of politics in countries and regions other than the United States. Focus is on political culture and socialization, socio-economic structure and class interests, government institutions and electoral processes, political parties, and major shifts in public policy. Themes of globalization, social justice, and democratization are emphasized. Case studies vary, but may include Great Britain, Japan, Russia, Mexico, and Nigeria.

2 Introduction to American Politics
Survey of the principal institutions and processes of the American political system. Topics include constitutional origins and development, political parties, elections, Congress, presidency, bureaucracy and the federal courts.

3 Introduction to Political Thought
A survey of the great political ideas and ideologies that have shaped the history of politics. Topics include core political concepts such as liberty, justice, and equality, as well as organized belief systems such as liberalism, conservatism, and socialism. Students learn to analyze and evaluate political values and to apply them to practical political problems.

UPPER DIVISION

101 State and Urban Politics
Survey of current issues and problems in state and city government. Analysis of the evolutionary nature of such issues and problems through a comparison of the historical and contemporary experiences of cities and states. Topics include the distribution of power in the community; the organization of city government; state executive and legislative processes; and community responses to law enforcement, social welfare, education, and taxation.

102 Political Parties and Pressure Groups
An investigation into the theory and practice of political groups. Analysis of the nature of political behavior within and among groups through reading and discussion of classic texts on groups. Topics include the influence of the political environment on group activity; the roles of leaders and followers; the identification and pursuit of group goals; the organization and function of American political parties; and the phenomenon of party loyalty.
Curriculum Politics

103 Elections and Voting Behavior
A study of the electoral process in America with emphases on the organization and the conduct of elections, and the behavior of the electorate. Topics include campaign organization, primaries and nominations, the role of the media, the impact of issues and personalities, and electoral realignment. Depending on the year, the course will focus on presidential elections or the midterm congressional elections. Politics 102 is not a prerequisite for this course.

104 United States Public and Constitutional Law
A study of the landmark opinions of the U.S. Supreme Court. Topics include separation of powers, federalism, judicial review, government regulation of business, and civil rights. Methods of legal reasoning and case analysis are taught. Prerequisites: Politics 1 and 2 or consent of the instructor.

105 Presidency and Congress
An investigation of the institutional and behavioral characteristics of the presidency and the Congress. The course focuses upon the development of the office of the presidency, the nature and scope of presidential power, and the interaction of the presidency with the cabinet, bureaucracy, media, political parties, and public opinion. It also considers the operation of the modern Congress through an examination of the committee system, congressional procedures and customs, and the relationship between the representative and the constituency.

106 Politics of Labor
A study of the American labor movement from its early economic militancy through its later political passivity to its renewed vigor in the present time. Topics include de-industrialization and the transformation of work, the changing gender, ethnic and racial composition of the workforce, the plight of immigrants and undocumented workers, and how the employer offensive and labor laws affect unionization. We also look at student-labor relations, labor and the environment, the role benefits play in contract negotiations and strikes, the impact of globalization on labor, and the struggle to democratize the unions. The readings chronicle and analyze the history of the American labor movement, study the connections between labor struggles and politics, and how labor is perceived by the larger public. A special feature of this course is a series of speakers from the labor movement who address the issues they face.

107 American Legal Institutions
A survey of the American judicial process. The role of the courts in the political process is described, with special emphasis on the Supreme Court. Topics include: how judges are selected, how courts decide cases, the limits of the courts' power, and the impact of court rulings.

108 CIA and the Intelligence Community
An investigation into the role of the intelligence community in the formulation and conduct of American foreign policy. The course focuses on the Central Intelligence Agency but also considers other members of the intelligence community such as the National Security and the Defense Intelligence Agency. Topics include covert operations, intelligence collection and analysis, counterintelligence, and oversight and control of intelligence activities. Offered in alternate years.

109 Topics in American Politics
A detailed analysis of selected problems in American politics involving the investigation of such contemporary issues as campaign reform, morality in politics, executive-legislative relationships, the military in American politics, and legal-political issues of the intelligence apparatus. May be repeated for credit as content varies.

110 Minority Politics
An examination of the racial and ethnic dimensions of American politics. Topics include the growing diversity of the American population; government policies on civil rights, affirmative action, and immigration; political participation by, and political conflicts among, racial and ethnic groups; and the impact of ethnic and racial subcultures on contemporary politics. Offered in alternate years.

111 Modern Political Thought
Works by modern masters of political theory from the Protestant Reformation up to the contemporary era are compared and contrasted. Topics include the alternative theoretical foundations of modern political movements and regimes. Students learn to evaluate and criticize political ideas and gain insight into contemporary political problems. Offered in alternate years.

112 American Political Thought
This course seeks to illuminate the philosophical antecedents to the foundations of the American government as well as the thought of the Founders themselves, and concludes with a review of some of the diverse views regarding the American political order. Offered in alternate years.

113 Political Psychology
This course surveys the relationship between psychological and political phenomena. Attention is given to classic works which have significantly shaped the field. Topics include theories of human nature, personality and politics, the nature of political beliefs and values, the psychology of political conflict, political leadership, and decision-making. Psychoanalytic, behavioral, cognitive and humanistic perspectives are examined. Offered at least once in a three-year period.

114 Topics in Political Thought
A detailed investigation of selected problems in political thought. Topics such as freedom, equality, justice, authority, ideology, violence, political economy and political psychology are explored. May be repeated for credit as content varies. Offered in alternate years.
115 Theories of Justice
The course examines different theories of justice based on concepts such as “fairness”, “equal treatment”, and “getting one’s due”. These alternative theories are then applied to contemporary controversies concerning economic, racial, sexual, and environmental justice and to current debates about such issues as immigration, euthanasia, abortion, and capital punishment.

116 Research Theory and Methods
This course explores the theoretical basis of modern empirical methods of investigating political behavior. The course stresses the development of empirical theories of politics through the formation and testing of hypotheses. Emphasis is on the use of survey instruments, polling techniques, and data analysis. Throughout the semester, students work in groups to complete a research project for a local nonprofit organization.

120 International Relations
A study of the forces and forms of international politics and modern state system; nationalism, internationalism, imperialism; war and “cold war”. Restrictions on the struggles for power: balance of power, morality, and law. The problems of world stability and peaceful change today; diplomacy, disarmament, collective security, the United Nations, regional federations, world government, and universal empire.

122 Topics in International Politics
A detailed analysis of selected problems in international politics, involving case studies of major geographical regions such as Western Europe, Southeast Asia, and the Middle East, together with a critical examination of the influence of contemporary ideologies on the behavior of nation states. May be repeated for credit as content varies. Offered in alternate years.

123 American Foreign Policy
An investigation of United States foreign policy in the post-World War II period, from the beginning of the Cold War to the present. Consideration of current political, economic, social and ecological problems that challenge developments in foreign policy, with special attention paid to political, economic and military policy priorities. Topics include unilateralism, military intervention, the role of human rights in foreign policy strategy, examining American interests and purposes in the war on terrorism, empire, war and occupation in Iraq, U.S. policy toward the Middle East as a whole; global trade issues (including the role of NAFTA, the IMF, WTO and FTAA), nuclear proliferation and defense policy, national conflicts, the continuing disintegration of the former Soviet Union and its impact on global issues.

124 Defense Policy
The course examines U.S. national security policy objectives, the military strategies and institutions that have been designed to achieve these objectives and the defense capabilities that can be used to accomplish political and economic goals. The focus of readings and class discussion is on the following topics: the international environment as the setting for the making of American defense policy; the evolution of U.S. strategy; World War II, the Korean War and Vietnam as case studies; arm control; the institutional structure and processes of defense policy; military professionalism; reform and appraisal.

125 Human Rights
Three main areas of human rights are examined: 1) human rights theory and the philosophical foundation of human rights, 2) the international institutions, international law, and regional mechanisms for protecting rights, 3) an overview of major empirical theories of rights, identifying economic, political, and social factors and actors that shape present-day human rights conditions.

130 Introduction to Public Administration
A basic introduction to the theory and practice of public administration. Major works in organization and decision theory are read, and particular attention is given to the creation and implementation of programs in the U.S. federal government.

133 Comparative Administration
An introduction to the comparative study of government administration in various nations of the world. Attention is given to the effects cultural and historical differences have on the development of a country’s governmental arrangements and processes, and to the different ways other countries deal with the problems and changes in the world with which we also must contend.

135 Environmental Politics
A political analysis of environmental problems such as pollution, energy shortages, population growth, climate change, and the destruction of wilderness areas. Public policies to address these problems both here and in other countries are examined. Ethical aspects of environmental issues are explored.

136 Environmental Law and Regulation
Examination of alternative legal mechanisms for protecting the environment. Topics include environmental torts and remedies; environmental criminal law; private property rights and the “public trust” doctrine; administrative regulations and standards; economic incentive statuses; federal vs. state environmental jurisdiction; and international environmental agreements.

140 Gender Politics
A study of the social, economic, political, and legal status of women in contemporary America and in other countries. The course examines the dynamic changes taking place in the relationship between women and men. Topics include the history of women’s liberation movements, the Equal Rights Amendment, abortion, sexism in the workplace, feminist social theory, and women in politics.
141 Contemporary Revolutions
A comparative study of failed and successful revolutions of the 20th century, examining revolutionary theory and the debates between revolutionaries. Using primary texts, students read the theorists and practitioners of each revolution studied. Cases include the successful Russian Revolution as the first model, followed by the unsuccessful German and Spanish revolutions, the Chinese and the Cuban revolutions, the attempted French revolution of May 1968, the Chilean revolutionary process of 1970-73, the Vietnamese Civil War, the Iranian and Nicaraguan revolutions of 1979. Eastern European revolutions of 1989 are examined as the completion of the failed process of imposed revolutions from above and without after 1945. The causes and basis of social conflict are explored as well as the way rebellions, riots and insurrections can turn into revolutions. Questions are posed for the contemporary post-Cold War world: after the Seattle ferment around globalization and the rise of religious nationalism and terror in the post-September 11 reaction, are revolutions in order?

143 Middle East Politics
An introductory comparative politics course in the Middle East, the course analyzes such specific problems as the role of the military, the process of modernization, the impact of state proliferation, and the consequences of socioeconomic disparities resulting from the influx of all wealth. In addition to providing a brief survey of major historical developments since World War I and their impact on current issues, the course examines intra-Arab and Israeli-Arab conflicts.
Offered in alternate years.

144 Asian Politics
A survey of political systems in northeast Asia (including China, Japan, Korean peninsula) and southeast Asia (including Vietnam, Indonesia, Philippines). Emphasis on modern history, economic development, democratization, political culture, and international relations.
Offered in alternate years.

145 Latin American Politics
Examination of political systems in selected Latin American countries. Emphasis on institution, ideologies, political modernization, and the role of the military.
Offered in alternate years.

146 West European Politics
Examination of politics, institutions, ideologies, patterns of stability and change in selected countries such as Great Britain, France, and Germany. Theory of comparative studies.
Offered in alternate years.

147 Soviet and Post-Soviet Russian Politics
A survey of the historical, social, political and economic development, disintegration and demise of the Soviet Union from the Revolution to the present. The course takes an interdisciplinary and theoretical approach beginning with Marx, Lenin, Trotsky and Stalin, and goes on to Gorbachev’s attempted reform, and the disintegration of the USSR. The course finishes with an examination of the contradictions facing the present Russian government in its attempt at integration into the world economy and its response to the terminal crisis of a system in collapse.

148 East European Politics
East Europeans have lived through all the great ‘isms’ of the last century, ending up with post-Soviet neo-liberal capitalism today. The course focuses on the creation and evolution of the Soviet bloc, the attempts at reform in Eastern Europe, looking at case histories of Hungary, Poland, the former Czechoslovakia, and Yugoslavia, the absorption of East Germany by West Germany, and the process of integration into the world economy. Topics include the revolutions of 1989, the dilemmas of democratization, the rise of nationalism, the problem of privatization, the rise and decline of civil society, and the social costs of transformation. A large part of the course is devoted to an examination of ongoing changes and toward that end a variety of topical issues are explored in some detail.
Offered at least once in a three-year period.

149 Topics in Comparative Politics
Examination of political systems not covered in other courses, investigating selected areas such as African, Canadian, or Pacific Rim countries. May be repeated for credit as content varies.

190 Social Justice Speakers Series (25)
This quarter-credit course focuses on different aspects of social justice in conjunction with the “social justice speakers” who are invited to speak on our campus. The course helps the students explore the topics presented by the speakers through pertinent readings and follow-up discussion.

191 Remembrance and Resistance (25)
This quarter-credit course is offered in conjunction with a trip to Fort Benning, Georgia to participate in the vigil that remembers victims of human rights atrocities in Latin America and to protest against training that may induce Latin American military officers to commit such atrocities. Requires six weekly discussion sessions and participation in the vigil and protest during the third weekend of November.

195 Internship in Government
Offers the student the opportunity to earn credit while learning about the day-to-day functioning of government by working part-time in the office of a government agency or elected official. Internships in local, state, and federal offices may be arranged to fit the interests of the student. Student must be in good academic standing.

197 Special Study
An independent study or research course for students whose needs are not met by the regular course offerings of the department. Permission of instructor and department chairperson required.

199 Honors-Special Study
An independent study or research course for upper division majors with a B average in government. Permission of the instructor and department chairperson required.
PRE-PROFESSIONAL CURRICULA

PRE-LAW
The Association of American Law Schools and the Law School Admissions Council (LSAC) do not recommend any specific undergraduate major or program for students planning to study law. While they consider the prescription of particular courses unwise, the LSAC does believe that the Council can call attention to the quality of undergraduate instruction it believes fundamental to the subsequent attainment of legal competence. The three general aspects of education stressed are:

Interpretive and expressive mastery of language: Language is the lawyer’s primary tool. Courses (in English or other disciplines) that stress sound writing, or oral discussion, presentation or debate, and courses (for example, in foreign language or linguistics) that illuminate the workings of language are recommended.

Critical understanding of institutions and values: Legal counsel and advocacy are among the most powerful influences shaping institutions and affecting the quality of lives lived within them. Hence, courses (in history, economics, politics, or sociology/anthropology, for example) that illuminate institutions’ structure, functions, and (therewith) potentials are recommended. Attorneys’ professional influence is matched by their moral influence, since legal questions inevitably implicate fundamental notions of equity and fairness. Courses (in religious studies, philosophy, or psychology, for example) that examine the sources and meaning of normative values are therefore recommended. Sound and creative thinking.

Above all, attorneys are problem-solvers and advisors in unendingly various, complex circumstances that demand rigorous, comprehensive analysis (grasp the law and the facts), sensitivity and imagination (know the people), and sound practical judgment (match the end desired to the limits imposed by law, facts and people). Courses (in mathematics, logic, or natural science, for example) that promote rigorous analytic thinking or creative synthetic thinking are recommended. (For prospective law students, the LSAC recommends, by name, some study of accounting, since accounting shapes the language of business.)

In sum, legal studies demand liberal artistry of the kind Saint Mary’s College believes fundamental to the subsequent attainment of legal competence. Therefore recommended. Sound and creative thinking.

The College’s pre-law advisor is located in the Career Development Center, Ferroggiaro Hall. Information on, and advice about, specific law schools and the Law School Admissions Test (LSAT) are available at the center.

HEALTH PROFESSIONS
Saint Mary’s offers an excellent preparation for professional study in a variety of health care fields. Graduates have successfully entered such professions as medicine, dentistry, physical therapy, physician assistants, pharmacy, optometry, podiatry, and chiropractic. Saint Mary’s has a full-time health professions advisor to assist students with preparation for these careers and with the application process.

MEDICINE
Traditionally, Saint Mary’s students intending to enter the medical profession have majored in biology or chemistry. However, medical schools give equal consideration to students with any major, as long as students have completed the prerequisite coursework. Thus, a student interested in medicine should not automatically exclude any course of study when entering Saint Mary’s. Rather each student should consider such factors as personal interest, aptitude, and alternative career goals when choosing a major.

Regardless of choice of major, there are certain courses that are required by virtually all allopathic and osteopathic medical schools. These include one-year sequential courses in general chemistry (Chemistry 8, 9, 10, 11), organic chemistry (Chemistry 104, 105, 106, 107), general biology (Biology 92, 93, 94, 95), general physics (Physics 10, 20, 11, 21), and English. Calculus (Math 27, 28) is required for physics. All these courses should be completed before taking the Medical College Admission Test (MCAT). If the student wants to enter medical school after graduation, he or she should take the MCAT during his or her junior year. In addition, it is advisable to take at least one upper division science course as an elective if a science major is not chosen. Some medical schools suggest or require additional courses in biochemistry, psychology, or foreign language. Thus, the student is advised to check the specific requirements of prospective medical schools. All pre-medical students, regardless of academic major, should seek counseling from the health professions advisor in the School of Science initially upon entering Saint Mary’s and thereafter on a regular basis.

DENTISTRY
The general course requirements are the same as for pre-medical students and should be completed prior to taking the Dental Admission Test (DAT). Each pre-dental student should plan his or her curriculum through close consultation with his or her academic advisor and the health professions advisor in the School of Science.

PHYSICAL THERAPY
The health science major is designed to include those courses that are required for entrance into most physical therapy master’s or doctoral programs. These courses include general chemistry (Chemistry 8, 9, 10, 11), general biology (Biology 92, 93, 94, 95), and general physics (Physics 10, 20, 11, 21), plus courses in human anatomy (Biology 15, 16), human physiology (Biology 25, 26), psychology (140, 152), and statistics (Psychology 3 and 4, Math 4, or Biostatistics 119). Additional courses may be needed, depending upon the entrance requirements of a particular physical therapy program. For further information, contact the director of health science.
Curriculum Pre-Professional Curricula

OCCUPATIONAL THERAPY
The health science major is designed to include those courses that are required for entrance into most occupational therapy master’s programs. These courses include human anatomy (Biology 15, 16), human physiology (Biology 25, 26), psychology (140, 152), statistics (Psychology 3, Math 4, or Biostatistics 119), general chemistry (Chemistry 8, 9, 10, 11), general biology (Biology 92, 93, 94, 95), and general physics (Physics 10, 20, 11, 21). Additional courses may be needed, depending upon the entrance requirements of a particular occupational therapy program. For further information, contact the director of health science.

PHARMACY
Students planning to enter the field of pharmacy could follow the biology, chemistry, or health science major. Students should check the prerequisites with individual pharmacy schools in which they are interested as they do vary. Some schools of pharmacy allow students to enroll after three years of pre-professional education. Pre-pharmacy students should consult closely with the health professions advisor in the School of Science.

VETERINARY MEDICINE
Students interested in pursuing veterinary medicine as a professional career have traditionally majored in either biology or chemistry (or a split major between these two disciplines). However, schools of veterinary medicine may consider students from any major providing they have completed the prerequisite coursework. Veterinary medicine requires the same courses in biology, chemistry, mathematics and physics as are required in pre-medicine (see under Medicine). Many veterinary schools have other specific core requirements, such as embryology or statistics. In addition, actual experience in the field of veterinary medicine or extensive experience with animals is required, as well as taking the Graduate Record Exam (GRE). Students are advised to obtain a copy of the catalog from prospective schools, and should also seek counseling from the pre-vet advisor in the School of Science upon entering Saint Mary’s and throughout their stay at the College.

OTHER HEALTH PROFESSIONS
Saint Mary’s College provides pre-professional preparation for a number of other health care fields such as physician assistant, optometry, podiatry, and chiropractic. Students should contact the health professions advisor in the School of Science for more information.
PSYCHOLOGY

The major in Psychology is a four-year program leading to a Bachelor of Science degree. Students majoring in Psychology are introduced to a spectrum of psychological theories, experiments and problems within the context of a liberal arts college. Although there is considerable variety in the Department of Psychology’s course offerings, an orientation which embraces both research and application is emphasized. Psychology majors who have earned their bachelor’s degrees are prepared for many different endeavors. For example, they may pursue further study at the graduate level; become involved with the work of counseling centers, elementary and secondary schools, or youth authority facilities; earn a credential in early childhood education and/or in special education; or pursue a career in human resource management. Psychology is also an excellent preparation for careers in law, medicine, or business.

LEARNING OUTCOMES

Upon completion of the requirements for the Bachelor of Science degree in Psychology, students will be able to:

• DEMONSTRATE knowledge of the theoretical approaches, findings, and historical trends in psychology.

• ENGAGE in informed, critical intellectual discussion surrounding questions of human behavior.

• USE multiple research methods and statistical tools to design research and collect, analyze, and interpret data; understand the limitations of these tools and methods; successfully interpret empirical research; demonstrate information competence through use of key data bases; and proficiently write a research report using the standard APA format.

• DEMONSTRATE the skills of skeptical inquiry and critical thinking in the analysis of peer-reviewed articles and articles appearing in the popular press.

• DEMONSTRATE an understanding of the multiple ways gender, culture, age, and sexual orientation affect psychological processes (i.e., perception, memory, learning, affect, social behavior, and development).

• DEMONSTRATE through the use of computer simulations and anatomical dissections the role of biology and neurology in perception, learning, memory, and language, and understand their relation to neurological and biological pathologies.

• APPLY psychological theory and research to issues that may arise in their careers and personal lives as well as applications to problems of social justice in the world around them.

MAJOR REQUIREMENTS

CORE CURRICULUM

Intended to give breadth and scope of the discipline, all Psychology majors are required to fulfill the following nine courses: Psychology 1, 2, 3, 4, 100, 110, 140, 150, 160.

COURSE PREREQUISITES AND REQUIREMENTS

In addition to individual course prerequisites, Psychology 1 and 2 are generally required for admission to all upper division psychology courses. Psychology 3 and 4 are required for admission to some upper division Psychology courses as indicated in the course descriptions. A minimum grade of C– in all prerequisites is required for admission to all courses. Prerequisites may be waived at the discretion of the instructor.

LOWER DIVISION

Psychology 1, 2, 3 and 4 are required for all Psychology majors. A minimum grade of C– is required for all lower division courses.

UPPER DIVISION

There are four major concentrations in the Department of Psychology. A student may elect to follow any one of these programs for a Bachelor of Science degree:

GENERAL PSYCHOLOGY

For the student who wants a general education in Psychology, a sequence of upper division courses in addition to the Core Curriculum which must include Psychology 103 or 104, 110, 126 or 127, and one course each from 3 of the following areas of concentration:

• Biological courses: 113, 115, 157

• Developmental courses: 141, 142, 143, 144, 147

• Personality courses: 148, 152, 174

• Social courses: 165, 172, 180

EXPERIMENTAL/NEUROSCIENCE PSYCHOLOGY

For the student with an interest in the biological bases of behavior, a sequence of upper division courses in addition to the Core Curriculum which must include Psychology 103, 104, 113 or 115, 126, and 127.
## Curriculum Psychology

### Developmental Psychology
For the student interested in working with individuals in educational or social service settings, two tracks are offered:
- Child/Adolescent track, a sequence of upper division courses which must include Psychology 103 or 104, 141, 142, 144, and any one of the following:
  - Psychology 147, 148, 165, 174,
  - Anthropology 113. A field study (Psychology 195) is strongly recommended.
- Adolescent/Adult track, a sequence of upper division courses which must include Psychology 103 or 104, 142, 143, and any two of the following: Psychology 115, 147, 157, 165, 174. A field study (Psychology 195) is strongly recommended.

### Social/Personality Psychology
A Social track, for the student interested in community or organizational psychology, a sequence of upper division courses in addition to the core curriculum which must include Psychology 165, 172, either 103 or 104, either 127 or 180, and any one of the following: Psychology 115, 147, 157, 195, 199.

A Personality track, for the student interested in social work or counseling/clinical psychology, a sequence of upper division courses in addition to the Core Curriculum which must include Psychology 152, 174, either 103 or 104, either 127 or 147, and any one of the following: Psychology 115, 142, 143, 148, 157, 170, 195, 199.

### Minor Requirements
The minor in psychology requires Psychology 1, 2, and 3, and three upper division courses from the following five pairs of options, no two of which are from the same pair: Psychology 110, 115, 126 or 127; Psychology 140-148, 150 or 152; 172 or 180, 160 or 165. Minors may fulfill only one upper division course off-campus.

### Transfer Credit in Psychology
Students already enrolled at Saint Mary’s College who wish to transfer credit for an off-campus upper division psychology course must submit a formal petition to do so to the chair of the Psychology Department before enrolling in the course. Online courses are generally not accepted for credit in this department.

### Prerequisite Grade
Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course.

### Courses

#### Lower Division

1. **Introduction to Personal-Social Psychology**
   A survey of personality theory and assessment, social, developmental, and clinical psychology with special attention to the pervasive influences of culture, gender and ethnicity.

2. **Introduction to Physio-Experimental Psychology**
   An exploration of the scope and methods of physiological and experimental psychology.

3. **Psychological Methods and Analysis I**
   This course is the first part of a two-semester sequence of courses that presents a survey of the complementary methodologies frequently used within the field of psychology. An emphasis will be placed upon the collection and analysis of data, with a focus on non-experimental methods and descriptive statistics. Students who enroll in this course in the fall must register for Psychology 4 in the following spring semester. Prerequisite: competence in basic algebra. Does not satisfy an **Area B** requirement.

4. **Psychological Methods and Analysis II**
   This course is the second part of a two-semester sequence of courses that presents a survey of the complementary methodologies frequently used within the field of psychology. An emphasis will be placed upon the collection and analysis of data, with a focus on experimental methods and inferential statistics. Prerequisite: Psychology 3. Does not satisfy an **Area B** requirement.

8. **African American Psychology and Law (fall)/The African American Family and Law (spring)**
   The course examines various aspects of African American psychology. In the fall, the course focuses on improving one’s understanding of the dynamics of being black in an urban society by exploring psychological forces and influences that proliferate racism, subordination, dehumanization and victimization. In the spring the course focuses on the historical background of the black family from a psychological perspective, including personality development, black masculinity, parental roles, extended family and alternative lifestyles that impact the black family. Both semesters explore how the U.S. Constitution and Supreme Court decisions have affected public policy issues within a psycho-social context.

12. **Special Topics in Psychology**
   Selected areas of psychology not covered by the regular department course offerings. Topics are announced prior to preregistration. Course may be repeated for credit as content varies. Potential topics include: Psychology of Racism; Psychology in the Courtroom; Psychology of Religion; Sports Psychology; Environmental Psychology.

13. **Meditation**
   Students learn to use the Jose Silva theory of meditation to enhance performance and well being. Exercises are offered in stress reduction for the improvement of sports performance, for the enhancement of prayer life, and other areas of student interest. Course offered on a pass/fail basis only. Does not count toward the major. Does not satisfy an **Area B** requirement.
14 Advanced Meditation (25)
Building upon the skills and knowledge gained in Meditation 13, students continue with more advanced aspects of the theory and practice of meditation. Course offered on a pass/fail basis only. Does not count toward the major. Prerequisite: Psychology 13. Does not satisfy an Area B requirement.

UPPER DIVISION

100 Seminar in Psychology
An investigation of the history and philosophical foundations of modern psychology. Emphasis is upon basic issues of psychology, emerging in the long philosophical tradition of Western civilization, which ground psychology as an empirical human science. Prerequisite: Senior psychology major or consent of instructor.

103 Advanced Psychological Statistics
Advanced research methods for evaluating psychological data utilizing SPSS. Topics generally include: theoretical sampling distribution, probability, decision theory, multiple analysis of variance, multiple regression analysis, and factor analysis. Prerequisite: Psychology 3, 4. Does not satisfy an Area B requirement.

104 Test Construction
A study of the principles of testing and measurement in the creation of a psychological test. The general history, function, and use of tests. Norms, reliability, validity, item analysis. Prerequisite: Psychology 3, 4. Does not satisfy an Area B requirement.

110 Psychobiology
Examines the complex interaction of nature and nurture underlying the behavior of animals and humans, and the methods used to investigate this interaction. An overview of the anatomical, neural and neurochemical bases of behavior in both normal and clinical cases is provided. Learning is enhanced through laboratory activities of dissection, computer models and electrophysiological techniques. Laboratory fee: $125. Does not satisfy an Area B requirement.

113 Animal Behavior
A study of behavior of animals, including primates and humans, and the mechanisms that control behavior at both the biological and psychological levels. Field trips may be required. Cross-listed with Biology 103.

115 Health Psychology
A study of the relationships among mental processes, behavior, and physical health with an emphasis on the role of psychology in prevention and treatment of illness as well as promoting optimum health. Prerequisite: Psychology 2, Biology 15 or 25.

120 Experimental Psychology
A study of the logic of experimentation as applied to psychological problems through selected experiments in sensation, perception, cognition, learning, and motivation. Laboratory fee $50. Prerequisite: Psychology 3. Does not satisfy an Area B requirement.

126 Sensation and Perception
Examines the cognitive and physiological processes responsible for the acquisition and mental representation of sensory information. Prerequisite: Psychology 3, 110.

127 Learning, Memory, and Cognition
Examines how organisms acquire and use information provided by experience and how such information is represented in memory. The course covers the major theories in learning and memory, and the mechanisms and processes by which knowledge is used for the control of behavior. Prerequisite: Psychology 3.

139 Human Development for Non-majors
Students will examine theory and research in physical, social, emotional, and cognitive development from conception to death. Students will examine how developmental research is conducted and analyze recent studies in the field. There will be on-site visits to developmental programs and students will critique programs in terms of what they have learned in the course. Not open to majors and minors in psychology, who should take 140. Prerequisite: Psychology 1 or 10.

140 Human Development
An examination of the major theories of and influences on human development from conception through death, including the biological, cognitive, emotional, social and cultural dimensions of development. Only majors and minors in psychology may enroll in this course. All others should take 139. Prerequisite: Psychology 1 and 2.

141 Infancy and Childhood
An examination of development from conception through early childhood (0-5 years), including the biological, cognitive, emotional, social and cultural dimensions of development, with discussion of special topics, e.g., learning disabilities and child abuse. Students complete an in-depth case study of a child as a way to integrate course materials and naturalistic observation. Prerequisite: Psychology 139 or 140.

142 Adolescent Development
An examination of development from late childhood through adolescence (11-18), including the biological, cognitive, emotional, social and cultural dimensions of development, with discussion of special topics, e.g., identity issues, cross-cultural issues, and high-risk behaviors. Students conduct an extensive interview which integrates an adolescent’s own experience with current research and theory. Prerequisite: Psychology 139 or 140.

143 Adult Development
A study of the major psychological, social, and cultural factors that influence development from early adulthood through old age. Students examine in-depth a public policy that affects adults or families. Prerequisite: Psychology 139 or 140.
144 Middle Childhood
The purpose of this course is to examine the key developmental tasks of middle childhood, including the development of achievement motivation, positive peer relationships, moral responsibility, self-regulation, and initial mastery of the skills important to one's culture. Students will observe children in various settings, including school, organized sports, and informal play settings, to investigate how the peer culture influences development. Students will also conduct an ethnographic pilot study of a peer culture. Prerequisite: Psychology 139 or 140.

147 Psychology of Gender
A critical review of the theory and research on gender from the biological, psychological, and sociological perspectives. The course explores the social construction of gender and how it impacts human development and social behavior. Throughout the course, the interaction between gender and the complexities of race, culture and sexual orientation is considered.

148 The Exceptional Individual
Examines individuals with special needs, be they physical, cognitive, or social/emotional. Causes, consequences, and treatment approaches are covered, as well as implications for development issues. Students will be required to visit facilities and interview individuals. Prerequisite: Psychology 139 or 140. Offered in alternate years.

150 Theories of Personality
A critical review of the traditional and modern theories of personality, including the psychoanalytic, neoanalytic, trait, behavioristic and humanistic perspectives, with a focus on personality development, assessment techniques, and application of theory to everyday life.

152 Abnormal Psychology
The abnormal personality with special emphasis on those afflicted with psychoneuroses, psychoses, psychosomatic reactions, brain damage, or personality disorders.

156 Personal and Professional Adjustment
A research-oriented treatment of personal and vocational adjustment, including: stress and stress tolerance, defensive and constructive coping, social and job satisfaction, behavior modification, and interpersonal communication. Offered in alternate years.

157 Human Sexuality
A review of the empirical evidence on human sexuality, with a focus on historical and cultural perspectives as well as the physiological, psychological and sociological basis for sexual behavior and sexual identity.

160 Social Psychology
An introduction to social psychology including the study of attitude formation and change, social interaction, social norms, and cultural influences on personality formation.

165 Cross-Cultural Psychology
An analysis of cultural influences on human behavior. Topics include cross-cultural methodology, perception, cognition, motivation, development, attitudes and prejudice, gender, adaptive and maladaptive patterns, and the construction of self. This course includes a community service learning component with CILSA. Fulfills the Diversity Requirement. Prerequisites: Psychology 1 and 2.

170 Theories of Counseling
A critical review of traditional and modern theories of counseling and psychotherapy. Offered in alternate years.

172 Groups and Organizations
Fundamental concepts of organizational theory as it applies to successful group functioning, with a focus on group structure and group processes, team building, group norms and group communication. Prerequisites: Psychology 1 or 10, or junior standing in Psychology, Business Administration, or Sociology.

174 Psychology of the Family
A study of family dynamics and the influences which contribute to family dysfunction. Examination includes relationships between family patterns and childhood disorders.

180 Organizational Psychology
Examines the major theoretical findings in the field concerning the relationship between the individual and the organization, including the study of motivation, leadership, decision making, power and politics, corporate culture, and organizational development. Prerequisites: Psychology 1 or 10, or junior standing in Psychology, Business Administration, or Sociology.

195 Special Field Study
This course may be taken only on a pass/fail basis and does not count toward the major. Prerequisites: upper division standing as a Psychology major, sponsorship by a Psychology faculty member, and approval of the Department of Psychology chair. This course may be taken for .25, .50, or 1.0 course credit as determined by the faculty sponsor.

197 Special Study
An independent study or research course for students whose needs are not met by the regular course offerings of the department. Permission of the sponsoring faculty member and department chair is required.

199 Special Study—Honors
Independent study and research on campus in an area of interest to the student culminating in a written presentation of the problem, method of analysis and findings. Prerequisites: upper division standing as a Psychology major, B average in upper division psychology courses already taken, consent of the instructor and the chair of the department. May be repeated for credit if content varies.
In our rapidly changing world, sociology provides us with a perspective to examine and to better understand the sometimes confusing nature of human social life. Sociology asks, how is social life possible? What do patterns of social life tell us about the world we live in? What is the relationship of the individual to the social order? Why are some groups of people so different from those we are familiar with? What causes inequality in society and can it be eliminated?

Sociology addresses the most pressing social issues in contemporary American society—racial and ethnic tensions, gender inequality, poverty, health and illness, social movements, crime and deviance, educational inequality, immigration, and problems in urban environments, just to name a few. Sociologists study everything from the social dynamics of two people in conversation to the social dynamics of political revolutions.

Sociology provides students with a theoretical framework to help make sense of an increasingly complex world and the place of the individual within that world. Sociology also provides students with specific methodological tools to investigate the social world and to collect and analyze data about the world we live in.

The sociology major develops research skills, analytical skills, and communication skills that are well-suited to students interested in careers in teaching, public and mental health, counseling, social work, the criminal justice system, public policy, marketing, journalism, and the nonprofit sector.

Students can take advantage of the exchange course program to enroll in sociology and ethnic studies courses at the University of California, Berkeley, as well as Mills College and California State University East Bay. The department offers a field placement/internship program with neighboring institutions such as social service agencies and businesses.

**LEARNING OUTCOMES**

When students have completed the sociology program they will be able to:

- **UNDERSTAND** sociological theory and methods and be able to apply theoretical explanations to empirical examples.
- **WORK INDEPENDENTLY** to research secondary sources using library resources. In addition, students will be able to collect and analyze primary data.
- **WRITE** research papers with a clear thesis statement with sufficient support for that thesis. Also, write papers in accordance with the ethical and professional standards of the American Sociological Association.
- **EXAMINE** their own lives in social context and assess how their lives are affected by the specific time and place in which they live.
- **EMPLOY** critical reading, thinking, and writing skills that will allow them to research, analyze, and report on a social issue in a way that incorporates what they have learned while maintaining their own authentic voice.
- **EXPRESS** themselves with confidence in both written and oral communication.

**MAJOR REQUIREMENTS**

The sociology major is comprised of 13 lower and upper division courses.

A minimum acceptable grade of C- for coursework is required to count toward the major. In addition, the minimum acceptable grade is C for the capstone courses Sociology 130, Sociological Theory and Sociology 132, Research Methods.

**LOWER DIVISION**

- Sociology 2 Introduction to Sociology
- Sociology 4 Social Problems
- Anthropology 1 Introduction to Social and Cultural Anthropology
- Mathematics 4 Introduction to Probability and Statistics

**UPPER DIVISION**

I. Sociology 134 Contemporary Social Issues
   - Anthropology 121 World Cultures
   - Sociology 130 Sociological Theory
   - Sociology 132 Sociological Research Methods

II. Five additional upper division courses, three of which must be Sociology courses, two of which may be Anthropology courses.
**MINOR REQUIREMENTS**

A minimum acceptable grade of C– is required for coursework to count toward the minor.

**SOCIOLoGY**

The minor in Sociology requires two lower division courses (Sociology 2, Introduction to Sociology and Sociology 4, Social Problems) and four upper division Sociology electives.

A combined Anthropology and Sociology minor requires Anthropology 1, Introduction to Social and Cultural Anthropology, Sociology 2, Introduction to Sociology, and four upper division courses evenly divided between Anthropology and Sociology.

**ETHNIC STUDIES**

The Sociology Department offers a minor in ethnic studies. The minor allows a focus on two of the under-represented ethnic groups in the United States; it provides theoretical background on issues of ethnicity, and is interdisciplinary in nature. The minor requires the following courses: Anthropology 1 or Sociology 2, and Sociology or Anthropology 112; two courses from Anthropology 119, Anthropology or Sociology 123 (courses may be repeated for credit as content varies); either Sociology 116 or History 136; Politics 110, and one upper division course in History, English, or Modern Languages that covers either of the two ethnic groups which are a part of a student’s focus, i.e., English 153, 154; Spanish 150; History 140, 141; Psychology 7, 165.

**JUSTICE AND COMMUNITY**

This multidisciplinary minor, which is housed within the Departments of Sociology and Anthropology, incorporates field research and issues of social justice into the experiences and curriculum of students pursuing careers in social justice. The following courses are required:

**LOWER DIVISION REQUIREMENTS**

Sociology 4 and either Economics 3 or 4, or Economics 10

**UPPER DIVISION REQUIREMENTS**

Theory (1): Politics 115

Theory/Praxis (1): An/Soc 122 or 124 or Religious Studies 129 or BusAd 181 (or 182) or Politics 106

Electives (2): Sociology 116, 120, 122, 124, 128; BusAd 181 or 182; Communication 161, Econ 159, 152, 192; Politics 106, 110, 135; Religious Studies 140, 141, 143

Capstone (1): Sociology or Anthropology 126

Students must take five courses outside their major. Sociology majors must take Sociology 124 in place of Sociology 4, and both electives must be outside the department. Politics students must choose one elective outside their department; and Economics majors must take an additional upper division elective in place of Economics 10.

**PREREQUISITE GRADE**

Any course listed in this department with a prerequisite assumes a grade of C– or better in the prerequisite course. In addition, C is the minimum acceptable grade in Sociology 130 and 132 for credit toward the major.

**COURSES**

**LOWER DIVISION**

2 Introduction to Sociology

Sociological theory, methods and the sociological perspective are studied. This perspective enables students to see how the self, human behavior and attitudes are shaped by social structures and institutions, e.g., social class, popular culture, and the family. The social world is re-examined (social rules, deviance, gender, inequality, the economy, etc.).

4 Social Problems

An overview of the causes, characteristics, and responses to social problems in the United States. Topics such as crime, substance abuse, racism, ageism, and family instability are studied through the sociological framework.

**UPPER DIVISION**

All upper division courses have a prerequisite of any one of the following lower division Sociology or Anthropology courses: Anthropology 1, Sociology 2, Sociology 4, or the consent of the instructor.

111 Kinship, Marriage, and Family

A concentration on modern, westernized societies where kinship and marriage are still the basis of society yet are undergoing significant changes.

112 Race and Ethnicity

This course presents sociology’s key concepts and theories in the study of race and ethnicity. Focusing primarily on the U.S., this course looks at the cultural and social constructions of race and ethnicity.

114 Urban Studies

Traces the development of modern communities, ranging from suburbs to the megalopolis. Studies the benefits and problems of contemporary urban life and projects future trends based on sociological models.

116 New Immigrants and Refugees

Looks at the attitudinal and legal reactions to immigrants and refugees in the United States in this century. Emphasis is placed on the new Americans, why they are coming, and how they differ from earlier migrants. Special attention is given to the impact of new immigrant groups in California.

118 Health and Illness

Presents social and cultural factors influencing health and illness. Looks at the roles of health care professionals, patients, and medical settings in our society. Discusses the relationships between the current health care system and the political and economic system.
Sociology Curriculum

120 Social Movements and Social Change
Each course focuses on one or more social movements, which are collective actions aimed at social change. The course addresses factors that can bring about social movements and determine their success or failure.

122 Education, Culture, and Society
Examines formal education from a sociocultural perspective. Provides students with an understanding of the concepts of schooling and learning, of culture and culture reproduction, the linkages of education to other social institutions, the school as a social organization, and the role of education in the transmission of culture and social change. Emphasis is placed on the political, religious, ethnic and economic aspects of education shown by ethnographic studies of schooling in the United States and cross-culturally.

123 Ethnic Groups in the United States
Each course in this series looks at one of the following American ethnic groups: Latino, Asian American, African American. While emphasizing the contemporary period, each course focuses on the social, cultural and historical experiences of each group. Areas covered are assimilation and resistance, distribution in the social and power structure, family systems and cultural values, labor and migration, role of religion, status of women, etc. May be repeated for credit as content varies.

124 Justice and Community
Addresses the use of state power in the carrying out of crime control, retribution and the overall protection of the community. The course has three main parts: a theoretical look at how we have ended up with the justice system that we have today; the practice of justice through field studies on police, courts, and prisons; and an in-depth investigation into an area of criminal justice of current relevance (such as “Three Strikes,” the expansion of prisons, or race and justice).

125 Gender and Culture
While sex differences are biological, gender encompasses the traits that culture assigns to and inculcates in males and females. This course studies the latter: the interplay between gender and culture. It takes an inclusive and cross-cultural perspective, with a focus on men and women in differing cultural contexts such as ethnic group membership and socioeconomic status.

126 Field Experience
Opportunity for students to gain hands-on experience conducting sociological analysis in the field. Supervised work in community agencies, government bureaus, museums, and political or industrial organizations.

128 Crime and Delinquency
The course addresses different theoretical and sociological approaches to crime, follows changes in these approaches over time and looks at how these changes reflect broader shifts in our comprehension of human nature and behavior. Students gain insights not only to changes in the understanding of crime but also to changes in our fundamental view of human behavior.

130 Sociological Theory
Analysis of the works of major theorists who have influenced sociology. Emphasis on explaining what is essential about particular theoretical frameworks, how they can be used, and why they should be studied. Students must have completed Sociology 2: Introduction to Sociology. This course should be taken in the senior year.

132 Sociological Research Methods
Logic of research procedures and the theoretical and practical issues arising from sociological research. Skills and methods of designing and analyzing research explored in readings and exercises. Design of an original research proposal. Students must have completed Anthropology 1: Introduction to Social and Cultural Anthropology and Sociology 2: Introduction to Sociology. This course should be taken the last semester of the junior year or in the senior year.

133 Senior Thesis
Continuation of Research Methods course where honor students undertake individual research, culminating in the senior project. This should be taken in the senior year.

134 Contemporary Social Issues
Each contemporary social issues course concentrates on one particular social problem in the United States today. Areas covered include racism, classism, sexism, ageism, poverty, environmental degradation as well as deviance. Among the topics covered in regard to these issues are causation, stratification of resources, distribution of power and attempts to resolve these problems. May be repeated for credit as content varies.

135 Special Topics
Special topics in sociology include such issues as international race relations, criminology and emotion, sociology of disaster, sociology of film, and other topics. May be repeated for credit as content varies.

195 Special Study Internship
This course is usually taken by an upper division student who wishes to complete his/her education with related work experience and is maintaining at least a C average. In addition to work experience (6-8 hours per week), outside research and a term project are usually required. Sponsorship by a Sociology faculty member and approval of the department chair is required.

197 Independent Study
This course entails independent study or research for students whose needs are not met by courses available in the regular offerings of the department. The course usually requires the writing of a term project. Sponsorship by a Sociology faculty member and approval of the department chair is required.

199 Special Study—Honors
This course is only available to upper division majors with a B average or higher and entails independent study or research under the supervision of a Sociology faculty member. Approval of the department chair is required.
Curriculum Studies for Multilingual Students

STUDIES FOR MULTILINGUAL STUDENTS

The prime objective of this program is to serve matriculated students whose native language is not English. SIS 3 helps students develop their writing skills so they can take SIS 4 and 5, which are designed to equip students to handle college-level reading and writing. These courses fulfill the English composition requirements (see Program of Study, p. 39). SIS 15 is a study of American culture and values and is required of all international students who have not completed their entire secondary education in the United States (see Program of Study, p. 39).

FACULTY
Nushafarin Safinya, M.A., SIS Lecturer
John Knight, M.A., SIS Lecturer
Chris Correale, SIS Lecturer

PREREQUISITE GRADE
Any course listed in this program with a prerequisite assumes a grade of C– or better in the prerequisite course.

COURSES

SIS 3 Practice in Writing for Non-Native Writers
This course is designed primarily for students whose native language is not English and who score 3 or less on the Saint Mary’s College Writing Placement Exam. The purpose of SIS 3 is to bridge the gap between students’ present level of writing competency and that expected in SIS 4. Students write multiple drafts of essays concentrating on developing and organizing ideas, constructing complex sentences, and enhancing proofreading and editing skills. With an enrollment limited to 15, classes are team-taught to allow for individualized instruction. A grade of C– or better and passing an exit exam are required before enrolling in SIS 4.

SIS 4 Composition for Non-Native Writers
This course, designed primarily for students whose native language is not English, satisfies the English composition requirement (see Program of Study, p. 39). Work focuses on the expository essay and guides the student through the various stages in the writing process, including content generation, pre-writing, and editing. Essays and several full-length works provide models for writing and help students develop both critical thinking and discussion skills. Students must demonstrate competency on rhetorical and mechanical levels through in-class writing and two portfolios of carefully revised assignments.

SIS 5 Argument and Research for Non-Native Writers
Building on the composition skills developed in SIS 4, this course focuses on the production of at least two major research papers. Investigating topics of their own choosing, students receive guidance in the skills of summarizing, paraphrasing, and the conventions of citing source material. Essays and nonfiction works of contemporary relevance provide models for effective writing and critical reflection. In addition to the research papers, students must submit two portfolios of work demonstrating ability to analyze and argue a position. Prerequisite: SIS 4 or English 4.

SIS 15 American Culture and Civilization
This survey course provides the student with the tools to interpret and evaluate culture from a social science perspective. The approach is cultural with an emphasis on American values, life-styles, and traditions within a framework of the day-to-day workings of American culture. Course work is comprised of lectures, readings, discussions, and field-work projects. Required of all international students. Must be taken during the first semester of attendance. In certain cases, permission for exemption may be granted upon evaluation by the SIS Placement Committee.

SIS 101 Writing Tutor Workshops for Non-Native Writers of English (.25)
Through examining their own work in a workshop environment, students learn techniques for coaching non-native writers of English in developing and editing academic writing. Theories about cross-cultural communication are discussed and tested in practice.
THEOLOGY AND RELIGIOUS STUDIES

As a Catholic college, Saint Mary’s welcomes all students to explore questions of belief. The Theology and Religious Studies Department carries primary, though not exclusive, responsibility for this exploration through the College’s two-course requirement in religious studies. By requiring of all students an introduction to the Christian scriptures followed by an upper-division course of their choosing, the College demonstrates the importance both of faith itself, and of critical inquiry into it.

As a liberal arts college, Saint Mary’s encourages its students to become critical thinkers. The Theology and Religious Studies Department enthusiastically participates in this College-wide goal. Its offerings continually charge students to think for themselves, to challenge preconceived notions, and to integrate what they learn into a personal worldview that remains open to learning from the perspectives of others.

Finally, as a Lasallian college, Saint Mary’s, while respecting the difference between a school and a church, also respects the need to integrate knowing and doing and to foster a radical concern for justice in the world.

While the Theology and Religious Studies Department thus plays an important role in the general education of all the students, it also takes satisfaction in the growing number of students who choose to major or minor in Theology and Religious Studies. The minor provides a convenient way for those students who would like to explore their religious questions beyond the two-course requirement, but who do not have room in their schedule for either a full-time major in religion or a double major with religion. It consists of five courses, including the two already required of all students, and any three other upper-division courses.

The major builds on the foundation of the scripture course, where students learn foundational techniques of analysis of religious texts and concepts. Combining choice with guidance, the program enables each student to create a series of courses both integrated and varied.

Whether the students have fulfilled the requirements for the major, the minor, or just the two-course requirement, the department’s goal is to prepare them for a life of continual growth, not just in knowledge, but in wisdom.

FACULTY
Norris Palmer, Ph.D., Associate Professor, Chair
Brother Michael Avila, FSc, Ph.D., Lecturer
Michael Barram, Ph.D., Associate Professor
John Dwyer, Ph.D., Professor Emeritus
D. Zach Flanagan, Ph.D., Assistant Professor
Paul Giurlanda, Ph.D., Professor
Brother Mark McVann, FSc, Ph.D., Professor
Brother Michael F. Meister, FSc, Ph.D., Assistant Professor
Father John Morris, Ph.D., Adjunct
Felicidad Oberholzer, Ph.D., Professor
Marie Pagliarini, Ph.D., Assistant Professor
Thomas Poundstone, Ph.D., Associate Professor
Brother S. Dominic Ruegg, FSC, Ph.D., Professor Emeritus

LEARNING OUTCOMES
When they have completed the two-course requirement in theology and religious studies,

• STUDENTS WILL KNOW:
  – the basic biblical story, from Adam to Revelation, as understood in the Christian tradition, including major names, places, events and themes
  – the basic historical-cultural background to the biblical texts
  – the steps in the formation of the Bible
  – some of the diverse ways in which the Bible has been read throughout history

• STUDENTS WILL BE ABLE TO:
  – employ historico-critical method on biblical, religious and theological texts
  – make connections between the biblical story and the topics studied in their second course
  – use the tools of scholarship commonly accepted in the academy to study religion
  – converse respectfully and critically about religion, especially with those of differing views
  – write an essay (of at least several pages and conforming to standard norms for good writing) that demonstrates an ability to analyze religious texts (understood broadly), and to recognize and struggle with their contexts, contradictions and implications

• STUDENTS WILL:
  – take growing pleasure in the reading and study of religion
  – critically appreciate the Christian tradition
  – develop a growing awareness both of the mystery of life and of themselves as called by that mystery
  – develop an increasing sensitivity to the dignity of persons, as taught in the Catholic tradition
  – gain greater clarity about their beliefs and values, leading to the development of a mature and responsible personal philosophy
**Curriculum Theology and Religious Studies**

**GENERAL EDUCATION REQUIREMENTS**

Students entering Saint Mary’s College with fewer than 16.0 units are required to complete two Theology and Religious Studies courses. Students who transfer in with 16.0 or more units must complete only one Theology and Religious Studies course. Please note that TRS 01 or its equivalent is a prerequisite to all upper division classes in Theology and Religious Studies. Students may apply Theology and Religious Studies courses beyond those required to their Area A (Humanities) requirement.

Theology and Religious Studies classes, like Collegiate Seminar courses, are integral to the Saint Mary’s experience and are expected to be completed in residence. As such, transfer courses are not routinely accepted in fulfillment of this requirement after establishing residence at Saint Mary’s College. For courses taken as part of study abroad to count towards the core requirement in Theology and Religious Studies, they should be shown in advance as not only academically rigorous but also as enhancing the study abroad experience in that particular country.

**MAJOR REQUIREMENTS**

**LOWER DIVISION**

Religious Studies 01

**UPPER DIVISION**

One course, selected with guidance of the Chair, from each of the following areas:
- Christian History
- Scripture
- Contemporary Christian Thought
- Ethics
- World Religions

Four additional elective courses

Majors are also encouraged to take an “Intensive Inquiry” course chosen each semester by the department and having special prerequisites. Intensive Inquiry courses are designed to offer students who have already taken two Theology and Religious Studies courses an opportunity for synthesis and assimilation of what has been learned in earlier courses.

**MINOR REQUIREMENTS**

The minor in Theology and Religious Studies requires five courses: TRS 01, Introduction to Biblical Literature, and any four upper division courses. The department strongly recommends that at least one of the upper division courses should be an Intensive Inquiry class.

The Theology and Religious Studies Department also offers a focused minor in the “Catholic Tradition.” Six courses are required:
- TRS 01, Introduction to Biblical Literature;
- two of the following three courses in sequence: TRS 101, Origins of Christianity, TRS 102, The Middle Ages, and TRS 103, The Reformation Era;
- either TRS 141, Christian Ethics or TRS 143, Catholic Social Teachings;
- and two electives from a list of classes focusing on the Catholic tradition.

**PREREQUISITE GRADE**

Religious Studies 01 is a prerequisite for any upper division Religious Studies course; however, only a passing grade in RS 01 is required, not a minimum grade of C-.

**COURSES**

**LOWER DIVISION**

01 Introduction to Biblical Literature

An exploration of the Bible as a whole, its basic contents and contexts, and the various critical methods of interpretation used to understand it.

**UPPER DIVISION**

**CHRISTIAN HISTORY**

100 Topics in Christian History

An investigation of a topic in Christian history not covered by the regular offerings of the department. Topics are announced prior to registration each semester. May be repeated for credit when content changes. Prerequisite: TRS 01.

101 Origins of Christianity

The Christian religion begins its story with only a few dozen followers of a crucified man in the first century – backwater, uneducated, and unlikely to survive very long in a Mediterranean world dominated by much more powerful religious systems. Yet, within less than three centuries, Christianity would overwhelm the Roman Empire and beyond, building an elaborate theological and ecclesiastical system that would last until the present day. This course examines the rise of this Christian movement, focusing on such topics as Gnosticism, martyrdom, and the development of Christian ideas about Jesus. Prerequisite: TRS 01.

102 The Middle Ages

The European Middle Ages was a world dominated by monks, popes, and mystics. Life was an uninterrupted struggle between heaven and hell, life and death, priests and kings. This course is an introduction to the major figures, events, and movements of this period from the fall of Rome to the dawn of modernity. Students will have the opportunity to explore the great pillars of medieval religion – monasticism, papalism, theology, and mysticism – as well as delve into the darker side of the Crusades and the burning of heretics. Prerequisite: TRS 01.

103 Reformation

Every age of Christian history has been marked by the call for religious reform – renewing both the personal lives of each believer and the institutional structures that endure through the centuries. However, such a universal passion for reform took on special importance in the 15th and 16th centuries, a period that has come to be known as The Reformation. This course explores the variety of reforming voices, Protestant and Catholic, that shaped the future of Christianity, giving special attention to the major theological and political issues that dominated the time. Prerequisite: TRS 01.
104 Challenge of Modernity
A study of the life and faith of the Christian community as it faced the challenges of the Enlightenment and the upheavals of the French Revolution. Prerequisite: TRS 01.

105 History of the Church
A study of the life and faith of the Christian community from New Testament times to the present. Prerequisite: TRS 01.

SCRIPTURE
110 Topics in the Study of Scripture
An investigation of a topic in Scripture not covered by the regular offerings of the department. Topics are announced prior to registration each semester. May be repeated for credit when content changes. Prerequisite: TRS 01.

111 The Pentateuch
A study of the first five books of the Bible, the history of their composition, and their theological contributions to Judaism and Christianity. Prerequisite: TRS 01.

114 The Gospel of Mark
A close study of the Gospel of Mark with an emphasis on its literary, historical, social, and political background. Prerequisite: TRS 01.

115 Jesus and His Teaching
An exploration of teachings attributed to Jesus in the Synoptic Gospels (e.g., the Sermon on the Mount, parables, and other memorable statements), emphasizing the ways in which Jesus’ statements have been interpreted and appropriated. Prerequisite: TRS 01.

116 Paul’s Letters and Legacy
An in-depth examination of the letters of Paul, focusing on the mission and message of the apostle in his Jewish and Greco-Roman contexts. Students develop a broad understanding of the apostle’s work and thought, as well as an appreciation for the historic and continuing impact of these documents. Prerequisite: TRS 01.

117 Wealth and Poverty in the Bible
Cross-listed with the Department of Sociology, this course explores biblical and theological perspectives and values on wealth, poverty, and economic justice, paying particular attention to potential implications those issues may have for the contemporary Christian community and wider society. Prerequisite: TRS 01.

119 The Apocalyptic Impulse: Literature and Legacy
An exploration of the Book of Revelation as well as other early Jewish and Christian apocalyptic literature not included in the biblical canon, seeking to understand the social and historical contexts that gave rise to these writings, how the documents functioned for their original readers, and the ways this literature has been understood and appropriated in various times and places during Christian history. Prerequisite: TRS 01.

CONTEMPORARY CHRISTIAN THOUGHT
120 Topics in Contemporary Christian Thought
An investigation of an area of Christian Thought not covered by the regular offerings of the department. May be repeated for credit when content changes. Prerequisite: TRS 01.

121 Belief and Unbelief
An investigation, theoretical and existential, of the challenge of faith today. Prerequisite: TRS 01.

122 Jesus: The Person and the Myth
This course examines the traditional sources of the Christian community’s understanding of Jesus of Nazareth in the light of contemporary concerns and critiques. Prerequisite: TRS 01.

123 Sex and the Spirit
An exploration of a contested area in Christian thought today, setting traditional understandings in dialogue with contemporary concerns and critiques. Prerequisite: TRS 01.

124 War and Violence
This course provides a brief overview of Christian attitudes toward war, and then explores current authors, with the aim of stimulating students to arrive at a considered and responsible position. Prerequisite: TRS 01.

125 Women in the Christian Tradition
An introduction to the major themes and tensions that shape the study of women in the Christian tradition. Prerequisite: TRS 01.

SACRAMENTS AND SPIRITUALITY
130 Topics in Spirituality
An investigation of a topic in spirituality not covered by the regular offerings of the department. Topics are announced prior to registration each semester. May be repeated for credit when content changes. Prerequisite: TRS 01.

131 Christian Spirituality
An investigation of the theoretical and practical problem of how to live authentically today in the light of the gospel of Jesus. Prerequisite: TRS 01.

132 Sexuality, Marriage and Family: A Catholic Perspective
A presentation of the teaching of the Church on all aspects of sexuality, marriage and family. Prerequisite: TRS 01.

133 Life Stories and Theology
Uses narratives of exemplary lives, ancient and modern, Christian and non-Christian, as a tool to investigate the task of authentic existence today in the light of the gospel. Prerequisite: TRS 01.

134 The Catholic Imagination
Catholicism is much more than a set or intellectual propositions. The doctrine of the church grows out of a faith experience and a worldview that is rich and deeply fascinating. That worldview includes the stories of scripture and the symbolism of the sacramental tradition. It includes the mystical experience of women and men of prayer as well as art, music, poetry, and fiction. This course invites students into a comprehensive study of the Catholic imagination.
ETHICS
140 Topics in Christian Ethics
An investigation of a topic in ethics not covered by the regular offerings of the department. Topics are announced prior to registration each semester. May be repeated for credit when content changes. Prerequisite: TRS 01.

141 Christian Ethics
This course examines the principles and norms by which choices lead to morally good or bad actions, in the light of contemporary issues and critiques, and with special attention to the Catholic tradition. Prerequisite: TRS 01.

142 Medical Ethics
Explores the relation between religious and moral values and the choices we as individuals and as a society make about health care. Prerequisite: TRS 01.

143 Catholic Social Teachings
Explores the Catholic approach to questions of social justice (e.g., the problems of poverty, exploitation, and racism). Prerequisite: TRS 01.

WORLD RELIGIONS
150 Topics in World Religions
An investigation of a topic in World Religions not covered by the regular offerings of the department. Topics are announced prior to registration each semester. May be repeated for credit when content changes. Prerequisite: TRS 01.

151 Introduction to Judaism
This course investigates the evolution of Jewish thought, worship, traditions, theology, and history. Prerequisite: TRS 01.

152 Islam: Beliefs and Practices
This course provides students with an understanding of Muslim beliefs, practices, and cultural heritage. Prerequisite: TRS 01.

153 Eastern Religions
An examination of some of the world’s major Eastern traditions (Hinduism, Buddhism, Confucianism, and Taoism), either singly or in concert. Prerequisite: TRS 01.

154 Hinduism
This course examines the cultural/religious phenomenon of “Hinduism” in a number of its ancient and modern forms by examining how it has developed in the context of historical forces and responded to the modern world as it adapts to a global setting. It examines dimensions of Hindu theology and philosophy; the role of deities, temples, and cultural practices; investigates central myths, much-loved stories, global gurus, and Bollywood films. Prerequisite: TRS 01.

155 Buddhism
This course examines the history, thought, and practice of Buddhism by studying the enduring themes and cultural adaptations of its main schools through primary and secondary texts, art, video/audio, and field trips. Prerequisite: TRS 01.

156 Religions of India
The course focuses on the religious traditions of Hinduism, Buddhism, Islam, Jainism, Zoroastrianism, and Sikhism and examines their interaction in historical context and contemporary India. Prerequisite: TRS 01.

157 Pluralism and Interreligious Dialogue
This course proceeds under the assumption that various of the world’s religions are similar in enough ways to make some comparison possible and different enough to make it interesting. The history, prospects, and limitations of interreligious dialogue are considered within the context of an increasingly pluralistic world. Prerequisite: TRS 01.

RELIGION AND CULTURE
160 Topics in Religion and Culture
An investigation of a topic of religion and culture not covered by the regular offerings of the department. Topics are announced prior to each semester. May be repeated for credit when content changes. Prerequisite: TRS 01.

161 Religion and Literature
An exploration of the rich relationship between literary productions and religious commitment. Prerequisite: TRS 01.

162 Biblical Themes in Literature
Religious and biblical themes are woven into important works of modern American fiction. This course usually features a critical reading of biblical texts like Genesis, Exodus, and Maccabees followed be a reading of plays and novels like Inherit the Wind, A Different Drummer, and The Chosen. Prerequisite: TRS 01.

164 Dante and The Divine Comedy
This course offers an in-depth spiritual and literary exploration of one of the greatest works of world literature: Dante’s Divine Comedy. Prerequisite: TRS 01.

167 Seeing Salvation: Christian Art and Architecture
This course examines the buildings, paintings, and sculptures that Christian artists over the centuries have created in their attempts to give visible embodiment to their religious experiences. The course will focus on what their creations reveal of how they understood the gospel, how well they gave expression to the deepest longings of the human heart, and the influence of their creations on our understanding of the Christian faith. Prerequisite: TRS 01.

197 Special Study
An independent study or research course for students whose needs are not met by the regular course offerings of the department. Permission of the department chair and instructor required.

198 Special Study—Honors
An independent study or research course for upper division majors with at least a B average in Theology and Religious Studies. Permission of the department chair and instructor required.
WOMEN'S STUDIES

Women's Studies fulfills and exemplifies the mission and curriculum of Saint Mary's College by offering students the opportunity both to critically examine issues of gender across many fields of knowledge, and to study the varied contributions and experiences of women in historical periods and across cultures. Since the 1960's, Women's Studies students—women and men—have found that embarking on such a course of study has had a profound effect on their academic and personal lives. The questions and insights that Women's Studies scholars have brought to their fields of inquiry have expanded the traditional boundaries of intellectual investigation and generated new areas of research and teaching, as students explore human experience through the lens of gender. In keeping with this tradition of scholarship, teaching and learning, Saint Mary's College Women's Studies Program offers an interdisciplinary academic course emphasizing critical thinking and inquiry.

In its 10-year tenure at Saint Mary's, the Women's Studies Program has been specifically developed to address the College's mission to educate the whole human being. This mission is in concordance with the College's academic priorities. The Women's Studies major emphasizes the development of a teaching and learning community across disciplines, framing the scholarly and pedagogical discourse on gender as it intersects class, race, sexuality, and global concerns. This emphasis has an integral connection to the liberal arts, Lasallian, and Catholic mission of the College, through its scholarly focus on the primacy of human interaction and relationship within the context of community responsibility, social justice and the intellectual and moral development of the individual.

Women's Studies courses are interdisciplinary in nature, cross-listed with a range of departments including Anthropology/Intellectual and Moral Development of the Individual, Psychology, Anthropology, Sociology, Literature, Religious Studies, among others.

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FACULTY
Myrna Santiago, Ph.D., Director, Women's Studies Program, Associate Professor, History
Denise Witzig, Ph.D., Candidate, Coordinator, Women's Studies Program, Adjunct in English
Theo Carliie, Ph.D., Professor, Integral Program
Catherine Davalos, M.F.A., Associate Professor, Performing Arts
Jan Dosne, Ph.D., Professor, English
Jose Feito, Ph.D., Associate Professor, Psychology
Margaret Field, Ph.D., Associate Professor, Biology
Paul Giurlanda, Ph.D., Professor, Religious Studies
Sandra Grayson, Ph.D., Professor, English
Jennifer Heung, Ph.D., Assistant Professor, Anthropology
Jeannine King, Ph.D., Assistant Professor, English
Carol S. Lashof, Ph.D., Professor, English
Gretchen Lemke-Santangelo, Ph.D., Professor, History
Patrizia Longo, Ph.D., Professor, Politics
Phyllis Martinei, Ph.D., Professor, Sociology
Molly Metherd, Ph.D., Assistant Professor, English
Alvaro Ramirez, Ph.D., Associate Professor, Modern Languages
Maria Ruiz, Ph.D., Assistant Professor, Modern Languages
Scott Schönfeldt-Aultman, Ph.D., Assistant Professor, Communication

• CONTINUE to explore areas of social justice in theory and in practice, particularly those related to gender, women and sexuality in society.
• CONSIDER ways to engage in intellectual and social activities and advocacy which increase the individual's understanding of global and local citizenship and community responsibility.

MAJOR REQUIREMENTS
The major requires 12 courses. Four are core courses in Women's Studies: one lower division (WS 1) and three upper division (WS 100, WS 177, and WS 190). Eight are upper division electives cross-listed with Women's Studies. Majors have two options: a) a concentration in either social sciences or humanities, with the majority of courses in one of those disciplines; or b) a balanced distribution of courses, four and four, in social sciences and humanities. Students must take at least two courses each from social sciences and humanities; one cross-listed Jan-Term course may be petitioned for credit; and at least one course must focus on non-Western, Third World, or minority U.S. women. Women Studies students may also design a double or split major with another discipline, with the approval of the director of Women's Studies and the chair of the other department.

MINOR REQUIREMENTS
The minor requires six classes: three core courses (WS 1, 100, 177), and three upper-division electives cross-listed with Women's Studies. No more than two courses may be in a single discipline; one must focus on non-Western, Third World, or minority U.S. women.

PREREQUISITE GRADE
Any course listed in this program with a prerequisite assumes a grade of C- or better in the prerequisite course.
CURRICULUM Women's Studies

COURSES

CORE COURSES

1 Introduction to Women's Studies
An introduction to the interdisciplinary field of Women's Studies. The course provides a broad perspective on Women's Studies research in a variety of disciplines (including sociology, psychology, politics, philosophy, history, and literature). Topics include the historically changing representations of women; the history of the women's movement in the United States; and issues of contemporary feminism. A goal of the course is for each student to develop a critical perspective on the meaning of gender in our society. This course fulfills Area C requirement.

100 Research Seminar on Special Topics in Women's Studies
An exploration of a theme or problem area in the field of Women's Studies. Possible topic areas include: women and work; gender and science; gender and popular culture; women in the third world; cultural representations of gender; women and the media; masculinity. The course combines seminar discussions of texts that represent a variety of methodologies and disciplines with research papers. Research topics are designed by individual students in consultation with the instructor. Prerequisite: Women's Studies 1 or permission of instructor.

177 Feminist Theories
This seminar provides a series of inquiries into the diverse theoretical frameworks of contemporary feminism. Critical race theory, cultural studies, post-structuralism, Marxist and postcolonial theories, gender difference and queer theories, and third-wave identity politics are a few of the directions in discussion and research. Prerequisite: Women's Studies 1 or permission of instructor.

190 Senior Capstone
Critical examination of theories and issues in contemporary women's and gender studies methodologies. Directed readings, research, and writing of a final senior paper or project under the supervision and approval of instructor. At the conclusion of the term, students are expected to present their work at a program colloquium of faculty and students. Prerequisites: Upper-division standing; Women's Studies 1; Women's Studies 100 and 177. Open to minors upon approval of director and instructor of the course. (In the case of a split or double major, Women's Studies 190 may be taken in conjunction with thesis work in the other discipline. In the case of a minor, Women's Studies 190 may be taken in conjunction with thesis work in the major.)

REGULARLY OFFERED ELECTIVES

88 Biology of Women
Biology of women is an introduction to the structure, physiology, and genetics of women across the lifespan. We study physiology and development from conception, through puberty, pregnancy and aging. The first half of the course explores the genetic, hormonal, and developmental basis for one's gender. The latter part of the course deals with specific health concerns of women and focus on the high frequency of uniquely gender-related illnesses and their physiologic basis. (Cross-listed as Biology 88.)

106 Gender Politics
A study of the social, economic, political, and legal status of women in contemporary America. The course is an introductory survey of the dynamic changes taking place in the relationship between women and men. Topics include the history of women's liberation movements, the Equal Rights Amendment, abortion, sexism in the workplace, feminist social theory, and women in politics. (Cross-listed as Politics 106.)

115 Theories of Justice
The course examines different definitions and views of justice: justice and race; justice and gender; justice and welfare; international justice; justice and the law; environmental law; court cases and current debates on euthanasia, abortion, and pornography. (Cross-listed as Politics 115.)

116 New Immigrants and Refugees
Looks at the attitudinal and legal reactions to immigrants and refugees in the United States in the 20th century. Emphasis is placed on the new Americans, why they come, and how they differ from earlier migrants. Special attention is given to the impact of new immigrant groups in California. Prerequisite: Anthro 1. (Cross-listed as Sociology 116.)

120 Transgression and Defiance in the Texts of Contemporary Latin American Women Writers (in Spanish)
Women's writing in Latin America has transformed traditional images of women, their societies, and the cultural and political context that they narrate. This course is a survey of Latin American women writers breaking out of the literary tradition. (Cross-listed as Modern Languages 120.)

121 Dance History I
This course covers the development of dance from its roots in court dancing through the development of ballet to the beginning of the modern era. Students attend professional dance concerts in the Bay Area. (Cross-listed as Performing Arts 121.)

123 Sex and the Spirit
The course looks critically at body, gender, and sexuality as clues to the spirit in the religious tradition, asking, are gendered bodies and spirit inherently in tension? Is it possible for sexual communion to be a “sacrament”? (Cross-listed as Religious Studies 123.)

125 Women in the Christian Tradition
An introduction to the major themes and tensions that shape the study of women in the Christian tradition. (Cross-listed as Religious Studies 125.)

139 History of Women in America
A study of the changing roles and status of American women from the Colonial period to the present. Topics considered include work and family life, the legal status of women, education, reform movements, and the campaigns for suffrage and women's rights. (Cross-listed as History 139.)

147 Psychology of Gender
Examines how psychological, biological and social factors influence the development of masculine and feminine gender roles, and explores how these gender roles, in turn, influence development of the self and social behavior. Prerequisites: Psych 1 and 2 (Cross-listed as Psych 147.)

153 U.S. Latino/a Literature and the Americas (in English)
An introduction to the literature and cultures of Latinos/as in the United States, with prose and poetry from Chicanos/as, Cuban-Americans, Dominican-Americans, and Puerto Ricans, exploring memory, exile, language, family, and displacement. (Cross-listed as English 153.)

173 Women Writers
Intensive study of some aspect of literature by women. Examples of possible topics are: 19th-century British novelists; contemporary women poets; American and Canadian short story writers. May be repeated for credit as content varies. (Cross-listed as English 173.)

In addition, new courses are approved on a term-to-term basis. Examples of such electives include English 154 (African-American women writers) or 141 (medieval women writers), Art History 194 (history of women artists).