Accreditation
Whittier College is regionally accredited by the Western Association of Schools and Colleges. You may contact WASC at:

985 Atlantic Avenue, SUITE 100
Alameda, CA 94501
(510) 748-9001

The Department of Education of the State of California has granted the College the right to recommend candidates for teaching credentials. The College's programs are on the approved list of the American Chemical Society, the Council on Social Work Education, and the American Association of University Women.

Notice of Nondiscrimination
Whittier College admits students of any race, color, national or ethnic origin to all the rights, privileges, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of race, color, marital status, sexual orientation, national or ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs, or athletic and other school-administered programs. Whittier College does not discriminate on the basis of disability in admission or access to its programs.

Fees, tuition, programs, courses, course content, instructors, and regulations are subject to change without notice.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Inside Front Cover</td>
</tr>
<tr>
<td>Academic Calendar</td>
<td>4</td>
</tr>
<tr>
<td>Introducing Whittier College</td>
<td>6</td>
</tr>
<tr>
<td>President's Message</td>
<td>6</td>
</tr>
<tr>
<td>Values</td>
<td>6</td>
</tr>
<tr>
<td>Traditions</td>
<td>7</td>
</tr>
<tr>
<td>Mission</td>
<td>7</td>
</tr>
<tr>
<td>Undergraduate Admission</td>
<td>8</td>
</tr>
<tr>
<td>Credential and Graduate Admission</td>
<td>10</td>
</tr>
<tr>
<td>Student Financing</td>
<td>11</td>
</tr>
<tr>
<td>College Life</td>
<td>19</td>
</tr>
<tr>
<td>The Faculty</td>
<td>19</td>
</tr>
<tr>
<td>The Academic Advising System</td>
<td>19</td>
</tr>
<tr>
<td>Academic Support Programs and Services</td>
<td>20</td>
</tr>
<tr>
<td>Endowed Professorships</td>
<td>23</td>
</tr>
<tr>
<td>Recognition of Academic Achievement</td>
<td>25</td>
</tr>
<tr>
<td>Student Life</td>
<td>25</td>
</tr>
<tr>
<td>Student Rights &amp; Responsibilities</td>
<td>28</td>
</tr>
<tr>
<td>Academic Policies and Procedures</td>
<td>29</td>
</tr>
<tr>
<td>The Curriculum</td>
<td>45</td>
</tr>
<tr>
<td>Degrees</td>
<td>45</td>
</tr>
<tr>
<td>The Liberal Education Program</td>
<td>45</td>
</tr>
<tr>
<td>Whittier Scholars Program</td>
<td>46</td>
</tr>
<tr>
<td>Writing Program</td>
<td>47</td>
</tr>
<tr>
<td>Requirements for Graduation</td>
<td>48</td>
</tr>
<tr>
<td>Liberal Education Program Requirements</td>
<td>48</td>
</tr>
<tr>
<td>Requirements for the Major</td>
<td>49</td>
</tr>
<tr>
<td>Requirements for the Minor</td>
<td>49</td>
</tr>
<tr>
<td>Requirements for Transfer Students</td>
<td>49</td>
</tr>
<tr>
<td>Whittier Scholars Program Requirements</td>
<td>50</td>
</tr>
<tr>
<td>Requirements for the Master of Arts in Education</td>
<td>50</td>
</tr>
<tr>
<td>Courses of Study</td>
<td>51</td>
</tr>
<tr>
<td>Academic Divisions</td>
<td>51</td>
</tr>
<tr>
<td>Course Numbering</td>
<td>51</td>
</tr>
<tr>
<td>Graduate Education</td>
<td>190</td>
</tr>
<tr>
<td>Whittier Law School</td>
<td>191</td>
</tr>
<tr>
<td>Expenses</td>
<td>193</td>
</tr>
<tr>
<td>College Administration</td>
<td>194</td>
</tr>
<tr>
<td>Board of Trustees</td>
<td>196</td>
</tr>
<tr>
<td>Faculty</td>
<td>199</td>
</tr>
<tr>
<td>Index</td>
<td>206</td>
</tr>
</tbody>
</table>
ACADEMIC CALENDAR 2003-2004

FALL SEMESTER 2003
Orientation ............................................. August 30-September 3
Fall Semester ....................................... September 4–December 12
Fall Semester classes begin ......................... September 4
Mid-Semester Break ................................ October 17
Thanksgiving Break ................................ November 27-28
Fall Semester classes end ........................... December 5
Reading Day ......................................... December 8
Finals ................................................. December 9-12

JANUARY INTERIM 2004
January Interim ...................................... January 5-30
Martin Luther King Holiday ....................... January 19

SPRING SEMESTER 2004
Spring Semester ..................................... February 5–May 17
Spring Semester classes begin ..................... February 5
Spring Break ........................................ March 22-26
Spring Semester classes end ....................... May 11
Reading Day ......................................... May 12
Finals ................................................. May 13-15,17

COMMENCEMENT 2004 ................................ May 21

SUMMER TERM 2004
Summer Term ........................................ June 1-August 29
Summer Session I .................................. June 1-June 25
Summer Session II ................................. June 28-August 6
Summer Session III ............................... August 9-August 27
ACADEMIC CALENDAR 2004-2005

FALL SEMESTER 2004
- Orientation: September 4-8
- Fall Semester: September 9–December 17
- Fall Semester classes begin: September 9
- Mid-Semester Break: October 15
- Thanksgiving Break: November 25-26
- Fall Semester classes end: December 10
- Reading Day: December 13
- Finals: December 14-17

JANUARY INTERIM 2005
- January Interim: January 10-February 4
- Martin Luther King Holiday: January 17

SPRING SEMESTER 2005
- Spring Semester: February 10-May 23
- Spring Semester classes begin: February 10
- Spring Break: March 28-April 1
- Spring Semester classes end: May 17
- Reading Day: May 18
- Finals: May 19-23

COMMENCEMENT 2005: May 27

SUMMER TERM 2005
- Summer Term: May 31-August 26
- Summer Session I: May 31-June 24
- Summer Session II: June 27-August 5
- Summer Session III: August 8-August 26
PRESIDENT’S MESSAGE

Never before in the history of higher learning has a liberal arts education been so highly valued. Employers actively seek those who can think in global terms and who can learn, adapt, and solve problems with rigor and creativity. The liberal arts are more crucial than ever for success in the 21st century. Citizens of the future must possess the ability to analyze complex issues rationally and creatively, communicate effectively, work from a solid base of knowledge, and cooperate with individuals from diverse backgrounds in order to develop solutions to complex issues.

As we contemplate the liberal arts in the digital age, we must explore what traditions must evolve or be transformed in order to adapt to our modern era. What can best prepare our students for a time of increasingly rapid change? How do new forms of technology enhance the learning process? What values are timeless? How can we be effective citizens and experience fulfilled lives in an age of increasing flux?

Students, faculty, and staff at Whittier repeatedly address these fundamental educational questions - and so much more - through the curriculum and programs represented in this catalog. The creative spark that is the hallmark of Whittier's liberal arts approach is that all members of the College community share their varied experiences and their love of learning as they advance the life of the mind. At Whittier, we passionately believe that a liberal arts education provides the best preparation for work and life in our new age, creating habits of mind which represent the highest attributes of human life and development.

KATHERINE HALEY WILL, President

VALUES

Located in the hills overlooking metropolitan Los Angeles and coastal Southern California, Whittier College was founded in the City of Whittier by members of the Religious Society of Friends (Quakers) in 1887, and the College was chartered by the State of California in 1901. The social values of its Quaker heritage—respect for the individual, freedom of conscience, integrity, justice, and internationalism—strongly influence its ethos. The campus has a friendly tone and there is a concern for the individual and for his or her personal growth within the context of a community. The College has a long-standing commitment to a diverse student body and faculty, and the tolerance of human difference that it thereby seeks to engender. There is an integration of humanistic and pre-professional education, reflecting Whittier's desire that its members be socially responsible citizens. Also reflective of the Quaker heritage is a commitment within the college community to strive to settle issues amicably and make major decisions by achieving consensus rather than by simple majority vote.
Traditions
A college with a long and distinguished past has traditions that connect each new student with important aspects of community life. These traditions reflect both solemn rituals and the lighter side of college life. Some of Whittier's traditions can be dated to a century ago when the College was founded, and others have emerged as popular events repeated year after year.

The most important Whittier College traditions are those that mark both the initiation of new students into the College and, four years later, their successful completion of the course of study. The President's Convocation, held on the first evening that new students arrive, celebrates the introduction of students into the College community. This impressive ceremony begins with students processing through a corridor of faculty in full academic regalia and concludes with the lighting of candles to symbolize sharing the light of knowledge. Commencement exercises celebrate our students' graduation and feature faculty, graduating students, and distinguished guests marching to the strains of "Pomp and Circumstance."

Between these two important rituals are a host of traditions that help give meaning to the Whittier College experience. These range from the never-ending painting of "The Rock," to Homecoming, Spring Sing, Friday the Squirrel, and the "battle for the shoes" against Occidental College. Celebrations of the diverse cultures represented by students and faculty include the annual Tardeada and Asian Festival. These events reflect the traditions that flow from our rich heritage and from our values.

Mission
Whittier College is dedicated to student learning and transformation. As a community, the College expects and fosters engagement and excellence through the rigorous tenets of the liberal arts, with a strong interdisciplinary emphasis, drawing upon our location in an exceptionally diverse multicultural metropolis. A Whittier education weaves together theory and practice to inspire lifelong learning, responsible citizenship, personal development and professional success.

A selective, independent, four-year college, Whittier offers a nationally recognized liberal arts curriculum, a vibrant campus community that is strong and diverse, and a tradition of academic achievement that includes four Rhodes Scholars and honors from the National Endowment for the Humanities and the National Association of Academic Advisors. It provides an important option in American higher education: a distinctive, high-quality academic program based upon the liberal arts, which also integrates selected professional and pre-professional programs into the core of the College through innovative, interdisciplinary curricula. Committed to excellence in undergraduate education, Whittier also offers selected advanced degrees, and the Whittier Law School is an important part of the total institution.
UNDERGRADUATE ADMISSION

Admission to Whittier College is competitive and students must demonstrate strong academic ability and preparation in order to be a successful candidate for admission. Candidates must show that they have the ability to prosper and be engaged learners within the Whittier academic community; scholastic ability, as demonstrated in previous coursework, is of prime importance. The Admission Committee practices careful, selective admission, but Whittier's concern for each student as a unique person is manifested in its admission policies and procedures. The special qualities, motivations, talents, background and interests of each applicant are assessed along with the more common measurements of academic ability. Further consideration is given to the applicant's commitments, leadership and initiative outside the classroom, as evidenced in school and community activities. Finally, the College is interested in the personal qualities that mark students as potential contributors to our vibrant learning community. Whittier College strives for a student body diverse in economic, social, ethnic, religious and geographic makeup, as well as in academic interests and talents.

All applicants to Whittier College receive individual attention and consideration throughout the admission process. Prospective first year students can apply for entrance in the Fall semester; transfer students can apply for entrance in the Fall or Spring semesters. Detailed information concerning application requirements and deadlines can be found in the Application for Admission or by contacting the Office of Admission. The College web site (www.whittier.edu) is another excellent source of College information.

First Year Student Admission

Whittier College strongly recommends that first year applicants enter with at least four years of English, three or four years of mathematics, two or three years of one foreign language, two or three years of social studies, and two or three years of laboratory science. Honors, Advanced Placement, and International Baccalaureate courses add further strength to an applicant's record and are considered favorably in the admission deliberations.

Credentials Required. Candidates for first year admission normally must provide the completed Application for Admission, a personal essay, high school transcripts, results of the Scholastic Aptitude Test (SAT1) or American College Test (ACT), and two academic recommendations. Personal interviews are highly recommended but not required. Verification of the completion of the high school diploma must also occur prior to matriculation. The College also accepts the Common Application as well as electronic applications for admission consideration.

Non Binding Early Action. First year applicants who view Whittier College as one of their top choices can apply under the Non Binding Early Action Program. Under this program, candidates are free to apply to other colleges and universities, yet do not have to commit to Whittier until May 1. Applicants for Early Action must submit all required credentials by December 1. Candidates are notified of their admission decisions by the end of December and have the opportunity to receive an early assessment of merit scholarship and financial aid eligibility in January.

Admission Decision Notification. Whittier College reviews all other first year applicants as they complete their credentials, with priority given to those students who meet the priority deadline of February 1. Admission decisions, along with scholarship and financial aid eligibility notifications, are mailed beginning in March. Students who wish to accept the offer of admission must provide a non-refundable enrollment deposit.
by the National Candidates’ Reply Date of May 1 to secure their place in the entering class. Enrollment deposits will be accepted after May 1 based on space availability in the first year class.

Transfer Student Admission
Whittier welcomes students who wish to transfer from fully accredited community colleges and four-year institutions. Applicants in good standing who meet the admission standards are admitted to the appropriate class standing at Whittier College. Candidates may apply for entrance into the Fall or Spring semesters.

Credentials Required. Candidates for transfer admission must provide the completed Application for Admission, a personal essay, high school transcripts, proof of attainment of the high school diploma (completion of the G.E.D. may be substituted if 30 transferable units have been earned), and two academic recommendations. The results of the Scholastic Aptitude Test (SAT1) or American College Test (ACT) will be required if the candidate has not completed at least 30 transferable academic units. Personal interviews are highly recommended but not required.

Regular Decision. Whittier College reviews all transfer candidates as they complete their credentials with priority given to those students completing the process by the priority deadlines stated on the Application for Admission. Notification of the admission decision is sent on a rolling basis upon receipt of all credentials. Students who wish to accept the offer of admission must provide a non-refundable enrollment deposit to secure their place in the entering class.

Transferability of Course Work. Whittier College WILL determine the number, type, and applicability of transfer credits to be accepted toward a student's degree. Whittier College will evaluate coursework taken at other regionally accredited institutions on an individual basis upon receipt of the official college transcript. A minimum of a C- must be attained in a course to be applied toward the Whittier College degree. Generally, remedial, professional, technical, vocational, work experience, co-op, and terminal coursework will not be accepted for credit. A maximum of 70 semester credits from a community college and a maximum of 90 credits from a four-year institution can be transferred.

International Student Admission
International students are a vital part of Whittier College’s community of learners and scholars. Applicants with strong academic credentials and demonstrated English proficiency are considered for both first year and transfer admission. In addition to the documents listed previously, international applicants are required to submit a Certificate of Finances and the results of the TOEFL, if English is not the first language (a minimum of 550 paper score or 213 computer score is strongly recommended). All transcripts and other documentation must be translated. Those who wish to transfer credit from a post-secondary institution outside the United States are required to have their coursework evaluated by an external credit evaluation agency. International candidates are urged to complete the process early to allow sufficient time to satisfy visa and immigration requirements. Entrance is normally granted for the Fall semester only.
Admission to Non-Degree Standing

Non-degree standing is granted to a limited number of students who are not currently interested in seeking a degree at Whittier. To apply for non-degree standing, students must submit a transcript from the last institution attended, proof of attainment of the high school diploma, and the appropriate application form. Additional credentials may be requested if needed to make a determination. Non-degree standing is based on the academic credentials of the candidate, his or her intent in continuing the course of study at Whittier, and the availability of space at the College. Students must reapply to continue non-degree standing each semester. A non-degree student must satisfy the English proficiency requirement for degree candidates at the College. A student may transfer no more than 30 credits of courses taken at Whittier College under non-degree status toward a Whittier College Bachelor of Arts and no more than 12 non-degree credits toward the Master's degree at the College. To request a non-degree application or more information, contact the Office of The Registrar.

Credential and Graduate Admission

Admission to either the credential or the Master of Arts program is selective; meeting the minimum requirements does not guarantee admission to either program.

Credential Program

Graduate students must complete an application for admission to the Teacher Preparation Program according to specified deadlines. Only those students accepted to the program may enroll in the four core courses.

Applicants seeking admission to the Administrative Services Credential programs (Preliminary and Professional) must verify previous teaching or administrative experience as noted on the application, in addition to the requirements listed below:

Graduate candidates applying to the credential programs must complete and submit the following to the Department of Education and Child Development:

1. The application for admission includes such items as a statement of purpose, at least two professional references, and documentation of subject matter preparation.
2. Transcripts documenting the following:
   - A Bachelor of Arts Degree or Bachelor of Science Degree from an accredited college or university
   - Minimum 2.8 GPA in the last 60 graded units.

In addition to the above requirements, applicants who meet the qualifications will be contacted for an interview.

Master of Arts in Education

Whittier College offers the Master of Arts in Education with a variety of concentrations. Candidates should check with the Department of Education and Child Development for more specific information regarding areas of concentration. Candidates must complete 34 units beyond the Bachelor of Arts (excluding student teaching). At least 12 of the 34 units must be in an area of concentration, and all 34 units must be part of an approved Educational Design for the Master of Arts in Education. During the last two semesters of study, students take ED 502 (Research Techniques) and ED 504 (Thesis 1).
Master’s Degree Candidacy
Applicants seeking the Master of Arts in Education must be admitted to Master’s Degree Candidacy. Students should apply as early as possible and no later than one semester prior to the intended entry date. To apply for Master's Degree Candidacy, applicants must submit the following:

1. The application for graduate admission, which includes an essay on professional and educational goals and two professional references. Students who have previously been admitted to a credential program must complete the application for advancement to master's candidacy.
2. Transcripts of all college work documenting a Bachelor of Arts Degree or a Bachelor of Science Degree from an accredited college or university.
3. Evidence of completion of the last 50 upper division/graduate semester units with a grade point average of 3.0 or higher.
4. An Educational Design proposal that has been developed by the candidate and the Department of Education and Child Development Chair.
5. A writing sample to demonstrate the ability to communicate effectively in writing. Candidates who meet the qualifications will be contacted for an interview.

Admission of International Students to Credential and Graduate Program
International graduate students who wish to apply for the credential program and/or the Master of Arts Degree program must do the following:

1. Submit a completed application for graduate admission.
2. Submit transcripts verifying the completion of a baccalaureate degree. All students whose baccalaureate work was completed outside the United States or Canada at an institution where a language other than English was the dominant language of instruction must submit transcripts that have been translated and analyzed by the International Education Research Foundation, Inc. or another authorized agency before they can be accepted to the teacher credential or master's degree program. (Students already in the U.S. may be permitted to enroll in a maximum of two courses while they await transcript analysis.)

All students whose baccalaureate work was completed at an institution where a language other than English was the dominant language of instruction must submit acceptable TOEFL scores.

STUDENT FINANCING
Whittier College offers a full range of programs to help students pursue their education which include: merit scholarships which recognize outstanding academic achievement, leadership, service, or talent; need-based grants, loans, and work programs for families who need assistance in meeting college costs; and alternative financing plans.

Scholarships
Academic Scholarships. Each year the faculty honors a select group of entering first year students with prestigious awards in recognition of academic achievement, leadership, service, or special talent. The John Greenleaf Whittier Scholarships range from $2,000 a year to full tuition; financial need is not a consideration in granting these awards. Winners are expected to participate in the leadership of the College community and will in turn benefit greatly from their special relationship with the faculty and their peers. These awards are renewable for up to four years of continuous study at Whittier.
College if the student maintains the specified grade point average and remains in good standing with the College. Information concerning the application deadlines and procedures for these scholarship programs is contained in the Application for Admission.

**Talent Scholarships.** These awards are offered to entering first year students in the areas of art, music, and theatre arts. Winners are expected to enrich our community through the use and sharing of their talent but are not required to major in their talent field. Auditions and/or portfolio reviews are required by each talent scholarship department in the spring of the senior year in high school. These awards are also renewable for up to four years of continuous study at Whittier College as long as the student continues to participate in and contribute to his or her talent area, meets specified departmental criteria, and remains in good standing with the College.

**Alumni Scholarships.** These awards are offered to sons and daughters of Whittier alumni and are valued at $1,000 per year for a maximum of four years. Qualified applicants may receive this award in addition to John Greenleaf Whittier Merit and/or Talent Scholarships.

**Need-Based Aid**
Whittier College believes that a diverse student population adds to the richness of an education. This philosophy is evidenced in our support of scholarship and financing programs and, most importantly, in the College's commitment to providing funds for deserving students who otherwise could not attend.

Families participating in need-based aid programs agree to several commitments. Foremost among these is that parents and students must support the student's educational expenses to the extent that they can, and students must seek all available outside sources of funding. For California residents, this includes applying for the Cal Grant awards. Other sources of funds may include high school, church, community, or corporate-sponsored awards. The College will evaluate each family's ability to pay on the basis of a nationally accepted formula. In determining a family's need for assistance, all costs associated with a Whittier education are considered, including tuition, fees, books, supplies, room and board, and transportation.

Whittier College utilizes funds from the federal and state governments, donors, and our own resources to assist families in meeting costs that cannot be afforded or covered by other outside resources. These funds take the form of grants, loans, and work awards for undergraduate students. Graduate and credential students are considered for loan support only. Grants are gifts of money that do not have to be repaid. Loans are normally low-interest and do not require repayment while the student is in school. Work awards allow students to earn funds to cover a portion of their expenses while gaining valuable work experience. The amount, source, and terms of each award offered an applicant are detailed in the student's award notification letter.

**Eligibility:** To be eligible for need-based aid, a student must be either a citizen or an eligible non-citizen of the United States. Applicants must be enrolled in a program of study at Whittier College that leads to a degree, approved certificate, or credential. Many programs require at least half-time enrollment while most require full-time enrollment. Applicants must not be in default on repayment of any student loan or owe refunds for federal grant funds. Students must continue to maintain satisfactory academic progress toward their degree as defined by College policy (available from the Office of Student Financing).
How to Apply
The Office of Student Financing is committed to helping students identify and obtain the maximum need-based assistance available.

Entering Students. To be considered for funding, new students should follow the steps outlined below. For priority consideration, all three steps must be completed by February 15 of the preceding academic year.

Step 1: Apply for admission to Whittier College by completing the Application for Admission. Applicants need not wait for an admission decision before proceeding to Step 2.

Step 2: Complete the PROFILE Registration form and mail it with the appropriate fee to the College Scholarship Service (CSS) to register for the PROFILE. Be sure to list Whittier College (Code# 4952) as a recipient of your information. Recommended registration dates are listed on your Application for Admission. Students may also register via the Internet (www.collegeboard.org) or by phone at (800)778-6888.

Step 3: Upon registration, you will receive a customized PROFILE application packet from CSS. Complete your customized packet and return it to CSS. You may file your packet as soon as your family can answer the financial questions with reasonable certainty. You do not have to wait until you have completed your tax forms or until January 1 to file the packet. Please refer to the Application for Admission for recommended dates to follow.

Step 4: Complete the Free Application for Federal Student Assistance (FAFSA) and mail it to the processor listed in the form. California residents should be sure to complete the statement of their California residency to apply for the Cal Grant. Whittier College must be listed in the school section.

Admitted students who meet the priority filing date will be mailed a detailed eligibility letter starting on April 1. Students who decide to accept the offer and attend Whittier College will be asked to provide documentation supporting the financial information reported on the PROFILE and FAFSA prior to disbursement of funds.

Continuing Students. Continuing students must apply for renewal of their assistance each year. To apply for renewal, students must file the Free Application for Federal Student Assistance (FAFSA) by March 2 of the preceding the academic year. Students also must submit a Renewal Request form with the Office of Student Financing. Applicants who are required to submit additional information and documentation will be notified. Renewal award letters are sent beginning in early July.

International Students. A limited amount of assistance is available to international students who otherwise would not be able to attend Whittier College. The awards are based on academic promise and financial need. Information on award amounts, availability, and application requirements is available from the Office of Admission.

Alternative Financing Plans
Many families who have the resources to afford a Whittier education, as well as those who wish to augment their need-based assistance, may wish to spread the payment of college expenses over the course of the year or longer. The following financing programs may be used by families as they engage in planning for their children’s education.

Short-Term Financing. Whittier College participates in a short-term payment plan through Academic Management Services (AMS). The AMS plan has been designed to
relieve the pressure of large “lump sum” payments by allowing families to spread the cost of education over ten months without borrowing money or paying interest charges. A small application fee is required per school year, and the plan automatically includes a Life Benefit Coverage. Payment under the plan normally begins on June 1 prior to the designated academic year. Application for participation can be made through mid-August with an applicable down payment required.

Long-Term Financing. These plans allow families to pay in smaller installments over a longer period of time, normally from five to twenty years. The loans are made in coordination with the Office of Student Financing, through outside lending institutions or agencies in amounts ranging from $500 per year to the cost of full expenses at Whittier. Participation in the plans is based on the borrowers’ credit worthiness and ability to repay. Applications are normally made in June for the following academic year.

WHITTIER COLLEGE ENDOWED AWARDS AND ANNUAL SCHOLARSHIPS

Whittier College wishes to recognize the individuals, corporations and foundations who so generously support our students by having established the following endowed awards and annual scholarships. Without their continuous and generous support, many qualified students would not be able to take advantage of a Whittier education. Students are considered for these awards through the admission and financial aid application processes.

Endowed Awards
  Carl W. Ackerman Endowment  
  Edward and Rosa Ahlswede Endowment  
  Max B. and Ruth B. Alcorn Endowment  
  Harvey & Madge Alverson Endowment  
  Madge Alverson Speech & Drama Endowment  
  Dr. John A. Arcadi Endowed Scholarship  
  Ethel Townsend Ball Endowment  
  Mabel H. Bankhead Endowment  
  Granville B. and Helena Barrett Basye Endowment  
  Alva G. Bellah Endowment  
  Beulah Bartlett and Blyethe Monroe Endowment  
  Eva B. and Harry C. Billings Endowment  
  Ralph E. Bishop Endowment  
  W. O. and O. A. Brown Memorial Endowment  
  Hazel Caldwell Endowment  
  Class of 1934 Richard Spaulding Endowment  
  Class of 1937 Endowment  
  Class of 1961 Endowment  
  Class of 1968 Endowment  
  Genevieve Connick Memorial Endowment  
  Dr. C. J. Cook & Evelyn Jessup Cook Endowment  
  Charles W. and Edris Cooper Endowment  
  Ruth Schaefer Corzine Endowment  
  Sylvia Marie Cosand Performing Arts Endowment
INTRODUCING WHITTIER COLLEGE

Ardys M. Cox Endowment
Lex B. Cox International Endowment
John H. Crow Endowment
James and Ida Darling Endowment
John F. & Katherine N. Dean Education Endowment
Grace Elizabeth Dickerson Endowment
Floyd E. and F. Earl Durham Biology Endowment
Mr. & Mrs. Thomas McGregor Erwin Endowment
Richard Ettinger Endowment
Herbert & Elizabeth Francis Evans Endowment
Elizabeth Delia Felt & Jessie Felt Savage Endowment
William & Christine R. Ferguson Memorial Endowment
Roberta J. Forsberg Humanities Endowment
Jeffrey Thomas Foster Memorial Endowment
Judith A. Francis Endowment
Friends of Music Endowment
Robert L. Gifford Eagle Scout Endowment
Bernard and Esther Goerg Endowment
Stanley and Marjorie Gregory Endowment
Barbara Ondrasik Groce Endowment
Donald and Shirley Hall Endowment
Homer and Cora Halvorson Memorial Endowment
Edna M. Hampton Memorial Endowment
Arthur J. Hanson Endowment
Clair R. Hare Endowment
Ruth Haroldson Violin Endowment
William Randolph Hearst Foundation Endowment
Dorothy C. Heddens Memorial Endowment
Dee Louise Hochstetler Memorial Endowment
Howard L. and Alice B. Hockett Endowment
Lawrence B. & Sylvia A. Hoefer Endowment
William H. Hornaday Endowment
Bailey Howard Endowment
Wendell Milo Hunt Memorial Endowment
James Irvine Foundation Endowment
Lois James Endowed Scholarship
James W. Jones Endowment
Laura Jones Endowment
Lynn R. and Katherine Balden Juday Endowment
Donna Lee Kendall Endowment
William H. and Irene Savage King Endowment
Paul D. Kirk Memorial Endowment
Paul A. and Frances K. Lewis Endowment
Jay R. and Elizabeth T. Livingston Endowment
Margaretha Lohmann Piano Endowment
Margaretha Lohmann Talent Endowment
James R. Long and John M. Gates Endowment
Albert Madden Endowment
Markham Endowment
Charles K. Marlatt Music Endowment
George H. Mayr/Martin Ortiz Endowment
C. W. McMurtry Memorial Endowment
Trula and Laurel Meyer Endowment
Hilda Mary Millbank-Gobar Endowment
Milhous-Marshburn Endowment
Mary McGraw Miller Music Endowment
John and Elsie Murfett Endowment
Delphi Murphy Memorial Endowment
Wallace “Chief” Newman Endowment
Dr. W. Roy and Alice Newsom Endowment
Dr. W. Roy Newsom Endowed Scholarship
John Hill Nichols Endowment
Martin Ortiz Endowment
Lee & Erika Owens Endowment
Bruce Patton Memorial Endowment
Dr. Gerald Patton Memorial Endowment
William Penn Endowment
Perry Memorial Endowment
Richard & Sissel Pomboy Endowment
Margaret Pressey Endowment
Quaker City Federal Savings and Loan Endowment
Audrey Richardson Memorial Violin Endowment
Henry C. Rosene Endowment
Paul K. and Nina Schroeder Memorial Endowment
Marie Quinzel Sewell Endowment
Margaret Merrill Shannon Endowment
Vincent Sinatra Memorial Endowment
Delphine P. Smith Endowment
Elden and Barbara Smith Endowment
Nora & Woody Smith Endowment
Walter H. and Helen J. Spicer Endowment
John Stauffer Science Fellows Endowment
John Stauffer Trust Science Endowment
Alfred J. Stevens Memorial Endowment
Martin A. and Mildred L. Stewart Endowment
Bobbie Stoll Endowed Scholarship
Emma Strain Endowment
Roy O. Lisle M. Strain Endowment
Amos and Matilda Hadley Stuart Endowment
Charles E. Sydnor-William V. Marshburn Endowment
Lorraine Thompson Endowment
Raymond C. Thompson Endowment
Helen Ulitin Endowment
Frances E. Van Riper Endowment
May Vertrees Endowment
George E. and Maye R. Wanberg Endowment
Bonnie Bell Wardman Endowment
David E. Wicker Endowment  
D. L. and M. A. Williams Endowment  
Ed J. & Ruth Wudell Endowment  
Mary E. Wyatt Memorial Endowment  
YMCA Daniel Luther Endowment

**Annual Scholarships**

Ahmanson Foundation Scholarship  
Alianza de los Amigos Scholarship  
Avery Dennison Careers in Education Scholarship  
Bank of America Scholar  
Chevron Merit Award  
Christian Leadership Merit Scholarship  
Coca Cola First Generation Scholarship  
Nola Lee Cole Trust  
James S. Copley Foundation Scholarship  
Beckman Coulter Science Scholarship  
Farmers Insurance Group Scholarship  
Si and Bob Fluor Scholarship Program  
Forest Lawn Scholarship  
Friends of Whittier Scholarship  
Gillette Company/Stationery Products Group Scholarship  
GTE California Independent Colleges Scholarship  
John Randolph and Dora Haynes Foundation Scholarship  
Independent Colleges of Southern California Scholarship  
Litton Industries Scholarship  
Los Angeles Philanthropic Foundation Scholarship  
George H. Mayr Foundation Scholarship  
Mebane Scholar in Education  
B.C. McCabe Foundation Scholarship  
Milken Family Scholar  
Norma L. Murdy Scholarship  
Richard M. Nixon Scholarship (Whittier Republican Women)  
Nordstrom Scholarship  
Norris Foundation Scholar  
Ralph M. Parsons Foundation Scholarship  
Smith Trust Fund  
TELACU Scholarship  
Transamerica Occidental Life Insurance Company Scholarship  
Union Bank of California Scholar  
Union Pacific Scholarship  
UNNOVA Foundation Scholarship  
UPS Scholar  
John F Warwar Scholarship  
Washington Mutual Scholarship  
Whittier College Veteran's Scholar  
Whittier College Women's Auxiliary Scholarship  
Whittier Rotary Club Scholarship  
Tien Zee Scholarship
Student Rights and Responsibilities Regarding Financial Aid
Whittier College subscribes to the professional standards of the National Association of Student Financial Aid Administrators and urges students to know their rights and responsibilities.

Student Rights
Whittier College students have the right to know the following: which financial aid programs are available; application deadlines for each of the programs available; how financial aid will be distributed, how distribution decisions are made, and the bases for these decisions; how financial need was determined, including how costs for tuition and fees, room and board, travel, books and supplies, personal and miscellaneous expenses were considered in the budget; how much of the financial need has been met, as determined by the Office of Student Financing; what resources (such as parental contribution, other financial aid, and personal assets) were considered in the calculation of the need; what portion of the financial aid received must be repaid and what portion is grant aid (if a loan is awarded, students have the right to know the interest rate, the total amount to be repaid, repayment procedures, the date when repayment begins and the length of the repayment period); how the school determines whether students are making satisfactory academic progress and what happens if they are not; and an explanation of each program in the student aid award package.

Student Responsibilities
Whittier College students must complete all application forms accurately and submit them on time to the correct location; provide correct information (in most cases, misreporting information on financial aid applications is a violation of the law and may be considered a criminal offense); return all additional documentation, verification, corrections, and/or new information requested by either the Office of Student Financing or the agencies to which applications were submitted (students are responsible for reading and understanding all forms they are asked to sign and for keeping copies of each); accept responsibility for all signed agreements; perform the work agreed upon in a work-study award; be aware of and comply with the deadlines for aid application or reapplication; know and comply with Whittier College's refund procedures; maintain satisfactory academic progress according to the policies and standards of the College; notify the Office of Student Financing in writing of any change in the circumstances reported on the student financing application upon which aid is based or if any additional awards from an outside source will be received; and notify the lender of changes in name, permanent mailing address, and school status, if a loan was received as part of the award package.
Whittier College students join with faculty and staff to form a community of learners. In this special community devoted to learning, the faculty play the leading role in college life. The system of Resident Faculty Masters is symbolic of that role.

The purpose of this section is to describe residential living, extracurricular opportunities, student rights and responsibilities, and administrative support for students. The section starts with the faculty, the most important and influential people students encounter in the Whittier College community.

THE FACULTY

The Whittier College faculty exhibits a rare quality in American higher education: a commitment to balancing the teaching of undergraduate students with scholarly accomplishment. Our finest teachers are also nationally recognized scholars who have won awards for their books, research and other creative activities. In recent years, faculty have published numerous books on topics ranging from the Chinese revolution to European currency, have exhibited in juried art shows and directed plays in Hollywood.

An accomplished faculty wins awards. The Whittier College faculty has a strong history of receiving National Science Foundation fellowships, Fulbright fellowships and lectureships, Graves Awards, NASA summer fellowships, Haynes Foundation awards, and grants from the National Endowment for the Humanities. Accessible to students not just in the classroom or during office hours, Whittier faculty often open their homes to students for honorary society and departmental meetings, or sometimes just good conversation.

THE ACADEMIC ADVISING SYSTEM

Whittier College believes that proper teaching of undergraduates includes close advising. From the moment new students step on campus, faculty advisors are ready to assist in charting their curricular path. Whittier College and several faculty have been recognized as the best advisors in the West by the National Academic Advising Association.

This careful advising ensures that our students graduate in four years—not five or six, as in larger institutions. It also results in our students’ admission to the country’s finest graduate programs in medicine, law, and the arts and sciences, in addition to winning prestigious awards ranging from NCAA Student Athlete awards to the prestigious Rhodes Scholarship.

The primary purpose of the advising and mentoring programs is to support students in the development of an academic career complementary to individual life goals. The College provides the students with all the necessary information and resources required in making meaningful educational plans. At Whittier, students obtain academic and career advising from faculty and staff, who are pro-active in promoting excitement about
the learning process. As students develop a habit of lifelong learning and continuing inquiry, they should ideally assume active roles in educational planning. They are expected to seek satisfactory progress in their academic careers. In keeping with the small college collegial relationships between faculty and students, faculty mentors serve as role models and provide primary advising for students.

In recent decades, emphasis on advising and retention have placed particular attention on first-year students, recognizing that the first year of transition and adaptation to college is an especially difficult one for these students. As part of Whittier's First Year Mentor Program, each new student is assigned to a full-time faculty member who provides academic support and direction through the first year. It is the primary role of the first-year mentor to introduce the new student to Whittier College, and to further an understanding of its overall mission and the importance of a liberal education. Mentors also help students become aware of the many resources available to them on campus.

**Academic Support Programs and Services**

**Bonnie Bell Wardman Library**
The Bonnie Bell Wardman Library occupies a central position on campus. Its collections total 230,000 volumes and has seating for 400 readers and researchers. Library collections are available in open stacks, as are the 630 periodicals currently received with another 700 full text in electronic format. Wardman Library is a designated depository for both federal and state documents. First Search, Searchbank, Lexis Nexis, and Muse are some of the electronic databases available through the library.

**The Broadoaks School**
The Broadoaks School was founded in 1906 as an open-air kindergarten and primary school. Today, the nationally recognized laboratory/demonstration school serves two interrelated purposes: to provide outstanding educational and childcare services to children and their families; and to provide Whittier College students and faculty with a rich variety of opportunities for studying children, family relationships, and developmentally appropriate approaches to education.

The preschool and elementary-grade curriculum emphasizes active, self-initiated learning, critical thinking, problem solving, intercultural understanding, and shared responsibility. Both undergraduate and graduate students work directly with children under clinical supervision by mentor teachers. College students also participate actively in instructional planning and evaluation, as well as in interdisciplinary case conferences, child assessment, and a variety of related professional organizations and activities.

Broadoaks offers professional development programs for teachers and administrators throughout California. Through special funding, The Broadoaks School provides a few highly selective graduate and undergraduate teaching fellowships each year. Undergraduate Broadoaks Teaching Fellows usually work as a member of the school's instructional team a few hours each week. Graduate Teaching Fellows may teach from a few hours each week to full time. Additional information is available through the Broadoaks office.

**The Center of Mexican-American Affairs**
The mission of the Center is to serve as a support program for the College's Hispanic students.
To help meet the needs of Hispanic students, the Center supports educational, cultural, and recognition programs including the annual "Tardeada;" the Hispanic Graduates Reception; the "Big Brother/Big Sister" Program; the Hispanic Students Recruitment Project; the annual "Alianza de Los Amigos" (the Hispanic alumni organization) scholarship fund-raising banquets; Hispanic students recruitment project; and other related events and activities. Adjunct groups to the Center include the Hispanic Students Association, the Hispanic Parents Advisory Council, "Alianza de Los Amigos," the Business-Industry Resources Advisory Council, and the Corporate Sponsors Group.

The Clift Microcomputer Lab
The Clift Microcomputer Lab, located in Hoover Hall, provides students the opportunity to develop business-related skills. The lab contains both Macintosh and IBM compatible computers available for student use. Students use software for numerical and word processing, statistical analysis, and general business applications. Access to the college's other computing resources, including the Internet, and laser printing are also available.

Computing and Telecommunication Services
Whittier College Computing and Telecommunication Services operate the Computer Center and other academic and administrative computing facilities around campus, providing consultation and educational programs on the use of available computer resources. Voice and data communication systems, including telephone service to the residence halls, and plans for future computing and communications requirements of the College community are also found at the Computer Center. Whittier College students have free access to all computing resources except printing, for which there is a nominal fee.

Departmental Computing
Most academic departments utilize microcomputers as a component of their instructional process; many of these applications are quite sophisticated. For example, all natural science departments and the Psychology Department use computers in the student laboratories for data collection and analysis. The Art Department offers instruction on computer-assisted graphic design using Macintosh computers and access to more than 50,000 works of art using hypermedia-controlled videodisks. The Music Department has a Macintosh MIDI synthesizer used for instruction on and composition of music. In general, Whittier College students can expect to find modern computing technology applied, where appropriate, throughout the academic curriculum.

The GTE Language Resource Center
This digital audio/video/computer lab supports the courses offered by the Department of Modern Languages and Literatures. The lab can accommodate up to 40 students working at 14 separate work stations which are all networked via a master Instructor's console/server. Language professors can monitor the progress of individual students in the Lab as they work through exercises “etched” on CD ROM. Among other activities, students master language pronunciation, view digitally prepared video, and discover aspects of various cultures via the internet.

The W. M. Keck Foundation Image Processing Laboratory
The W. M. Keck Foundation Image Processing Laboratory, located on the second floor of the Stauffer Science Building, is a facility for the analysis of all types of digital images,
including remotely sensed data from Earth-observing satellites, interplanetary spacecraft, and medical scanners. Geographical information system software for the integration of spatial data provides a link between maps, aerial photographs, and remotely sensed data. The primary baseline data for the laboratory is the Fairchild Aerial Photography Collection; acquired during the period 1927-1964, these photographs compose one of the largest libraries of photographic images in the United States. The laboratory computer system is based on DEC Station 5000/200 UNIX-based workstations.

**The Lautrup-Ball Cinema**

This newly renovated room serves the College primarily as a teaching space, but also houses the two film series which take place on campus each year. The room contains 145 comfortable theater style seats with convenient “swing up” writing surfaces. In addition to projecting slides and 16mm films, instructors can project media in all formats (including videotape, computer applications, “Elmo” visual presentations, etc.) on a large screen via a ceiling mounted LCD projector. The small stage area makes this location ideal for presenting guest lecturers and chamber music.

**The Math Lab**

The Mathematics Department operates a Math Lab across from the Computer Center in the Science Building. The facility contains Macintosh computers and a variety of math software to be used as instructional aids. Students in freshman calculus classes make extensive use of this facility. Tutoring in math also is available during scheduled times of the day.

**Media Center**

Located in Platner Hall, the Media Center furnishes the College with a wide range of audio-visual services. In addition to providing equipment for instructional purposes, cultural events, and athletic contests, the Center houses an extensive software library of audio tapes, video tapes, and films. Photography, sound, and synchronized slide programs also can be readily produced in the Center’s facilities. Along with a darkroom and audio booth, the Media Center houses a color television studio and sophisticated editing bay. It offers faculty and students the opportunities to produce diverse programming such as individual video projects and local documentaries.

**The Norbert Erteszek Computer Center**

The Norbert Erteszek Computer Center is located in the John Stauffer Science Building. Macintosh computers available for student use are networked into the main academic computing resources and provides access to a variety of educational software and a host of applications including full access to the Internet. Laser printing is available. A seminar room provides a location for workshops and occasional classroom use of the computers. Student workers, known internally as “elves,” are selectively chosen to assist with the Center’s operation.

**Ruth B. Shannon Center for the Performing Arts**

Whittier College’s Ruth B. Shannon Center for the Performing Arts, opened in the fall of 1990, accommodates drama, musical comedy, orchestral and choral performances, solo presentations, and oratory. The 28,000 square-foot facility houses a 400-seat theatre, an intimate studio theatre, a scenic studio, costume construction shop, prop and costume
storage, large group dressing rooms, and a green room, as well as a classroom and faculty offices.

The Writing Center
The Writing Center, located in the basement of Hoover Hall, is the place to go for help with common problems in writing papers. Trained student tutors help visitors to the Center overcome writer's block, develop and support a persuasive thesis, organize ideas into clearly structured paragraphs, master grammar and punctuation, and revise a paper to communicate more clearly to its intended audience. The tutors can also help students learn to use the word-processing functions of the Writing Center's 12 Macintosh computers; several of these computers offer email and Internet access. Laserprinting is also available.

Endowed Professorships
Endowed professorships lend distinction and strength to the Whittier College faculty.

The Roy E. and Marie G. Campbell Distinguished Chair in Biology
Dr. Roy E. Campbell, director of the U.S. Entomological Laboratory, provided for the Endowment of a chair in Biology from the proceeds of his estate. The Campbell Chair supports a distinguished faculty member in that department, and assists the College in enriching teaching and research activities.

The C. Milo Connick Chair in Religion
Named in honor of C. Milo Connick, Professor Emeritus of Religion and College Trustee, this endowed chair provides funds for support of distinguished faculty in the field of Religion. Funding for the chair was made possible through the support of C. Milo Connick, Richard and Sharon Ettinger, Jr. and Ray and Joanie Dezember.

The Genevieve Shaul Connick Chair in Religion
Named in honor of Genevieve Shaul Connick, deceased spouse of Milo C. Connick, professor emeritus and college trustee. The Chair provides support for a faculty member in Religious Studies.

The Richard and Billie Deihl Distinguished Chair
Richard Deihl ’49 and his wife ’50, both alumni, established this Endowed Chair to provide funds for support of a distinguished scholar. Richard has been a long-time trustee of Whittier College as well as a prominent executive in the financial services industry.

The Douglas W. Ferguson Chair in International Economics
Named in honor of Douglas W. Ferguson, long-time member of the Whittier College Board of Trustees, the chair was endowed at the time of his retirement as Chief Executive Officer, Quaker City Federal Savings and Loan. The endowed chair provides funds for support of a distinguished faculty member in the field of international economics.
The James Irvine Foundation Chair in the Biological Sciences
Established through the generosity of the James Irvine Foundation, this endowed chair provides for the support of a faculty member in the field of Biological Sciences, who has distinguished him/herself as an instructor, researcher and author.

The Fletcher Jones Chair in Molecular Biology or Genetics
The funding for the Fletcher Jones endowed chair was generously provided through the Fletcher Jones Foundation. This Endowment provides funds for support of a distinguished faculty member in the field of Molecular Biology or Genetics.

The John A. Murdy Chair in Business Administration and Economics
Funded by the Murdy Foundation and Trustee Maxine Murdy Trotter ’47, the John A. Murdy Chair in Business Administration and Economics is named in honor of Mrs. Trotter’s father, former state senator John A. Murdy, Jr. and her brother John A Murdy III, a member of the Class of 1950 and a former college trustee. The Chair provides support for a faculty member in the departments of business and economics.

The W. Roy and Alice Newsom Chair in Chemistry
Named in honor of the late Roy Newsom, tenth President of Whittier College, and his wife Alice. The Newsom Chair provides support for an outstanding scholar/teacher in Chemistry. W. Roy Newsom was a leader at Whittier College for forty years: 1934 graduate, Professor of Chemistry and department chair, Dean of the College, Vice President for Administration, and President of the College.

The Richard M. Nixon Chair in Public Policy
This chair honors President Richard M. Nixon, distinguished public servant and Whittier College graduate in the class of 1934. This specially endowed program, established by his family and friends, enables the College to bring outstanding scholars to campus each year for seminars and public lectures on issues related to public policy.

The Albert Upton Chair in English Language and Literature
The Albert Upton Chair in English Language and Literature commemorates the director of Whittier’s earlier liberal education curriculum, the General Studies Program, and the designer of a semantically oriented freshman English course. The holder of the Upton Chair is committed to the teaching of writing, and plays an important role in the College’s writing program.

The Nadine Austin Wood Chair in American History
Named in honor Nadine Wood, deceased spouse of Donald “Bill” Wood L.H.D. ’98, trustee and college treasurer, this endowed chair provides support for a faculty member in American History. Nadine was active in community organizations, particularly the Whittier Historical Society, and the Friends of the Shannon Center. Bill has been a college trustee since 1975.
RECOGNITION OF STUDENT ACADEMIC ACHIEVEMENT
Honoring our students’ academic achievements is among the most important things Whittier College does. From national honor societies to the Dean's List and honors at graduation, we take pride in and recognize academic achievement.

Whittier College supports the following national honorary and leadership societies:

- Alpha Kappa Delta (Sociology)
- Alpha Pi Delta (Business)
- Alpha Psi Omega (Drama)
- Cap and Gown (Student Honorary)
- Delta Phi Upsilon (Child Development)
- Omicron Delta Epsilon (Economics)
- Omicron Delta Kappa (National Leadership Honors Society)
- Omicron Psi (Non-traditional students)
- Phi Alpha Theta (History)
- Phi Sigma Tau (Philosophy)
- Pi Delta Phi (French)
- Pi Sigma Alpha (Political Science)
- Psi Chi (Psychology)
- Sigma Pi Sigma (Physics)
- Sigma Tau Delta (English)
- Sigma Delta Pi (Spanish)

Academic Achievement Convocation
A formal convocation, with faculty marching in full academic regalia, is held each spring semester to honor students with outstanding academic achievements. In addition, students and faculty honor one faculty member each year with the Harry W. Nerhood Teaching Excellence Award.

STUDENT LIFE
The mission of Student Life at Whittier College is to provide students with a distinctive, high quality, co-curricular experience that shares the academic mission of the college. Student Life provides support services that recognize the diverse needs of Whittier College undergraduate students. The staff of the division provides the training, tools and expertise that supports students in the development of academic and personal skills, attitudes, and values appropriate for leading and serving in a global society. Student Life is guided by student development theory and professional expertise in student affairs. The staff maintains the most current knowledge of best practices and models for student achievement and applying them to the needs of the student body at Whittier College.

Programs and services offered by Student Life reflect the College’s Quaker heritage, and is expressed by friendliness, strong cooperative relationships with faculty and students, consultative decision-making, a concern for the individual, respect for community, and a strong value on social responsibility.
Career Services
Career Services assists students in choosing, planning, and implementing their career-related goals. The primary areas of focus include career planning, career preparation, and job search assistance. Career planning services include individual counseling, self-assessment workshops, assessment inventories, a career planning course, and materials in the career resource library. Career preparation involves the development of internship and other forms of career-related work opportunities to assist students in acquiring career-related skills and experience prior to graduation. Job search assistance includes providing referrals for on-campus work-study positions; off-campus part- and full-time job listings; workshops on résumé writing, interviewing skills, and job search strategies; an on-campus interview program; and educational placement file services. The Career Services Office also maintains directories and information on graduate school programs. Career Services' web page www.whittier.edu/career/ contains helpful information and links for career exploration, internships, summer jobs, full-time positions, graduate school, and conducting a job search and much more.

Counseling Services
Counseling Services provide the opportunity for students to discuss personal, emotional, and academic problems with a counselor in a safe, confidential environment. Under the direction of a licensed clinical psychologist, services are provided by psychologists, psychology interns in training, or postdoctoral associates. Services are free to currently enrolled undergraduate students and include short-term, problem focused individual counseling; group counseling; and programs on many aspects of campus life. There is also a small library of books, tapes, and articles that can be borrowed. Staff are prepared to provide referrals to students who need resources not offered by the counseling service.

The Cultural Center
The Cultural Center, located in Hanover House, seeks to increase cultural interaction and dialogue on campus. The Center provides support to all minority students by creating bridges to academic and student support services that help students develop career and educational goals. The staff of the Cultural Center serve as advocates for students who need assistance in adjusting to college life. In addition, the Cultural Center collaborates with faculty to develop resources that expand the understanding of tolerance and cultural appreciation in the curriculum.

The Cultural Center is proud to offer a variety of programs throughout the year, including those focused on peer mentorship and leadership development. All Cultural Center programs educate, celebrate and honor the cultural richness on campus. Students are invited to stop by the Cultural Center to use the computers and resources that are available at no charge.

Disability Services
Whittier College's policy and practice is to comply with the Americans with Disabilities
Act, Section 504 of the Rehabilitation Act, and state and local requirements regarding students and applicants with disabilities. Under these laws, no otherwise qualified individuals with a disability shall be denied access to or participation in services, programs, or activities of the College.

It is the policy of the College that otherwise qualified students who have disabilities shall be given reasonable accommodation, including academic adjustment and auxiliary aids, where appropriate, necessary to ensure access to the College's overall educational program. Individual students shall receive reasonable and necessary accommodation, including adjustments and aids, based on specific information and assessment data provided by a qualified professional.

The full text of the Disabilities Policy is available on the Whittier College website or in Disability Services.

Health Services
The Health Center provides treatment for common illnesses and minor injuries; immunizations; women's health exams; health education, illness prevention information; referral to local medical services when needs cannot be addressed on campus; and a variety of other services. The Center's Nurse/Director is available from 8:00 a.m. – 4:00 p.m. Monday through Friday. The doctor is on duty at various times during the week. There is no charge for a visit; however, there is a small charge for medications and lab tests. After hours or emergency medical attention is available through Whittier Presbyterian or Bright Medical Associates Urgent Care.

All full-time students must be covered by health insurance while attending Whittier College. Students who are not covered by a personal or family policy are required to participate in a Student Health and Accident Insurance Program provided by the College for a fee.

Learning Support Services
Learning Support Services provides academic support to address the various learning needs of Whittier College students. We provide individual academic counseling, tutoring services, a computer learning lab, and instructional workshops. Through individualized academic counseling, students receive personalized assistance to assess learning styles and develop study skills. Tutoring is available, free of charge, for any class from dedicated student tutors who are committed to assisting their peers. The Computer Learning Lab is equipped with a comprehensive program designed to diagnose and improve basic skills in reading, writing, language, and math. Furthermore, workshops are given throughout the year on topics such as time management, test-taking strategies, stress, motivation, and much more.

Residential Life
Most Whittier College students live in one of eight campus residence halls. Residence halls accommodate from 20-210 students. They are staffed by full-time Area Coordinators and undergraduate Resident Advisors who provide students with
continuous support, assistance, and program opportunities for learning and development.

Because on-campus living is viewed as an integral part of the educational experience at Whittier College, all first year students, sophomores, and juniors are required to live on campus. Exceptions are extended to students who reside with their parents or legal guardians in the Los Angeles area, are 22 years of age or older, are married, or have exceptional circumstances documented by petition to the Assistant Dean of Students/Director of Residential Life. Residential students are additionally required to subscribe to one of the meal plans offered through the Campus Inn.

In addition to the variety of social and educational programs offered by the Residential Life staff, each residence hall is also affiliated with a Faculty Master House. This out-of-the-classroom living and learning opportunity creates a learning environment unmatched on the West Coast. The Faculty Master House tradition at Whittier College is modeled after those established at Oxford and Cambridge universities. It is designed to extend the classroom learning experience to all aspects of students' lives. Educational and social programs including such events as scholarly lectures, dinners, musical performances, and cooking classes are hosted by the faculty members in their homes. To enrich student experience at Whittier College, faculty masters also frequently sponsor trips to museums, galleries, theaters, and concerts in Southern California.

Student Activities
The Office of Student Activities works closely with the student government and officers of various clubs and organizations to promote and encourage co-curricular activities that meet the interests of the student body. Numerous student organizations initiate a variety of programs with the financial support of the student activity fee. The Office of Student Activities also advises programming in The Club. Comprehensive information about opportunities for leadership and involvement at Whittier College through societies, publications, broadcasting, clubs and organizations is available in the Student Handbook and through the Office of Student Activities in Hastings House.

STUDENT’S RIGHTS AND RESPONSIBILITIES
A student enrolled at Whittier College assumes an obligation to conduct himself or herself in a manner compatible with the College's function as an educational institution. The College will not police the personal lives of students on or off campus, but the College does have jurisdiction over student conduct that is unacceptable to an academic community.

The Code of Students’ Rights and Responsibilities, created jointly by faculty, students, and administrators, is published annually in the student handbook and describes the principles and procedures employed at Whittier College. All members of the Whittier College community are expected to uphold and protect the values of the College.
Academic Honesty
When we engage in scholarship, we seek answers to questions we care about; we learn from others’ work, and we add our contributions to a growing body of knowledge. By citing sources whose work has helped to shape our own, we identify ourselves as members of a community made up of fellow seekers of knowledge. However, we cannot honestly value that knowledge unless we also value truth. Acts of academic dishonesty are lies. They degrade our shared search for understanding as a community of scholars, and they undermine the integrity of that community by injecting falsehood into our dialogue. As a historically Quaker college, Whittier honors the Friends’ testimonies of truth, community, and equality, and equality does not in this context simplistically imply that we are all somehow identical; rather, the term reflects our conviction that we are all worthy of equal respect. Thus, when members of our community commit acts of academic dishonesty, they are not committing victimless crimes. By violating—even in secret—the respect which they owe their colleagues, they tear the fabric of our community. Further, by shrinking from the self-defining work of scholarship, they hurt themselves.

Because the preservation of academic honesty is as fundamental to our shared enterprise as the transmission of knowledge, the faculty and administration of the College regard educating students in academic integrity to be as important as inspiring them to rise to the challenge of learning. Thus, adherence to the policies delineated below reflects the commitment of our community to a single standard of truth, a standard binding on students, faculty, and administrators alike.

General Policy on Academic Honesty
Academic honesty is expected of all members of the Whittier College community. Failure to adhere to standards of honesty will result in sanctions.

The following definitions will help you understand the boundaries of academic dishonesty. The sanctions section, which follows, will help you understand the seriousness of various types of academic dishonesty.

Definitions
These definitions do not represent a complete list of possible infractions; rather, they are intended to generally reveal the range of conduct which violates academic honesty. Presentation of this list is prompted by the belief that education concerning improper conduct will help students avoid such practices, including those which, although innocently performed, may technically be classified as academically “dishonest.”

1. plagiarism - presenting the words or ideas of another person requires proper acknowledgment; failure to do so is plagiarism; this applies to direct quotations, paraphrases or summarized ideas; guidelines concerning standards for citation may be found in the Random House Handbook, which is owned and used by all students from the time they take Freshman Writing. Two examples of plagiarism and an example of proper acknowledgment may be found immediately following these definitions;
2. submission of same work in two courses without explicit permission to do so -
Presenting all or part of work done for one course in another course requires
permission of the instructors of the involved courses. A related point is that paired
courses, by design, often require submission of the same work in the two
associated courses;
3. unauthorized collaboration - In many course activities, other than examinations,
collaboration is permitted and encouraged. Course syllabi and in-class instructions
will usually identify situations where collaboration is prohibited, but the student
shares responsibility for ascertaining whether collaboration is permitted. In cases
where a student receives tutoring on a course topic, the student should consult the
professor of the course to understand the permissible limits of the tutoring help;
4. cheating - this is a very broad category encompassing a variety of forms
of misrepresentation and fraud; examples include sharing exam answers, presenting
work done by another as one's own, changing in any way work which may be
reviewed in response to a grade reconsideration request, having a falsely identified
person take an exam, or using notes, books and the like in closed-book
examinations;
5. misrepresentation of experience or ability - providing false information
concerning academic achievement or background in an area of study; for example,
false reporting the substance of an internship;
6. falsification of records - any attempt to change grades or written records
pertaining to assessment of a student's academic achievement;
7. sabotage - destruction of or deliberate inhibition of progress of another person's
work related to a course; this includes the destruction of shared resources such as
library materials and computer software and hardware;
8. complicity concerning any of the above - any act which facilitates academic
dishonesty is itself an act of academic dishonesty.

Examples of Plagiarism
Plagiarism requires special attention. Too often students fail to understand the principles
of documentation—that is, when to cite a source and/or how to paraphrase the source
material utilized if it is not presented as a direct quote. The following segment from the
Random House Handbook (Crews, 1992, pp. 181-83) is presented to emphasize the
importance of documenting sources and to offer aid in understanding when to do so:
Consider the following source and three ways that a student might be tempted to
make use of it.

SOURCE
The joker in the European pack was Italy. For a time hopes were entertained of her as
a force against Germany, but these disappeared under Mussolini. In 1935 Italy made a
belated attempt to participate in the scramble for Africa by invading Ethiopia. It was
clearly a breach of the covenant of the League of Nations for one of its members to
attack another. France and Great Britain, as great powers, Mediterranean powers, and the
African colonial powers, were bound to take the lead against Italy at the league. But they
did so feebly and half-heartedly because they did not want to alienate a possible ally
against Germany. The result was the worst possible: the league failed to check
aggression, Ethiopia lost her independence, and Italy was alienated after all.

VERSION A:
Italy, one might say, was the joker in the European deck. When she invaded Ethiopia, it
was clearly a breach of the covenant of the League of Nations; yet the efforts of England and France to take the lead against her were feeble and half-hearted. It appears that those great powers had no wish to alienate a possible ally against Hitler's rearmed Germany.

Comment: Clearly plagiarism. Though the facts are public knowledge, the stolen phrases are not. Note that the writer's interweaving of his own words with the source does not make him innocent of plagiarism.

VERSION B:
Italy was the joker in the European deck. Under Mussolini in 1935, she made a belated attempt to participate in the scramble for Africa by invading Ethiopia. As J.M. Roberts points out, this violated the covenant of the League of Nations (Roberts 845). But France and Britain, not wanting to alienate a possible ally against Germany, put up only feeble and half-hearted opposition to the Ethiopian adventure. The outcome, as Roberts observes, was “the worst possible: the league failed to check aggression, Ethiopia lost her independence, and Italy was eliminated after all” (Roberts 845).

Comment: Still plagiarism. The two correct citations of Roberts serve as a kind of alibi for appropriating the other, unacknowledged phrases.

VERSION C:
Much has been written about German rearmament and militarism in the period 1933-1939. But Germany's dominance in Europe was by no means a foregone conclusion. The fact is that the balance of power might have been tipped against Hitler if one or two things had turned out differently. Take Italy's gravitation toward an alliance with Germany, for example. That alliance seemed so far from inevitable that Britain and France actually muted their criticism of the Ethiopian invasion in the hope of remaining friends with Italy. They opposed the Italians in the League of Nations, as J.M. Roberts observes, “feeble and half-heartedly because they did not want to alienate a possible ally against Germany” (Roberts 845). Suppose Italy, France, and Britain had retained a certain common interest. Would Hitler have been able to get away with his remarkable bluffing and bullying in the late Thirties?

Comment: No plagiarism. The writer has been influenced by the public facts mentioned by Roberts, but he has not tried to pass off Roberts’ conclusions as his own. The one clear borrowing is properly acknowledged.

Sanctions
Various sanctions exist which may be applied in response to an act of academic dishonesty. The severity of sanctions will correlate to the severity of the offense. Judgment of the severity of an academic dishonesty offense is the responsibility of the faculty member. The faculty member is encouraged to seek counsel of faculty colleagues, the Associate Dean for Academic Affairs and/or the Dean of Students in gaining perspective concerning the severity of an offense.

All grade related sanctions shall be levied by the faculty member teaching the course within which the offense occurred. The Associate Dean for Academic Affairs and the Dean of Students are available to provide guidance concerning appropriate sanctions.

The following list more completely articulates the sanctions which may be levied in response to acts of academic dishonesty:

1. A warning - indicating to the student, faculty and/or administration knowledge of the incident; this will ordinarily be accompanied by a requirement that the student redo the work if the infraction is related to a course assignment; included will be
notification that another act of academic dishonesty will result in a more severe sanction;

2. A letter grade reduction on the assignment - this will also ordinarily be accompanied by a requirement to redo the work;

3. A failing grade for the assignment - this applies in cases where the faculty member chooses not to allow redoing the work;

4. A failing grade for the course - this would be a suitable sanction for a serious case or for repeated cases of less extreme infractions;

5. Suspension from the College for a specified minimum period of time - this sanction will ordinarily be applied when in the estimation of the Dean of Students a pattern of misconduct (both academic and non-academic) is so chronic or severe that separation from the campus community is warranted; if serious enough, a single case of academic dishonesty can result in suspension; this could occur in the case of indisputably willful intent by the student to commit an academically dishonest act, such as altering a professor's grade record or maliciously damaging academic work of another individual; suspension may take effect immediately following the hearing; continuing attendance at the college may be permitted during an appeal; the minimum period of suspension will be the balance of the current semester; ordinarily the period of suspension will continue through the entire following semester, excluding summer sessions.

6. Expulsion from the College - this sanction is used in the event of extraordinarily grave cases of academic dishonesty or when less severe cases of dishonesty persist after one returns from a period of suspension for academic dishonesty.

The Process
Faculty members should provide the student with a written account of the offense and the sanction. Faculty members should also report cases of academic dishonesty to the Office of the Dean of Students, including an indication of the sanction levied (this could be a copy of the letter sent to the student).

The Dean of Students will monitor academic dishonesty infractions in the context of a student's entire record of misconduct at the college. When appropriate the Dean of Students will activate a hearing process wherein the sanctions of suspension or expulsion from the college may be levied. These cases are heard by Hearing Board.

Hearing Board does not reconsider the grade sanction which may have been levied at an earlier stage. It only considers whether additional sanctions are in order, and does not confine consideration to the case of academic dishonesty. Rather, it considers the entire record of misconduct of the student at the college which is compiled in the Dean of Students office.

Academic Petitions Policy and Process
The Petitions Committee, composed of faculty and the Associate Dean for Academic Affairs, reviews and makes decisions on student petitions for waivers of admissions requirements, specific graduation requirements as outlined in the College catalog, or other academic requirements. The committee normally grants such waivers only in the presence of strong and sufficient evidence supplied by the student. The Committee considers petitions on an individual basis and does not grant blanket waivers of graduation or other requirements. Ignorance of College requirements and/or financial hardship are not sufficient reasons for the granting of a petition.
The procedure for filing a petition is as follows:
1. The Student discusses a petition request with his or her faculty advisor and/or the Associate Dean for Academic Affairs.
2. The Student fills out the petition form as completely as possible, paying particular attention to “Petition Request” and “Rationale for Request.”
3. The Student reviews the petition with his or her faculty advisor and has it signed by the advisor. If necessary, the advisor provides additional comments.
4. The Student returns the petition and any supporting materials that may assist the committee in the evaluation of the request to the Registrar's Office.
5. The Petitions Committee reviews the request and provides a written response to the petition.
6. Students may appeal Committee decision. The procedure for appeal is as follows:
   a. The Student reviews the Committee's decision with the faculty chair of the Petitions Committee (the name of the chair can be obtained from the Registrar's Office or the Advisement Office).
   b. The Student reviews with the faculty advisor the decision of the Committee and the explanation given by the chair of the committee. Before an appointment to appeal the decision is made, the student should be sure to discuss any new and relevant arguments or materials that might persuade the Committee to re-evaluate the original request.
   c. The Student makes an appointment, through the Registrar's Office, with the Petitions Committee. All appeals must be made in person before the Committee. Students are entitled to bring an advisor to the meeting. Most students bring their faculty advisor, but any member of the faculty may accompany a student to the appeal.

Academic Progress Policy
Whittier College students are expected to make continuous progress toward their educational goals. In order to monitor student progress, a faculty committee reviews all academic records after the end of each semester. Students who have received any grades of non-completion have their records placed in an advisement file. Students who have encountered more serious academic problems are advised to seek assistance from their faculty advisor, the Advisement Office, and the Office of Student Life.

Continuing academic problems may result in academic probation with restrictions on enrollment and extracurricular activities. Students who do not meet the obligations of probation or who cease to make satisfactory progress may not be permitted to register for one or more semesters.

Academic Review
A. Good Standing
   Students are considered in Good Standing if their overall and last semester grade point averages are both 2.00 or above.

B. Academic Difficulty
   Students who earn a semester grade point average of below 2.00 will be categorized as follows for the next semester:
1.50 - 1.99 into Partial Probation
1.00 - 1.49 into Full Probation
.00 - .99 into Suspension

C. Partial Probation
1. Students on Partial Probation who received a semester grade point average above 2.00 will continue on Partial Probation if their overall grade point average is below 2.00; they will resume Good Standing if their overall grade point average is above 2.00.
2. Students on Partial Probation are not restricted from participating in any activities except that they may not join a society.

D. Full Probation
1. Students on Partial Probation who earn a semester grade point average below 2.00 will be placed on Full Probation. Students on Full Probation may not hold any office in student government, the residence halls, or a society, or participate in athletics, club sports, drama or music productions, the yearbook, or the Quaker Campus, unless required to do so for graduation. Other conditions may be attached to Full Probation by the Academic Review Committee on an individual basis.
2. Students on Full Probation who earn a semester grade point average of 2.00 will be moved to Partial Probation if their overall grade point average is below 2.00; they will resume Good Standing if their overall grade point average is above 2.00.

E. Suspension. Students on Full Probation who earn a semester grade point average below 2.00 will be suspended for at least one semester.

F. Academic Review Committee. Students placed on Partial Probation, Full Probation or Suspension will receive a letter of notification from the Office of the Associate Dean for Academic Advisement.

Students who wish to appeal the conditions that pertain to their level of academic difficulty (Full Probation or Suspension) may request a meeting with the Academic Review Committee. This committee, comprised of faculty and administration, meets prior to the onset of the fall and spring semesters.

G. Guidelines. The following guidelines may be applied by the Academic Review Committee as it deems appropriate:
1. The above policies are designed primarily for full-time students.
2. In considering suspensions, some consideration may be given to the total number of units earned toward graduation.
3. Students may appeal Committee decisions to the Associate Academic Dean. In the case of successful appeal of a suspension, students will be reinstated on Full Probation and additional conditions may be attached to the probation.
4. Students finishing Incompletes successfully may have the severity of the sanction reduced.
5. Incompletes, Ws, CR's, and Evaluations will not be used in calculating grade point averages.
Appeals
There are two avenues of appeal, one applicable to appealing grade sanctions, the other applicable to appealing suspension or expulsion decisions. The Grade Appeal Committee of the faculty will consider appeals of grade sanctions. The Dean of Faculty will hear appeals of suspension and expulsion sanctions. No further opportunities for appeal are available.

Attendance Policy
Faculty may, through the end of the fifth school day for semester classes, drop students who have never attended class.

  Individual faculty members establish their own attendance policies for each course they teach. Students are advised to check with faculty members about the attendance policies for each class (Also see the Withdrawal Policy).

Auditing
Lecture and recitation courses may be audited without credit with the consent of the instructor. The normal audit fee is assessed. Courses such as laboratory or studio work may be audited, but regular tuition and fee charges apply. A student auditing any course takes no examinations and receives no grade or credit.

Class Standing
The total number of units earned, including those accepted from other colleges or universities, determines classification of undergraduate students. Classification is established as follows:

<table>
<thead>
<tr>
<th>Classification</th>
<th>0–29 semester credits</th>
<th>30–59 semester credits</th>
<th>60–89 semester credits</th>
<th>90+ semester credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Commencement
The College conducts one Commencement each year in late May. However, the date of the degree noted on the student's permanent record is the last day of the term during which degree requirements were completed.

  Commencement at Whittier College is a very special event. The faculty are proud of the College's graduates and, as such, attendance at Commencement is a College requirement if clearance from the Business Office has been secured. Students may be excused only by approval from the Office of the Registrar.

  In order to be listed in the Commencement program and to participate in the graduation ceremonies, all graduation requirements must be satisfied before Commencement. To be eligible as a summer graduate and participate in Commencement, a student must register and pay (or make suitable arrangements with the Business Office) for the courses needed in the summer at least three weeks prior to Commencement.

Concurrent Enrollment Policy
The purpose of concurrent enrollment is to allow currently enrolled students to take approved courses at other institutions and not lose their current enrollment status at
Whittier College. A student must obtain a Concurrent Enrollment Form from the Office of the Registrar and have prior approval for all courses taken at another institution. Concurrent enrollment courses may not be used for the Liberal Education requirements. A student may not register for credit at Whittier College and elsewhere simultaneously without advance permission from the Registrar. Credit will not be guaranteed unless the Concurrent Enrollment Form is filed and approved prior to enrollment at the other institution. Credit will be awarded after an official transcript has been received and evaluated by the Office of the Registrar. Actual grades from other institutions will not transfer to Whittier College; only the credits will transfer.

Credit by Examination
College credit totaling a maximum of 30 semester hours may be earned by satisfactorily completing approved examinations. Acceptable examinations include College Entrance Board Advanced Placement Tests and International Baccalaureate Higher Level Examinations. No more than eight units may be awarded from a single department.

Entering students who have passed Advanced Placement Tests with a score of four or five will receive credit toward graduation if the tests are in subject areas taught at Whittier and the academic department approves. The Registrar's Office can provide information on specific departmental policies on numbers of credits awarded and course equivalencies.

Entering students who have passed International Baccalaureate Higher Level Examinations with a score of five or above will receive credit toward graduation on a case-by-case basis with the approval of the academic department.

Dean's List
An undergraduate student will be awarded Dean's List honors if he/she earns a 3.70 GPA while completing 12 gradable units (letter grades of A through F) in the Fall or Spring terms. No Dean's List honors will be awarded for Summer or January terms.

Directed Study
Directed Study is a tutorial arrangement with a faculty member. Directed Study requires permission of the faculty member and operates under the following guidelines:
1. The student should have completed the basic courses offered by the department in which the work is to be done.
2. The substance of the study should not duplicate the work of any course listed in the catalog; however, students may petition to meet specific course requirements through Directed Study.
3. The student may take only one Directed Study in a given semester.
4. Directed Study courses may be arranged for one to three credits.
5. Directed Study is offered at the discretion of the faculty member who will be supervising the tutorial.

Distinction in the Major
The Whittier College faculty believes that students who have achieved excellence in their majors should receive recognition at graduation. Because this is an award for academic achievement, rather than service, the criterion will be either a superior grade point average in the major (3.5 minimum, at the discretion of the department) or other
extraordinary academic achievement (published or publishable papers, presentation at a conference, significant research or creative project). The GPA will be based on seven semesters, including the first semester of the senior year. For transfer students, at least 50% of the units required for the major should reflect work done at Whittier College, or in programs under the auspices of the College, in order to be considered for the award. In addition to recognition in the graduation program, the student's achievement will be noted on the transcript.

Federal Education Rights and Privacy Act
The purpose of the Educational Rights and Privacy Act of 1974 is to assure students at Whittier College access to any and all records kept by Whittier College that are defined as educational records and to assure the privacy of students by restricting the disclosure of information from educational records only to those persons authorized under the Act. Procedures and policies for access to specific records may be obtained from the appropriate office.

Information from educational records is not available to unauthorized persons on campus, or to any person off campus without the express written consent of the student involved, except under legal compulsion (e.g. subpoena, warrant), or in cases where the safety of persons or property is involved. In compliance with judicial order or subpoena, an attempt must be made in advance to notify the student. A signed consent from the student must be presented, where appropriate, to the Dean of Students, the Registrar, or other appropriate college officials, before information will be released to those persons who are not institutional authorities specifically authorized to inspect these files.

Students in attendance at Whittier College, and parents of such a student with prior written consent of the student, have access to any and all education records maintained by Whittier College, including the right of obtaining copies by paying copy fees.

The College will not disclose personally identifiable information from the educational records of a student without the prior written consent of the student, with some exceptions, except information that has been designated as directory information: the student's name, id number (not Social Security Number) address, telephone number, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student.

Whittier College will give public notice as to the information designated as directory information. The student has the right to prohibit the designation of any or all of the categories of personally identifiable information with respect to that student, provided that said student notifies the Office of the Registrar in writing that such personally identifiable information is not to be designated as directory information with respect to that student. Notification must be made to the Office of the Registrar within three days after the student registers each semester.

Final Examination Policy
It is the policy of Whittier College that all final examinations are to be given only at the officially scheduled time for the course as published in the schedule of classes each term. In addition, no take-home final examinations or papers assigned in lieu of a final examination will be due prior to the scheduled time of the final examinations.
Grade Appeal Policy and Process
The faculty of Whittier College believes that grading is the responsibility and prerogative of individual faculty members according to their professional judgments of students’ performance, and that this responsibility and prerogative should be safeguarded. Nevertheless, the faculty also recognizes the need to safeguard students of Whittier College against possible bias or lack of uniformity in the evaluation process, and thus has provided a mechanism to address this concern.

The maximum time allowed for filing a grade appeal with the Associate Academic Dean, whether the student is enrolled or not, is one year from the date the grade was awarded.

This mechanism will be used only in cases where strong and demonstrable evidence of bias or lack of uniformity in assigning grades to members of a class exists, and only after all other avenues of appeal have failed to resolve this question.

I. The process to be observed prior to utilizing the grade appeal petition is as follows:

1. The student will discuss a disputed grade for a course with the faculty member in person, in an attempt to resolve the differences over the grade. If no agreement is reached, then

2. The student will consult with the chair of the department in which this faculty member is teaching. If the question is still unresolved, or in the event that the teacher giving the disputed grade is also the department chair, then

3. The student will refer the question to the Associate Dean of Academic Affairs. The Associate Dean will inquire into the matter and attempt to bring about an amicable solution. If no agreement can be reached, and the Associate Dean decides that the matter requires further attention, then

4. The Associate Dean of Academic Affairs will direct the student to complete a Grade Appeal Petition, which will be forwarded to the Grade Appeals Committee, composed of the Dean of Faculty, the Chair of the Academic Standing Committee, and one faculty member, appointed by the Faculty Executive Council.

II. The Grade Appeals Committee
The Committee will investigate the underlying facts of an appeal, which may include interviewing the student, faculty member, and any other persons whom the committee feels might be able to help it clarify the matter. If, in the course of this process, an amicable resolution of the difference can be affected, the Committee's consideration of the matter will end.

If, after making a full inquiry into the matter, no resolution is reached, the Committee will decide the outcome of the grade appeal. Possible decisions may include leaving the grade as it is, changing the grade to correct demonstrated evidence of bias or lack of uniformity in grading, or working out other possible solutions as the Committee sees fit. No grade may be changed unless the Committee reaches consensus on the proposed change.

Academic policies and procedures for post-baccalaureate and graduate students may differ from those cited above for undergraduates. Please see the document, Academic Policies and Procedures for Graduate Programs and Programs in Education, available in the Education Department, for details.
Grade Definitions

A  Excellent     Generally reserved for the very highest level of academic work.

B  Good          Meeting course requirements with a high level of performance.

C  Satisfactory  Awarded for satisfactory completion of all or most of the
                course requirements.

D  Passing       Awarded for barely meeting the minimum standards of the course.

F  Failing       Not meeting the minimum standards of the course.

Grading Philosophy

The members of the Whittier College faculty regard the evaluation of student
performance as one of their most important responsibilities. They further believe that
grading is a vital element in this evaluation in that it allows for the reporting of student
progress to the students themselves, to the college for the purposes of advisement and
for the awarding of honors upon graduation, and to the outside world, at the request of
the student, for the applications to graduate school and for prospective employment.

The awarding of grades by the faculty reflects the quality of the students’
performance as measured against the individual faculty member’s expectations based
upon objective criteria, including the nature of the discipline and the faculty member’s
experience in evaluating student performance within that discipline. Thus, grading will
not always be uniform from course to course.

Moreover, the boundaries of academic freedom allow discretion on the part of
individual faculty members in the awarding of grades. However, the faculty recognizes
that grades must always be rigorously fair, and awarded on the basis of criteria that are
explained to the students at the beginning of each course. The following points
underscore the faculty’s grading framework:

1. Course expectations and grading are the sole responsibility of the course instructor.
2. Grades are determined based on the students’ mastery of the course materials and
demonstration of the skills required.
3. The grading standards shall be appropriate to the academic level of the course and
   standards shall not be set either so high that no one can attain an ‘A’ nor so low that it is
   impossible to receive a grade of ‘F’
4. Students have the right to information about how they will be evaluated, so information
   about grading and grading standards should be contained in the course syllabus.

Grading Policy

The academic standards of an institution are largely determined by the admissions
policies of the institution and by the standards of work required by the faculty. Once
awarded, a grade may not be changed as a result of reevaluation of work submitted by a
student. The only justification for a change of a grade is to correct a clerical error on the
part of the instructor. The submission of additional work by a student (except to remove
an Incomplete resulting from illness or similar circumstances) is not justification for
altering a grade, once it has been recorded.

Most courses at Whittier College are graded from A to F with the awarding of (+) or
(-) grades at the discretion of the instructor; however, by the fourth week of the
semester, and at the discretion of the instructor, the student may be given the choice of
Credit/No Credit (CR/NC) or Letter of Evaluation. Freshman Writing Seminars cannot be taken for CR/NC.

The grade option cannot be changed after it has been submitted to the Registrar's Office. All letter grades, including Ds, Fs, NCs, UWs and Ws, will be recorded on the student's permanent transcript.

When an instructor is unable to submit his or her grades by the time all grades are to be posted, then the Registrar will assign NG (no grade reported) to each student. The grade will be treated as an Incomplete for all purposes of evaluation.

The three grading options are:

<table>
<thead>
<tr>
<th>Grade Option I</th>
<th>(Grade points)</th>
<th>Grade Option II</th>
<th>Grade Option III</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>(4.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A –</td>
<td>(3.70)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B +</td>
<td>(3.30)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>(3.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B –</td>
<td>(2.70)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C +</td>
<td>(2.30)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>(2.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C –</td>
<td>(1.70)</td>
<td>CR</td>
<td>EV (*)</td>
</tr>
<tr>
<td>D</td>
<td>(1.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>(0.00)</td>
<td>NC</td>
<td></td>
</tr>
<tr>
<td>W(**)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UW(***)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(*) Evaluation grades do not guarantee a passing grade or credit.
(**) Withdrawal
(***) Unauthorized Withdrawal

**Graduate Standing**

Those who have been granted baccalaureate degrees (or equivalent) from accredited colleges and universities are admitted for fifth-year work as graduate students if they have met the requirements for degree candidacy as determined by the Whittier College faculty.

**Honors at Commencement**

Each year Whittier College grants academic honors to deserving seniors at Commencement. The determination is based on grades received throughout all undergraduate studies at Whittier College. Honors at Commencement are based on students' cumulative grade point averages. Students will receive the highest level of honors for which they are eligible. Those students with the following grade point averages will receive the corresponding Honors at commencement:

- 3.70 - 3.79: Cum Laude
- 3.80 - 3.89: Magna Cum Laude
- 3.90 and above: Summa Cum Laude
In order to graduate with academic honors, the student must have earned at least 60 credits at Whittier College. Two-thirds of the total credits earned must be letter grades.

Incomplete Grades Policy
At the discretion of the instructor, an Incomplete may be given only to students who have satisfactorily met all course requirements except for certain assigned work or final examinations that they were compelled to postpone for reasons of health or serious personal problems. Academic overload, outside employment, or improper management of time are not sufficient reasons for an Incomplete to be given. Further, if a student has missed a final examination or other assignment without prior notification and/or arrangements with the instructor, an Incomplete cannot be awarded.

Incomplete grades from a semester or a January course must be made up within the first 10 weeks of the following semester. Summer courses must be made up within the first 10 weeks of the fall semester. Failure to complete the work within the time allotted will result in the student receiving a Failure or No Credit for the course.

It is understood that there may be certain exceptions from the above guidelines. Prior approval for these exceptions must be obtained from the Registrar. The maximum time allowed for completion of a course, whether the student is enrolled or not, is one year from the date the Incomplete was incurred.

IP In-Progress Grades Policy
Assigned when an educational experience (e.g., student teaching, internship, or practicum) is designed to extend beyond the traditional grading term, a grade of IP must be accompanied by a date at which a final grade is due. If a grade is not submitted to the Registrar by the specified date, a grade of “IN” will be assigned. Thereafter, the course is governed by the policy of “Incomplete Grades.” A grade of IP cannot be assigned for a traditional course as a means to extend the grading period beyond the traditional term.

Non-Degree Standing
For those interested in academic pursuits outside of any degree requirements, “non-degree” standing is permissible on either a part-time or full-time basis with the approval of the Office of the Registrar. A non-degree student must satisfy the English proficiency requirement for degree candidates at the College. A student may transfer no more than 30 credits of courses taken at Whittier College under non-degree status toward a Whittier College Bachelor of Arts and no more than 12 non-degree credits toward the Master’s degree at the College.

Readmission
Those students who have interrupted their studies at Whittier for a semester or more must be readmitted by the Registrar’s Office. Transcripts must be submitted from any other college(s) attended during the absence from Whittier. Readmitted students may begin classes at the beginning of the fall, January, or spring terms.

Registration and Class Scheduling
The Office of the Registrar is the principal source of information concerning registration procedures. Details are contained in the Schedule of Classes published each semester prior to registration for the upcoming semester.
Student must complete registration during the assigned period at the beginning of each term by paying tuition and fees and by filing the completed registration form with the Registrar. A new, re-admitted, or continuing student who did not pre-enroll must register during regular registration periods. No credit will be given for a course in which the student is not officially registered.

Flexibility for learning is built into daily and weekly class scheduling. 50-minute and 80-minute class periods are available throughout each week day. Frequency of weekly meetings varies, depending upon the credit value of the particular subject.

Registration Changes
Once the student has filed the registration form with the Registrar, any necessary changes must be made on the appropriate form during the period stated in the Class Schedule and Registration Guide. The faculty mentor or advisor must approve all program changes. Once classes have started, individual instructors must approve the addition of any student to their classes. No change is accepted after the third week of the semester.

Repeated Coursework Policy
A course may be repeated, but degree credit will be given only once (except for courses designated in this catalog as “may be repeated for credit”). The grade assigned for each enrollment shall be permanently recorded on the student's transcript. A course originally taken for a letter grade may not be repeated on a CR/NC basis. In computing the GPA of a student repeating a course, only the most recently earned grade shall be used.

ROTC
Although actual ROTC courses are not taught on the Whittier College campus, “cross-town” agreements with other institutions exist to allow qualified Whittier College students to participate in the Air Force Reserve Officers Training Corps (AFROTC) or the Army Reserve Officers Training Corps (AROTC).

Upon the registrar's approval, academic credit earned in these programs may be counted as elective units toward fulfillment of Whittier College graduation requirements. Additional information is available at the Office of the Registrar.

Special Course and Laboratory Fees Policy
Some courses have expenses associated with them that are not covered by regular tuition and fees, and in such cases the College may charge additional fees in amounts approximately equal to the added instructional or laboratory costs. Special charges may be made according to current costs for the following:

A. Courses requiring equipment, facilities or materials not available on campus, for science and certain field courses.
B. Courses requiring use of high technology equipment, e.g., computer courses.
C. Private instruction in music and similar arts.
D. Courses requiring field trips or travel.
E. Noncredit courses, conferences, workshops, postgraduate seminars and similar educational offerings.
Student Grade Report
A formal student grade report indicating academic achievement is issued for each term. Grade reports are available online to all students and under special circumstances, may be sent to the student mail boxes at the end of the fall semester and the January Interim, and mailed to the student's permanent address at the end of the spring semester.

Study Load
For undergraduate students, a minimum full-time study load is 12 credit hours per semester (one credit hour is equivalent to one semester hour). A normal course load for students planning to graduate in four years is 30 credits per year; this could be accomplished by taking 15 credits each semester or, in some years, by taking 13 credits each semester and a 4-credit course during the January Interim. Credit hours taken in excess of 15 require additional tuition charges. An extra study load, more than 17 credit hours per semester, must be approved by the student’s mentor or advisor and certified by the Registrar. Forms for an extra study load are available in the Registrar's Office. For Graduate Students, a minimum full-time study load is 9 credit hours per term.

Transfer Credit Policy
Whittier College accepts courses in transfer as long as the courses were completed at a regionally accredited institution. Whittier will not accept courses that earned a grade lower than a C-. A student may not receive credit for courses taken at a community college after completing 70 units of college work. A maximum of 70 credits from a community college and 90 credits from a four-year institution can be transferred.

Transcript of Whittier College Record
A transcript of the academic record will be issued upon written authorization of the individual. Only credits accepted for transfer from other institutions will appear on the Whittier transcript along with credits earned at Whittier College. All subsequent transcripts carry a fee of $5.00 payable upon submission of the request. Transcripts and diplomas will be withheld for any student who has outstanding financial obligations to the College.

WITHDRAWAL POLICIES
Instructor Drop
Faculty may, through the end of the fifth school day for semester classes, drop students who have never attended class (also see Class Attendance policy).

Dropping Classes
With the approval of the advisor, students may drop a class without record of enrollment during the first three weeks of a semester course.

Withdrawing from Courses
Until the end of the sixth week of a semester course, students may withdraw from a course for any reason. A grade of “W” will be assigned. After this period, withdrawals
will be allowed only for reasons of health or serious personal problems. Academic difficulties or lack of interest in the course are not sufficient reason for late withdrawals.

Unauthorized Withdrawal from Courses

If, in an instructor's judgment (not the student's), a student has an excessive number of absences in a course, an instructor may recommend to the Associate Dean for Academic Affairs and the Registrar that the student be administratively withdrawn from the course. The student's record will show a mark of UW for the course. This policy is designed only for those students who have stopped coming to class and for whom there is insufficient course work to produce an earned grade. It is not to be used to allow students to withdraw from a class because they may not like the grade they have earned, nor is it a way for students to circumvent the processes for students to initiate a class withdrawal, as described in this catalog.

Withdrawing from the College

A withdrawal is generally requested when a student does not plan to return to Whittier College or plans to transfer to another school. A leave of absence is granted to a student who plans to return to Whittier within one academic year. Students who plan to do either must apply through the Dean of Students' Office. Withdrawals will be recorded on the transcript as a W.

No withdrawals of any type will be granted during the last week of any course.
THE CURRICULUM

DEGREES
Undergraduate courses offered by Whittier College lead to the degree of Bachelor of Arts. Graduate instruction leads to the degree of Master of Arts.

The Bachelor of Arts degree at Whittier is built upon a pattern of general education requirements to develop breadth of knowledge and an understanding of the relationships among various disciplines. General education is complemented by a major, which may be in a single department or interdisciplinary program, and by electives, which offer students an opportunity to explore additional areas of academic interest. Within this basic structure, Whittier College's curriculum is flexible, to allow for the individual needs, academic interests, and goals of its students. Through the Whittier Scholars Program, the College encourages students with a desire to design their own curricula to do so, in close consultation with the Scholars' Council. Regardless of which curricular path or major a student chooses, Whittier College is committed to developing strong writing skills throughout the curriculum.

THE LIBERAL EDUCATION PROGRAM
The Whittier College community shares a love of learning and a delight in the life of the mind; these are at the heart of the Whittier College liberal arts education. A liberally educated person develops an informed self-awareness through a lifelong commitment to learning and through responsible membership in the multiple communities and contexts that make up the environment. (This environment may be understood in terms of time, place, and perspective, and may include physical, social, and spiritual aspects.) Responsible membership implies the ability to effect change in one's environment. In the service of these values, we present the following primary learning objectives.

1. Students should appreciate that education is a creative, collaborative, and transformative experience. The curriculum should provide a framework for students' awareness of their intellectual, physical, moral, and cultural development.
2. Students should learn to think and articulate their thoughts critically (meaning to define, analyze, and synthesize) using a variety of methods and technologies.
3. Students should develop an understanding of, and competency in, the use of signs and symbols in constructing, creating, perceiving, and conveying meaning.
4. Students should develop the capacity to entertain multiple perspectives and interpretations.
5. Students should develop the ability to understand the convergence and divergence of different fields of knowledge. Students should develop familiarity with essential concepts in major fields, a considerable knowledge of at least one field, and the ability to make connections across fields.
6. Students should develop skills and methods necessary for systematic investigations.
7. Students should develop an understanding of themselves and others in relation to physical, historical, cultural, and global contexts.
Outline of Liberal Education Program

**Freshman Writing Experience**
Six credits taken during the freshman year including a seminar taken by all students and a writing intensive course.

**Mathematics**
Three credits of course work in mathematics.

**Natural Science**
Eight credits consisting of an Introductory Lab Science and Science and Math in Context.

**Civilizations, Cultures, and Global Perspectives**
Seventeen credits of work in American, European, African, Asian, or Latin American civilizations and cultures and in International or Global Perspective and the Individual in a Social Context.

**Comparative Knowledge**
Six credits in Paired or Team-Taught Courses

**Creative and Kinesthetic Performance**
Two credits in Creative Arts and two credits in Kinesthetic Performance.

**Whittier Scholars Program**
Throughout its history, Whittier College has been committed to high quality, innovative education and to a concern for the individual, particularly as a member of a community. The Whittier Scholars Programs exists within the context of those two traditions. It is a rigorous, individualized interdisciplinary program that offers an alternative approach to a liberal arts degree. Working with faculty advisors and their peers, students in the Scholars Program construct an educational program that is unique to them, as well as designed to make them educated individuals in the world today. Through interdisciplinary seminars, discussions with faculty and peers, and guest lecturers, students explore fundamental questions that help them define themselves and their goals and the role that education plays in helping them achieve those goals. These ideas are further explored as part of the requirement to complete an off-campus experience such as study abroad and community service.

Central to the Scholars Program is the Educational Design process. Through an interdisciplinary seminar and with the assistance of a faculty advisor, students design their own course of study. Each design must have coherence and purpose while still supporting the goals of the individual student. All designs must be presented to, defended before, and approved by faculty members of the Whittier Scholars Council. Student reflection does not end with the Educational Design process. Rather, students continue to examine their goals, objectives and values on an ongoing basis throughout their course of study as part of all the Whittier Scholars Program seminars.

Although students design their own course of study, the program does have some specific requirements. Because one of our ideals is the ability to communicate, the College Writing requirement also applies to those students in the WSP. In addition, three three-credit interdisciplinary seminars plus the Design Your Education course and a Senior Project are required to complete the program successfully.

The seminars are taught by faculty members from across the College and focus on fundamental and enduring questions and topics that demand analysis, value judgments and synthesis, and include significant student participation and research. Students come to grips with what they believe and why, but they also learn that the search is more important than any single answer. Through the seminars, there is a progression toward greater self-direction and discovery, which culminates in the Senior Project process.
The first course, “The Individual, Identity and Community,” is the foundation course for the Scholars Program and is typically taken in the freshman year. It is designed to enable students to explore issues such as: human beings in a social context; the relationship between the individual and the community; the role of education and the life of the mind; and the ways in which values play a role in asking and understanding enduring questions and analyzing issues. These themes are addressed in terms of different historical periods, disciplines, cultures and identities.

The WSP course of study then builds upon that seminar by having students continue to explore their own values in the Design Your Education class. That course is then followed by another interdisciplinary seminar called “Nature, Theory and Bases of Knowledge.” This seminar explores various methods of gathering and understanding knowledge from a number of disciplinary perspectives. By the conclusion of the course, students should have an awareness of what knowledge is and also an understanding of the approach most appropriate for them as they begin the Senior Project process. The final course in the sequence is a Senior Seminar which enables students in the program to share their ideas and to peer review one another’s work as they progress through the creation of a Senior Project.

The Senior Project is the culmination of the Whittier Scholars Program. The concept must be presented and defended to faculty members of the Whittier Scholars Program in the form of a proposal which frames the Project, places it in a disciplinary context, and provides a bibliography (where appropriate) and timetable for completion. Each student works on the Project with a faculty Sponsor selected by the student who serves as a mentor and guide through the process. The Project may be a research paper, an art portfolio, the production of a play, or anything else that allows each student to prove himself/herself as a scholar. The Senior Project permits students to demonstrate that they can learn on their own, that they have attained a level of mastery appropriate to advanced undergraduate work, and that they are aware of the relationship of themselves and their work to others in their own and different disciplines. Students then share their Senior Projects with the larger Whittier College Community as part of a WSP Senior Symposium series.

Admission: Provisional acceptance to the Whittier Scholars Program requires admission to the College and completion of an application to the program concurrent with enrollment in one of the first two courses in the program. Full acceptance follows successful completion of the first seminar, the Educational Design course, and Whittier Scholars Council faculty approval of an Educational Design.

Writing Program
At Whittier College, each student learns to think critically and write effectively. Because the need to communicate clearly is essential in every discipline, faculty from every department share responsibility for improving students’ writing abilities. For these reasons, the faculty have constructed a writing program that spans four years at Whittier College.

The Whittier College Writing Program begins with Freshman Writing Seminars. Among the most popular courses that freshmen take, these fall semester seminars are limited to 15 students and are taught by faculty from all disciplines on topics such as “Science and the Criminal Justice System,” “Wilderness Writing,” and “Writing to Understand: Contextualizing the Chicano/Mexican-American Experience through Literature.” The second component of the Writing Program is the Writing Intensive
Course (WIC), which all students take in either the second semester of their freshman year or the first semester of their sophomore year. The third component of the program is “writing across the curriculum:” students write in all courses offered in the Liberal Education and Whittier Scholars Programs—including science and mathematics courses. Capping the Writing Program is the “paper-in-the-major.” Written in the junior or senior year and a requirement for graduation, this paper demonstrates the student's command of his or her major's perspectives, methods, and body of knowledge, as well as his or her ability to communicate these skillfully in writing.

Requirements for Graduation
All students entering Whittier College will follow one of two paths to a Whittier degree: the Liberal Education Program or the Whittier Scholars Program.

The completion of all requirements for a degree is a student’s responsibility. A student has the option of completing graduation requirements prevailing at the time of admission or readmission, at the time of graduation, or any intervening year of continuous full-time enrollment. Graduation requirements cannot be selected from two or more catalogs.

Students must monitor their own progress through frequent reference to the appropriate catalog. Consultation with faculty advisors as well as with the Registrar is suggested to assure satisfactory progress toward completion of the degree.

High school deficiencies may be met by enrolling in appropriate Whittier College courses, through a local high school or community college, through extended education or summer school courses, or by some other acceptable alternative. Students with high school foreign language deficiencies must take six credits of a single foreign language.

Both degree paths require a minimum of 120 credits for graduation, satisfaction of the College Writing Requirement, and residence at Whittier College for 30 credits of college work. Further, an overall grade point average of not less than 2.0 in Whittier College courses is required in order for a student to be eligible for graduation.

Liberal Education Program Requirements
Six credits of writing including a Freshman Writing Seminar and a Writing Intensive Course.
Three credits of Mathematics.
Eight credits in the Natural Sciences including an Introductory Lab Science and Science and Mathematics in Context.
Twelve credits in the Civilizations and Cultures of America, Europe, and Asia, Africa, or Latin America.
Three credits in International or Global Perspectives.
Two credits involving The Individual in a Social Context.
A Comparative Knowledge Paired or Team-Taught Course for six credits.
Two credits in the Creative Arts.
Two credits in Kinesthetic Performance.

(Lists of courses which satisfy these requirements are available from the Registrar.)

Once a student has matriculated at Whittier College, course work taken at other institutions (other than Whittier College Overseas programs) cannot be used to satisfy Liberal Education Requirements.

When a student fails to complete satisfactorily one of a paired set of courses, no Liberal Education credit will be given for the pair requirement, although, the successfully completed part will count toward graduation. The student must then
complete a different paired set to satisfy the Comparative Knowledge requirement.

Credit received for Advanced Placement (A.P.) from high school may satisfy Liberal Education requirements in appropriate areas. See the Liberal Education section of this Catalog for more information.

A student may satisfy both high school deficiencies and Liberal Education requirements with the same course.

Courses taken in a semester-length study-abroad program may be applied to Liberal Education requirements as specified in the catalog description of Whittier Foreign Study Programs. Courses approved for study in Copenhagen are published annually by the Liberal Education Committee, while courses for other programs must be approved in advance by the Registrar, based on guidelines developed by the Liberal Education Committee.

**REQUIREMENTS FOR THE MAJOR**

Every student, by no later than the Fall registration period for the Spring semester of his/her sophomore year, will declare a major and select an appropriate faculty advisor. Students must have an advisor approved for their major by the Office of the Registrar. Students who transfer in with 45 credits or more must declare a major upon entrance.

At each registration, a student has the opportunity to confirm or change his/her major. During non-registration periods, this can be done in the Office of the Registrar.

A minimum of 30 credits is required in the major field. See each department for specific course requirements.

A maximum of 48 credits in a single discipline may be counted toward the 120 credits needed for graduation. At least 72 units must be completed outside of the major. In a department housing two or more recognized disciplines, a maximum of 60 credits may be counted from the department.

At least 12 credits in the major must be taken at Whittier College.

A minimum grade point average of 2.0 is required in the courses taken from the major department.

**REQUIREMENTS FOR A MINOR**

Minors may be earned as part of a student’s academic achievement but are not required for graduation. Students considering a minor should contact the faculty advisor for minors in their department of interest early in their academic career.

A minimum of 16 credits is required for a minor, and specific requirements are defined in this catalog for each department.

Only six credits of coursework may be counted toward both a major and a minor.

**GRADUATION REQUIREMENTS FOR TRANSFER STUDENTS**

All Requirements for Graduation apply, as stipulated in the previous pages, with the exceptions indicated below.

The Registrar of Whittier College will determine which credits transferred from another institution may be used to satisfy each requirement.

Liberal Education Requirements: All students with transfer credits, regardless of the number of transfer credits that satisfy Liberal Education Program requirements, must complete one set of paired courses or a team-taught sequence in Comparative Knowledge at Whittier.
WHITTIER SCHOLARS PROGRAM REQUIREMENTS

Six credits of College Writing (Freshman Writing Seminar and a second 3-credit approved writing course. Students admitted to the WSP may meet the second-semester writing requirement by successfully completing WSP 101.)

An approved Educational Design

Whittier Scholars courses 101, 201, 301 and 401, all of which should be taken sequentially

An off-campus experience (study abroad or off-campus internship)

A Senior Project

Completion of 60 credits after the Educational Design has been approved

If a student transfers from the Whittier Scholars Program to the Liberal Education Program, the student must submit a formal letter signed by his/her advisor and the Director of the Whittier Scholars Program to the Registrar's Office. The Registrar will then evaluate the student's academic record as though the student were a transfer student with regard to the Liberal Education requirements. If a student chooses to enter the Whittier Scholars Program after his/her freshman year, then s/he must meet with the Director of the Program to review necessary requirements including completion of WSP 101, 201, 301 and 401, and the acceptance of an off-campus requirement.

DEGREE REQUIREMENTS FOR THE MASTER OF ARTS IN EDUCATION

Candidates attain the Master of Arts in Education Degree upon successful completion of the Educational Design described below. The Department of Education and Child Development, the student's graduate advisor, and other faculty members representing the area of specialization must approve the Educational Design prior to completion of the degree. (Ideally, this would occur prior to enrolling in ED 502.) The Educational Design consists of the following:

1. Three or four required courses to include one of the following: Introduction to Educational Inquiry (ED 500), OR Advanced Educational Psychology (ED 501), OR Sociology of Education (ED 503); and the following: Research Techniques (ED 502), and Thesis (ED 504). In addition to the above, Thesis II (ED 506), is required when a thesis is not completed according to established deadlines.

2. A concentration with a minimum of 12 units

3. Electives to total 33 units (minimum)

4. Completion of a research thesis in accordance with department policies

5. A maximum of 9 units may be transferred from other institutions

Candidates must file a Master's Degree Completion Plan prior to or in conjunction with registering for Research Techniques (ED 502). Students who do not finalize their completion plan by the end of the add/drop period for the fall semester may not be allowed to graduate with their class.

All requirements for the M.A. must be completed with a 3.0 minimum GPA; no more than one “C” grade will be applied toward the degree. Students must complete the M.A. within five years of admission to Master's Degree Candidacy. A maximum two-year extension may be sought through petition. Courses completed prior to admission to the program may be accepted at the discretion of the Department of Education and Child Development, but in no case will a course taken more than 10 academic years prior to the date of graduation be applied to the degree. Guidelines and stipulations regarding admission to the program are available in the Department offices. Variation or amendment of the guidelines can only be obtained by petitioning the Department of Education and Child Development.
Courses of Study

Division of Humanities
Department of Art and Art History
Department of English Language and Literature
Department of History
Department of Modern Languages and Literatures
Department of Music
Department of Philosophy
Department of Religious Studies
Department of Theatre Arts and Communication

Division of Natural Sciences
Department of Biology
Department of Chemistry
Department of Earth and Environmental Science
Department of Mathematics
Department of Physics and Astronomy

Division of Social Sciences
Department of Business Administration
Department of Economics
Department of Education and Child Development
Department of Kinesiology and Leisure Science
Department of Political Science
Department of Psychology
Department of Sociology, Anthropology and Social Work

Course Numbering
1-9 Courses for which no college credit is offered
10-69 Experiential courses
70-99 Courses which may not be counted toward the major in the discipline of origin
90, 190, 290, 390, 490, 590 Selected topics courses
295, 395, 495, 595 Directed studies
100-199 Generally appropriate for freshmen
200-299 Generally appropriate for freshmen and sophomores
300-399 Generally appropriate for sophomores, juniors, and seniors
400-499 Generally appropriate for juniors, seniors and graduate students.
500-599 Graduate courses

The groups listed above are general guidelines, but they may not be accurate
descriptions for all courses in all departments. The sections of the catalog devoted to
individual departments provide more precise information.

Numbers in parentheses in this catalog indicate the former number of the course.
The letters A, B, C, D, E, F following the course number indicate courses are
sequential. Each course in the sequence, or academic background equivalent to that
course, is normally a prerequisite to the next course. S preceding the number indicates a
summer session offering. X preceding the number indicates an Extended Education
course (evening course).
The study of art is increasingly valuable as contemporary society becomes ever more visual in its orientation. Making art and studying its history are complementary pursuits; the knowledge and skill gained in one supports achievement in the other.

Students majoring in art take a program that emphasizes either the history of art or studio art. Students emphasizing art history should have meaningful exposure to studio art, and those focusing on studio art need a strong foundation in art history.

Art history is different from other historical disciplines in that it is founded on the primacy of objects that are both concretely present and yet artifacts of history. Art history courses concentrate on painting, sculpture, and architecture, all forms defined as fine arts.

Because the basic unit of art historical analysis is the visual experience, art historical study strengthens one's powers of observation and the ability to use those observations as a point of departure for critical thought.

Courses in art history are designed to utilize local art collections, including those at the Getty Center, the Norton Simon Museum, the Huntington Library, the Los Angeles County Museum of Art, and the Museum of Contemporary Art.

For non-majors, art history studies provide a standard of aesthetic appreciation and an awareness of past and present achievements in the visual arts. With additional study at the graduate level, art history can lead to professional careers in college teaching, museum curatorship, fine arts librarianship, and publishing.

Studio art courses focus upon the materials, methods, and forms most commonly used by contemporary artists. Students are guided toward mastery of technique and expression of ideas.

Articulation of personal experience and visual ideas in drawing, painting, printmaking, ceramics, computer art, and sculpture is approached as a process of facilitating informed choices by student artists.

The faculty recognizes and encourages individual differences by working with students primarily on an individual basis, emphasizing the need to cultivate self-evaluation. The faculty seek to stimulate students' ability to think, express themselves, and appreciate life creatively.
GUIDELINES FOR A MAJOR IN ART
A minimum of 39 credits of which 18 must be at the 300 level or above.
Courses Required:
- Introduction to Art 2-D, ART 100, 3 credits
- Introduction to Art 3-D, ART 101, 3 credits
- History of Western Art 1, ART 205, 3 credits
- History of Western Art 2, ART 206, 3 credits
- Drawing 1, ART 210, 3 credits
- Painting 1, ART 222, 3 credits
- Sculpture 1, ART 252, 3 credits
- Age of Dada and Surrealism, ART 369, 3 credits
Students electing to major in art may design their program with either of two foci: (1) Art History, emphasizing visual analysis of art works and understanding of stylistic development or (2) Studio Art, stressing problem solving and development of skills and techniques necessary for effective visual communication. Ordinarily, a student majoring in art with an emphasis in studio art will select a concentration of three semesters in drawing, painting, sculpture, ceramics, computer art, or printmaking.

Students are encouraged to make integrative connections between their visual studies and related areas in natural science, humanities, and the social sciences. They are also expected to attend Mendenhall Gallery exhibitions.

Interdisciplinary Major:
The department participates in an interdisciplinary major in Art History and Philosophy. See Applied Philosophy under the Philosophy department.

GUIDELINES FOR A MINOR IN ART
Required for a minor are 21 credits including 100 or 101, 205, 206, 210, 222 or 252, 369, and at least one upper-division course chosen in consultation with a department faculty advisor.

COURSE DESCRIPTIONS

ART HISTORY
205 History of Western Art I
Surveys art beginning with the Paleolithic age through the ancient civilizations of Mesopotamia, Egypt, Greece, Rome, Medieval Europe, and Byzantium up to the early Renaissance. Stresses cultural context and style. One semester, 3 credits.

206 History of Western Art II
Surveys the visual arts of Europe from the Renaissance to the present. One semester, 3 credits.

207 Women and the Visual Arts
Historically oriented examination of women artists from the Renaissance through the Modern periods, followed by an exploration of theoretical issues involving women and representation. One semester, 3 credits.

361* Art of Ancient Greece and Rome
Examines the visual arts of ancient Greece and Rome. One semester, 3 credits.

362* Art of the Medieval West
Surveys art and architecture of Western Europe from the Early Christian period to the beginnings of the Renaissance. One semester, 3 credits.

363* Early Renaissance Art in Italy
Explores painting, sculpture, and architecture in Italy, especially in Florence and Siena, from the thirteenth through the fifteenth centuries; emphasis will be on cultural and historical context. One semester, 3 credits.

*Not offered every year
**ART & ART HISTORY**

364* The High Renaissance and Mannerism
Art and architecture in Florence, Rome, and Venice in the later fifteenth and sixteenth centuries, with special attention to the works of Leonardo, Michelangelo, Raphael, and Titian. One semester, 3 credits.

366 Art of the Eighteenth Century
Explores the painting, sculpture, architecture and decorative arts in France, Great Britain, Spain, Germany and Italy from approximately 1700 to 1800. One semester, 3 credits.

367* Age of Romanticism
Explores the visual arts in Europe and America during the first half of the 19th century in light of the changes wrought by industrialization and revolution. One semester, 3 credits.

368 Age of Impressionism
Explores the visual arts in Paris during the last half of the 19th century from the perspective of modernism, asking how and why the painting of modern life, practiced by Manet, Degas, and the Impressionists, became transformed into the Symbolism of Gauguin and Van Gogh. One semester, 3 credits.

369 Age of Dada and Surrealism
Explores the visual arts during the first half of the 20th century, concentrating on Dada and Surrealism and its antecedents such as Cubism, Futurism, and Suprematism. The relation of these movements to World War I, the rise of Fascism, and World War II will be examined. One semester, 3 credits.

370* Contemporary Art
Explores the visual arts since 1950, with special emphasis on recent developments. One semester, 3 credits.

380* Visual Arts of India
Provides a broad historical survey of Indian art, beginning with Indus Valley culture and ending with Rajput painting in the 18th century. Emphasizes the religious traditions to which the objects are connected. One semester, 3 credits.

381* Art of Mexico
Surveys the art of Mesoamerica and Mexico from the time of the Olmecs to the twentieth century. One semester, 3 credits.

382* Art of Colonial Spanish America
Surveys the art produced within the interaction of different ethnic groups under Spanish rule in California, Southwestern United States, Mexico, Central America, and the Andes. One semester, 3 credits.

391* Seminar
Explores an art historical topic from the Ancient, Medieval, or Renaissance periods. Topics will vary; the seminar may be repeated for credit whenever the topic changes. Permission. One semester, 3 credits.

392* Seminar in Modern Art
Explores selected substantive and methodological problems in art history of the Modern period. Topics may be drawn from the seventeenth, eighteenth, nineteenth or twentieth centuries. May be repeated for credit whenever the topic changes. Permission. One semester, 3 credits.

**STUDIO ART**

50* Art Seminar
A course for art majors and minors. Preparation of a resume, artist’s statement, slides, and other documentation of work. Exploration of graduate programs and exhibition opportunities. May be repeated for credit. One semester, 1 credit.

51* Art Practicum
Work directly on a professional art project or installation that is being created by an art professor or visiting artist. Projects vary. Contact the art department for information on this semester’s project. May be repeated for credit. One semester, 1 credit.

53* Looking at Art
Visit art museums and galleries in the Los Angeles area. Each visit is followed by a discussion. May be repeated for credit. One semester, 1 credit.

100 Introduction to Art 2-D
Explores a variety of processes for creating two-dimensional images, using materials and techniques such as drawing, painting, collage, simple printmaking, and mixed media. Emphasis will be on understanding how basic visual elements (line, shape, form, space, color, and texture) are used in contemporary art. Color theory will be included. One semester, 3 credits.

101 Introduction to Art 3-D
Explores a variety of processes for creating three-dimensional objects, using materials and techniques emphasizing wood, steel and mixed media. Effective use of the qualities of line, shape, form, mass, and texture will be emphasized in making sculptural creations. One semester, 3 credits.

200 Computer Art I
An initial study of basic software for the Macintosh computer as related to fine art. Photoshop© and Illustrator©, both essential software programs for artists and designers, are covered. The technical
and conceptual potential of the computer is explored by applying established and contemporary principles of art and design. Differences and similarities between commercial and non-commercial computer generated art are addressed through assignments, which cover both approaches. The ultimate goal of the course is to enable students to create their own imagery using the computer as a tool in making art. May be repeated for credit. One semester, 3 credits.

201* Computer Art Workshop
This course is a condensed version of Art 200, introducing the student to computer art in an intensive 4-week class. May be repeated for credit. January session, 4 credits.

210 Drawing I
Course designed for beginning art majors and non-art majors (those students who wish to learn the fundamentals of drawing). Covers the basic operative aspects of art and principles of design. Emphasis is placed on analytical study of composition, space, proportions, line, value, texture, etc. May be repeated for credit. One semester, 3 credits.

217*, 317* Painting Workshop
Drawing and painting with emphasis on color, design and pictorial expression. Subjects for projects will vary. May travel to do landscape paintings. May be repeated for credit. January session, 4 credits.

218*, 318* Drawing Workshop
Introduces the students to drawing by presenting different samples of dry and wet drawing techniques in an intensive 4-week class. Emphasis placed on more experimental drawing approaches and large-scale drawing. May be repeated for credit. January session, 4 credits.

219*, 319* Ceramic Sculpture Workshop
Clay sculpture. Problems designed with hand forming methods to techniques of clay construction and design with emphasis on the basics of sculpture. May be repeated for credit. January session, 4 credits.

220*, 320* Sculpture Workshop
Explores the properties and primary working methods of plaster casting the human form with emphasis on the basics of sculpture. The individual develops sculptural expression with attention to visual properties and qualities of content. May be repeated for credit. January session, 4 credits.

221* Printmaking Workshop
Introduces the students to the printmaking medium by presenting traditional and experimental processes in a condensed, intensive 4-week class. May be repeated for credit. January session, 4 credits.

222, 323 Painting I, II
Acrylic or oil painting and related media as vehicles for creative expression. Structural, spatial, and symbolic uses of color are explored. May be repeated for credit. Prerequisites: 100 or 210. One semester, 3 credits.

232 Ceramics
Problems designed to take the student from basic hand forming methods to advanced techniques of clay construction and design. While not a prerequisite, it is advised that ART 101 be taken first. May be repeated for credit. One semester, 3 credits.

242, 343* Printmaking I, II
An initial study of basic intaglio and relief printing processes. The basic techniques, proper and safe use of printing equipment, and different aspects of preserving and collecting fine art prints are covered. The objective is to enable the student to make his/her own imagery while exploring the technical and conceptual potential of the printmaking medium. In Printmaking II the student explores innovative printing methods from conventional to experimental. May be repeated for credit. Prerequisite: 100. Permission required for Printmaking II. One semester, 3 credits.

243* Papermaking/Bookmaking
Papermaking/Bookmaking (offered in a pair with Writing Poetry) covers the art and craft of making handmade papers and books from traditional to experimental by approaching the book format, with or without text, as a work of art. May be repeated for credit. One semester, 3 credits.

252, 353 Sculpture I, II
Using techniques of wood construction, welding, assemblage and modeling the individual develops sculptural expression with attention to visual properties, spatial organization and qualities of content. May be repeated for credit. Prerequisite: 101. One semester, 3 credits.

300* Computer Art II
A continuation of Computer Art I with emphasis placed on developing one’s own imagery and innovative approaches towards computer software and peripherals. The objective is for students to further deepen their understanding of contemporary art using the computer as a tool.

*Not offered every year
May be repeated for credit. Prerequisite: 200. One semester, 3 credits.

301 Special Projects in Computer Art
A continuation of Computer Art I and II. Designed for advanced students in studio art to further explore their aesthetic and conceptual ideas using the computer as a tool. Prerequisites: 200 and 300 or instructor's permission. One semester, 3 credits.

303* Printmedia in Visual Communications
Encompasses both traditional and digital printmaking processes with a strong emphasis on the history of 20th-century graphics and printed images in visual communications. Major movements in printed graphics such as the Russian Avant-Garde, Bauhaus and Die neue Sachlichkeit in the Weimar Republic, the WPA Federal Arts Project, Chinese Propaganda Posters, Solidarnost Posters from Eastern Europe, Mexican Revolutionary Posters are studied. Connection between diverse cultural, political, and economic communities and issues such as urban society, religion, ethnicity, and cultural and political changes are analyzed by examining, and better understanding, prints and multiples. The ultimate goal of the course is to enable students to create their own imagery utilizing a variety of printing techniques and the computer as a tool in their own art making. Prerequisite: 100 or instructor's permission. One semester, 3 credits.

310* Figure Drawing
Introduction to figure drawing with awareness of the human body's basic structure and form (skeletal structure, sub-surface anatomy, and surface anatomy). Emphasis is placed on development of perceptual awareness of the human figure through appropriate exercises. Concepts and principles from Drawing I, with an emphasis on the human figure, are explored. May be repeated for credit. Prerequisite: 210. One semester, 3 credits.

311* Special Projects in Drawing
A continuation of Drawing I and/or Drawing Workshop. Designed for advanced students in studio art to further explore their aesthetic and conceptual ideas in drawing, painting, printmaking and mixed media. May be repeated for credit. Prerequisites: 100 and 210. Permission. One semester, 3 credits.

316* Watercolor
Exploration of watercolor as a medium for creative expression. Structural, spatial, and symbolic uses of color are explored. Experimentation with other media in combination with watercolor. May be repeated for credit. Prerequisites: 100 and 210. One semester, 3 credits.

324* Special Projects in Painting
A continuation of the objectives of Art 100 and 222. The student is expected to integrate conceptual and aesthetic concerns with a serious exploration of the medium's potential. May be repeated for credit. Prerequisites: 222 and 323. Permission. One semester, 3 credits.

333 Ceramics II
Problems designed to take the student from hand forming methods to throwing on the wheel, basic techniques of clay construction and design. May be repeated for credit. Prerequisite: 232. One semester, 3 credits.

334* Special Projects in Ceramics
Experimentation with glazes, materials, and colorants. Problems in clay designed to meet individual needs. May be repeated for credit. Prerequisites: 232 and 333. Permission. One semester, 3 credits.

344 Special Projects in Printmaking
A continuation of Printmaking I and II. Designed for advanced students in studio art to further explore their aesthetic and conceptual ideas through matrix or non-matrix printmaking. May be repeated for credit. Prerequisites: 100, 242, and 343, or instructor's permission. One semester, 3 credits.

354* Special Projects in Sculpture
Advanced work in sculpture. Further exploration and refinement of personal style and content. Projects designed to meet individual needs. Prerequisites: 101 and 252. One semester, 3 credits.

390*, 490* Selected Topics in Art
Designed for the advanced student. Provides for the development and completion of a special project. One semester, 2-3 credits.

NOTE: Students enrolling in Studio Art classes are charged a materials fee that typically ranges between $30 and $100.

INDEPENDENT STUDY
395, 495 Directed Studies
Credit and time arranged. Permission. May be repeated for credit.

*Not offered every year.
Asian Studies allows an interdisciplinary approach to the study of one or more regions or countries of Asia. Because of the importance of Asian economies, politics, religions, and strategic concerns to both the United States and the rest of the world, a major or a minor in Asian Studies is appropriate for those students who are interested in exploring the histories, cultures, and languages of Asian societies and who plan to pursue careers in government, NGOs, international business, law, or journalism, to mention just a few. The program includes an overview of the history and culture of Asian countries and additional coursework in four other areas, the development of Asian language abilities, study abroad in an Asian country, and an internship or a capstone senior project. Students choosing the Asian Studies major or minor are encouraged to major or minor in one of the participating disciplines.

Requirements for the Asian Studies Major

The interdisciplinary major in Asian Studies consists of a minimum of 30 credits and a maximum of 60 credits, distributed as follows, including a study abroad experience:

I. Introductory courses (6 credits):
   - **East Asian Civilizations**, HIST 220, 3 credits
   - **Religions of the World**, REL 202, 3 credits

II. Elective coursework (12 credits). At least 3 credits from each thematic field; courses from at least three disciplines; no more than 6 credits from any one discipline.
   A. Historical Studies
      - **Imperial China**, HIST 321, 3 credits
      - **Modern China**, HIST 323, 3 credits
      - **Communist China**, HIST 325, 3 credits
      - **Modern Japan**, HIST 329, 3 credits
      - **Modern India**, HIST 3xx, 3 credits
   B. Politics, Economics, and Society
      - **Peoples of the World**, ANTH 210, 3 credits
      - **East Asian Political Systems**, PLSC 348, 3 credits
      - **Southeast Asian Politics**, PLSC 349, 3 credits
      - **Sociology of Development**, SOC 357, 3 credits
      - **Social Class and Inequality**, SOC 352, 3 credits
   C. Cultural Systems
      - **Chinese Cinema**, CHIN 125/325, 3 credits
      - **Topics in Traditional Chinese Lit.**, CHIN 150/350, 3 credits
      - **Topics in Modern Chinese Lit.**, CHIN 151/351, 3 credits
      - **East Asian Lit.**, ENGL 270, 3 credits
      - **Third World Novels (India)**, ENGL 350, 3 credits
      - **Early Chinese Philosophy**, PHIL 300, 3 credits
Asian Studies

Dev of Buddhist Phil, PHIL 302, 3 credits
Heroes, Gods, and Gurus, REL 313, 3 credits
Buddha and Buddhism, REL 330, 3 credits
Hindu Religion and Culture, REL 333, 3 credits
D. Asia, the Pacific Rim, and Asian Diasporas
Asian American Literature, ENGL 347, 3-4 credits
American Foreign Policy in Southeast Asia (Jan term), PLSC 290, 3 credits
Southeast Asian Politics (also listed under B), PLSC 349, 3 credits
Problems and Policies in Contemporary Politics (with instructor approval; depends on topic), PLSC 225, 4 credits
Asians in America, SOC 388, 3-4 credits

III. One methods course chosen from the following (3 credits), taken prior to study abroad:
Field Research, ANTH 311, 3-4 credits
Critical Procedures, ENGL 400, 3 credits
Historical Methods, HIST 380, 3 credits
Approaches to the Study of Religion, REL 361, 3 credits
Approaches to Social Research, SOC 310, 3 credits

IV. Proficiency in an Asian language, however attained, defined as intermediate college level (i.e. the equivalent of two years of Whittier College Modern Languages department coursework). Asian languages other than those taught at Whittier (e.g. Vietnamese or Tagalog) would be acceptable so long as they are relevant to the student’s senior project and study abroad; proficiency in these languages will be determined by the program faculty on an ad hoc basis.

V. Study abroad for one semester (or two January terms) in China, Japan, or India through one of Whittier College’s programs. With prior approval of the advisor and the College Registrar, coursework completed abroad may count toward the Asian Studies major, college-wide requirements, and graduation. Study abroad is to be preceded by a one-credit preparatory seminar (Asian Studies 90), and to be followed by a one-credit debriefing seminar (Asian Studies 91)

VI. Capstone project, paper, or internship (4 credits), relevant to the “theme” being studied, completed in the senior year, and supervised by the student’s advisor and approved by one other member of the faculty advisory board. Asian Studies 400.

Requirements for an Asian Studies Minor (18 credits)
The two introductory courses, plus a minimum of 12 credits from the elective courses (one from each of the four sub areas).
Biology

David Bourgaize, The Fletcher Jones Professor of Molecular Genetics, Chair
Stephen R. Goldberg, The Roy E. and Marie G. Campbell Professor of Biology
A. Warren Hanson
Clifton Morris, The James Irvine Foundation Professor of Biology
Cheryl Swift

Biologists investigate a phenomenon that even philosophers have difficulty defining—the concept of “LIFE.” As mysterious as it is, life manifests itself in numerous ways and with many layers of complexity. From non-living molecules, life “emerges” at the cellular level, is amplified into the organismal level and transcends into species interactive at the population level.

The Biology faculty believes that a challenging academic curriculum coupled with personal, one to one, student-faculty interaction foster the most appropriate environment for success: majors who enter as students of science progress to the level of “student scientists.”

Our curriculum is based upon acquiring an understanding of life from many vantage points, especially those inherent in the three major levels of organization: molecular-cellular, organismal, and population-ecological.

Guidelines for a Major in Biology

Life is a wonderfully complex phenomenon organized on many levels. Biology is unique among the sciences in the broad range of sub-disciplines necessary to understand the entire field. Each perspective adds a valuable voice to the constant “dialogue” between experimenter and living organisms.

The faculty believes that, to become knowledgeable investigators (and appreciators) of the life phenomenon, biology majors should be acquainted with the various experimental approaches and the concepts gained therefrom. These sub-disciplines range from the molecular-cellular level of organization, with intensive laboratory experience, to understanding organisms, and to populations, with emphasis on communities.

The course selections for the major reflect those sub-disciplines and approaches to biology.

Completion of a minimum of 36 credits in Biology, with the following provisions:

1) Completion of four foundation courses:
   Life Science, BIOL 195, 4 credits
   followed by (in any order)
   Plant Form and Function, BIOL 205, 4 credits
   Animal Form and Function, BIOL 210, 4 credits
   Biological Information, BIOL 215, 4 credits

2) Completion of at least 20 credits in Biology at the 300 level or above.

3) Completion of one course from each of the following organizational levels (Note: courses listed in multiple categories can only be counted in one of the categories):
   A. Cellular-Molecular—a study of cell structure and molecular-controlled functions
      Mycology, BIOL 305, 4 credits
Biology

Microtechnique, BIOL 320, 4 credits
Immunology, BIOL 331, 3 credits
Microbiology, BIOL 343, 4 credits
Cell Physiology, BIOL 380, 4 credits
Molecular Genetics, BIOL 381, 4 credits
Developmental Biology, BIOL 404, 4 credits
Animal Histology, BIOL 407, 4 credits

B. Organismal—a study of the organism, the congruence of form and function, and the maintenance of its internal environment.

Human Physiology and Anatomy, BIOL 300A,B, 4 credits each
Invertebrate Zoology, BIOL 340, 3 credits
Parasitology, BIOL 346, 3 credits
Herpetology, BIOL 360, 4 credits
Animal Behavior, BIOL 385, 4 credits
Entomology, BIOL 386, 4 credits
Field Ornithology, BIOL 388, 4 credits
Developmental Biology, BIOL 404, 4 credits
Animal Physiology, BIOL 428, 4 credits
Field Botany, BIOL 473, 4 credits
Field Zoology, BIOL, 481, 4 credits

C. Populations—a study of the interaction of organisms with each other, with the external environment, and the changes that occur through time.

Conservation Biology, BIOL 379, 4 credits
Marine Biology, BIOL 384, 4 credits
Animal Behavior, BIOL 385, 4 credits
Entomology, BIOL 386, 4 credits
Evolutionary Biology, BIOL 445, 4 credits
Field Botany, BIOL 473, 4 credits
Field Zoology, BIOL 481, 4 credits
Advanced Field Studies, BIOL 485, 4 credits
Herpetology, BIOL 360, 4 credits

4) Completion of CHEM 261A,B and one year of college mathematics.
For majors seriously considering graduate or professional schools, Organic Chemistry, Biochemistry, Physics, and Calculus are imperative (these courses are required by many graduate and professional schools).

Guidelines for a Minor in Biology

Sixteen credits of core courses, BIOL 195, BIOL 205, BIOL 210, BIOL 215, and at least one additional course at the 300-level or above.
COURSE DESCRIPTIONS

100 General Biology
An introductory laboratory science course that concentrates on basic scientific investigation, with a particular emphasis on living organisms. One semester, 4 credits.

135* The Natural History of Southern California
A study of the flora and fauna of Southern California plant communities. Field trips will include desert, chaparral, coastal sage, dune and beach, forest and mountain communities. Lectures, laboratories and field trips. One semester, 4 credits.

195 Life Science
All living things need to solve certain fundamental problems if they are to stay alive. This course will focus on the basic organization of life, particularly at the cellular level, and address ways that the structure of different organisms allows them to solve these problems. One semester, 4 credits.

205 Plant Form and Function
Primarily for Biology majors. An in-depth study of the classification, morphology, structure, physiology and ecology of major plant groups. Lectures, laboratories and field work. Prerequisite: 195. One semester, 4 credits.

210 Animal Form and Function
Primarily for Biology majors. An in-depth study of the classification, morphology, structure, physiology and ecology of invertebrates and vertebrates. Lectures and laboratories (some dissection required). Prerequisite: 195. One semester, 4 credits.

215 Biological Information
Primarily for Biology majors. An in-depth study of how biological information is stored and used by cells. The structure and organization of genes, principles of heredity, basic recombinant DNA techniques, population genetics, and evolution will all be considered. Lectures and laboratories. Prerequisite: 195. One semester, 4 credits.

260 Introductory Human Anatomy and Physiology
The structure and function of the human body. Intended for non-majors. 3 credits.

300 A,B Human Physiology and Anatomy: Structure and Function of the Human Body
The structure of the human body as an integrated whole, and the functions of the various organ systems that compose it. Emphasis on how structure relates to function. Includes detailed dissection. Lectures and laboratories. Two semesters, 4 credits each.

305* Mycology
Fungi; their role in the ecosystem, influence upon human society, lifestyle and unique physiology; stresses medical and economic aspects. Lectures and laboratory. Prerequisite: 205. January, 4 credits.

320* Microtechnique
A laboratory course in which students learn to prepare and stain histology slides for light microscopic examination. One semester, 4 credits.

331* Immunology
Nature and production of antibodies, their interactions with antigens, and their role in human defense against disease. Lectures and demonstrations. Prerequisite: 215. One semester, 3 credits.

340* Invertebrate Zoology
Survey of the major groups of invertebrate animals with emphasis on their systematics, comparative morphology, and phylogeny. Lecture, laboratory, and field work. Prerequisite: 210. One semester, 3 credits.

343 Microbiology
Principles of the culture, physiology, and control of microorganisms with emphasis on medical bacteriology. Lectures and laboratory. Prerequisites: 215, CHEM 331 (may be taken concurrently). One semester, 4 credits.

346* Parasitology
Animal parasites with special reference to the common parasites of humans. Lectures and laboratories (some dissection required). Prerequisite: 210. One semester, 3 credits.

360 Herpetology
The ecology, taxonomy, and behavior of amphibians and reptiles. Lectures, laboratories and field work (some dissection required). January, 4 credits.

*Not offered every year
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>379*</td>
<td>Conservation Biology</td>
<td>Conservation biology deals with the study of preserving biodiversity. Topics to be covered include the effects of habitat fragmentation on populations, reserve design, the effect of fragmentation on levels of diversity, and issues surrounding the problem of maintaining genetic diversity. Lectures and field work.</td>
<td>205, 210. One semester, 4 credits.</td>
<td></td>
</tr>
<tr>
<td>380*</td>
<td>Cell Physiology</td>
<td>Biochemical approach to the understanding of cellular functions with emphasis on the interactions of biochemical pathways and their importance. Lectures and seminars.</td>
<td>215. One semester, 4 credits.</td>
<td></td>
</tr>
<tr>
<td>381</td>
<td>Molecular Genetics</td>
<td>In-depth study of how genetic information is stored and utilized by cells, including DNA replication, transcription and translation, and the control of gene expression. Emphasis will be split between prokaryotic and eukaryotic cells.</td>
<td>215. One semester, 4 credits.</td>
<td></td>
</tr>
<tr>
<td>384</td>
<td>Marine Biology</td>
<td>The physical, chemical, and biological aspects of the marine environment; emphasizes factors affecting the distribution and abundance of marine organisms.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>385*</td>
<td>Animal Behavior</td>
<td>Diverse types of behavior exhibited by animals.</td>
<td>210. One semester, 4 credits.</td>
<td></td>
</tr>
<tr>
<td>386*</td>
<td>Entomology</td>
<td>Morphology, physiology, ecology, and the behavior of insects. Taxonomy and collection of the common insect families is emphasized. Lectures, laboratories and field work (some dissection required).</td>
<td>210. One semester, 4 credits.</td>
<td></td>
</tr>
<tr>
<td>388*</td>
<td>Field Ornithology</td>
<td>The structure and habits of birds; trains students to identify birds in the field. Lectures, laboratories, and field trips.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>404</td>
<td>Developmental Biology</td>
<td>The processes that allow a single cell to develop into an entire organism will be explored. Topics will include classical embryology, control of development at the cellular and molecular level, and mechanisms of differentiation. Extensive laboratory work included.</td>
<td>215. January, 4 credits.</td>
<td></td>
</tr>
<tr>
<td>445*</td>
<td>Evolutionary Biology</td>
<td>Examination of the mechanisms of microevolutionary and macroevolutionary change. Lecture and laboratory.</td>
<td>205, 210. One semester, 4 credits.</td>
<td></td>
</tr>
<tr>
<td>473*</td>
<td>Field Botany</td>
<td>Taxonomic and ecological study of native plants.</td>
<td>205. One semester, 4 credits.</td>
<td></td>
</tr>
<tr>
<td>481</td>
<td>Field Zoology</td>
<td>The speciation and ecology of common invertebrate (exclusive of insects) and vertebrate fauna (some dissection required).</td>
<td>210. One semester, 4 credits.</td>
<td></td>
</tr>
<tr>
<td>485</td>
<td>Advanced Field Studies</td>
<td>Variable Credits. Permission.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>490</td>
<td>Current Topics in Biology</td>
<td>Variable credits. Permission. May be repeated for credit.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>493</td>
<td>Seminar</td>
<td>Discussion of current biological research. May include student oral presentations. Time arranged. Permission. May be repeated for credit.</td>
<td>One semester, 1 credit.</td>
<td></td>
</tr>
<tr>
<td>495</td>
<td>Independent Study</td>
<td>Variable credits. Permission. May be repeated for credit.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>496</td>
<td>Undergraduate Research</td>
<td>Variable credits. Permission. May be repeated for credit.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
BUSINESS ADMINISTRATION

Lisa L. Bleich  
Jeffrey N. Decker  
Daniel F. Duran  
Charles R. Laine, Chair  
John H. Neu, affiliate  
Lana S. Nino

The B.A. in Business Administration develops, in a liberal arts environment, the student's conceptual knowledge and professional management skills necessary for success in the ever-changing business environment. The specific aim of the program is to prepare students for management and staff positions in profit-oriented and non-profit organizations.  
The major provides a broad overview of the various sub-disciplines within business administration. For business administration majors wishing to receive more in-depth knowledge in one of the functional areas of business, the department offers the opportunity to pursue a concentration in each of the following: accounting, finance, international business, management, and marketing.  
The department also participates in the Mathematics-Business interdisciplinary major. The department highly recommends study abroad, and participates in the Denmark International Studies International Business program wherein students study in Copenhagen for one semester.

GUIDELINES FOR A MAJOR IN BUSINESS ADMINISTRATION

A minimum of 36 credits in Business Administration, of which 24 credits must be at the 300 level or above.

Courses Required:

- Business and Society, BSAD 130, 3 credits
- Principles of Accounting I, II, BSAD 201, 202, 6 credits
- Business Law, BSAD 231, 3 credits
- Business Finance I, BSAD 310, 3 credits
- Marketing Principles, BSAD 320, 3 credits
- Management and Organizational Behavior, BSAD 330, 3 credits
- Management Information Systems, BSAD 341, 3 credits
- Operations Management, BSAD 342, 3 credits
- Management Strategy and Policy, BSAD 489, 3 credits

Choice of either:

- Six credits of upper-division electives in Business Administration, or
- For students choosing to earn an optional concentration in Accounting, Finance, International Business, Management or Marketing:
  - Nine credits in the chosen area of concentration beyond those required courses specified above.
  - These courses must be selected with the department’s approval, with at least six credits being 300-level or 400-level BSAD courses. If appropriate, one of the three


63
courses may be a BSAD course below the 300 level or a non-BSAD course.

Statistics, MATH 80, 3 credits

Choice of either:
- Mathematics for the Management Sciences, MATH 81, 3 credits or
- Integrated Precalculus/Calculus, MATH 139A,B, 7 credits or
- Calculus and Analytic Geometry I, MATH 141A, 4 credits

Principles of Economics I, II, ECON 200, 201, 6 credits

One upper division economics course

Introduction to Literature, ENGL 120, 3 credits

Basic Oral Communication, THEA 101, 3 credits

One course in ethics highly recommended.
Study abroad is also highly recommended.

GUIDELINES FOR A MINOR IN BUSINESS ADMINISTRATION

A minor in Business Administration requires 21 credits, including 201, 202, 231, 310, 320, 330 and one other upper-division course.

COURSE DESCRIPTIONS

ACCOUNTING

201, 202 Principles of Accounting I, II
Accounting concepts and techniques essential to business administration; accounting as a process of measurement and communicating economics information; analyzing, recording, and interpreting financial transactions and statements; manufacturing accounts and reports; interaction of accounting with finance, quantitative methods, and data information systems. One semester, 3 credits each.

306 Managerial Accounting
A study of the concepts and techniques used by management for planning, controlling, and decision making. Includes the use of standard costs and flexible budgets; cost reports; cost-volume-profit relationships; and performance evaluation. Prerequisites: 201 and 202. One semester, 3 credits.

307 Federal Tax Accounting
Fundamentals of federal income taxation; emphasis on taxation of individual income. Prerequisites: 201 and 202. One semester, 3 credits.

FINANCE

212 Financial Institutions
The role of financial institutions in our nation's financial markets and the economy; analysis of various types of financial institutions with an emphasis on differentiating functions and practices. Some field trips and guest speakers. Prerequisite: 130 or permission. January, 4 credits.

310 Business Finance I
Introduction to financial management, its concepts, and institutions; time value of money; bond and stock valuation; risk; financial statement analysis and financial forecasting; capital budgeting; long-term financing decisions; working capital management; international financial management. Prerequisites: 201, 202, MATH 80 and either MATH 81, 139A,B, or 141A recommended. One semester, 3 credits.

411* Business Finance II
Case studies of topics from 310; study of additional topics such as a dividend policy, mergers, leasing, and options using text material and case studies. Students will learn how to use electronic spreadsheets in analyzing financial problems. Prerequisite: 310. One semester, 3 credits.

413* Principles of Investments
Securities markets and theories of market behavior; securities and portfolio analyses; investment strategies. Prerequisite: 310 or permission. One semester, 3 credits.

*Not offered every year
MARKETING

320 Marketing Principles
An overview course designed to develop an understanding of the role and processes of marketing in contemporary society and a managerial viewpoint in planning and evaluating marketing decisions of the firm. One semester, 3 credits.

422* Consumer Behavior
Theories of consumer behavior and applications to marketing strategy and tactics. Psychological, social, economic, and cultural factors influencing consumption are examined. Prerequisite: 320. One semester, 3 credits.

423 International Marketing
Product and service mix in international marketing, promotional alternatives; distribution systems; pricing policies; and special opportunities and problems caused by cultural, social, political and other environmental variables. Prerequisite: 320 and 350. One semester, 3 credits.

425* Promotion Management
Strategic management of advertising, personal selling, sales promotion, public relations, and packaging. Prerequisite: 320. One semester, 3 credits.

426* Retailing
Introduction to the elements of retail marketing and management, including acquisition and management of merchandise, store location and layout, pricing, and promotion. Application of concepts to various retail institutions. Prerequisite: 320. One semester, 3 credits.

MANAGEMENT

130 Business and Society
An introduction to business and management in America. The central focus is on the interrelationships of technological, economic, political, and social forces within business enterprises and on management's ethical obligations to owners, employees, consumers, and society at large. One semester, 3 credits.

231 Business Law
The law of contracts, agency, and business structures; sales contracts, negotiable instruments and secured transactions. Analysis of selected real property, tort, and bankruptcy problems. One semester, 3 credits.

330 Management and Organizational Behavior
The systematic study of individual, group, and organizational behaviors and processes. The analyses of these levels of organizational functioning are aimed at enhancing personal and group effectiveness. Topics include motivation, leadership, power, cooperation, decision-making, and organizational change. One semester, 3 credits.

332* Business Leadership
An advanced course in leadership designed to explore in depth issues of power, influence and leadership styles and practices. Types of leadership particular to different historical periods, different industries, and different economic and business challenges will be explored. Issues such as the relationship between leaders and followers, the influence of gender on leadership style, and the characteristics of entrepreneurial leaders, corporate leaders, and union leaders will be addressed. Particular emphases for the course will be selected each time the course is offered. One semester, 3 credits.

333 Managing Multinational Corporations
Establishing and managing international business operations under widely fluctuating economic and socio-political conditions. Case analysis and guest lectures supplement a rigorous analysis of this subject. Prerequisite: 130 or permission. January, 4 credits.

341 Management Information Systems
General systems concepts; past, present, and future development of information technologies; procedures and examples of information systems building. Emphasis on applications of information systems and their interactions with other management functions. Prerequisite: 130. One semester, 3 credits.

342 Operations Management
History of production and operations management. Concepts and applications of operations management in service and manufacturing. Focus on problem-solving skills, hands-on practice, value-driven approach.

*Not offered every year
quality management, and customer satisfaction. Prerequisites: 130, MATH 80 and either MATH 81, 139A,B or 141A. One semester, 3 credits.

350 International Business
An introduction to all facets of international business. Case studies and class discussion explore the economic framework of international business; the environmental, operational, and strategic aspects of international business and the social responsibility and future of international business. Prerequisite: 130 or permission. One semester, 3 credits.

431* Human Resources Management
Selection, staffing, remuneration, labor relations, and training and development of human resources in organizational environments such as business, government, and education. Prerequisite: 330 or permission. One semester, 3 credits.

435 Small Business Management
Application of management theory and concepts in the context of a small business. Special consideration is given to the unique problems associated with early stages of growth. Prerequisites: 201, 330. One semester, 3 credits.

489 Management Strategy and Policy
Integration of underlying concepts in marketing, personnel, finance, production, and other business functions; analysis of strategies and operating environments, including ethical concerns; case study and seminar discussion. Prerequisite: Senior standing in BSAD. One semester, 3 credits.

ADDITIONAL OFFERINGS
14 Business Practicum
Provides students with experiences in the field of business such as: participation in a marketing promotion, preparation for and participation in a management competition, and participation in professional meetings or conferences. May be repeated for credit. Permission. One semester, 1 credit.

240* Business Applications with Computers
The course teaches the basics of computers and computer programs through many exercises with real-world business applications. It is designed for novice users as well as advanced users who wish to apply their skills in problem solving. The course covers a variety of business functions and includes model building and numerical analysis. Student will learn analytical problem solving skills and apply them to hands-on projects. Prerequisite: 130 or permission. January, 4 credits.

391* Business Institute: Liberal Arts at Work
An overview of Business Administration designed to develop introductory competencies in management information systems, finance, accounting, marketing, business communication, and career management. Analysis of small business, large corporations, and international companies will be combined with a corporate internship. Students must be declared liberal arts majors. Permission. January, 4 credits.

392 Business Internship
Internship in business setting under joint college/site planning and supervision; helps student apply and assess business management theory, individual skills and personal values in a corporate setting. Eight hours per week at site. Required weekly seminar. Permission. Junior standing required. One semester, 3 credits.

390, 490 Selected Topics in Business Administration
Variable credits. Permission. May be repeated for credit.

395, 495 Directed Studies
Credit and time arranged. Permission. May be repeated for credit.

*Not offered every year
The field of chemistry is concerned with the analysis, composition, properties, structures, and transformations of natural and synthetic substances. The chemistry curriculum emphasizes laboratory/research experience as well as theory and thus prepares students to pursue a career in chemistry or pursue graduate studies in chemistry, biochemistry, and related areas: environmental chemistry, medicine, dentistry, pharmacy, optometry, public health, and allied health fields. In addition, students are prepared to teach chemistry or science in the secondary school system. The Department also offers courses in support of other Whittier College science programs as well as courses for students who wish to acquire or strengthen a background in chemistry, but who do not plan a career in science.

The Chemistry Department is approved by the Committee on the Professional Training of Chemists of the American Chemical Society. Students who follow the ACS-approved program in chemistry receive certification as being prepared for a career in chemistry or for graduate study in the field.

The Chemistry Department offers three tracks for the major. Students pursuing graduate work or a career in chemistry are encouraged to take course work beyond the minimum requirements.

GUIDELINES FOR A MAJOR IN CHEMISTRY

Core courses for all three options:
- **General Chemistry**, CHEM 110A,B, 8 credits
- **Quantitative Analysis**, CHEM 220, 4 credits
- **Organic Chemistry**, CHEM 231A,B, 6 credits
- **Organic Chemistry Laboratory**, CHEM 233A,B, 2 credits
- **Physical Chemistry**, CHEM 321A, 4 credits
- **Seminar**, CHEM 491, 2 credits
- **Integrated Laboratory**, CHEM 486, 3 credits
- **Calculus and Analytical Geometry I,II**, MATH 141A,B, 8 credits or
- **Integrated Pre-Calculus/Calculus I,II**, Math 139 A,B, 7 credits and Math 141B, 4 credits
- **Introductory Optics & Modern Physics, Introductory Mechanics & Electromagnetism**, PHYS 130, 131, 9 credits or
- **Introductory Optics & Modern Physics, Introductory Kinematics & Mechanics**,
- **Introductory Electricity & Magnetism**, PHYS 130, 150, 190, 13 credits (with permission from the Chemistry department)

I Major in Chemistry
A minimum of 35 chemistry credits.
Choice of 6 additional 300 level chemistry credits.
II Major in Biochemistry
A minimum of 40 chemistry credits.
Biochemistry, CHEM 471A,B, 6 credits
Biochemistry Laboratory, CHEM 472, 1 credit
Advanced Biochemistry Laboratory, CHEM 473, 1 credit
Biophysical Chemistry, CHEM 480, 3 credits
Life Science, BIOL 195, 4 credits
Biological Information, BIOL 215, 4 credits
Molecular Genetics, BIOL 381, 4 credits

III Major in Chemistry with ACS Certification
A minimum of 46 chemistry credits.
Biochemistry, CHEM 471A, 3 credits
Physical Chemistry, CHEM 321B, 2 credits
Physical Chemistry Laboratory, CHEM 325, 1 credit
Instrumental Analysis, CHEM 442, 4 credits
Advanced Inorganic Chemistry, CHEM 452, 4 credits
Choice of three additional 400 level chemistry credits.
Study of a foreign language, although not required, is highly recommended, particularly for students who plan to pursue graduate studies in chemistry.
CHEM 85 and 95 may not be applied toward a major in Chemistry.

GUIDELINES FOR A MINOR IN CHEMISTRY
A minor in chemistry requires 20 credits: 110A,B; 220; 231A,B; 233A,B.
NOTE: All laboratory courses require a laboratory fee.

COURSE DESCRIPTIONS

85* Introduction to Chemistry
Survey of the principles of chemistry taught in the context of environmental and/or other contemporary issues. Topics include chemical formulas, atomic structure, bonding, chemical reactions and stoichiometry. Laboratories involve hands on experience with collecting and analyzing data as well as some elements of laboratory method design. One semester, 4 credits. Satisfies the ILS requirement.

95 Preparation for General Chemistry
Scientific measurements, matter, elements and compounds, the periodic table, nomenclature, chemical formulas and equations, stoichiometry, gas laws, and solutions are covered. Problem-solving techniques are stressed. Prerequisite: Eligible to take Math 85. One semester, 2 credits.

110 A,B General Chemistry
Lecture and laboratory work covering the fundamental principles of chemistry, states of matter, chemical bonding, ionic theory, kinetics, equilibria, thermodynamics, electrochemistry, and descriptive chemistry of metals and non-metals. Laboratory work includes both individual and project-based experiments. Prerequisites: one semester of college math, sufficient score on math proficiency exam, or permission. Two semesters, 4 credits each. Satisfies the ILS requirement.

220 Quantitative Analysis
Lecture and laboratory work covering statistics and sampling, fundamentals of volumetric analysis and several instrumental methods. Electrochemistry, gas and liquid chromatography, and spectrophotometry will be introduced. Desirable preparation for all further work in chemistry. Prerequisite: 110B, 4 credits.

231 A,B Organic Chemistry
Investigation of the fundamental principles of organic chemistry. This course focuses on understanding organic chemistry through chemical mechanisms, stereochemical principles and diverse functional reactivity. Prerequisite: 110B Concurrent registration in 233 required. Two semesters, 3 credits each.

*Not offered every year
233 A,B Organic Chemistry Laboratory
Project oriented class focusing on problem solving within the organic chemistry laboratory. An integrated introduction to laboratory skills, techniques, instrumentation and chemical reactivity. Prerequisite: 110B, concurrent registration in 231 required. Two semesters, 1 credit each.

282* Environmental Chemistry
Study of the underlying chemical processes involved in the environment. This course focuses on energy, atmospheric chemistry, chemistry of the hydrosphere/lithosphere and chemical interactions of the biosphere. A strong emphasis is placed on environmental challenges in the local community. Prerequisite: 110A. One semester, 3 credits.

321 A,B Physical Chemistry
Chemical thermodynamics; kinetic theory and chemical kinetics; quantum concepts and their applications to spectroscopy and the structure of matter. Prerequisites: 220, 231B, PHYS 130, 131 or PHYS 130, 150, 190, MATH 141B, or permission. Two semesters, 4 credits for A, 2 credits for B.

325* Physical Chemistry Laboratory
Precise determination of physical-chemical properties of various systems by classical and modern techniques. Permission. One semester, 1 credit.

431* Advanced Organic Chemistry
Detailed investigation into the subspecialties of organic chemistry. This course focuses on understanding physical organic, synthetic organic, bio-organic, industrial and basic pharmacological chemistry. A strong emphasis is placed on current literature, development of problem solving skills and integration of practicality and theory. Prerequisite: 231B and 321A. One semester, 3 credits.

442* Instrumental Analysis
Operating principles and applications of instrumental methods of analysis including atomic absorption, UV-vis, fluorescence, IR, Raman, NMR and mass spectrometry. A strong emphasis will be placed on laboratory work designed to provide hands on experience with each type of instrumentation. Prerequisite: Chem 220. One semester, 4 credits.

452* Advanced Inorganic Chemistry
Study of structure and reactivity of coordination and organometallic compounds; emphasis on bonding, symmetry and catalytic properties; laboratory emphasizes inorganic synthesis, reactivity and determination of structure. Prerequisite: 321B or permission. One semester, 4 credits.

471 A,B Biochemistry
The structure and function of molecules found within living systems. 471A covers proteins and nucleic acids and integrates them into the process of protein synthesis. 471B covers carbohydrates and lipids and integrates them into the study of cellular metabolism. Prerequisite: 231B or permission. Two semesters, 3 credits each.

472 Biochemistry Laboratory
General biochemical techniques involving protein purification and enzyme catalysis. Prerequisites: 233B and concurrent enrollment in 471A. One semester, 1 credit.

473* Advanced Biochemistry Laboratory
Additional experimental techniques; experience in conducting experiments that are performed under actual research conditions. Prerequisite: 472. One semester, 1 credit.

480* Biophysical Chemistry
Thermodynamics, equilibria, biopolymers, kinetics, transport processes, and spectroscopy of biochemical systems. Prerequisites: 471A, MATH 141B, or permission. One semester, 3 credits.

486 Integrated Laboratory
Laboratory/instrument intensive course designed to integrate the different disciplines of chemistry. The labs will incorporate method design and development, and data collection and analysis. Students will work on several projects; the final project will be self-designed. Prerequisites: 220, 231B, 233B, 321A, and 491. January, 3 credits.

490* Selected Topics in Chemistry
Variable credits. Permission. May be repeated for credit.

491 Seminar
Training and practice in preparation and presentation of oral and written reports on scientific topics. May be repeated for credit. One semester, 2 credits.

495 Directed Studies
Credit and time arranged. Permission. May be repeated for credit.

496 Research
Individual research projects in selected areas of chemistry under the supervision of a faculty member. Prerequisites: junior or senior standing, and permission. May be repeated for credit. One semester, variable credits.

*Not offered every year.
COLLEGE WRITING PROGRAMS

Susanne Weil, Director of College Writing Programs

Whittier's curriculum is writing-intensive, designed to teach students how to communicate effectively at each successive level of their major discipline, as well as to general audiences outside their chosen fields. Students begin with Freshman Writing Seminars, progress to Writing Intensive Courses, proceed through Writing Across the Curriculum, and write a capstone Paper-in-the-Major as part of their senior year experience.

Whittier's Writing Center offers peer tutoring. Students interested in teaching careers are encouraged to take INTD 33, the required training class, and work at the Center.

THE FRESHMAN WRITING PROGRAM

Freshman Writing Seminars introduce students to Whittier's writing program. These seminars, themed courses designed by faculty from all disciplines, delve into challenging intellectual questions which freshmen explore in class discussions and in essays. Freshmen develop both critical thinking skills and the ability to communicate their conclusions about complex problems in clearly written form. Seminar size is limited to 15 students and differ in content each year. Each seminar is 3 units and is taken for a letter grade.

INTD 100: COLLEGE WRITING SEMINARS

Students read complex texts chosen to sharpen critical reading and thinking skills. Texts frame a central course theme. Writing assignments based on these texts are designed to teach and practice description, narration, exposition, argument, analysis, synthesis, and research-based writing, as well as writing under pressure of time. Extensive revision is emphasized as integral to the writing process. One semester, three credits.

Examples of recently offered College Writing Seminars:

Science and the Criminal Justice System. High profile court cases in recent years, including the O.J. Simpson case, have heightened the awareness of the important role forensic science plays in the criminal justice system. Scientific evidence has been used to free wrongly convicted people, but can it also be used to free the guilty? This writing seminar will explore the science behind criminalistics and how science interfaces with the jury system. We will read court decisions, scientific papers, and works of fiction. This seminar is well suited for students interested in studying science, particularly chemistry and physics.

Wilderness Writing. What lures “civilized” humans into the wilderness, to test the limits of their physical and mental endurance against the conditions nature imposes? When men and women emerge from the Sierra Nevada or remote deserts, from exotic rain forests or national forests bordering urban zones, they seem driven to interpret their experience in writing. In this seminar, we will read texts by wilderness adventurers like John Muir, Henry David Thoreau, Mark Twain, Annie Dillard, Barry Lopez, Jon Krakauer, and others. We will write our own narratives, research the human
relationship with the wild, and develop arguments supporting our conclusions. To ground our discussions and writing in shared experience, members of this seminar will spend a weekend together living in the wild, so only students willing to test whether the rewards of wilderness experience balance its challenges should sign up for this seminar!

Women and Power in the Middle Ages and the Renaissance. In the popular imagination, the Middle Ages and the Renaissance are peopled by knights and damsels. Are these valid images? In this seminar, we will study several extraordinary women from these periods who were princesses, nuns, wives, and mystics. Some had visions; some refused food; some became powerful social and religious reformers. In our discussions about their lives, we will address the following kinds of questions: How did these women gain power in a circumscribed world? How did their gender inform and contain these women? What can we learn about their lives, and can we apply these lessons to the roles that men and women now occupy?

Writing to Understand: Contextualizing the Chicano/Mexican-American Experience Through Literature. The ongoing demographic shift in the U.S. will ensure that by 2025, Latinos will make up almost 18% of the U.S. population and 43% of California’s. Of this large, diverse group, Chicanos/Mexican-Americans comprise the largest; this seminar will focus on them. Why should you, a freshman at Whittier, care about this population shift? As crossing cultural boundaries becomes more commonplace, it is critical that we engage in an ongoing dialogue about what it means to be “American;” about what it means to be bilingual and bicultural; about what it means to “live on a razor sharp edge of two vastly different cultures;” and about what it means to atravesar--cross--borders. In this writing seminar, you will enter a dialogue that is often messy, confusing, and painful, but often transformative as well. Through critical reading and writing (and rewriting), our goal is to lay part of the foundation you will need as a student at a liberal arts college.

A Word From Our Sponsor: Advertising and the Creative Process. What is advertising? Revered or reviled, the prominence of advertising in modern culture--and its intertwinnings with these cultures--make advertising an important area of study. In this seminar, we shall explore what advertising is, how it works, its functions and roles, and its ethics. This is primarily a writing course, so you should be prepared to do significant reading, writing, revising, and talking about your writing process. However, it might interest you to know that this process is analogous to the creative process in which writers and art directors (“creatives”), account executives, and clients participate each day. Great advertising does not spring full-blown from the mind of some creative genius like a latter-day version of Botticelli’s Venus; rather, it is the product of creativity guided by the client’s need, tempered by the attributes of the target audience, and refined by patient editing and rewriting.
INTD 90: INTRODUCTION TO COLLEGE WRITING

Students learn critical reading skills for college level texts. These texts serve as bases for assignments teaching fundamental college writing skills: thesis development, organization of ideas, basic exposition and argumentation, and mechanics. Each student learns to develop an effective writing process. One semester, three credits.

An example of the INTD 90 classes offered in Fall 2000:

Rites of Passage: Coming of Age in Diverse Environments. This writing class will explore the paradigm of coming of age and attaining one's role in society as represented in major texts from writers of diverse identities and environments. We will focus on the personal essay and growing-up stories in coming of age fiction and films. Both fiction and films confront issues of assimilation amid the confusion and anger that often results from growing up and being from a different ethnic or otherwise diverse group in a country where ethnicity and diversity are not always prized. The multiple exposures made possible by this multicultural approach should deepen your sense as students of your own historical moment and the ways in which these issues have been framed, both in the past and in other cultures.

WRITING INTENSIVE COURSES

Writing Intensive Courses continue students' development as writers by emphasizing writing and revision in the context of specific disciplines. Students write at least one longer paper to emphasize the importance of applying information and interpretations gleaned from research or textual analysis. Research paper assignments focus on using information and interpretations to present a case, rather than simply to catalogue information. Papers emphasizing analysis of textual materials involve comparison and synthesis of ideas presented in sources read.

Each student must complete a Writing Intensive Course by the end of the first semester of the sophomore year. The Writing Intensive Course may be taken within or outside the major; it may simultaneously satisfy other Liberal Education Program requirements. Courses satisfying the Writing Intensive requirement in 2000-2001 include: Introduction to Literature; Introduction to Ethics; Introduction to Sociology; Psychology of Adolescence; and Fundamentals of Nutrition.

WRITING ACROSS THE CURRICULUM

Writing to communicate understanding of core concepts is the primary mode of assessment in both lower and upper division courses at Whittier, including mathematics and science, in both the Whittier Scholars Program and the Liberal Education Program. In their majors, students learn not only to master written modes of discourse typical of their discipline, but also how to “translate” complex disciplinary information to general audiences.
**PAPER-IN-THE-MAJOR**
The capstone writing experience in Whittier's curriculum is the Paper-in-the-Major. Researched and written in the senior year (occasionally in the junior year), this paper demonstrates students' command of their major's perspectives, methods, and body of knowledge, as well as their ability to communicate these skillfully in writing. The Paper-in-the-Major can serve as a writing sample in applications to graduate programs. Specific topics and formats for the Paper-in-the-Major are determined by the faculty in each department.

**THE CAMPUS WRITING CENTER AND THE PEER MENTOR PROGRAM**
Students interested in teaching careers should consider applying to and training for work as peer tutors at the Campus Writing Center. Students may also apply to work in partnership with faculty teaching Freshman Writing Seminars as peer mentors to incoming freshmen. See the Director of College Writing Programs for information about these programs.
The Comparative Cultures program focuses on areas or traditions markedly different from the dominant cultures of the United States and Europe. In addition to the comparative courses and those on specific regions of Asia, the Middle East, Africa, or Latin America, offerings on “ethnic minority cultures” within the United States, e.g., Chicano/Latino-American, Black/African-American, Native American/American Indian, and Asian American, are also included. Students may pursue: 1) an international track by focusing on areas in Asia, the Middle East, Africa, and/or Latin America, or, 2) they may focus on minorities within the United States. The major seeks both concentration within one geographical area and diversity spanning several disciplines and areas.

The primary aims of the Comparative Cultures major are to increase understanding of people whose cultures differ from mainstream cultures in the United States and Europe, to give perspective on those cultures, and to broaden and deepen appreciation of the diversity and richness of the human experience. The major incorporates diverse ways of understanding the world drawn from the cultures on which it concentrates in order to gain a global perspective and to situate ourselves within the myriad ways of being human. The aims are grounded on the knowledge that an educated person needs such understanding and appreciation both as a world citizen and as a participant in the culturally diverse United States. A Comparative Cultures major also provides excellent background for graduate study in many areas, such as anthropology, area studies, comparative politics, ethnomusicology, history of religions, international business, and international relations.

GUIDELINES FOR A MAJOR IN COMPARATIVE CULTURES
The Comparative Cultures major consists of a coordinated program of courses selected by the student and his/her advisor, chosen from among the faculty listed above. These courses are selected according to the following criteria:

1. A minimum of 30 credits, at least 24 of which are to be taken from courses numbered 300 or above or a program of study approved by the Faculty Council. (Students participating in the South India Term Abroad Program can count 6 of those credits as 300-level.)
2. Required courses: ANTH 210, Peoples and Cultures, 3 credits; and ANTH 311, Field Research: Crossing Cultural Boundaries, 3 credits.
3. Courses from at least three different disciplines.
(4) A minimum of 12 credits from one of the following three areas: (a) Asia, Africa, and the Middle East; (b) Latin America; (c) U.S. Ethnic Minorities; and at least one course representing each area.

(5) Up to 6 credits from foreign language/composition/conversation courses that are congruent with the geographical specialization may be included.

Although not required for the Comparative Cultures major, study of a foreign language is strongly encouraged. Also recommended as electives are offerings in European cultures (in history, literature, politics, art history, and religion) for exposure to perspectives that contrast sharply with those of the “non-western” cultures emphasized in this program. The following courses have been approved by the Comparative Cultures Council for the major.

### ANTHROPOLOGY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>210</td>
<td>Introduction to Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>211</td>
<td>Peoples and Cultures of Asia</td>
<td>3</td>
</tr>
<tr>
<td>212</td>
<td>Peoples and Cultures of Africa</td>
<td>3</td>
</tr>
<tr>
<td>213</td>
<td>Peoples and Cultures of Native America</td>
<td>3</td>
</tr>
<tr>
<td>214</td>
<td>Peoples and Cultures of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>307</td>
<td>Myth, Symbol, and Meaning</td>
<td>3</td>
</tr>
<tr>
<td>311</td>
<td>Field Research: Crossing Cultural Boundaries</td>
<td>3-4</td>
</tr>
<tr>
<td>321</td>
<td>Expressive Arts of Africa</td>
<td>3</td>
</tr>
<tr>
<td>323*</td>
<td>Environmental Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>327</td>
<td>Male and Female: The Anthropological Perspective</td>
<td>3</td>
</tr>
<tr>
<td>374</td>
<td>Cultural Contexts of Childhood</td>
<td>3</td>
</tr>
<tr>
<td>387*</td>
<td>Life in Minority Environments</td>
<td>3</td>
</tr>
</tbody>
</table>

### ART

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>308*</td>
<td>Colonial Latin American Art</td>
<td>3</td>
</tr>
</tbody>
</table>

### CHINESE LITERATURE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>125*</td>
<td>Culture and Civilization in Translation</td>
<td>3</td>
</tr>
<tr>
<td>150*</td>
<td>Topics in Literature in Translation</td>
<td>3</td>
</tr>
<tr>
<td>151</td>
<td>Topics in Modern Chinese Literature</td>
<td>3</td>
</tr>
<tr>
<td>190*</td>
<td>Current Topics of the Asian World in Translation</td>
<td>3</td>
</tr>
<tr>
<td>325*</td>
<td>Culture and Civilization</td>
<td>3</td>
</tr>
<tr>
<td>450*</td>
<td>Topics in Chinese Literature</td>
<td>3</td>
</tr>
<tr>
<td>490*</td>
<td>Current Topics of the Asian World</td>
<td>3</td>
</tr>
</tbody>
</table>

### ENGLISH

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>461</td>
<td>Cultural and Linguistic Diversity in Schools</td>
<td>3</td>
</tr>
<tr>
<td>484*</td>
<td>World Geography</td>
<td>3</td>
</tr>
<tr>
<td>492</td>
<td>Multicultural Perspectives</td>
<td>3</td>
</tr>
</tbody>
</table>

### FRENCH LITERATURE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>477*</td>
<td>African Francophone Literature and Cinema</td>
<td>3</td>
</tr>
</tbody>
</table>

### HISTORY

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>220</td>
<td>East Asian Civilizations</td>
<td>3</td>
</tr>
<tr>
<td>221</td>
<td>Modern East Asia</td>
<td>3</td>
</tr>
<tr>
<td>230</td>
<td>Introduction to African History</td>
<td>3</td>
</tr>
<tr>
<td>242*</td>
<td>Introduction to Latin America</td>
<td>3</td>
</tr>
<tr>
<td>246</td>
<td>Intro to South American History</td>
<td>3</td>
</tr>
<tr>
<td>315</td>
<td>Mexican Americans</td>
<td>3</td>
</tr>
<tr>
<td>318*</td>
<td>Spanish-Mexican California</td>
<td>3</td>
</tr>
<tr>
<td>321*</td>
<td>Imperial China</td>
<td>3</td>
</tr>
<tr>
<td>323*</td>
<td>Modern China</td>
<td>3</td>
</tr>
<tr>
<td>325*</td>
<td>Communist China</td>
<td>3</td>
</tr>
<tr>
<td>329*</td>
<td>Modern Japan</td>
<td>3</td>
</tr>
<tr>
<td>331</td>
<td>Comparative Immigrations: Southern Africa/North American</td>
<td>3</td>
</tr>
<tr>
<td>344</td>
<td>Mexican Revolution</td>
<td>3</td>
</tr>
<tr>
<td>347</td>
<td>Modern Mexico</td>
<td></td>
</tr>
<tr>
<td>348</td>
<td>US/Mexico Border Studies</td>
<td></td>
</tr>
</tbody>
</table>

### EDUCATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>281</td>
<td>Culture, Communication, and Learning</td>
<td>3-4</td>
</tr>
<tr>
<td>305</td>
<td>Chicana/o Education in Socio-Political Perspective</td>
<td>3</td>
</tr>
</tbody>
</table>

*Not offered every year.*
MUSIC
74 Music of Latin America, 3 credits
75 Music of Africa, 3 credits
76 A World of Music, 3 credits
102 History of Jazz, 3 credits
103 American Popular Music, 3 credits

PHILOSOPHY
300 Early Chinese Philosophy, 3 credits
302* Development of Buddhist Philosophical Thought, 3 credits

POLITICAL SCIENCE
220 International Relations, 3 credits
240 Comparative Politics, 3 credits
290 Race, Religion, and Gender in Latin America
348 East Asian Political Systems, 3 credits
349 South East Asian Politics, 3 credits
352 Latin American Politics, 3 credits
354 Latin American Revolutions, 3 credits
356* Middle Eastern Political Systems, 3 credits
358* African Political Systems, 3 credits
420 Seminar in International Relations, 2 or 3 credits

RELIGIOUS STUDIES
201 Monotheisms, 3 credits
202 Religions of Asia, 3 credits
251* Monks, Nuns, and Ascents, 3 credits
253* Women and Religion, 3 credits
313* Heroes, Gods, and Gurus, 3 credits
330* The Buddha and Buddhism, 3 credits
331* Islam, 3 credits
333 Hindu Religion and Culture, 3 credits
342 Sound, Healing and the Religious Experience, 3 credits
347 Shamanism, 3 credits
350* Latin American Liberation Theologies, 3 credits
352* Pilgrimage, 3 credits
101 Religious Diversity in America
253 Women and Religion
307 Religion and the Body
348 Ritual Studies
349 Religious Fundamentalisms
359 Religion and Colonialism

SOCIOMETRY
104 Sociology in the Global Context, 3 credits
287 Workshop in Urban Studies, 4 credits
289 African-American Experience, 3 credits
350* Modern Society, 3 credits
352* Social Class and Inequality, 3 credits
337 Sociology of Development, 3 credits
368 Racial and Ethnic Relations, 3 credits
388 Asians in America, 3-4 credits

SPANISH LITERATURE
10 Latin American Performance Experience, 2 credits
190 Special Topics, 3 credits
225 Chicano Literature and Cultural Production, 3 credits
325 Hispanic Culture and Civilization, 3 credits
355/356 Introduction to Peninsular and Latin American Literature I and II, 6 credits
410 Masterpieces from the Middle Ages to the Baroque, 3 credits
420 Quests and Discoveries in Hispanic Literatures, 3 credits
440 Latin American Theatre, 3 credits
470 Latin American Voices: The Twentieth Century, 3 credits
480 Major Hispanic Authors, 3 credits
481 Revisiting the Canon in Peninsular and Latin American Literature, 3 credits
484 Hispanic Avant-Garde Literature, 3 credits
485 Subaltern Voices, Diversity and Marginalization, 3 credits

No more than 6 credits from the following:

CHINESE LANGUAGE
120/121 Elementary Chinese I and II, 8 credits
220/221 Intermediate Chinese I and II, 6 credits
320 Advanced Chinese: Conversation and Composition, 3 credits

FRENCH LANGUAGE
120/121 Elementary French I and II, 8 credits
220/221 Intermediate French I and II, 6 credits
225 Conversation, Culture, and Communication, 3 credits
310* Composition and Conversation, 3 credits

JAPANESE LANGUAGE
120/121 Elementary Japanese I and II, 8 credits

SPANISH LANGUAGE
120/121 Elementary Spanish I and II, 8 credits
220/221 Intermediate Spanish I and II, 6 credits
222 Spanish for Bilingual Students, 3 credits
320* Advanced Spanish: Composition and Conversation, 3 credits

*Not offered every year
ECONOMICS

Gregory R. Woirol, The Douglas W. Ferguson Professor of Economics and Business Administration
Kim C. Thomas, Chair
Charles R. Laine, affiliate

Economics is the social science concerned with how economies allocate resources so as to best satisfy society’s unlimited wants. It employs a logical and ordered approach to understanding how economies work and how to deal with pressing social issues and problems. In encouraging an appreciation of the way in which economists think about and approach issues, the study of economics is rewarding in itself and, as well, is an excellent background for a wide variety of careers, including law, business, and government. The program is designed to provide a rigorous course of study for those interested in pursuing graduate work in economics.

GUIDELINES FOR A MAJOR IN ECONOMICS

A minimum of 30 credits, of which 24 must be at the 300 level or above. There are three options leading to a degree in economics: General Distributive (for students with professional interests in areas such as law, government, and secondary education); Business Economics (for students intending to pursue the MBA or other business-oriented programs); and Pre-professional Economics (for students planning graduate work in economics).

General Distributive Option:
- Principles of Economics: Macro, ECON 200, 3 credits
- Principles of Economics: Micro, ECON 201, 3 credits
- Intermediate Macro Theory, ECON 300, 3 credits
- Intermediate Micro Theory, ECON 301, 4 credits
- Current Economic Problems, ECON 330, 4 credits (paper in the major)
- Statistics, MATH 80, 3 credits
- Basic Oral Communication, THEA 101, 3 credits

Business Economics Option:
All of the courses under the General Distributive Option
Plus:
- Managerial Economics, ECON 365, 3 credits
- Principles of Accounting, I,II, BSAD 201, 202, 6 credits
Two additional Business Administration courses appropriate to this option.
Choice of one:
- Mathematics for the Management Sciences, MATH 81, 3 credits
- Calculus and Analytic Geometry, MATH 141A, 4 credits
- Integrated Precalculus/Calculus, MATH 139A,B 7 credits
Pre-Professional Economics Option:
All of the courses under the General Distributive Option
Plus:
Introduction to Econometrics, ECON 305, 3 credits
History of Economic Thought, ECON 315, 3 credits
Calculus and Analytic Geometry, I, II, MATH 141A, B, 8 credits

GUIDELINES FOR A MINOR IN ECONOMICS
A minor in economics requires 18 credits, including 200, 201, 300, 301, and two additional electives at the 300 level or above.

COURSE DESCRIPTIONS

BASIC ECONOMIC ANALYSIS
200 Principles of Economics: Macroeconomics
The problem of scarcity; theory of national income and employment; policy applications to problems of employment, inflation and business fluctuations; introduction to money, banking, and monetary policy. One semester, 3 credits.

201 Principles of Economics: Microeconomics
Introduction to the theory of price and wage determination in markets. Includes analysis of consumer choice, decisions by firms, industrial organization, and government policy as it affects markets. Also includes discussion of economic efficiency and income distribution in the market economy. One semester, 3 credits.

INTERMEDIATE ECONOMIC ANALYSIS
300 Intermediate Macroeconomic Theory
Theoretical analysis of forces that determine the general level of prices, output, and employment; monetary and fiscal policy. Prerequisites: 200 and 201. One semester, 3 credits.

301 Intermediate Microeconomic Theory
The theory of consumer behavior and of the firm under perfect and imperfect competition; resource pricing; general equilibrium and welfare economics. Prerequisites: 200 and 201. One semester, 4 credits.

305* Introduction to Econometrics
An introduction to the mathematical and statistical tools used to model, test, and forecast economic relationships. Construction of models, data collection, linear regression, hypothesis testing, and forecasting. Introduction to computer software used for regression analysis. Prerequisites: 200, 201 and MATH 80. One semester, 3 credits.

310* Money and Banking
An examination of the institutional structure of the U.S. financial system, including the scope and effect of bank deregulation; the instruments and theoretical impact of Federal Reserve System monetary policy on the domestic and international economy. Prerequisites: 200. One semester, 3 credits.

315* History of Economic Thought
The evolution of economic ideas; concentration on major schools of thought, economists and their ideas since 1750. Prerequisites: 200 and 201. One semester, 3 credits.

APPLIED ECONOMIC ANALYSIS
330 Current Economic Problems
The application of economic analysis and research methodology to issues such as air pollution and poverty; intensive student research into one current economic problem. This course satisfies the paper-in-the-major requirement. Prerequisites: 300 or 301. January session, 4 credits.

340* Urban Economics
Application of economic analysis to problems that stem from urbanization and evaluation of potential solutions. Topics include housing, transportation, poverty, crime, environmental control, urban public finance, and urban planning. Prerequisites: 200, and 201. One semester, 3 credits.

343* Environmental and Natural Resource Economics
Application of microeconomic analysis to problems of environmental quality and resource use. Topics include: limits to growth, control of

*Not offered every year
pollution, optimal exploitation of renewable
(e.g. fish and timber) and exhaustible (e.g. coal
and oil) resources, public vs. private ownership,
benefit-cost analysis, equity vs. efficiency.
Prerequisite: 201. One semester, 3 credits.

345* Public Sector Economics
The role of government in a market economy,
the economics of public expenditures and
taxation; policy issues. Prerequisites: 200, and
201. One semester, 3 credits.

353 Labor in America
Analysis of changes in labor markets and labor
institutions. Topics include union history,
collective bargaining, shifts in aggregate
employment patterns, current issues.
Prerequisite: 200. January session, 4 credits.

355 Women in the Labor Force
Analyzes the economic experiences of women
both in and out of the labor market including
historical trends as well as current issues.
Prerequisite: 201. January session, 4 credits.

360* Industrial Organization
Application of economic principles to study of
structure, conduct, and performance of U.S.
industry. Analysis of antitrust and regulation
policy in terms of appropriate government
response to industrial performance. Prerequisites:
200, and 201. One semester, 3 credits.

365* Managerial Economics
Application of economic theory and
methodology to managerial decisions.
Prerequisites: 200, and 201. Statistics
recommended. One semester, 3 credits.

370* Economic History
Factors behind European and U.S. economic
development; concentration on the U.S.
Prerequisite: 200. One semester, 3 credits.

INTERNATIONAL ECONOMICS

380 International Economics
Basic principles of international trade and
finance; their application to trade barriers,
payment systems, and international
organizations; a policy approach. Prerequisites:
200, and 201. One semester, 3 credits.

383* Comparative Economic Systems
The organization and performance of economic
systems. Focus is on current issues and trends
in market, former planned-command, and
developing economies. Prerequisites: 200, and
201. One semester, 3 credits.

ADDITIONAL OFFERINGS

390 Current Topics in Economics
Variable credits. Permission. May be repeated
for credit.

395 Directed Studies
Credit and time arranged. Permission. May be
repeated for credit.

*Not offered every year.
The Department offers studies in two distinct fields: education and child development. Education programs lead toward teaching credentials. (California law does not permit students to major in education at any California college or university.) An undergraduate minor in elementary education and a program in education leading to a Master's Degree are also offered. Child Development offers an undergraduate major and minor, leading toward a variety of careers in working with children.

**Education**

Teacher education programs at Whittier College are grounded in a set of guiding principles. Among others, these include commitments to: (1) developing a social constructivist approach toward learning and teaching; (2) valuing diversity and supporting all students’ learning; (3) establishing a climate which promotes equity and social justice, and which nurtures independent and group learning; and (4) growing professionally by continually reflecting on one’s practice and pursuing other opportunities for learning.

Whittier College is fully accredited by the California Board of Education and the California Commission on Teacher Credentialing to offer programs leading toward both the Multiple Subject (elementary school) Teaching Credential and the Single Subject (secondary school) Teaching Credential. An undergraduate Minor in Elementary Education and a program leading to a Master’s Degree are also offered.

Whittier College teacher education programs enable students to begin working toward their teaching credentials as undergraduates by taking required teacher preparation courses during their junior and senior years. These undergraduate courses count toward students' Multiple Subject (elementary) or Single Subject (secondary) teaching credential. Students can then complete their remaining requirements as post-baccalaureate students.

Because California law does not permit majoring in education, credential candidates must also complete departmental or interdisciplinary majors as described in this catalog. Among the appropriate majors for Multiple Subject (elementary) credential candidates are biology, child development, English, history, mathematics, and psychology. Students should be aware that advancement to Credential Candidate Status and student teaching require a 2.8 minimum GPA in the last 60 graded units of course work and a 3.0 minimum GPA, with no grade less than B–, in the required professional-preparation courses.
Procedures and requirements for those who enter Whittier College teacher education programs as post-baccalaureate students differ from those for undergraduates. Post-baccalaureate students can complete all credential and masters program requirements through evening and summer courses. Post-baccalaureate students should obtain program information and advisement as early as possible.

Students interested in Whittier College teacher education programs can find the latest information on policies, procedures, requirements, and courses by visiting either the Department of Education and Child Development or the Department's web page on the Whittier College World Wide Web site. These sources also have current information on requirements for the undergraduate Minor in Elementary Education and for the master's degree offered in education by the Department.

At the time of this catalog's publication, teacher education programs throughout California were being redesigned to fit new state guidelines and teacher education standards. Thus, the Department of Education Child Development and its web page are students' best sources of information on Whittier College's new programs and courses in education.

GUIDELINES FOR THE MAJOR IN CHILD DEVELOPMENT

Completion of all disciplinary core courses, interdisciplinary requirements, research requirement and depth requirement, for a total of at least 34 credits.

A. Disciplinary Core Course Requirements

Introduction to Lifespan Human Development, CHDV 105, 3 credits
Field Methods: Child Study through Observation and Interaction, CHDV 220, 3 credits
Infancy through Early Childhood, CHDV 315, 3 credits
Middle Childhood, CHDV 330, 3 credits
Practicum: Integration of Theory and Practice, CHDV 477, 4 credits
Senior Seminar in Child Development, CHDV 497, 3 credits

B. Interdisciplinary Requirements

Complete a, b, AND c below:

a. Choose One: Cultural Contexts of Childhood, Anth 374; an approved education course providing social-cultural perspectives on diverse children and families, or an approved Child Development and Diversity Course in Denmark
b. Biological Bases of Behavior, Psyc 222
c. Statistics, Psyc 314

C. Research Requirement

Choose ONE of the following:

a. Crossing Cultural Boundaries, Anth 311
b. Experimental Psychology, Psyc 212
c. Approaches to Social Research, Soc. 310
D. Depth Requirement

Take ONE additional courses relevant to the major that has been approved by your CHDV advisor to fulfill this requirement.

COURSE DESCRIPTIONS

10 Working with Children
Experiential course involving interaction with children and adults (parents, teachers, other professionals). Typically organized around a theme or question of interest to the class. Requires approximately 2 hours fieldwork per week in addition to class meeting. May not be concurrently enrolled with 220. One semester, 1 credit.

11 Supervised Classroom Experience at Broadoaks
Practical experience with various aspects of teaching and learning at Broadoaks. Requires minimum of 3 hours per week in addition to staff meeting. One semester, 1 credit. May be repeated for credit.

12 Research with Children
Opportunity to learn and apply research skills by assisting faculty on research. May include research design, data collection, data analysis, and writing up findings. Permission required. One semester, one credit. May be repeated for credit.

105 Introduction to Human Development
Emphasizes major theories and principles of human development across cultures. Introduces history, literature, and methodology of the study of human beings from developmental perspectives. Critical reading and writing required. One semester, 3 credits.

220 Field Methods: Child Study through Observation and Interaction
Focuses on observing, recording, and interacting with children as a basis for scientific investigation in child development. Field-based research project required. Includes seminar and supervised fieldwork at The Broadoaks Children's School. Prerequisite: 105. One semester, 3 credits.

315 Infancy through Early Childhood
Study of physical, cognitive, linguistic, social, emotional, and moral/ethical development from 0 to 8 years. Emphasizes literature review and fieldwork resulting in a scholarly paper. Prerequisites: 105, 220. One semester, 3 credits.

330 Middle Childhood
Study of physical, cognitive, linguistic, social, emotional and moral development from 6-12 years. Emphasizes theory, child observation, and research, as well as child and family issues in public policy and current events. Prerequisite: 315. One semester, 3 credits.

477 Practicum: Integration of Theory and Practice
An intensive fieldwork or internship assignment designed to (1) situate and contextualize developmental theory and its applications in a real-world setting, (2) help students integrate what they have learned in their liberal arts core with their study of child development from a variety of disciplinary perspectives, and (3) provide opportunities for additional experience in a setting that relates to the student's future academic and career interests. Senior standing. January, 4 credits.

490 Current Topics in Child Development
Permission. Variable credits.

*Not offered every year
295/395/495/595 Directed Studies in Child Development
Time and credit arranged. Permission. May be repeated for credit.

497 Senior Seminar in Child Development
Builds upon previous core and extra-departmental courses in the major, requires in-depth study of a significant issue or question relating to CHDV theory and practice. Includes paper in the major. Senior standing. One semester, 3 credits.
Engineers apply the principles of science and mathematics to solve real world problems ranging from building bridges to designing computer chips. Whittier College has established cooperative programs with engineering schools at a number of prestigious universities, allowing students to benefit from the broad intellectual training offered by a liberal arts college and the technical training offered by an engineering school. Students in the 3-2 program normally spend three years at Whittier College and two years attending an engineering school. The five-year program leads to a Bachelor of Arts degree from Whittier College and a Bachelor of Science degree in Engineering from a university. The Engineering 3-2 Program web page, accessible through the Whittier College web page and at www.engineering.whittier.edu, provides up-to-date information and announcements important to students planning to complete the program.

GUIDELINES FOR THE THREE-TWO PROGRAM IN ENGINEERING
To be recommended for admission to engineering school, students must ordinarily complete the prescribed sequence at Whittier College with at least a 3.0 overall GPA, a minimum grade of "C" in each of the 3-2 program core courses, and a 3.0 GPA in the core courses. Students recommended by their advisor and the 3-2 director will normally be admitted to at least one of the cooperating universities. The B.A. from Whittier College will be awarded only after a student has successfully completed all of the graduation requirements at both schools.

As part of the 3-2 program, students may elect to pursue a Whittier College B.A. degree in Physics, Math, or Chemistry. The course requirements for these options are extensive and completion of the program in five years requires careful planning. Alternatively, students in the 3-2 program may elect to complete a B.A. in Science and Letters from Whittier College. The requirements for this program are more flexible than the requirements for a B.A. in a particular science.

Students who do not complete the entire 3-2 program (e.g., do not finish engineering school) will be awarded a B.A. from Whittier College only after completing all of the requirements of a B.A. as described in the Whittier College Catalog. This will usually entail returning to Whittier College for two semesters. The B.A. in Science and Letters cannot be awarded to students who do not complete an engineering program.

All required Liberal Education courses and Core 3-2 courses must ordinarily be completed at Whittier College. Other courses required for the B.A. can usually be taken either at Whittier College or the engineering school. Courses taken at the engineering school to fulfill Whittier College requirements must be approved in advance by the appropriate department, the Registrar, and by the Director of the 3-2 program.
**CORE COURSES**

In addition to satisfying the Whittier College Liberal Education requirements, all 3-2 students must complete the following 35 credits in science and mathematics with grades of "C" or better in each course and a 3.0 GPA:

I. **Fundamentals of Physics**, PHYS 150, 190; 9 credits
II. **General Chemistry**, CHEM 110 A, B; 8 credits
III. **Calculus and Analytical Geometry**, MATH 141 A, B; 241; 12 credits
IV. **Differential Equations I**, MATH 345A; 3 credits
V. **Computer Programming I**, COSC 120; 3 credits

*PHYS 130 is strongly recommended for students planning to major in electrical engineering and related disciplines. PHYS 205 is strongly recommended for all 3-2 engineering students.*

**CHEMISTRY**

3-2 students wishing to receive a B.A. in Chemistry in combination with an engineering degree must complete, in addition to the core courses, the following 21 credits in chemistry.

The following courses must be taken at Whittier College:

I. **Organic Chemistry**, CHEM 231A, B; 6 credits
II. **Organic Chemistry Lab**, CHEM 233A, B; 2 credits
III. **Quantitative Analysis**, CHEM 220; 4 credits

The following courses must be taken either at Whittier or the Engineering school:

IV. **Physical Chemistry**, CHEM 321 A, B; 6 credits
V. One upper division chemistry course approved by the Chemistry Department; 3 credits

**MATHEMATICS**

3-2 students wishing to receive a B.A. in Mathematics in combination with an engineering degree must complete, in addition to the core courses, the following 18 credits in mathematics.

I. **Abstract Thinking**, MATH 280; 3 credits
II. **Linear Algebra**, MATH 380; 3 credits
III. Choose one:
    - **Introduction to Analysis**, MATH 440A
    - **Modern Algebra**, MATH 480A; 3 credits
IV. Three additional courses in Mathematics or Computer Science, approved by the Math Department, at the 200 level or above; 9 credits
**PHYSICS**

3-2 students wishing to receive a B.A. in Physics in combination with an engineering degree must complete, in addition to the core courses, the following 18-19 credits in Physics.

I. Introductory Modern and Optics, PHYS 130; 4 credits
II. Computational Oscillations and Waves, PHYS 250; 3 credits
III. Electromagnetic Theory, PHYS 330; 3 credits
IV. Mechanics, PHYS 310; 3 credits
V. Choose one:
   - Advanced Modern Physics, PHYS 325
   - Quantum Mechanics, PHYS 350; 3 credits
VI. Choose one:
   - Optics, PHYS 320
   - Experimental Physics, PHYS 380A; 2-3 credits

**SCIENCE AND LETTERS**

Some 3-2 students may wish to complete a B.A. in Science and Letters in combination with an engineering degree. This option offers more flexibility than the 3-2 majors in chemistry, physics, or math, but students cannot receive a B.A. in Science and Letters without completing an engineering program. The requirements for the Science and Letters major include the Liberal Education program, the 3-2 core courses, the requirements for a minor in Physics, Chemistry, or Mathematics, and six additional credits of upper division courses in any of these disciplines.
The study of language and literature is at the core of the arts that make us humane and free. English courses contribute both to personal enrichment in the liberal arts tradition and to professional development. The study of literature enables us to understand ourselves and other people—as individuals, as participants in particular cultural traditions, and as human beings. Courses in language and in writing, as well as those in literature, develop the ability to make sense out of both our emotions and the world around us, to analyze experience and data, and to express the results of our analysis clearly and effectively. As such, they are significant parts of the lives of all liberally educated people.

Many English majors choose to teach—either at the elementary, junior high, or high school level, or, after suitable graduate work, at a college or university. The emphasis on textual analysis and writing skill, however, makes English a strong undergraduate major for many professions, including journalism, law, and library science, and for a variety of areas in the business world.

GUIDELINES FOR A MAJOR IN ENGLISH

Students should plan their course of study, in consultation with their faculty advisors, as soon as they have decided upon the major.

Requirements:
1. A minimum of 36 credits, at least 24 of which are at the 300 level or above, and the following:
2. ENGL 220 Major British Writers to 1789.
3. ENGL 221 Major British and American Writers from 1789.
4. At least one course from Writing or Language and Linguistics.
5. At least one course from the four categories of advanced literature courses (Section III) below.
6. At least one course from each of the three following major genres:
   - Drama: 326, 328, 350, 355.
7. ENGL 328 Shakespeare.
The two senior capstone courses:
8. ENGL 400 Critical Procedures in Language and Literature.
9. ENGL 410 Senior Seminar.

Strongly recommended:
Reading knowledge of a second language;
ENGL 155, Language and Critical Thought.
For those considering graduate study in English: ENGL 382 History of Literary Criticism.

NOTE: INTD 100 Freshman Writing Seminar is not a departmental course. Neither it nor a course which met the freshman writing requirement at another institution may be counted toward the English major or minor.

ENGL 120 or 124, or an equivalent, is a prerequisite to all literature courses with a number of 300 or above, although THEA 150 may be substituted as the prerequisite for ENGL 326, 328, 350, and 354. (Students having credit for ENGL 120 may not take ENGL 124.)

As noted above, all majors must take ENGL 220 and 221. It is required that they be taken sequentially; it is recommended, but not required, that they be taken before enrolling in upper-division literature courses. Courses for which one or both is especially recommended are noted below.

GUIDELINES FOR A MINOR IN ENGLISH
A minor in English requires 18 credits, including 120 and at least 9 upper-division credits. (ENGL 220 - 221 is recommended, but not required, for the minor.) Minors should be planned in consultation with a departmental advisor and must include one course from each of the following: (1) a genre (324, 326, 328, 329, 331, 332, 334, 335, 336, 350, 352, 355, 358, 362, 363, 364, 370, 371); (2) a historical period; and (3) a major figure (323, 324, 328, 329).

NOTE: For additional information on both the major and the minor, consult the English Department Handbook.

COURSE DESCRIPTIONS

I. FOUNDATIONAL COURSES IN LANGUAGE AND LITERATURE

120 Introduction to Literature
Exploration of various forms of literature from a variety of critical perspectives. (Appropriate for students at all levels who have not had a college course in literature.) Prerequisite: INTD 100.
One semester, 3 credits.

124* Modern European Literature
An introductory course in literary analysis that focuses upon major works of European literature written since 1648. May be substituted for English 120 as a prerequisite for taking upper-division English courses. Students having credit for ENGL 120 may not take 124.
One semester, 3 credits.

155* Language and Critical Thought
Introductory exercises in recognizing and controlling ambiguity with the tools of classification, definition, and exposition of critical thought. Prerequisite: INTD 100.
One semester, 3 credits.

220 Major British Writers to 1789
A team-taught introduction to major writers in British literature to 1789, with particular emphasis on their historical and thematic contexts. Prerequisite: ENGL 120 or instructors' permission.
One semester, 3 credits.

*Not offered every year
221 Major British and American Writers from 1789
A team-taught introduction to major writers in British and American literature from 1789, with particular emphasis on their historical and thematic contexts. Prerequisites: ENGL 120 and 220. One semester, 3 credits.

222 Literature of the Bible
A study of the Hebrew Bible and New Testament, with an emphasis on biblical texts both as literature in their own right and as sources for other literature, art, and music. Prerequisites: INTD 100 and ENGL 120 or instructor's permission. One semester, 3 credits. (Same as REL 216.)

223 Greek and Roman Literature
A survey of the epic, drama, lyric, and literary theory of Classical Greece and Rome— from its beginnings in the ninth century B.C.E. through the early common era—including works of Homer, Sophocles, Euripides, Aristophanes, Horace, Virgil, Ausonius, and Paulinus of Nola. Prerequisites: INTD 100 and ENGL 120 or instructor's permission. One semester, 3 credits.

II. COURSES IN WRITING AND LANGUAGE
Majors are required to take at least one course from either the Writing or the Language and Linguistics category below. Both introductory and upper-division writing courses from this list may be counted toward the major.

A. COURSES IN WRITING
201 Introduction to Journalism
The fundamentals of writing for a newspaper; introduction to the profession of journalism; problems of reporting, editing, and publishing. Not open to those who have had INTD 105. One semester, 3 credits.

202 Writing Short Fiction
By writing short stories and critiquing those of peers and published writers, students learn in workshops and conferences to analyze the problems of writing short fiction. Prerequisite: ENGL 120 and instructor permission. One semester, 3 credits.

203 Writing Poetry
An introduction to poetry writing, focusing on form and technique. Workshops, outside readings, visits by established poets. Prerequisite: ENGL 120 and instructor permission. One semester, 3 credits.

302 Advanced Fiction Writing
Intensive workshop in the writing of short stories. Prerequisite: ENGL 120 and instructor permission. May be repeated for credit. One semester, 3 credits.

303 Advanced Poetry Writing
Intensive workshop in the writing of poetry. Prerequisite: ENGL 120 and instructor permission. May be repeated for credit. One semester, 3 credits.

304 The Other Creative Writing
A class in forms of creative writing other than poetry or fiction, such as op-ed, memoir, translation, craft essays, travel writing, interviews, profiles, and meditative essays, as well as experimental forms involving collage, reduction, mail art, performance and/or found art. The final project will be a substantial undertaking. Students will learn how to write query and cover letters, and how to identify the correct market for their creations. Prerequisite: ENGL 120 and instructor permission. One semester, 3 credits.

305 Screenwriting
An introduction to writing scripts for films, including artistic and professional aspects of the trade. Workshops, readings, and writing exercises will lead toward a full-length screenplay. Prerequisite: instructor permission. One semester, 3 credits.

B. COURSES IN LANGUAGE AND LINGUISTICS
310 Linguistics
A study of the sounds, forms, structure, and meanings of human language, alongside the biological and social forces that shape its use and control its evolution over time. Prerequisite: INTD 100. One semester, 3 credits.

311 History of the English Language
A study of the origins of English and its dialects, and of the historical, social, and linguistic forces that shaped its evolution from Prehistoric Germanic through Old English, Middle English, and Modern English. Prerequisite: INTD 100. One semester, 3 credits.

*Not offered every year
315* The System of Basic English
An introduction to C.K. Ogden's system of Basic English in light of traditional and modern philosophy. This course is designed for students who want to develop systematic control of written and spoken English. Prerequisite: INTD 100. January, 4 credits.

316* Semiotics
Introduction to the major schools of semiotics. Particular attention will be paid to the distinction between signs and symbols, abstracting, multiple uses of language, and the role that symbols and other conceptual tools play in human behavior. Prerequisite: INTD 100. One semester, 3 credits.

III. ADVANCED COURSES IN LITERATURE
Majors are required to take at least one course from areas A – D listed below.

A. BRITISH AND EUROPEAN LITERATURE, 500–1700
320* Literature of Medieval Europe
A survey of the main trends and genres of literature in Europe from the Fall of Rome (c. 500) to the Protestant Reformation (c. 1500). Most texts (coming from Italy, France, and Germany as well as from England) will be read in translation. Prerequisite: ENGL 120; 220 or 222 recommended. One semester, 3 credits.

321* British Literature, 700 - 1500
A survey of major genres and works of the British Isles to the close of the Middle Ages. Readings include Beowulf, The Canterbury Tales, Sir Gawain and the Green Knight, The Second Shepherds' Play, and the Morte d'Arthur. Except for Middle English texts, works will be read in translation. Prerequisite: ENGL 120; 220 or 222 recommended. One semester, 3 credits.

323* Dante
A close reading (in translation) of Dante's Divine Comedy in the context both of his Vita Nuova and of various historical and literary movements of his time. Prerequisite: ENGL 120; 220 or 223 recommended. One semester, 3 credits. (Same as REL 316.)

324* Chaucer
A close reading of The Canterbury Tales and Troilus and Criseyde, in Middle English and with their medieval background. Prerequisite: ENGL 120; 220 or 321 recommended. One semester, 3 credits.

325* Literature of the English Renaissance
Representative literary works of the sixteenth and seventeenth centuries read in the context of historic events which helped shape these works. Prerequisite: ENGL 120; 220 recommended. One semester, 3 credits. (Same as REL 356.)

326* Shakespeare and his Contemporaries
An examination of several of Shakespeare's plays in connection with plays by such dramatists as Kyd, Marlowe, Jonson, Webster, and Beaumont and Fletcher. Prerequisite: ENGL 120; 220 recommended. One semester, 3 credits.

328 Shakespeare
Introduction to the major plays. Prerequisite: ENGL 120. One semester, 3 credits. (Same as THEA 328.)

329* Milton
An examination of John Milton's poetry and major prose in its biographical and historical context, culminating in a close reading of Paradise Lost. Prerequisite: ENGL 120; 220, 222 or 223 strongly recommended. One semester, 3 credits. (Same as REL 357.)

B. BRITISH AND EUROPEAN LITERATURE, 1700–1900
330* British Literature, 1640 - 1789
A survey of British literature of the English Civil Wars, Restoration, and eighteenth century, with particular attention to its social context. Special emphasis is given to Dryden, Defoe, Pope, Fielding, and Johnson, as well as to the numerous women writing during the period. Prerequisite: ENGL 120; 220, 222 or 223 strongly recommended. One semester, 3 credits.

331* Rise of the Novel
The pioneers of the novel in English: Defoe, Richardson, Fielding, and Sterne. Prerequisite: ENGL 120. One semester, 3 credits.

332* Nineteenth-Century English Novel
Major nineteenth-century novels, selected from the works of Austen, Dickens, Thackeray, the Brontës, Eliot, and Hardy. Prerequisite: ENGL 120. One semester, 3 credits.

*Not offered every year
334* Romantic Poetry
Poetry of Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats. Prerequisite: ENGL 120. One semester, 3 credits.

335* Victorian Poetry
Major works by such poets as Tennyson, Browning, Arnold, and Hopkins, and some prose. Prerequisite: ENGL 120. One semester, 3 credits.

336* The European Novel
Selected European novels of the nineteenth century, with particular emphasis on Russian fiction. Prerequisite: ENGL 120. One semester, 3 credits.

C. BRITISH AND GLOBAL LITERATURE FROM 1900
350* Modern Drama
A survey of modern dramatic works from the 1870s to the 1960s, from naturalism to the Theater of the Absurd. Prerequisite: ENGL 120. One semester, 3 credits.

352* The Modern British Novel
An examination of British novels from 1900 through the 1940s, with an emphasis on modernism and such novelists as Conrad, Woolf, Joyce, Ford, Forster, Lawrence, and Orwell. Prerequisite: ENGL 120. One semester, 3 credits.

353* Irish Literature, 1888 - 1949
Irish nationalism and Irish renaissance; emphasis on Yeats, Joyce, Synge, and O’Casey. Prerequisite: ENGL 120. January, 4 credits.

354* Contemporary British Literature
A study of British literature and culture since 1950, and of the relationship between literature and national identity in the period. Prerequisite: ENGL 120. One semester, 3 credits.

355* Contemporary Drama
A study of key figures and movements in drama and performance art since the 1950s. Prerequisite: ENGL 120. One semester, 3 credits.

358* Postcolonial Novel
Twentieth-century novels by Third World writers whose language of composition is English, with emphasis on India and Africa. Prerequisite: ENGL 120. One semester, 3 credits.

D. AMERICAN LITERATURE
360* The Origins of American Literature
The colonial period through the early republic. Consideration is given to the ways in which American literary expression began to concern itself with unique forms and ideas, in such writers as Bradford, Bradstreet, Wheatley, Edwards, Franklin, Brown, Irving, and Cooper. Prerequisite: ENGL 120; 221 recommended. One semester, 3 credits.

361* American Romanticism
The major writers of the literary movement known as “transcendentalism” and the response to them. Such writers as Emerson, Thoreau, Fuller, Hawthorne, Melville, Poe, Douglass, Whitman, Dickinson, Whitteir, Longfellow, and Bryant will be considered. Prerequisite: ENGL 120; 221 recommended. One semester, 3 credits.

362* American Realism and Naturalism
The major writers of the last half of the nineteenth century to World War I, with emphasis on the two movements of the course title. Such writers as Stowe, Twain, Howells, Crane, James, Norris, London, Chopin, Gilman, Wharton, and Adams will be considered. Prerequisite: ENGL 120; 221 recommended. One semester, 3 credits.

363* Modern American Novel
The modernist movement in the American novel from World War I to 1950. Such writers as Cather, Faulkner, Hemingway, Dos Passos, Hurrson, Dreiser, Welty, Stein, Steinbeck, Lewis, Fitzgerald, Hammett, and Chandler will be considered. Prerequisite: ENGL 120; 221 recommended. One semester, 3 credits.

364* Modern American Poetry
Poets of the modernist era in America, such as Williams, Stevens, Eliot, and Moore. May include some contemporaneous British poets (i.e. Yeats) and American precursors (i.e. Dickinson and Whitman). Prerequisite: ENGL 120. One semester, 3 credits.

365* Hemingway and Eliot
Close reading of major works by Ernest Hemingway and T.S. Eliot, with attention to literary form, ethical situations, and world views. Prerequisite: ENGL 120. January, 4 credits. (Same as REL 338.)

*Not offered every year
370* Postmodern American Novel
An examination of American novels since 1950 in relation to postmodern aesthetics, theory, and culture. Prerequisite: ENGL 120. One semester, 3 credits.

371* Contemporary American Poetry
Readings in American poetry from post-World War II to the present. May include some contemporaneous world poetry. Prerequisite: ENGL 120. One semester, 3 credits.

373* The African-American Literary Tradition
An examination of the development of the African-American literary tradition. Among the writers and topics which may be considered are slave narratives, the oral tradition, Wheatley, Douglass, the Harlem Renaissance, Hughes, Hurston, Baldwin, Wright, Ellison, Walker, Angelou, and Morrison. Prerequisite: ENGL 120. One semester, 3 credits.

374* Asian-American Literature
A course in contemporary Asian-American fiction, poetry, and drama, with an emphasis on immigrant history and on media images of Asian-Americans. Prerequisite: ENGL 120. One semester or January, 3 or 4 credits.

275* Chicano Literature
A survey of the works of Mexican-American authors of poetry, prose, and drama, which delves into questions of gender, textual interpretation, and socio-historic contexts. One semester, 3 credits. (Same as SPAN 225.)

377* Autobiography and American Culture
Examination of autobiography as a particularly American genre. Consideration of the theory and history of the genre. Emphasis on autobiography as a literary expression of a variety of literary, historical, and cultural concerns. Prerequisite: ENGL 120. One semester, 3 credits.

378* Wilderness Writing
American writing that explores the human relationship with the natural world. Selected works by Puritan and colonial authors, Emerson, Thoreau, Twain, Muir, Austin, Leopold, Carson, Snyder, Abbey, McPhee, Dillard, Lopez, Momaday, and others. Journal and narrative writing, integrative term paper, and experiential components such as hiking, camping, backpacking, and map/compass navigation are central features of this course. Prerequisite: ENGL 120. January, 4 credits.

IV. LITERARY, FORMAL, AND THEMATIC ALTERNATIVES

280* Literature on Film
An examination of the complex relationships between literary works and their cinematic realization. Prerequisite: INTD 100. January, 4 credits.

381* Images of Love in European Literature
The development of the theme of romantic love from the Song of Songs and Plato's Symposium, through the Middle Ages and Renaissance, to Milan Kundera and the end of the twentieth century. Prerequisite: ENGL 120. One semester or January, 3 or 4 credits. (Same as REL 359.)

382* History of Literary Criticism
Major approaches and critical assumptions in the history of literary criticism; special attention to critical movements since 1930. Prerequisite: ENGL 120; 220-21 recommended. One semester, 3 credits.

383* Asian Literature
Masterpieces, ancient and modern, of Asian literature—including philosophical writings, poetry, drama, short stories, and novels—from classics such as the Analects of Confucius to contemporaries such as Kobo Abe and Bharati Mukherjee. This class will focus on two or three of the following areas: India, China, Japan, and the Middle East. Prerequisite: ENGL 120. One semester, 3 credits.

284* Quaker Writers
An examination of the lives and works of writers who are Quakers, including Jan de Hartog, Jessamyn West, and John Greenleaf Whittier, as well as such seminal Quaker thinkers as George Fox and Lucretia Mott. Prerequisite: ENGL 120. January, 4 credits.

386* Satire
The main currents, techniques, and purposes of satire from ancient Greece to the present. Prerequisite: ENGL 120. One semester, 3 credits.
387* Science Fiction
A reading and viewing of science fiction from H.G. Wells to Octavia Butler in historical, thematic, stylistic, and socio-political terms. Prerequisite: ENGL 120. January, 4 credits.

390* Selected Topics in English and American Literature
Advanced study in a major figure or movement. Permission required. One semester or January, 3-4 credits. May be repeated for credit.

395 Directed Studies
Credit and time arranged. Permission required. May be repeated for credit.

420 Preceptorship: Teaching Literature
Collaboration with professors in teaching introductory literature courses. For advanced majors interested in the theory and practice of teaching literature. Requires attendance at the relevant course (120, 220 or 221) and intensive work with the instructor. Prerequisites: ENGL 120 and instructor permission. One semester, 1 credit. May be repeated for credit.

V. CAPSTONE COURSES AND PAPER IN THE MAJOR
Majors are required to take these two courses during their senior year. Senior Seminars may require prerequisites to ensure preparation for advanced work in the area. Students should consult their advisors at least two years in advance to select, then prepare for, an appropriate seminar.

400 Critical Procedures in Language and Literature
Consideration of the major theoretical positions in contemporary criticism with their application to selected literary texts. Designed for senior English majors. The portfolio produced in this course satisfies the Paper-in-the-Major college writing requirement for English majors. Permission required. One semester, 3 credits. (Same as REL 365.)

410 Senior Seminar
Intensive study of a particular figure or topic, for seniors. Prerequisites as appropriate to the subject. Permission required. May be repeated for credit. One semester or January, 3 credits.
Environmental Science is an emerging interdisciplinary approach to examining the environmental problems that human society is currently facing on Earth; among them understanding the implications of global climate change, costs and benefits of maintaining biodiversity, the handling and disposal of hazardous materials, and managing risks associated with large scale natural phenomena such as earthquakes, floods, and fires. The strength of the approach of environmental scientists to these issues is reflected in the interdisciplinary nature of the environmental science curriculum at Whittier College. The Environmental Science curriculum is based on a balance between the in-depth knowledge needed to tackle difficult problems and the breadth necessary to view the problems from multiple perspectives.

Guidelines for a Major in Environmental Science

Students must complete the following 55-57 credits in environmental science, biology, chemistry, earth science, and physics to be awarded a B.A. in Environmental Science from Whittier College:

Environmental Sciences Courses
Introduction to Environmental Science, ENVS 100, 4 credits

Biology Courses
Life Science, BIOL 195, 4 credits
Plant Form and Function, BIOL 205, 4 credits
Conservation Biology, BIOL 379, 4 credits
  Or Marine Biology, BIOL 384, 4 credits

Earth Sciences Courses
Earth Systems: The Solid Earth, ES 100, 4 credits
  Or Earthquakes, Volcanoes, and Other Geohazards, ES 110, 4 credits
Earth Surface Environments, ES 105, 4 credits
Earth Materials, ES 200, 4 credits
Structure of the Earth, ES 440, 4 credits
Water Resources, ES 470, 4 credits

Chemistry, Physics, and Math Courses
General Chemistry I, CHEM 110A, 4 credits
General Chemistry II, CHEM 110B, 4 credits
  Or Environmental Chemistry, CHEM 282, 3 credits
Introduction to Mechanics and Electromagnetism, PHYS 131, 5 credits
  Or Introductory Kinematics and Mechanics, PHYS 150, 4 credits
Precalculus, MATH 85, 4 credits
  Or any higher level math course such as MATH 141.

**Historical Context Course**
Evolutionary Biology, BIOL 445, 4 credits
  Or Global Change and Earth History, ES 230, 4 credits

**GUIDELINES FOR A MINOR IN ENVIRONMENTAL SCIENCE**
The minor in environmental science is designed for students from all academic disciplines who wish to be informed about the environment and environmental issues. To be awarded a minor in environmental science from Whittier College, students must complete the following courses.

Introduction to Environmental Science, ENVS 100, 4 credits
Life Science, BIOL 195
Earth Systems: The Solid Earth, ES 100, 4 credits
  Or Earthquakes, Volcanoes, and Other Geohazards, ES 110, 4 credits
  Or Earth Surface Environments, ES 105, 4 credits
Evolutionary Biology, BIOL 445, 4 credits
  Or Global Change and Earth History, ES 230, 4 credits
Upper-division (300 level or higher) coursework in the science division, 3 credits.

**GUIDELINES FOR A MINOR IN EARTH SCIENCE**
Earth Surface Environments, ES 105, 4 credits
Earth Systems: The Solid Earth, ES 100, 4 credits
  Or Earthquakes, Volcanoes, and other Geohazards, ES 110, 4 credits.
Geographic Information Systems, ES 140, 4 credits
  Or 3-4 Credits of Directed Study, ES 495, 3-4 credits
Students must take eight (8) additional credit hours in ES. At least one course must have a significant field component, and at least one must be a 200 or higher level course. Students should contact the Environmental Sciences department for more information.

**COURSE DESCRIPTIONS**

**ENVIRONMENTAL SCIENCE**

**ENVS 50 Environmental Science Colloquium**
Weekly colloquia from scientists engaged in study of the environment as well as various stakeholders in environmental issues. Students interested in environmental science and/or environmental issues are encouraged to attend colloquia. Seniors will normally give a colloquium presentation as part of the paper in the major requirement. 1 credit, can be repeated for credit.

**ENVS 100 Introduction to Environmental Science**
An introduction to the field of environmental science, examined from multiple perspectives: biology, earth sciences, chemistry, and physics. The class focuses on the contributions these different disciplines make to the diagnosis and solution of environmental problems, with an emphasis on the interdisciplinary nature of these issues. 4 credits.

*Offered occasionally when demand is sufficient.
ENVIRONMENTAL SCIENCE

EARTH SCIENCES

100 Earth Systems: The Solid Earth
An introduction to the planet Earth, emphasizing the fundamental Earth materials and the deep-Earth processes that formed them. Focuses on shifting continents, earthquakes, volcanoes, the origin of extractable resources, and the geological perspective on changes occurring below the surface. Lectures and laboratory. One semester, 4 credits.

105 Earth Surface Environments
An introduction to processes at the Earth's surface. The class explores the global weather and climate systems, the role of water in the environment, and processes that shape the surface of the Earth. The class provides basic information on the physical processes maintaining the environment in which life exists. Special topics include global climate change, the greenhouse effect, tornadoes, hurricanes, el nino, floods, landslides, and a survey of glacial, coastal, and stream environments. Lectures and laboratory. One semester, 4 credits.

110 Earthquakes, Volcanoes & Other Geohazards
Earthquakes and Volcanoes are awe-inspiring manifestations of the forces that shape our planet. The study of these phenomena enhances our appreciation for their beauty and enables us to minimize their destructiveness. Through the investigation of these and other geohazards, we will examine the current state of knowledge concerning the origin and structure of our planet and learn to see the Earth as a dynamic and ever-changing system. Lectures and laboratory. One semester, 4 credits.

140 Geographic Information Systems*
Introduction to GIS, a map-based database administration and analysis tool. Multiple types of information are referenced by geographic location and stored in overlying data layers. These multiple layers can be queried, combined to calculate new data layers, and interpreted with respect to spatial location. Results are graphically displayed in the form of maps. The class includes a brief introduction to cartographic methods. Prerequisites: instructor's permission. One semester, 4 credits.

180 Integrated Field Science
The geologic history, structure and geomorphology of both the Grand Canyon and Death Valley National parks will be explored, first in the class room and then in the field. Human impact on these parks will be considered and experienced. Each week of intensive on-campus classroom instruction will be followed by a weeklong camping trip to the national park, where as a group we will use our combined skills to decipher the mysteries of the Earth. Prerequisite: any introductory lab science class and instructor's permission. January, 4 credits.

200 Earth Materials
Identification and interpretation of naturally occurring solid Earth materials. Emphasis on the analysis of the chemistry and internal ordering of Earth materials in order to understand and predict their behavior, stability, and occurrence. Lectures and laboratory. Prerequisite: ES 100 or ES 110. One semester, 4 credits.

230 Global Change & Earth History
Examination of the geologic history of the Earth and the evolution of fossil life forms provides a unique perspective for examination of global environmental change. The profound depth of geologic time offers a meaningful context for modern decision making. Prerequisite: any introductory lab science class. One semester, 4 credits.

310 Surficial Processes and Landforms*
An examination of the agents and processes that shape the Earth's surface and the results of their work. Emphasizes process-response models for natural and human alteration of landscapes. Lectures and laboratory. Prerequisite: ES 105 and either ES 100 or ES 110. One semester, 4 credits.

420 Geochemistry*
An introduction to the chemistry of solid and liquid Earth material. Geochemical data and methods of analysis are used as tools in the study of hydrologic systems, crystalline rocks, and hydrothermal ore deposits. Attention given to the use of trace elements and isotopes as indicators of geological processes and as means of evaluating groundwater contamination. Lectures and laboratory. Prerequisites: ES 105 and either ES 100 or ES 110. One semester, 4 credits.

*Offered occasionally when demand is sufficient.
**430 Sedimentary Processes and Products**
An introduction to physical, chemical, and biochemical sedimentary processes and products. The focus is on sedimentary materials as records of the Earth's history, as reservoirs for fluid resources (water, oil, and gas), and as repositories for wastes. Lectures and laboratory. Prerequisites: ES 105 and either ES 100 or ES 110. One semester, 4 credits.

**470 Water Resources**
Principles of atmospheric, surface, and subsurface water circulation. Examines the physical, chemical, and geologic aspects of water resources. The class focuses on the calculation of water budgets at the watershed scale. Special topics include flood hydrology and surface flow mechanics. Lectures and laboratory. Prerequisite: ES 105 and either ES 100 or ES 110. One semester, 4 credits.

**440 Structure of the Earth**
Analysis of the behavior of Earth materials under both localized and regional stress, and the identification of the resulting structures. Measurements in field and the laboratory contribute to analytical and conceptual treatments of mountain-building, plate motions, and the continental growth. Lectures and laboratory. Prerequisite: ES 105 and either ES 100 or ES 110. One semester, 4 credits.
FOREIGN STUDY PROGRAMS

WHITTIER-IN-COPENHAGEN
Whittier has participated in Denmark’s International Study Program since 1959. Each fall, Whittier students study in Copenhagen with Danish professors teaching Whittier courses in the English language. A member of the college faculty accompanies the group as counselor, administrator, and instructor. Students live with Danish families and participate in organized tours. An updated copy of the Copenhagen course listings can be obtained in the Foreign Studies Office.

WHITTIER-IN-SOUTH INDIA
Whittier participates in an intercollegiate consortium with eight other premier liberal arts colleges to support a semester of study in South India, under the auspices of South India Term Abroad located in the city of Madurai, Tamil Nadu. The program is designed for undergraduates with a broad interest in South India.

WHITTIER-IN-SEVILLE
Whittier is affiliated with the Center for Cross-Cultural Study program in Seville, Spain. The program provides students with the opportunity to develop or enhance their fluency in the Spanish language while immersing themselves in Spanish culture and society.

OTHER PROGRAMS
Whittier also offers opportunities for international study in over 30 countries at more than 70 locations in Africa, Asia, Australia, Europe, and Latin America through affiliations with a variety of academic institutions and has exchange agreements with specific universities in Australia, China, and Japan.

Students participating in international study programs must petition the Registrar, prior to their participation, to have appropriate courses counted toward Liberal Education requirements. Students interested in studying abroad should see the Director of Foreign Studies in the Office of International Programs.
### ADDITIONAL COUNTRIES

Programs are currently available in the following countries:

<table>
<thead>
<tr>
<th>Country</th>
<th>Country</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>England</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Australia</td>
<td>France</td>
<td>New Zealand</td>
</tr>
<tr>
<td>Austria</td>
<td>Germany</td>
<td>Poland</td>
</tr>
<tr>
<td>Chile</td>
<td>Greece</td>
<td>Russia</td>
</tr>
<tr>
<td>China</td>
<td>Hungary</td>
<td>Scotland</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>India</td>
<td>South Africa</td>
</tr>
<tr>
<td>Cuba</td>
<td>Ireland</td>
<td>Spain</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Israel</td>
<td>Sweden</td>
</tr>
<tr>
<td>Denmark</td>
<td>Italy</td>
<td>Thailand</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Japan</td>
<td>Wales</td>
</tr>
<tr>
<td>Egypt</td>
<td>Mexico</td>
<td></td>
</tr>
</tbody>
</table>
Gender and Women's Studies, distinguished by its interdisciplinary nature, brings together faculty and students who share an interest in studying and producing theory and research about women's experiences. This interdisciplinary approach leads students to a critical perspective and enables them to understand better historical and contemporary relations of power and gender. By employing different methodologies and by considering questions regarding gender within different disciplines, students achieve an understanding of the complexity and the wholeness of human experience. Sex, sexuality, and gender are examined as biological, psychological, historical, and cultural phenomena. Special emphasis is placed on the nature of gender as a social construction varying with respect to time, place, and context. Finally, students are exposed to new scholarship on women and are encouraged to engage critically with feminist theories and practices.

A gender and women's studies minor is useful preparation for professional and postgraduate work in a variety of fields. On a personal level, it enhances the human potential of both women and men by questioning and redefining societal values and encouraging them to work toward greater equality.

Requirements for a Minor in Gender and Women's Studies
18 credits of course work, including:

Required Course:
- Feminist Social Theory, SOC 406, 3 credits OR
- Feminist Philosophy, PHIL 385, 3 credits

At least 2 Introductory Courses:
- Women and the Visual Arts, ART 207, 3 credits
- The Role of Science in Defining Gender, BIOL 190/INTD 215, 3 credits
- Introduction to Lifespan Development, CHDV 105, 3 credits
- Philosophy of Love and Sex, PHIL 260, 3 credits
- Women and Religion, REL 253, 3 credits
- Gender, Ethics and Religion, REL 253, 3 credits
- Race, Class and Gender, SOC 202, 3 credits
At least 2 Upper Division Courses:

- Male and Female, ANTH 327, 3 credits
- Senior Seminar in Child Development, CHDV 497, 3 credits
- Women in the Labor Force, ECON 355, 3 credits
- Women's Portraits/Portraits de Femmes, FREN 475, 3 credits
- Women and Gender in the United States, HIST 309, 3 credits
- Women in Modern Europe, HIST 390, 3 credits
- Seminar on Human Rights, PLSC 480, 3 credits
- Psychology of Women, PSYC 364, 3 credits
- Radicals and Reformers: Women, Religion and Social Change, REL 341, 3 credits
- Sociology of Gender, SOC 389, 3 credits
- The Mexican Muse/La Musa Mexicana, SPAN 190/390, 3 credits
- Latin American Women Writers, SPAN 290/490, 3 credits
- Cinema, Culture and Literature, SPAN 483, 3 credits
The Department of History offers a curriculum that is global in its approach and integral to a liberal arts education. The history major enables students to understand human beings and institutions around the world through the study of the human past. It encourages students to understand themselves and their multiple communities through comparison with cultures of other times and places. In a world that is increasingly interconnected, the study of history thus is a particularly apt way for students to understand both how the world we live in came to be, and their place in it. Indeed, the department strives to place all national and local histories into a global context.

Reflecting the department's commitment to providing an education fit for a global world, a seven-course sequence begins in the freshman year with an “Introduction to World History,” and ends with a capstone seminar. An additional three courses in one world area adds depth, and at least one course in four other world areas contributes breadth of knowledge about the world.

History 101 (Introduction to World History) serves as prerequisite for 300-level courses, as do 200-level courses in the relevant world areas; these courses should be taken in the freshman and sophomore years (for specific prerequisites, see the course listings on the following pages). Students planning a History major should take History 280 (History and Theory) in the sophomore year, and History 380 (Historical Methods) in the junior year.

To help prepare students for the world of work or for graduate school, the History curriculum offers two additional opportunities. Preceptorships (History 60 and 61) offer a special opportunity for junior and senior History majors to work with faculty in the teaching of introductory courses. The Preceptorships are especially useful for students intending to pursue either a graduate degree or a career in secondary school teaching, although they are open to all majors. Through its Internships (History 50), the History department offers opportunities for students to gain work experience.

**GUIDELINES FOR A MAJOR IN HISTORY**

A minimum of 30 credits:

1. **Foundation courses** (four courses, 12 credits)
   - Introduction to World History, HIST 101, 3 credits
   - The U.S. to 1877, HIST 206, 3 credits
   - The U.S. Since 1877, HIST 207, 3 credits
   - One additional 200-level course, 3 credits
II. Theory and Methods Seminars (three courses, 7 credits)

**History and Theory**, HIST 280, 3 credits

**Historical Methods**, HIST 380, 3 credits

Either **Internship**, HIST 50, 1 credit

or **Preceptorship in World History**, HIST 60, 1 credit

or **Preceptorship in U.S. History**, HIST 61, 1 credit

III. Breadth

At least one course in four world areas, (Africa; Asia; Europe; Latin America; and United States) 9-12 credits.

IV Depth

Three 300-level courses in one world area, 9 credits

V. Capstone Seminar, HIST 480, 3 credits

Recommended:

A course in statistics

Two to four years of a foreign language

Study abroad

**Requirements for a Minor in History**

A minimum of 18 credits, including either History 280 or 380, and at least one course in two of the following world areas: Africa; Asia; Europe; Latin America; United States.

**Course Descriptions**

**Foundation Courses**

101 *Introduction to World History*

A history of the world from the Neolithic revolution to modern times. Topics covered include: the invention of agriculture and the rise of early civilizations in the Fertile Crescent, Egypt, Asia, and Meso-America; early Greco-Roman, Indian, and Chinese classical civilizations; in the Middle Ages (ca. 300-1000 c.e.) the rise of Islam and the Arabic world, the medieval world in Western Europe, and the Chinese empire; the Mongol conquest and Eurasian empire; the rise of Western Europe and its offshoots, Russia and the United States; India under British rule and since independence; post-Columbian Latin America; the history of sub-Saharan Africa; and revolution and imperialism in East Asia. One semester, 3 credits.

201 *Western Civilization since the Seventeenth Century*

The development of Western civilization in the Age of Reason, the Enlightenment and the more recent ages of Revolution, Romanticism, Imperialism, and World Wars. One semester, 3 credits.

206 *United States to 1865*

Origins and early national development of the United States to the end of Reconstruction; development of the American people, growth of nationalism, rise of democracy, and divisiveness of Civil War. One semester, 3 credits.

207 *United States since 1865*

National development from Reconstruction to the Reagan era. Explores industrialization, urbanization, foreign policy, domestic politics, and social trends and movements. One semester, 3 credits.

*Not offered every year*
220 East Asian Civilizations
The development of East Asian civilizations, primarily China and Japan, from earliest times to the present, emphasizing the relationships among social, economic, political, and intellectual institutions. One semester, 3 credits.

230 Introduction to African History
A history of Africa from prehistory through the present. One semester, 3 credits.

232 Southern Africa
This course will concentrate on the economic, political, and social processes that have characterized the history of southern Africa since the 17th century. While South Africa has dominated much of this area more recently, the region as a whole forms a single economic zone. Consequently, many historical processes may be best understood through a consideration of events that took place throughout southern Africa. The course will cover the entire region but will draw most often on examples from South Africa, Mozambique, and Zimbabwe. One semester, 3 credits.

242 Introduction to Latin America
Latin America from pre-Columbian times to the 1820s; topical treatment of historical developments and trends basic to understanding the colonial period of Latin American history. One semester, 3 credits.

246 South America
A comparative history of Argentina, Brazil, and Peru, focusing on their differences in the time period from 1800 to the present. One semester, 3 credits.

WORLD AREAS

ASIA

321 Imperial China
China from earliest times to the 19th Century; emphasizes the major social, economic, and political developments of the imperial period. Prerequisite: 101 or 220. One semester, 3 credits.

323* Modern China
History of revolution in modern China, 1850-1949; the impact of imperialism on traditional Chinese society, the Taiping Revolution of the mid-19th Century, revolutionary development in the early 20th Century; history of the Chinese Communist movement from 1921 to 1949; and history of the People's Republic of China. Prerequisite: 101 or 220. One semester, 3 credits.

329* Modern Japan
Major social, political, economic and intellectual developments in Japan from the 17th Century to the post-World War II era; the transition of Japan from a traditional to a modern society; the nature and social costs of Japanese capitalism; the expansionist thrust; the breakdown of the state in the 1920s and 1930s. Prerequisite: 101 or 220. One semester, 3 credits.

EUROPE

360 Women and Gender in Modern Europe
An exploration of the lived realities of women's life and the changing relations between the sexes from the French Revolution to the present. Themes include separate spheres, cultural construction of gender and motherhood, women's changing economic roles, conflicts in class and empire, and discourses of/on femininity. Prerequisite: 101 or 201. One semester, 3 credits.

362* European City
This course is designed to introduce students to the development and the changing character of European cities in the modern era. We will discuss how and why cities were built and rebuilt, how they were represented and understood - in art as well as in social theory - as places of both danger and possibility, how people lived in them and moved through them, how different social groups at different moments

*Not offered every year
were granted, or seized, access to the urban environment, and how cities were understood as causing social problems and changing social behaviors. One semester, 3 credits.

363* Socialism and Revolution in Modern Europe
This course is designed to explore the relationship - both theoretical and practical - between socialism and revolution. We will begin with the radical idealism of the French Revolution, and continue with the French and British utopian socialists of the 1830s and 1840s, who dreamt of creating the perfect society composed of productive and fulfilled human beings, and whose utopian ideas influenced the European revolutions of 1830 and 1848. The course will then follow socialism and revolution in Europe through the development of Marxism and Marxist political organizations, worker struggle, unionization, anarchism, the Paris Commune of 1871, the Russian Revolution of 1917, and the German Revolution of 1918. Finally, we will examine the implementation of socialism as the ruling politics of France, Germany, and Italy in the period from the 1950s to the 1980s. One semester, 3 credits.

364* Modern France, 1789-present
This course is designed to explore French history from the French Revolution to the present. This period has seen four revolutions, numerous rebellions, two emperors, and five republics, as well as the "modernization" of French society and culture. We will examine political and class conflicts, the French role in the "scramble for Africa," as well as questions of nationalism and identity. How did France construct itself as a unified nation? What role did "revolution" play in French national identity, and how has the modern nation of France confronted its revolutionary past? What does it mean to be French, and how does this constrain politics, culture, and daily life?

365 Germany Since 1870
Modern Germany was born with the unification by Bismarck of German territories in 1870. This course follows German people and their politics from 1870 to 1991, through the German Empire, World Wars I & II, Hitler and the Holocaust, the division of Germany into two nations in 1945 and its reunification after the fall of Communism 1989. Prerequisite: 101 or 201. One semester, 3 credits.

LATIN AMERICA
340* Colonial Spanish America
Spain's American Empire, including pre-Columbian civilizations, Hispanic background, discovery and colonization; Spanish America's political, economic, and social institutions; independence movements. Prerequisite: 101 or 242. One semester, 3 credits.

347 Modern Mexico
The course is designed to help the student understand the history of Modern Mexico from the 1880s to the 1990s. Of particular importance are topics such as revolution, state formation, modernization, identity, immigration and cultural formations and practices.

348 U.S.-Mexico Border Studies
The course is designed to help students understand the history of the US-Mexican border from its creation in the mid-19th century to the beginning of the 21st century. Particular attention is paid to how the creation of a boundary between these two countries creates political, social, and economic spaces that promote cultural formations and human endeavors that are hybrid amalgamations with many (often-conflicting) sources of inspiration. One semester, 3 credits.

UNITED STATES
300 Colonial America
The European, Native American, and African backgrounds, experiences, and evolving institutions of the English colonies in North
America from the initial contact of peoples to the establishment of a mature provincial society. Prerequisite: 206. One semester, 3 credits.

301* The American Revolution
Origins, progress, and character of the struggle against Great Britain, internal developments, problems of the "critical period," and the making of the Constitution. Satisfies the state teaching credential requirements in the American Constitution. Prerequisite: 206. One semester, 3 credits.

304 A Nation Divided, 1820-1865
An examination of antebellum America, the causes of the Civil War, and the War itself. Prerequisite: 206. One semester, 3 credits.

306* Recent United States
The history of the United States from World War 2 to the present, emphasizing social and culture developments, domestic politics, and foreign policy. Prerequisite: 207 or consent of instructor. One semester, 3 credits.

309* Women and Gender in the U.S.
Historical investigation of gender ideologies and women's experiences in the U.S. with a focus on economic, political, and social history. Prerequisite: 207. One semester, 3 credits.

317* California
California from pre-Spanish times to the present; stresses political, economic, and social developments. Prerequisite: 206 or 207. One semester, 3 credits.

THEORY AND METHODS SEMINARS

50 Internship
For majors not going into the teaching profession, professionally supervised work in positions utilizing skills and knowledge developed as a history major. Permission. May be repeated only once for credit. One semester, 1-3 credits.

60 Preceptorship in World History
A one-semester course taken in the junior or senior year designed to engage students in the theory and practice of teaching world history. For those students intending to teach secondary school or to enter a graduate program in history, students in the preceptorship will work closely with the faculty who teach the foundation courses. Prerequisite: Junior standing and 101. One semester, 1 credit.

61 Preceptorship in U.S. History
A one-semester course taken in the junior or senior year designed to engage students in the theory and practice of teaching U.S. history. For those students intending to teach secondary school or to enter a graduate program in history, students in the preceptorship will work closely with the faculty who teach the foundation courses. Prerequisite: Junior standing and 206 or 207. One semester, 1 credit.

280 History and Theory
How do historians know what happened in the past? Can they know? What are the most important ways in which historians approach understanding and interpreting the past? This seminar explores those questions through reading and discussing significant works by and about historians, with the focus on currently practicing historians. Prerequisite: 101 or any other 200-level course. One semester, 3 credits.

*Not offered every year
380 Historical Methods
Introduction to methods of historical research and writing. For those pursuing a history major and others interested in developing basic skills. Prerequisite: 280. One semester, 3 credits.

480 Capstone Seminar
Significant contributions to the history and theory of the processes creating the modern world are read and discussed. For history majors and others in the social sciences or humanities. Prerequisites: 280 and 380. One semester, 3 credits.

390, 490 Selected Topics in History
Variable credits. Permission. May be repeated for credit.

395, 495 Directed Studies
Credit and time arranged. Permission. May be repeated for credit.

*Not offered every year
INTERDISCIPLINARY COURSES

11 Quaker Campus Workshop
Experience working on the student newspaper, The Quaker Campus. Writing articles, editing copy, doing layout and design, taking photographs, and learning about issues in journalism. May be repeated for credit. One semester, 1 credit.

12 Acropolis Workshop
Experience working on the yearbook, The Acropolis. Editing and writing copy, doing layout and design, taking photographs, and learning business management skills. May be repeated for credit. One semester, 1 credit.

13 Career Planning for Undecided Students
An introduction to career-life planning. The course focuses on self-assessment, exploration of career and college majors, career decision making, exploration of internships and career preparation. The course is recommended for freshman and sophomore students who are undecided about their academic major and/or future career options. One semester, 1 credit.

14 Career Planning
Career-life planning course for students interested in defining their career goals and preparing for graduate school/job search. The course focuses on career selection, career and graduate school preparation and job search strategies. The course is recommended for sophomores, juniors and seniors. One semester, 1 credit.

15 Leadership and College Student Development
Personal development; interpersonal skills; peer-counseling; student development; assertiveness; values exploration; leadership and program development skills; and special issues related to college students in residence. Open to all students, but those interested in applying for a Residential Life staff position must enroll in course. One semester, 1 credit.

25 Jazz Ensemble
Holds weekly rehearsals (seminars) and is designed to give students an opportunity to study and perform techniques and styles of jazz. The ensemble will focus on the development of instrumental improvisation, blues interpretation, and the memorization of classic jazz standards. Contemporary musical concepts and terminology will also be examined. Emphasis will be placed on a jazz combo (small group) setting. One semester, 1 credit.

33 Teaching Composition
This course is designed to provide training in the techniques of teaching secondary and college-level writing. Students will follow the progress of the instructor's ongoing Freshman Writing Seminar from the initial, "diagnostic" essay to the final research paper, learning how the instructor structures a writing course through both reading and writing assignments and classroom exercises, as well as techniques of individual tutoring. This course is required training for students who wish to work at the Campus Writing Center, students interested in secondary and college-level teaching would also find it helpful. May be repeated for credit. One semester, 1 credit.

53 Introduction to Radio Broadcasting
Experience working as a Disc Jockey at KWTR, the campus radio station. Select and introduce music, operate broadcast equipment, read promotional announcements, complete program logs, and generate listenership and income for the station. Learn about the issues facing radio and the recording industry. May be repeated for credit. One semester, 1 credit.

54 Radio Station Management
Learn to manage KWTR, the campus radio station. Supervise and schedule DJ's; work with record companies to obtain material for airplay; report playlists to appropriate music journals and record companies; solicit promotional

*Not offered every year
material from record companies, concert venues, and other prospects; learn about the technical aspects of station operation and licensing; create policies to generate listenership. May be repeated for credit. One semester, 1 credit.

60 Succeeding in College
This course is designed to assist students in discovering how to obtain a successful college experience both academically and personally. Emphasis is placed upon the development of practical knowledge and skills including: time planning, communication skills, study techniques, critical thinking skills, community and campus resources, and managing the personal and relationship issues that face many college students. One semester, 1 credit.

90* Introductory Writing Seminar
Students learn critical reading skills for college level texts. These texts are the basis for assignments which teach fundamental college writing skills: thesis development, organization of ideas, basic argumentation and exposition, and mechanics. Emphasis is placed on helping each student develop a viable writing process. One semester, 3 credits.

100 Seminar: Introduction to College Writing
Students read complex texts chosen to sharpen students' critical reading and thinking skills. Texts frame a central course theme. Writing assignment based on these texts are designed to teach and practice persuasion, description, narration, exposition, and research-based writing, as well as writing under pressure of time. Extensive revision is emphasized. Prerequisites: INTD 90 or permission based on SAT verbal and high school GPA scores. One semester, 3 credits.

101*, 102 The Western Mind I,II
This sequence is a survey of the artistic, philosophical, religious, and scientific history of Western Civilization from the Greeks and Hebrews to the 20th Century. Rather than giving more or less equal coverage to all periods, the course is structured around the periods and places within which there was the initial articulation or testing of major concepts, values, and institutions, such as Athens in the 5th century B.C. and Paris in the 13th century. Through both semesters, the goal is to provide a basis for understanding such ambiguous terms as “order,” “classicism,” “realism,” “romanticism,” “reason,” and “naturalism.” Two semesters, 3 credits each.

106* Introduction to Mass Media
Possible topics include history of the print media; history of broadcasting; the workings and function of newspapers, books, radio, television, advertising, and public relations; legal and ethical issues facing the mass media, and ownership and control of the media. One semester, 3 credits.

110* Introduction to The Quaker Campus
Possible topics include identifying The Quaker Campus audience; what makes news; where are the campus sources for news; how to interview and cover assignments; how to start writing and structure the information; legal and ethical issues in journalism; how to verify a story. Each student will also be assigned stories to report and write. One semester, 3 credits.

200 Integrative Course for Women's Studies
An introduction to basic Women's Studies, concepts and theories, drawing on methodologies and content of multiple disciplines. The course will explore differences as well as commonalities of women's experiences and will provide a foundation for more advanced work in Women's Studies. One semester, 3 credits.

216 Population Problems and Policy
This course provides an opportunity to develop quantitative skills in the analysis of population processes and in the formulation of policies attempting to intervene in these processes or to take them into consideration within other public and private sector policy arenas. The course will be of particular relevance to those interested in actuarial science, in environmental sustainability, in social policy, and in urban and other governmental and service planning processes. We examine the necessity, techniques, and precariousness of demographic projections.

*Not offered every year
in such arenas. The course will assume prior completion of the Quantitative Reasoning (QR) and Introductory Laboratory Science (ILS) requirements, or their equivalence for WSP and transfer students. Crosslisted with Sociology 358. One semester, 4 credits.

217 Search for Extraterrestrial Life
Does life exist elsewhere in the universe? This course examines this question in detail, from the possibility of fossil bacteria existing on Mars to the possibility of advanced races colonizing the galaxy. Topics studied include: the detection of planets around other stars, the evolution of life and intelligence on Earth, the search for life in our Solar System, radio astronomical searches for extraterrestrial intelligence, and UFO and alien abduction phenomena. One semester, 4 credits.

219 AIDS and Other Human Diseases
The course examines AIDS from a biological, sociological, and economic viewpoint. The biology focuses on the cause of AIDS, the impact of AIDS on the human body, and the current treatments for the disease. The course then focuses on the factors that have made AIDS such a widespread disease in Africa and the economic and sociologic impact of the disease in various countries in Africa. Finally the course explores other human diseases such as cancer, heart disease, and other diseases of interest to students. One semester, 4 credits.

220 Role Of Science In Defining Gender
This course discusses both the scientific theory and the cultural history that underlie the relationship between science and gender. Few cultural historians would argue that gender has not played a role in determining who becomes a scientist and therefore “speaks for science”. Few scientists would disagree with the idea that an individual's role in reproduction, one aspect of gender, is related to the behavior, form and evolutionary constraints that define an individual. However, few historians and even fewer scientists have examined this circular relationship between the practice of science and the definition of gender—that is what this course seeks to do in part using feminist theory as a series of lenses through which the relationship between gender and science can be viewed. One semester, 4 credits.

222 I Want a New Drug
This class investigates the impact of pharmaceutical medicines on society. Starting with a history of Western, Chinese, Ancient and Aztec medicines, we discover that all cultures use drugs as a method of treating illness. In order to understand the effects of drugs on illness, we investigate the science behind health and illness and how drugs specifically interact with the human body. We will also investigate the discovery, development, testing and marketing of pharmaceutical medicines, including discussions on animal testing, human clinical trials, the genetic revolution and the economics of medicine. We will conclude the course with a discussion on the science and ethics of the future of medicine through an investigation of cloning, genetic engineering, genetic testing and gene therapy. One semester, 4 credits.

223 Environmental Issues
An examination of some of the main areas of environmental science, including human population, land and its use, food, water, energy, mineral resources, pollution, and global change. One semester, 4 credits.

224 Artificial Reproductive Technology
This course investigates how normal human reproduction occurs and the intervention by modern medical techniques in the production of offspring. Terminology such as artificial insemination, in vitro fertilization, gamete intra-fallopian transfer, intra-cytoplasmic sperm injection, and surrogacy become meaningful on many levels. Basic mathematics (fractions) are used to predict expected offspring, while one type of statistics (Chi-Square) is applied to determine if the observed distribution of offspring is within expected limits; and algebraic expansions of equations like $p^2 + q^2 = 1$ help solve problems associated with changes in the gene pool. Guest lecturers have presented bioethical considerations, and have examined the effect that artificial reproductive
technologies have had on the growth and sociology of populations. One semester, 4 credits.

**225, 226 Arabs and Muslims**
The course traces the rise of Islam from Mohammed to the Ottoman Empire, along with analyses of the contemporary scene in the Arab World. Two semesters, 3 credits each.

**241* Sport, Play, and Ritual**
This course attempts to study the role of sport, play, and leisure in the religious life of the individual and the community at large. Some of the important questions to be investigated are: What role does sport play in spiritual life? Is it making life more meaningful? What does this mean to contemporary religion? January, 4 credits.

**345 An Introduction to Denmark**
An introduction to life in Denmark, Danish history, politics, economics, culture, social policy and life-style, as preparation for a semester in Copenhagen. One semester, 1 credit.

**NATURAL SCIENCE**

**200* Physical Science for Teachers**
An introductory course covering the basic principles of the physical sciences, with emphasis on the fields of chemistry and physics. Designed for students who are obtaining a Multiple Subjects Credential. Prerequisite: EDUC 402 or CHDV 105 or concurrent enrollment. One semester, 2 credits.
The International Studies major allows students to explore international issues from a broader perspective than that of a single discipline. The major is appropriate for students who wish to pursue careers in international business, government, nonprofit settings, law, or journalism or to pursue graduate study in such fields as economics, history, political science, and anthropology. The program includes a broad overview of international and comparative studies and the development of relevant analytical skills through core courses in anthropology, economics, political science, and related disciplines. These disciplinary perspectives are complemented by courses, language acquisition, and study abroad relevant to a selected region (East Asia, Europe, or Latin America). A Senior Project serves to integrate the various aspects of the major. A minor in a related discipline is encouraged as a complement to the International Studies major.

GUIDELINES FOR A MAJOR IN INTERNATIONAL STUDIES

I. General Core Courses
   A. Required courses:
      - Peoples of the World, ANTH 210, 211, 213, 214, 3 credits
      - International Economics, ECON 380, 3 credits
      - International Relations, PLSC 220, 3 credits
   B. Elective Courses in International, Comparative, and Theoretical Perspectives:
      At least nine credits from at least two disciplines are to be taken from among the following. Students are encouraged to include ECON 383 and/or PLSC 240.
      - Myth, Symbol, and Meaning, ANTH 307, 3 credits
      - Male and Female, ANTH 327, 3 credits
      - Child in Other Cultures, ANTH 374, 3 credits
      - Managing Multinational Corporations, BSAD 333, 4 credits.
      - International Business, BSAD 350, 3 credits.
      - International Marketing, BSAD 423, 3 credits
      - Intermediate Macro Theory, ECON 300, 3 credits
      - History of Economic Thought, ECON 315, 3 credits
      - Comparative Economic Systems, ECON 383, 3 credits
      - History and Theory Seminar, HIST 483, 3 credits
      - Contemporary Social Philosophy, PHIL 340, 3 credits
      - Model UN Conference, PLSC 28, 1-2 credits
      - Comparative Politics, PLSC 240, 3 credits
      - Warfare: In Pursuit of Military Security, PLSC 365, 4 credits
      - Seminar in International Relations, PLSC 420, 2-3 credits
International Studies

Military Strategy and Arms Control, PLSC 430, 3 credits
Seminar in Political Theory, PLSC 480, 2-3 credits
Contemporary Ethical Issues, REL 340, 3 credits
Modern Society, SOC 350, 3 credits
Social Class and Inequality, SOC 352, 3 credits
Comparative Urban Development, SOC 356, 3 credits
Population Problems and Policy, SOC 358, 3 credits
Social Theory in Social Context, SOC 402, 3 credits

C. Research Methodology from Selected Discipline:
   At least one course to be taken from among the following, preferably prior to Study Abroad.
   Field Research: Crossing Cultural Boundaries, ANTH 311, 3-4 credits
   Introduction to Econometrics, ECON 305, 3 credits
   Current Economic Problems, ECON 330, 4 credits
   Critical Procedures in Language and Literature, ENGL 400, 3 credits
   Historical Methods, HIST 380, 3 credits
   Political Methodology and Serious Games, PLSC 388, 3 credits
   Experimental Psychology, PSYC 312, 3 credits
   Approaches to the Study of Religion, REL 361, 3 credits
   Approaches to Social Research, SOC 310, 3 credits

II. Regional Studies in East Asia, Europe, or Latin America
A. Regional Courses:
   Each student shall complete 18 credits in additional humanities and social science courses focused on the selected region (East Asia, Europe, or Latin America), with no more than 9 of these units coming from one discipline. These courses should deal with more than one country in the region; should include at least one relevant religion course; and should provide both familiarity with the region today and understanding of cultural and historical background. Typically, some of this work will be done in the course of study abroad. Each student will develop a relevant selection of approved regional courses in consultation with his/her faculty advisor and the International Studies Council.

B. Language Requirement:
   Completion of the intermediate level, or approved equivalent, in a major language approved by the International Studies Council as central to one of the countries in the Selected Region.

C. Study Abroad:
   Students are required to participate in a structured academic study program located in their selected region and approved in advance by the International Studies Council and the Registrar.

III. Senior Project
   Each student will complete a major research paper (3 credits) on a topic and using a methodology agreed upon in consultation with his/her faculty advisor and the International Studies Council. With such approval, students in the Whittier Scholars Program may use the Senior Project to meet this requirement.
The study of Kinesiology as human movement and Leisure Science as leisure time activity has changed significantly in recent years. While Kinesiology continues to encompass the preparation of teachers and coaches for sport skills, the scientific disciplines of Biomechanics, Motor Learning/Motor Control and Exercise Physiology have gained prominence as necessary aspects for a complete curricula. Society, with more free time and stress is demanding more from the application of leisure science.

Students can major or minor in kinesiology and leisure science while emphasizing teaching/coaching, pre-athletic training, pre-physical therapy or recreation/sport management. The major can be completed without an emphasis as well.

The department offers activity courses in individual, dual, and team sports.

**GUIDELINES FOR A MAJOR IN KINESIOLOGY AND LEISURE SCIENCE**

A minimum of 30 credits, of which 20 must be at the 300 level or above, including the following core:

- **First Aid**, KLS 125, 1 credit
- **Movement Anatomy**, KLS 150, 3 credits
- **Biomechanics**, KLS 311, 4 credits
- **Exercise Physiology**, KLS 313, 4 credits
- **History and Philosophy**, KLS 340, 3 credits
- **Motor Learning and Control**, KLS 440, 4 credits

Choice of one:

- **Sociology of Sport and Leisure**, KLS 382, 3 credits
- **Psychology of Sport and Leisure**, KLS 435, 3 credits

**GUIDELINES FOR A MINOR IN KINESIOLOGY**

A minimum of 20 credits, including: 125, 150, 311, 313 and 440, with 4 credits of advisor-approved electives.

**GUIDELINES FOR A MINOR IN LEISURE SCIENCE**

A minimum of 18 credits, including: 215, 315, 360, 373, 382, and 388.

Two courses chosen from the following: 211, 212, 213, 221, 222, 225, or 320.
Areas of Emphasis

Teaching/Coaching: Designed for those interested in teaching physical education and/or coaching athletic teams. Requirements include the completion of the departmental core and 15, 212, 213, 215, 225, 315, 316, 320, 325, 350, 373, 420. For teaching credential requirements: See Education.

Pre-Athletic Training: Designed for those interested in a career in athletic training. Requirements include the completion of the departmental core and 92, 201, 316, 325, 350, 400, 410, 450 and BIOL 300A,B. This program is designed to prepare students for entrance to a graduate program in athletic training where the requirements for National Athletic Trainers Association’s certification may be completed. Requirements may vary institution to institution making contact with your advisor and the athletic training staff for guidance on this issue imperative.

Recreation and Sport Management: Designed for those interested in serving in public or private agencies that deal with recreation and sport. Requirements include the completion of the departmental core as well as 12 credits selected from 92, 221, 315, 360, 373, 382; and 388. BSAD 232 and 330 are highly recommended.

Pre-Physical Therapy: Designed for students interested in physical therapy. Requirements include completion of the departmental core and BIOL 100 and 300A/B; PHYS 130 and 131; PSYC 100; CHEM 110A/B; PSYC 314, MATH 80, or PER 420 and any 3 credit psychology elective. Students should also take BIOL 300A & B; MATH 85, MATH 139A, or MATH 141A; and KLS 92. Electives should be carefully selected with advisor’s approval and current requirements for entry to the physical therapy programs of choice.

Students interested in pursuing graduate degrees in the specialized subjects of Biomechanics, Exercise Science, Leisure Studies, Motor Learning and Sport Psychology should consult with their academic advisor.

COURSE DESCRIPTIONS

THEORY COURSES

125 First Aid
Principles of first aid and emergency accident management. One semester, 1 credit. May be repeated for credit.

130* Lifeguard Training
Provides the skills and knowledge necessary to maintain a safe aquatic environment. One semester, 1 credit.

150 Movement Anatomy
Basic anatomical principles concerned specifically with human performance analysis. One semester, 3 credits.

201* Fundamentals of Nutrition
An introduction to human nutrition: structure, function, sources of nutrients, and the recommended daily allowances. One semester, 3 credits.

205* Sports Photography
Study of photography as art and photography as science in human movement. The primary medium in the exploration of techniques and perspectives will be still photography but videography will be addressed. One semester, 2 credits.

211* Analysis of Football and Baseball
Fundamentals and teaching methodology for football and baseball. One semester, 2 credits.

212* Analysis of Aquatics and Track and Field
Fundamentals and teaching methodology for swimming, water polo, and track and field. One semester, 2 credits.

213* Analysis of Volleyball and Basketball
Fundamentals and teaching methodology for volleyball and basketball. One semester, 2 credits.

*Not offered every year
215 Analysis of Dance and Creative Movement
Fundamentals of folk, square, social and modern dance and creative movement; teaching techniques applicable to dance instruction. One semester, 2 credits.

225* Analysis of Racquet Sports
Fundamentals and teaching methodology for tennis, badminton, racquetball, and pickle ball. One semester, 3 credits.

230 The Olympic Games and Society
Study of the Olympic movement world wide, the effect of using the games for political influence, the role of special populations as extensions of changes in society and the current issues dominating hosts and athletes. January, 4 credits.

300A,B Human Physiology and Anatomy:
Structure and Function of the Human Body
(Same as Biology 300A,B) Two semesters, 4 credits each.

311 Biomechanics
Anatomical and mechanical principles relating to human motion. Lecture and laboratory. Prerequisite: KLS 150. One semester, 4 credits.

313 Exercise Physiology
The effects of exercise and stress upon the various organic functions. Lectures and laboratory. Prerequisite: KLS 150. One semester, 4 credits.

315* Outdoor Recreation
Basic techniques and resources available for camping, hiking, backpacking, mountaineering, and water-related recreation activities. One semester, 3 credits.

316 Care and Prevention of Athletic Injuries
Treatment procedures for athletic injuries, preventive and therapeutic conditioning, and safety in sport. Prerequisite: 150. One semester, 3 credits.

320 Movement and Elementary School Physical Education
The biological, psychological, and sociological interpretations of play and physical education. Fundamentals of teaching movement at the preschool and elementary level. Includes laboratory experience. One semester, 4 credits.

325 Health Science for Teachers
Acquaints the prospective teacher with the multiphasic school health program, nutrition and current health issues. Emphasis on the influence of these areas to individuals and the school setting are studied. Required for all Professional Clear Credentials. One semester, 3 credits.

340 History and Philosophy of Sport and Leisure
The historical and philosophical development of sport and leisure within the context of the discipline and human cultural development. One semester, 3 credits.

350* Adaptive Physical Education
Exercise and adaptations necessary for the needs of the physically and mentally challenged. Prerequisite: 150. One semester, 2 credits.

360* Therapeutic Recreation
Principles and organization of recreational activities in varied therapeutic settings; field work included. One semester, 3 credits.

373* Sport and Recreational Management
Administrative aspects of athletics, physical education, and recreation are studied and put into practice. One semester, 3 credits.

382* Sociology of Sport and Leisure
Impact of culture on the rise of games and sports in human societies. One semester, 3 credits.

388* Sport, Play and Ritual
(Same as INTD 241) January session, 4 credits.

400* Therapeutic Modalities
Understanding of the body's reaction to stress and the use of electromagnetic, infrared, and acoustic energy to elicit responses. One semester, 3 credits.

410* Therapeutic Exercise
Covers general treatment management along with rehabilitation goals in a therapeutic setting. One semester, 3 credits.

420* Statistical and Evaluative Methods
Parametric and nonparametric statistics used as a means of analyzing sport skills and the sport sciences. Correlation, probability, analysis of variance and measures of central tendency and variability, represent statistical analysis covered. One semester, 3 credits.

*Not offered every year
435* Psychology of Sport and Leisure
Psychological factors related to human performance and leisure activity. Individual and team functions of arousal, skill level, cohesion, social facilitation, and attention are among the areas studied. One semester, 3 credits.

440 Motor Learning and Control
Theoretical study of the change in motor skill behavior as a result of practice and experience, as well as the reflexive and voluntary mechanisms that control human movement. Lecture and laboratory. One semester, 4 credits.

450* Advanced Care and Prevention of Athletic Injuries
In depth study of treatment procedures for athletic injuries and advanced preventive and therapeutic conditioning. Prerequisite: 316. One semester, 3 credits.

489* Seminar In Physical Education & Recreation
Training and practice in the preparation and presentation of oral and written reports on the topics pertaining to the subfields in Physical Education and Recreation. Open to seniors majoring in KLS. One semester, 2 credits.

GENERAL COURSES
1 Fitness and Wellness
Discussion and laboratory experience covering fitness components (flexibility, endurance, strength, body composition) and wellness components (proper nutrition, risk factor reduction, stress management). Primary objective is to provide students with the skills and behaviors to maintain a high level of fitness and health throughout life. One semester. 1 credit.

15 Combatives
An introduction to the principles and techniques of the five basic forms of Tae Kwon Do Karate. One semester. 1 credit.

91 IC Team Management
Supervised work experience in the management of an athletic team. Permission. May be repeated for credit. One semester, 1 credit.

92 Field Work in Physical Education and Recreation
Experience in college and private settings. Permission. May be repeated for credit. One semester, 1 credit.

390, 490 Current Topics in PER
Variable credits. Permission. May be repeated for credit.

395, 495 Directed Studies
Credit and time arranged. Permission. May be repeated for credit.

KINESTHETIC PERFORMANCE
Activity classes carry one credit per semester, fulfill the kinesthetic performance requirement, and may be repeated for credit. Typical offerings: aerobics, badminton, combatives, racquetball, swimming, softball, tennis, volleyball and weight training.

*ACTIVITY CLASSES
2 Aerobics
4 Pilates
5 Yoga
7 Self-Defense for Women (R.A.D.)
8 Step Aerobics
9 Advanced Step Aerobics
10 Weight Training
11 Advanced Self-Defense for Women (R.A.D.)
15 Combatives
21 Badminton
23 Golf
24 Racquetball
25 Swimming
26 Tennis
27 Dynamics of Running
34 Soccer
35 Softball
36 Volleyball
38 Bowling

*Not all the activity classes listed are offered each year.

INTERCOLLEGIATE ATHLETICS
Participation in intercollegiate athletics carries one credit per semester and may be repeated for credit. These sports are: Cheerleading, Women's Intercollegiate Basketball, Cross Country, Lacrosse, Soccer, Softball, Swimming, Tennis, Track and Field, Volleyball, and Water Polo; Men's Intercollegiate Baseball, Basketball, Cross Country, Football, Golf, Lacrosse, Soccer, Swimming, Tennis, Track and Field, Water Polo.

*Not offered every year
North Americans live in an increasingly interdependent world, and knowledge about our neighbors is crucial to being liberally educated. Much interest is directed toward Latin America because of its close economic and social ties with the United States, as well as the significance of political events in the region for the United States.

Whittier College’s Latin American Studies minor is designed to respond to the considerable interest in understanding more about Latin American societies as well as to serve as a pre-professional program to prepare students for graduate study, service in government, or work in community development. The Latin American Studies minor is designed to complement work in a major and may be of special interest to those majoring in areas such as Business Administration, Economics, Spanish, History, Political Science, and Sociology.

GUIDELINES FOR THE MINOR IN LATIN AMERICAN STUDIES

Students may complete the minor in Latin American Studies by meeting the following requirements:

Completion of 18 units in approved core and elective courses, plus competency in Spanish at the intermediate level or the equivalent. The 18 units of courses must include three credits each from the Latin American History, Latin American Politics and Ideology, and Latin American Cultural Expression areas. The remaining units may come from any of the four areas listed below, with a three-unit limit in the elective category. Field Work/Internship/Overseas Study may be substituted for listed courses, with prior approval of the Latin American Studies Committee. New courses may be added periodically to the offerings listed here.

Latin American History (at least 3 credits):
- Introduction to Latin America, HIST 242, 3 credits
- US/Mexico Border Studies, HIST 348, 3 credits
- South America, HIST 246, 3 credits

Latin American Politics and Ideology (at least 3 credits):
- Latin American Politics, PLSC 252, 3 credits
- Politics of Diversity in Latin America, PLSC 253, 3 credits
- International Relations of Latin America, PLSC 335, 3 units
- Latin American Liberation Theologies, REL 350, 3 credits
Latin American Cultural Expression (at least 3 credits):

Art of Mexico, ART 381, 3 credits
Art of Colonial Spanish America, ART 382, 3 credits
Peoples of the World: Latin America, ANTH 214, 3 credits
Music of Latin America, MUS 74, 3 credits.
Religion and Colonialism, REL 359, 3 credits
Women and Religion, REL 253, 3 credits
Sociology of Development, SOC 357, 3 Credits
Latin American Performance Experience, SPAN 10, 3 credits
Advanced Composition and Creative Writing, SPAN 320, 3 credits
Conversation on Hispanic Cultures, SPAN 325, 3 credits
New World and Spanish Colonial Literatures, SPAN 420, 3 credits
Latin American Theatre, SPAN 440, 3 credits
Latin American Literature from Independence to Modernism, SPAN 450, 3 credits
Latin American Voices: The Twentieth Century, SPAN 470, 3 credits
Major Hispanic Authors, SPAN 480, 3 credits
Revisiting the Canon in Latin American Literature, SPAN 481, 3 credits
Literary Criticism and the Essay Tradition, SPAN 482, 3 credits
Women's Voices in the Hispanic World, SPAN 484, 3 credits
Subaltern Voices, Diversity and Marginalization, SPAN 485, 3 credits

Electives that provide conceptual tools for understanding Latin America. Only one 3-credit course of the following courses may be counted toward the 18 credits:

International Economics, ECON 380, 3 credits
Comparative Economic Systems, ECON 383, 3 credits
Chicana/o Education in a Sociopolitical Perspective, EDUC 305, 3 credits
Introduction to Comparative Politics, PLSC 140, 3 credits
Seminar in Comparative Politics, PLSC 440, 3 credits
Sociology in a Global Context, SOC 104, 3 credits
Comparative Urban Development, SOC 356, 3 credits
Social Class and Inequality, SOC 352, 3 credits
Population Problems and Policy, SOC 358, 3 credits
Immigrants and Refugees, SOWK 390, 3 credits

Study Abroad:
The Latin American Studies Committee encourages study for a summer, semester, or year in a Spanish-speaking country. Please consult with members of the committee for specific program information.
THE LIBERAL EDUCATION PROGRAM

Seamus Lagan (Physics and Astronomy), Associate Academic Dean and Director of the Liberal Education Program

THE LIBERAL EDUCATION CURRICULUM

Statement of Educational Values and Objectives:

The Whittier College community shares a love of learning and a delight in the life of the mind; these are at the heart of the Whittier College liberal arts education. A liberally educated person develops an informed self-awareness through a lifelong commitment to learning and through responsible membership in the multiple communities and contexts that make up the environment. (This environment may be understood in terms of time, place, and perspective, and may include physical, social, and spiritual aspects.) Responsible membership implies the ability to effect change in one's environment. In the service of these values, the curriculum should provide the following primary learning objectives.

PRIMARY LEARNING OBJECTIVES:
I. Students should appreciate that education is a creative, collaborative, and transformative experience. The curriculum should provide a framework for students' awareness of their intellectual, physical, moral, and cultural development.
II. Students should learn to think and articulate their thoughts critically (meaning to define, analyze, and synthesize) using a variety of methods and technologies.
III. Students should develop an understanding of, and competency in, the use of signs and symbols in constructing, creating, perceiving, and conveying meaning.
IV. Students should develop the capacity to entertain multiple perspectives and interpretations.
V. Students should develop the ability to understand the convergence and divergence of different fields of knowledge. Students should develop familiarity with essential concepts in major fields, a considerable knowledge of at least one field, and the ability to make connections across fields.
VI. Students should develop skills and methods necessary for systematic investigations.
VII. Students should develop an understanding of themselves and others in relation to physical, historical, cultural, and global contexts.

LIBERAL EDUCATION PROGRAM REQUIREMENTS
Courses for the Liberal Education Program must be taken from approved lists. Liberal Education requirements can be met only with Whittier College courses. Adjustments for transfer credits awarded prior to matriculation are noted on the Liberal Education Evaluation form.
Content Areas & Units

1. Freshman Writing Experience
   a. Freshman Writing Seminar (FWS) 3
   b. Writing Intensive Course (WIC) 3
      Courses taken to satisfy 1b must be taken after completion of INTD 100.

2. Quantitative Reasoning (QR) 3-4

3. Natural Science
   a. Introductory Laboratory Science (ILS) 4
   b. Science and Math in Context (SMC) 4

4. Civilizations and Cultures
   a. African, Asian, or Latin American (AFC, ASC, LAC) 6
   b. American (ACC) 3
   c. European (ECC) 3
      Within the twelve units of category 4, courses must be taken from a minimum of two
      divisions, with no more than two courses from the same discipline. Within 4a the
      courses must represent two different geographical regions.

5. Individual in a Social Context (ISC) 2
      The ISC requirement may be satisfied by a single course of two or more units, or by
      two courses of one unit each.

6. International or Global Perspectives (IGP) 3

7. Comparative Knowledge (CK) 6
      Paired or team-taught courses from two different disciplines.

8. Creative and Kinesthetic Performance
   a. Creative Arts (CA) 2
   b. Kinesthetic Performance
      i. Wellness (KW) 1
      ii. Performance (KP) 1
      The Creative Arts requirement may be satisfied by a single course of two or more units
      or by two courses of one unit each. Courses taken to satisfy 8b.ii must be taken after
      completion of PER 1.

Once a student has matriculated at Whittier College, course work taken at other
institutions (except Whittier College Overseas programs) cannot be used to satisfy the
Liberal Education requirements.

Courses taken in a semester-length study-abroad program may be applied to the
Liberal Education requirements, as specified in the catalog description of Whittier
Foreign Study Programs. Courses from foreign study programs must be approved in
advance by the Registrar, based on guidelines developed by the Liberal Education
Committee.

Credit received for Advanced Placement (AP) from high school may be used to
satisfy Liberal Education requirements.

AP credit in Art History will satisfy the European requirement.

AP credit in Biology, Chemistry, or Physics will satisfy the Introductory Laboratory
Science requirement.
AP credit in Economics will satisfy the Individual and Social Context requirement.
AP credit in English will satisfy the Freshman Writing Seminar requirement.
AP credit in History will satisfy either the American and/or European requirement.
AP credit in Mathematics will satisfy the Quantitative Reasoning requirement.
AP credit in Music or Studio Art will satisfy the Creative Arts requirement.
Credit received for International Baccalaureate (IBC) from high school may be used
to satisfy Liberal Education requirements in the same way as Advanced Placement credit.
Courses which meet the guidelines for more than one category may satisfy
requirements for each of those categories concurrently. Courses used to satisfy Liberal
Education requirements may also be used to satisfy requirements in other areas—such as
majors, minors, and credentialing programs.
When a student fails to complete satisfactorily a paired set of courses, the student
must then complete a different pair to satisfy that part of the Liberal Education Program.
A student may satisfy both high school deficiencies and Liberal Education
requirements with the same course.

**GRADUATION REQUIREMENTS FOR STUDENTS WITH TRANSFER CREDITS**

All requirements for graduation apply, as stipulated above, with the exceptions indicated
below.

The Registrar of Whittier College will determine which credits transferred from
another institution may be used to satisfy each requirement.

Adjustments of the Graduation Requirements (based on Undergraduate Standing at
entrance):

**Liberal Education Requirements:** All students with transfer credits, regardless of the
number of transfer credits that satisfy Liberal Education Program requirements, must
complete one set of paired courses or a team-taught sequence in Comparative
Knowledge at Whittier.

At least twelve credits in the major must be taken at Whittier College.
Mathematics is one of the original liberal arts and serves as the foundation underlying much of modern science and engineering. It is a rigorous discipline, but one in which a creative mind can flourish and excel. Graduates with a mathematics major generally work in business or industry, teach, or pursue graduate studies in mathematics or operations research. The Mathematics Department offers courses designed to prepare majors for their pursuits and courses designed to serve the needs of non-mathematics majors. Given their reputation for improving one's logical reasoning abilities, mathematics courses attract many non-mathematical majors.

All new students, except those with AP calculus scores of 4 or higher, must take the Mathematics Placement Examination to determine their mathematical preparation for placement in Whittier College mathematics courses.

The Liberal Education Program mathematics requirement can be satisfied by taking MATH 75, 85, 139A, 141A, 141B, 241 or by advanced placement credit.

Students in Chemistry, Mathematics, Physics, or Pre-Engineering should begin the calculus sequence in the freshman year. Those not prepared to do so during the first term should begin with 76 or 85, or 139A, depending on their preparation.

The department also participates in an interdisciplinary Mathematics-Business major.

Guidelines for a Major in Mathematics

In addition to the Major in Mathematics, the department offers a Major in Mathematics with Teaching Credential Emphasis for students who plan to teach high school mathematics. Teaching Credential students should contact the Department of Education and Child Development for more information on obtaining an appropriate California teaching credential.

Students who plan to enter a graduate program in mathematics should take more than the minimum number of mathematics courses; these students should work closely with an advisor from the Department of Mathematics to choose appropriate additional mathematics courses.
Core courses for both options:
Calculus and Analytic Geometry I, MATH 141A or Integrated Precalculus/Calculus, 139A,B, 4--7 credits
Calculus and Analytic Geometry II, MATH 141B, 4 credits
Calculus and Analytic Geometry III, MATH 241, 4 credits
Abstract Thinking, MATH 280, 3 credits
Linear Algebra, MATH 380, 3 credits
Senior Seminar, MATH 491, 3 credits

I. Major in Mathematics
In addition to the core courses, this option requires seven additional mathematics courses, at least five of which must be at the 300 level or higher. These seven courses must include at least one course from each of groups A, B, and C below. In addition, at least two of these seven courses must be on the list of Abstract Courses below.

A. Analysis and Geometry Courses (at least one)
   Advanced Geometry, MATH 320, 3 credits
   Complex Variables, MATH 344, 3 credits
   Differential Equations I, MATH 345A, 3 credits
   Differential Equations II, MATH 345B, 3 credits
   Point Set Topology, MATH 360, 3 credits
   Introduction to Analysis I, MATH 440A, 3 credits
   Introduction to Analysis II, MATH 440B, 3 credits

B. Algebra and Discrete Mathematics Courses (at least one)
   Discrete Mathematics, MATH 220, 3 credits
   Number Theory, MATH 305, 3 credits
   Modern Algebra I, MATH 480A, 3 credits
   Modern Algebra II, MATH 480B, 3 credits

C. Applied Mathematics Courses (at least one)
   Probability and Statistics, MATH 315, 3 credits
   Numerical Analysis, MATH 350, 3 credits
   Mathematical Modeling, MATH 354, 3 credits
   Quantum Mechanics, PHYS 350, 3 credits
   or another upper-division Mathematics course or an upper-division course in another department. This course must be for at least 3 credits, involve an application of mathematics to another field, and be approved by the Mathematics Department faculty.

Two of the seven courses beyond the Core Courses must be on the following list of Abstract Courses.

Abstract Courses (at least two of the above must be from this list)
   Advanced Geometry, MATH 320, 3 credits
   Point Set Topology, MATH 360, 3 credits
   Introduction to Analysis I, MATH 440A, 3 credits
   Introduction to Analysis II, MATH 440B, 3 credits
   Modern Algebra I, MATH 480A, 3 credits
   Modern Algebra II, MATH 480B, 3 credits
I. Major in Mathematics with Teaching Credential Emphasis

In addition to the core courses, this option requires the following eight courses:

- Programming I, COSC 120, 3 credits
- Discrete Mathematics, MATH 220, 3 credits
- Number Theory, MATH 305, 3 credits
- Probability and Statistics, MATH 315, 3 credits
- Advanced Geometry, MATH 320, 3 credits
- History of Mathematics, MATH 400, 3 credits
- Introduction to Analysis I, MATH 440A, 3 credits
- Modern Algebra I, MATH 480A, 3 credits

Guidelines for a Minor in Mathematics

A minor in mathematics requires 20--23 credits: MATH 139A,B or MATH 141A; MATH 141B; MATH 280; and 9 credits of upper-division Mathematics courses.

Course Descriptions

75 Quantitative Reasoning
Part of the integrated mathematics and science requirement. This course is designed to help students develop their ability to create, analyze, and communicate quantitative and scientific arguments. It will emphasize critical thinking and problem-solving skills while also giving students practice in computation and symbolic manipulation. Topics to be covered include elementary linear equations, polynomial modeling, working with and understanding graphs and graphical presentations, and elementary probability and statistics. These topics will be presented in the context of applications and models from various disciplines. (Not open to those who have had 81, 85, 139A, or 141A.) One semester, 3 credits.

76 College Algebra
Basic properties of real numbers, linear equations and inequalities, quadratic equations, graphs of linear equations, and inequalities, systems of linear equations, conic sections. (Not open to those who have had 81, 85, 139A, or 141A.) One semester, 3 credits.

80 Elementary Statistics
Descriptive Statistics: descriptive measures, probability concepts, discrete random variables, normal distribution. Inferential Statistics: sampling distributions, confidence intervals, hypothesis testing, Chi-square procedures, linear regression. Emphasis on methodology rather than theory. (Not open to those who have had 315.) One semester, 3 credits.

81 Mathematics for the Management Sciences
Functions, matrices, linear systems, linear programming, logarithmic and exponential functions, limits, differential calculus. Prerequisite: 75. (Not open to those who have had 85, 139A or 141A) One semester, 3 credits.

85 Precalculus Mathematics
Solutions of algebraic equations and inequalities; functions and graphs; exponential, logarithmic and trigonometric functions; plane analytic geometry. Recommended for those who plan to take the Calculus sequence but who did not score sufficiently high on the Math Placement Exam. (Not open to those who have had 81, 139A or 141A) One semester, 3 credits.

139 A,B Integrated Precalculus/Calculus
Calculus I with a review of Precalculus. Topics include: functions of one real variable and their graphs, various types of functions (polynomials, rational functions, exponential, logarithmic, trigonometric, and discrete functions) derivatives of these functions, applications of derivatives, introduction to integrals of functions, Riemann Sums. Prerequisite: 85 or
sufficient score on Math Placement Exam. Fall, 4 credits, January, 3 credits.

141 A,B, 241 Calculus and Analytic Geometry I-III
Unified course in analytic geometry and calculus; progresses from functions of one real variable, their derivatives and integrals, through multivariate calculus; topics from infinite series and differential equations. Prerequisite: 85 or sufficient score on Math Placement Exam. One semester, 4 credits each.

220* Discrete Mathematics
Sequences; recursion and recurrence relations; finite-state automata; elementary set theory; graphs and trees; elementary probability and combinatorics. One semester, 3 credits.

280 Abstract Thinking
Designed to bridge the gap between lower-and upper-division mathematics courses. Deals with sets, applications of logic, propositional and predicate calculus, techniques of mathematical proofs, relations, functions, number systems, mathematical induction, algebraic structures. Prerequisite: 141A,B. One semester, 3 credits.

305* Number Theory
Euclidean algorithm; fundamental theorem of arithmetic; multiplicative functions; congruences; Chinese remainder theorem; Euler, Fermat, Wilson, and Lagrange's theorems; diophantine equations. Prerequisite: 141B. One semester, 3 credits.

315* Probability and Statistics
Continuous random variables and their probability distributions, marginal and conditional probability distributions, functions of random variables, the Central Limit theorem, estimations; the method of maximum likelihood; hypothesis testing, power of tests, The Neyman - Pearson lemma, regression, linear statistical models, method of least squares. Prerequisite: 241. One semester, 3 credits.

320* Advanced Geometry
Hilbert's axioms for Euclidean geometry; non-Euclidean geometries; finite geometries; isometries in the Euclidean plane. Prerequisite: 241. One semester, 3 credits.

344* Complex Variables
Algebra of complex numbers, theory and applications of functions of complex variables, contour integrals, conformal mappings, and boundary value problems. Prerequisite: 241. One semester, 3 credits.

345* A,B Differential Equations I, II
The theory of first-and second-order ordinary differential equations including their series solutions, introduction to Laplace Transforms with applications, including the solutions of differential equations, systems of ordinary linear differential equations, introduction to Fourier Series and integrals with applications, difference equations, partial differential equations with applications, introduction to the boundary and initial value problems and their applications. Also other selected topics in ordinary and partial differential equations depending on the particular emphases of the students in the class. Prerequisite: 241 or concurrent enrollment. One semester, 3 credits each.

350* Numerical Analysis
Numerical solutions of non-linear equations; interpolation; curve fitting; and estimation of error. Prerequisites: 141B. One semester, 3 credits.

354* Mathematical Modeling
Formulation and evaluation of models; continuous and stochastic models; sources of error; accuracy, precision and robustness; mathematical techniques used in modeling; analytical and numeric solutions; optimization. Prerequisites: 141B. One semester, 3 credits.

360* Point Set Topology
Metric spaces, sequences, continuity, connectedness, product spaces, separation axioms, compactness, topological spaces. Prerequisite: 241. One semester, 3 credits.

380* Linear Algebra
Vector spaces, linear transformations, similarity, eigenvectors, diagonalization, quadratic forms. Prerequisites: 141B. One semester, 3 credits.

*Not offered every year
390* Topics in Mathematics
Subject of current importance in mathematics. May be repeated for credit. Variable time and credit.

395 Directed Studies
Credit and time arranged. Permission. May be repeated for credit. Variable credit.

400* History of Mathematics
Selected topics in the development of mathematics will be discussed. A good background in mathematics is needed. Prerequisite: 241. One semester, 3 credits.

440* A,B Introduction to Analysis I,II
Topology of the Reals and Euclidean n-space; compact sets; Heine-Borel and Bolzano-Weierstrass Theorems; connected sets; mappings; continuity and uniform continuity; differentiability; uniform convergence; power series; Inverse Function Theorem; Implicit Function Theorem; Integration. Prerequisite: 241. One semester, 3 credits each.

480* A,B Modern Algebra I,II
Sets, mappings, relations, operations, algebraic structures (groups, rings, fields, modules), homomorphisms, substructures, quotient structures, finite fields, field extensions, proof of impossibility of some geometric constructions using only compass and ruler, Galois Correspondence. Prerequisite: 241 and 380. One semester, 3 credits each.

490* Seminar in Mathematics
Topics of current interest. May be repeated for credit. Variable credit.

491 Senior Seminar
Develops the student's ability to learn mathematics independently and to write for a mathematical audience. Includes a significant expository or research paper and a public presentation. Must be taken in the fall semester of the senior year. Permission required. One semester, 3 credits.

COMPUTER SCIENCE COURSES

COSC 120 Programming I
Introduction to computer programming in a high-level language such as Pascal or Java, emphasizing structured programming techniques, procedural methods and simple user-defined data structures. One semester, 3 credits.

COSC 220 Programming II
Computer programming emphasizing data structures, algorithms, pointers and low-level interface. Prerequisite: COSC 120. One semester, 3 credits.
The interdisciplinary program involving mathematics and business administration provides a strong background of concepts and techniques in the field of "quantitative management." It prepares the student for a variety of positions in banking, insurance, manufacturing, transportation, and other industries. Such positions are frequently in staff areas involving the application of quantitative methods to decision-making situations—for example, sales forecasting, demographic analysis, personnel planning, financial control, and operational analysis. This program also prepares the student for pursuing post-graduate work in the field of applied mathematics and operations research.

GUIDELINES FOR A MAJOR IN MATHEMATICS-BUSINESS

Students should begin the calculus sequence as early as possible in their college career and should consult with one of the faculty advisors listed above in selecting courses from the elective and recommended categories.

I. Mathematics:
- Calculus and Analytic Geometry, MATH 141A or 139AB, 141B, and 241, 12 credits
- Abstract Thinking, MATH 280, 3 credits
- Probability and Statistics, MATH 315, 3 credits
- Numerical Analysis, MATH 350, 3 credits
- Mathematical Modeling, MATH 354, 3 credits
- Linear Algebra, MATH 380, 3 credits

II. One of the Following:
- Programming I, COSC 120, 3 credits
- Programming II, COSC 220, 3 credits

III. Business Administration and Economics:
- Principles of Economics I, ECON 200, 3 credits
- Principles of Accounting I, II, BSAD 201, 202, 6 credits
- Business Finance I, BSAD 310, 3 credits
- Marketing Principles, BSAD 320, 3 credits
- Management and Organizational Behavior, BSAD 330, 3 credits
- Management Information Systems, BSAD 341, 3 credits
- Operations Management, BSAD 342, 3 credits

IV. Capstone Requirement:
- Senior Seminar, MATH 491, 3 credits or
- Management Strategy and Policy, BSAD 489, 3 credits.

Electives—Optional but highly recommended. Students should confer with their faculty advisors to select appropriate elective courses:
- Principles of Economics II, ECON 201, 3 credits
- Introduction to Econometrics, ECON 305, 3 credits
- Managerial Economics, ECON 365, 3 credits
- Business Finance II, BSAD 411, 3 credits
- Marketing Research, BSAD 428, 3 credits
- Management Strategy and Policy, BSAD 489, 3 credits
Language study is desirable for liberally educated people because such study provides insights into other peoples and cultures. It also heightens awareness of language and generally strengthens knowledge of English. A concentration in Modern Languages and Literatures provides its graduates with both a specific area of skills and competence and a sense of the relationship between a particular discipline and the large body of knowledge that is the patrimony of liberally educated persons.

Whittier College’s programs in Modern Languages and Literatures stress both practical and humanistic goals. A series of graduated language courses permits acquisition of oral, aural, and written mastery of a foreign language. A comprehensive program of courses in literature and civilization ranges from general introductory surveys through period and genre offerings, to seminars treating individual major authors. This program provides, in depth and in breadth, the experience of another culture and of its modes of thought and expression. The study of Chinese, French, Japanese, or Spanish contributes to this crucial goal by nurturing the development of a sensitive use of the verbal medium.

As educators, we believe that learning languages is essential preparation for participation in the global economy. The USA cannot be a leader in the world while our citizens are captive of their inability to communicate beyond our borders. Knowledge of other languages is essential for business and trade and, more importantly, can be an important bridge to the understanding of other countries, cultures and customs. All college students must be knowledgeable about the broader world and conversant in another language.

Modern communications technology has turned the global village from a dream to a reality. The Department’s state-of-the-art language resource center and media ready classrooms bring the latest technology (CD ROM, video, World Wide Web) to the student, making the study of languages, literatures and cultures more interactive and effective.

Students should take a placement exam in September of their freshman year and also consult a faculty member in the language to determine enrollment level. The department also serves as a resource for preparation for professional careers in government, commerce, law, journalism, science, social work, women’s studies, bilingual education, and teaching, among others.

Committed to interdisciplinary studies, the Department also offers several paired courses in the College’s Liberal Education Program. When paired, these courses are taught in English and are generally numbered at the 100/200 level.
GUIDELINES FOR A MAJOR IN FRENCH

The Major in French is a comprehensive program leading to proficiency in the four basic language skills. It stresses knowledge of the literary, cultural, historical, and sociological developments of France and the Francophone world. A Major in French requires a minimum of 30 credits, 24 of which must be at the 300 level or above. Students are encouraged to take at least one course in each of the three major genres (prose, poetry, drama). Foreign study is highly recommended. Courses taken abroad may satisfy major requirements if approved by the language faculty. The Department offers study abroad programs and summer programs in France. Six credits or more of Spanish, Japanese or Chinese are desirable for the major in French (in addition to the 30 units). Students must complete a paper-in-the-major, consisting of a 10 to 15 page paper in a seminar and in close consultation with their professor, during their last three semesters of their major.

GUIDELINES FOR A MAJOR IN SPANISH

A major in Spanish requires a minimum of 30 credits, 24 of which must be at the 300 level or above. Since mastery of the Spanish language includes the cultural contexts that produced it and which it continues to influence, students are encouraged to take courses in other disciplines related to the Hispanic culture. An international experience of academic and cultural studies is highly recommended. A variety of programs in Spain and Latin America provides students with the unique opportunity to become immersed in language, culture, and academics and courses taken abroad may satisfy major requirements only if approved in advance by the language faculty. Required courses for the major include: 320, 325, 355, and 356 (or equivalent). Students are encouraged to take at least one course in each of the three major genres (Prose, Poetry, Drama) as well as courses from both the Peninsula and Latin America, both historical and contemporary. The paper-in-the-major requirement is met in courses at the 400 level, which characteristically require significant formal writing assignments as well as a capstone project that demonstrates the student's command of the material and methods, as well as his/her ability to communicate these skillfully in writing. Also highly recommended is the study of another language.

THE CHINESE PROGRAM

The program in Chinese offers a sequence of language courses in standard Mandarin, as well as courses on Chinese literature, culture, and film taught in English. As the native tongue of more than 1.2 billion people, Mandarin Chinese is the primary language for approximately one fifth of the human race. Spoken and written Chinese are also widely used throughout Southeast Asia and in other parts of the world, where it has emerged as an increasingly important medium of cultural, educational, and commercial interaction. The central goal of the program in Chinese is to provide students with a level of linguistic and cultural proficiency sufficient to permit them to function successfully within a Chinese-speaking society. With a structured sequence of language/culture courses, the curriculum is designed to familiarize students with China's very long history and cultural traditions, and to prepare students for studying, traveling, doing business, and eventually working and living in a Chinese language environment. Students learning Chinese are encouraged to spend one semester or year in their junior year studying advanced Chinese in China.
GUIDELINES FOR A MINOR IN CHINESE, FRENCH, JAPANESE OR SPANISH

A minor in Chinese, French, Japanese or Spanish requires a minimum of 16 credits from any level. Interested students should consult with language faculty. All courses require a laboratory fee of $13.00

COURSE DESCRIPTIONS

CHINESE LANGUAGE COURSES

120 Elementary Chinese I
An introductory course in standard Chinese (Mandarin) designed for students with no previous knowledge of the language. The course introduces fundamental of Chinese, including pronunciation, grammar, and Chinese characters, emphasizing the four basic language skills: listening, speaking, reading and writing. By the end of the 120/121 sequence, students will have acquired knowledge of basic grammar rules, the ability to converse, read and write on simple topics of student's daily life, and command over 500 Chinese compounds and over 300 characters. 4 hours of classroom instruction and one hour of lab per week. One semester, 4 credits.

121 Elementary Chinese II
A continuation of Chinese 120 with accelerated introduction of expressions, grammar, and sentence patterns designed to facilitate speaking, reading, and writing. 4 hours of classroom instruction and one hour of lab per week. One semester, 4 credits.

220 Intermediate Chinese I
A course designed to fulfill the personal interests and future professional goals of students who have had one year of elementary modern Chinese. Students will learn new vocabulary, sentence patterns, idiomatic expressions, proverbs, as well as insights into Chinese society, culture and customs in this course. Three hours of class, one hour of lab. One semester, 3 credits.

221 Intermediate Chinese II
A continuation of Chinese 220. By the end of this sequence, students are expected to be able to engage in general conversation with native speakers and to read and write essays in Chinese characters. Three hours of class, one hour of lab. One semester, 3 credits.

COMPOSITION, CULTURE AND LITERATURE COURSES

320* Composition and Conversation
This course aims at further development of overall language proficiency through extensive reading of selected texts representing a wide variety of styles and genres, including materials from newspapers, magazines, and other documents. Classes are conducted primarily in Chinese. Prerequisite: 221, or equivalent. One semester, 3 credits.

325* Culture and Civilization
A survey of Chinese cultural history from the earliest times to the eve of the modern era. The development of the arts, literature, and cultural trends are among the main topics presented through reading assignments, videos, and films. Classes are conducted primarily in Chinese. Prerequisite: 221, or equivalent. One semester, 3 credits.

450* Topics in Literature
A capstone literature course for students who have attained a high level of Chinese language proficiency. Students read a wide selection of representative works of major modern writers of China, Taiwan, and other Chinese communities. Topics vary by semester. May be repeated for credit. Prerequisite: 320, or equivalent. One semester, 3 credits.

490* Current Topics
This course includes essays introducing the social and cultural conditions of China, Taiwan, and other Chinese-speaking communities; live news broadcasts on current issues; and selected business Chinese expressions. This course bridges the gap between purely academic learning and the real world of native speakers. Emphasis is on reading, speaking, listening and writing in Chinese. Topics vary by semester. May be repeated for credit. Prerequisite: 320, or equivalent. One semester, 3 credits.

*Not offered every year.
395/495 Directed Studies
Credit and time arranged. Permission. May be repeated for credit.

COURSES IN ENGLISH
TRANSLATION
100 A Taste of China
This course is designed for students to get a taste of Chinese calligraphy, cooking, movie, theater, martial arts, meditation, and other folk arts. Artists, chefs, martial art and meditation masters from the Los Angeles area are invited to join student activities. Students will exhibit their calligraphy, or other related works at the end of the semester. One semester, 1-2 credits.

110, 310* Masterpieces from China
Representative readings in translation of twentieth-century Chinese literature from the late-Qing dynasty to the People's Republic of China, and contemporary Taiwan. This course will offer a window in twentieth-century China and an introduction to the study of literature, and ask: Why do we read literature, and about different literary approaches and movements? Students are expected to examine the socio-political context and questions of political engagement, social justice, class, gender, race, and human rights. All readings are in English translation and no background in China or Chinese is required. One semester, 3 credits.

130, 330* Chinese Theater
Introduction to the practice, concepts, history, and dramatic literature from China. The course will focus on the development of the Chinese theater as it received influences from other ethnic theaters, including the Japanese, French, Spanish, and American. Hands-on experiences with the Chinese theater and interaction with theater artists in the Los Angeles area will be emphasized. One semester, 3 credits.

150, 350* Chinese Cinema
An introductory course to the culture, aesthetics, and socio-political background of Chinese film produced in the period from the 1930s till the present. Students will look at the cultural antecedents which influenced the Chinese filmmakers, how they manipulated the artistic forms as a means of self and the function of films both within the art form and by extension within Chinese culture-expression, in general. A more general goal of the course is to develop and refine an ability to think about and understand culture. Films to be viewed include: To Live, Ju Dou, Changing Face, Fallen Angels, Shanghai Noon, and more. One semester, 3 credits.

FRENCH LANGUAGE COURSES
76* Performance in French Workshop
Learn about French theatrical tradition while helping write and perform a production in French. Prerequisite 120. One semester, 1 credit.

100* Beginning French Language and Culture Experience (Whittier in Nice Summer Program)
This course is designed for students who have never studied French or who have very little knowledge of the language. Emphasis is on “survival” French. It is taught in France during the Whittier in Nice Program. No prerequisite. Summer Session, 3 credits.

120 Elementary French I
This course is designed for students who have never studied French, or who have placed into French 120 on the French Placement Test. It is taught in French with four hours of classroom instruction and one hour of lab per week. Immersion of students is facilitated through the use of authentic material as well as the usage of video and other technological tools (multimedia, Web). By the end of this course students should have developed basic oral and written communication skills as well as reading skills, and be acquainted with some aspects of Francophone culture. One semester, 4 credits.

121 Elementary French II
This course is a sequel of Elementary French I. It is taught in French with four hours of classroom instruction and one hour of lab per week. Immersion of students is facilitated through the use of authentic material as well as the usage of video and other technological tools (multimedia, Web). By the end of this course students should have further developed their communicative competence and reading skills, as well as be better acquainted with the Francophone world. Prerequisite: 120, or equivalent. One semester, 4 credits.

*Not offered every year
**200* Intermediate French Language and Culture Experience**  
*(Whittier in Nice Summer Program)*  
This course is intended for students who have completed the 200 language sequence at Whittier College or who already have a good command of the French language. It is taught in France during the Whittier in Nice Summer Program. Prerequisite: 121, or equivalent. Summer Session, 3 credits.

**220 Intermediate French I**  
This course is a sequel of Elementary French II. It is taught in French with three hours of classroom instruction a week. It includes a brief review of the material studied in Elementary French I and II, presents more elaborate structures of the French language and culture, and introduces students to literary and contemporary readings. Three hours of class, one hour of lab. Prerequisite: 121, or equivalent. One semester, 3 credits.

**221 Intermediate French II**  
Course is designed to strengthen students' competence to communicate in the French language. It is taught in French with three hours of classroom instruction. It includes a thorough review of grammar and strongly emphasizes oral and written communication. Three hours of class, one hour of lab. Prerequisite: 220, or equivalent. One semester, 3 credits.

**225 Conversation, Culture and Communication**  
This course is designed to extend students' aural comprehension and oral expression, and to further the acquisition of a more complex vocabulary associated with contemporary issues described in newspapers, television and the Web. Prerequisite: 221, or equivalent. One semester, 3 credits.

**COURSES TAUGHT IN ENGLISH**

**115* Introduction to Contemporary French**  
This class is an introduction to contemporary France in which we look at the constant exchange of literary, cinematic, philosophical and even culinary ideas between France and the U.S. The goal is not to determine which culture is better, but to learn about another culture (and therefore our own as well) while acquiring the tools of cultural analysis. Taught in English. No prerequisite. One semester, 3 credits.

**126, 173, 177, 181, 190**  
No prerequisites. One semester, 3 credits. For course information see descriptions under 326, 473, 477, 481, 490.

**COMPOSITION, CULTURE, AND FRENCH FOR BUSINESS**

**300* Advanced French Language and Culture Experience**  
*(Whittier in Nice Summer Program)*  
Four week summer course taught in France. Emphasis on French language, contemporary culture and regional history. Class meets in the morning; afternoons reserved for excursions, experientials, activities. Students are housed in French families. Prerequisite: 221, equivalent. Summer Session, 3 credits. May be repeated for credit.

**310 Composition and Stylistics**  
Course designed to develop and refine students' writing skills on topics that are increasingly more abstract. It introduces students to the critical elements of stylistic differences and the application thereof. Prerequisite: 221 or equivalent. One semester, 3 credits.

**315* French for Business**  
Course designed to introduce students to commercial French including correspondence, and acquisition of business related vocabulary, and an understanding of successful business interactions. Prerequisite: 221 or equivalent. One semester, 3 credits.

**325* French Culture and Civilization**  
Course designed to study the evolution of French culture and civilization by establishing the links between political, social, and intellectual developments and the associated artistic and literary achievements. Prerequisite: 310, or equivalent. One semester, 3 credits.

**326* Francophone Culture and Civilization**  
Course designed to introduce students to the historical formations and transformations that occurred outside France (Africa, Caribbean, Canada and Americas). Prerequisite: 310, or equivalent. One semester, 3 credits.

**LITERATURE COURSES**

**355* Introduction to French Literature I**  
Survey course of French literature from the Middle Ages through the 18th century. Major

*Not offered every year*
literary works of writers of prose, poetry, and theater are read and discussed from both a historical and literary perspective. This course is taught in French. Students are expected to participate actively in class discussions, to give brief oral presentations, and to write short papers. Prerequisite: 310, or equivalent. One semester, 3 credits.

356* Introduction to French Literature II
Survey course of French literature from the 19th to the 20th century. This course includes major works of French and Francophone writers of prose, poetry and theater. Works are read and discussed in French from both a historical and literary perspective. Students are expected to participate actively in class discussions, to give brief oral presentations, and to write short papers. Prerequisite: 310, or equivalent. One semester, 3 credits.

432* Heroes and Heroines
The 17th century in France is a period where heroines and heroes were redefined to fit a society in transition. Topics will include the transition from the Baroque to Classicism, and the evolution of dominant intellectual and political currents such as rationalism and absolutism and the redefinition of the role of masculine and feminine ideals. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

435* History of Modern Novel
Course designed to provide students with a more thorough comprehension of the French and Francophone modern novel, from the 17th to the 20th-century. It is based upon detailed analysis of literary texts and considers the socio-historical background that contributed to the evolution of the genre. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

433* Poetic Perspectives
Course designed to provide students with a better understanding of the 19th and 20th-century poetic movements, from Romanticism, Parnasse and Symbolism to more contemporary expressions of the poetic genre. It includes analysis of French and Francophone poetry and presents students with analytical tools that contribute to critical thinking. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

465* 20th-Century Theater
Course designed for students who wish to broaden their cultural and literary understanding of 20th-century theater. Works studied are representative of major authors in the history of ideas of modern French and Francophone literature. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

469* Nouveau Roman/Nouveau Théâtre
Course designed to acquaint students with the literary production during the 1950's. Works studied are representative of major authors of this specific movement, such as Robbe-Grillet, Duras, Sarraute, Ionesco and Genet. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

OTHER PERSPECTIVES
473* French Cinema
This course presents the main movements and directors in French cinema. Students will be introduced to cinematographic vocabulary and will be able to develop critical thinking through the analysis of films. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

475* Women's Portraits/Portraits de femmes
Course designed to expose students to various portrayals of women, by women and by their male counterparts. Works studied are representative of different genres and centuries in French and Francophone literature. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

476* Performance in French
This course explores various aspects of performance in the French tradition—both as spectators studying varying types of French and Francophone theater texts and productions, and as actors in a workshop setting. Both theoretical and experiential, a major emphasis is put on creativity and collaboration to achieve the goals of the course. After working closely together to write and produce a creative work, the class's performance will be the final “exam.” Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

477* African Francophone Literature and Cinema
Course designed to introduce students to contemporary African literature and cinema. It

*Not offered every year
is based upon detailed analysis of literary texts and of films, both addressing a variety of cultural aspects of African Francophone life. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

478* Pre and Post Revolutionary Child
This class examines developments leading to modern concepts of the child in France all the while tracing parallel ideas of identity such as selfhood, nationality, public education, welfare and gender using literature and film. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

480* Love and Life until the Revolution
Students study works from the middle-ages to the Revolution and discuss the transformation of “senses and sensibilities” over time. To better understand the works of fiction, we will discuss the history and the society of the period. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

481* Asian Francophone Literature
This course explores the Asian influence in Francophone literatures and cultures. It exposes students to non-traditional aspects of the Francophone culture deriving from a history of complex and diverse interactions between Asia and French-speaking societies. Students will gain insight about the subject through the study of literature and films. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

490* Special Topics
An in-depth study of a specific period, genre, or topic (such as Francophone Writers, French Renaissance, 17th-century Moralists, Classical Theater, Enlightenment, etc.). Topics vary by semester. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

499* Senior Thesis
A paper and oral defense in the major that will indicate the student’s acquisition of the literary, the cultural and the language skills needed to pursue studies in French or Francophone literature.

395/495 Directed Studies
Credit and Time arranged. Permission. May be repeated for credit.

JAPANESE LANGUAGE COURSES
10 Japanese for Business
Designed for students who anticipate using the language in business-related fields. Also introduces Japanese business manners and customs. No prerequisites. 2 credits.

120 Elementary Japanese I
An introductory course in simple conversation, basic grammar, reading, culture, and written Japanese (Hiragana, Katakana and simple Kanji). Four hours of class, one hour of lab. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

121 Elementary Japanese II
Continuation of 120. Basic grammar, conversation, composition and readings. Four hours of class, one hour of lab. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

SPANISH LANGUAGE COURSES
10 Latin American Performance Experience
An experiential class in which students explore their bodies and minds in order to explore the difficulties involved in staging a text (poem, play, short story). While students practice Spanish during rehearsals, they also explore Latin American perspectives and techniques production (from acting to performance). Prerequisite: 221 or higher, equivalent, or permission. One semester, 3 credits.

120 Elementary Spanish I
Students are introduced to the basic principles necessary to carry out written and oral communication. Emphasis will be placed on developing the ability to use the language creatively to talk about oneself and to deal with daily situations within the Hispanic cultural context. Four hours of class, one hour of lab. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

121 Elementary Spanish II
Continuation of 120. Basic grammar, conversation, composition and readings. Four hours of class, one hour of lab. Prerequisite: 355, 356 or equivalent. One semester, 3 credits.

*Not offered every year.
122 Intensive Spanish
A course designed for students who have studied Spanish before but who want a comprehensive review course. As a fast-moving, intensive course focus is on learning strategies for reading, writing, and communicating in Spanish. Prerequisite: Previous knowledge of Spanish. One semester, 3 credits.

220 Intermediate Spanish I
A continuation of 120,121, this class further develops the students' ability to communicate in Spanish, both orally and in writing. Students will speak, read, and write about such topics as advice, opinions, and hypothetical situations, while at the same time gaining insights into the culture of the Hispanic world. While grammar is reviewed, this course does require a good foundation in the basic principles. Three hours of class, one hour of lab. Prerequisite: 121 or equivalent. Not open to Native Speakers. One semester, 3 credits.

221 Intermediate Spanish II
Continuation of 220. Review of grammar and extensive practice in conversation, writing and reading of selected texts as well as viewing of videos on Hispanic life and culture. Three hours of class, one hour of lab. Prerequisite: 220 or equivalent. Not open to Native Speakers. One semester, 3 credits.

222 Spanish for Bilingual Students
A fast paced course for students whose native language is Spanish or for those with extensive exposure to the language. Prerequisite: Placement exam results or permission. One semester, 3 credits.

230 Spanish Conversation
This course is conducted in Spanish and engages students in conversation in a variety of formats toward further developing oral proficiency and vocabulary. Readings, Internet surfing, TV or other viewings on topics of current interest done outside of class serve as the basis for general class discussions through practice in different types of discourse, including narration, description, critical commentary, debate, and dramatic dialogue. Some of the time will be devoted to developing conversational strategies, and much importance will be given to interaction in the classroom. Small group work, emphasis on natural language, and the use of authentic materials (including readings and films) will be among the instructional techniques used. Prerequisite: 221 or higher, equivalent, or permission. One semester, 3 credits.

CULTURE, COMPOSITION, AND INTRODUCTION TO LITERATURE

225* Chicano Literature and Cultural Production
Surveys the works of Mexican-American authors of poetry, prose, and drama. Delves into questions of gender, textual interpretation, and socio-historic contexts. One semester, 3 credits.

270 Intensive Spanish Grammar and Composition
This course focuses on a theoretical and practical approach to Spanish grammar. The goal is to provide the students with the right skills for discerning the structure and formal beauty of the Spanish language and its rules and differences with English. This course also explores phonology, morphology, syntax and semantics. Prerequisite: 221 or higher, equivalent, or permission. One semester, 3 credits.

320 Advanced Composition and Creative Writing
This course emphasizes the development of writing skills, vocabulary expansion, and review of grammatical structures. Focus is on written expression, creative and academic, on themes related to the Spanish cultures. Students develop the strategies and skills needed to write on topics through practice of different types of discourse, including narration, poetry, critical commentary and theoretical essays. Prerequisite: 270, equivalent, or permission. One semester, 3 credits.

325 Conversation on Hispanic Cultures
A study of Hispanic culture from its origins to the present. A study of the diversity of Hispanic civilization, this course will examine Hispanic societies through significant areas of cultural expression, including literature, visual arts, music, and film. Conducted entirely in Spanish. Prerequisite: 270, equivalent, or permission. One semester, 3 credits.

*Not offered every year
355 Introduction to Peninsular/Latin American Literature I
A survey of the most representative texts of writers of prose, poetry, and theater within the contexts of literary and sociohistorical interpretations. This course surveys the major authors and includes close readings of representative selections from 1100 to 1700, with attention to the development of literary genres in the context of the changing cultures of Spain and Latin America. Conducted entirely in Spanish with class discussions and extensive practice writing commentaries on texts. Designed for Spanish majors and minors. May be taken out of sequence. Prerequisite: 320, equivalent, or permission. One semester, 3 credits.

356 Introduction to Latin American/ Peninsular Literature II
Continuation of 355, this course studies trends and developments in major literary works from 1700 to the present day in both the Peninsula and Latin America. Conducted entirely in Spanish with class discussions and extensive practice writing commentaries on texts. Designed for Spanish majors and minors. May be taken out of sequence. Prerequisite: 320, equivalent, or permission. One semester, 3 credits.

LITERATURE COURSES
410* Masterpieces from the Middle Ages to the Baroque
Representative literary works of the Medieval, Renaissance and Baroque in both Spain and Latin America. Poetic and narrative texts, in their entirety, are read for their literary, cultural and historical value. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

420* New World and Spanish Colonial Literatures
Selections from major genres of the precolonial and colonial periods (1100-1810) produced by authors in Spain and Latin America: indigenous codices, the chronicle of the Encounter and Conquest, lyric and epic poetry, colonial theater, pre-independence writing, etc… Among the themes examined are: utopian images of the New World, the Hispanic “rewriting” of indigenous cultures, and the emergence of the mestizo identity in literature and political essays. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

430* Spanish Peninsular Theater
This course introduces the students to the historical, sociological and dramatic developments of Spanish Peninsular Theater from the Middle Ages to most recent productions, focusing specifically on how genre and sub-genres are linked directly to social changes and political transformations in each period. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

440* Latin American Theater
This course traces the development of Latin American theater from the pre colonial period to the New Popular Theater. It will focus on several problematic subjects, such as geographic parameters, themes and major trends in dramatic theory, and economic and political structures in the process of production. Detailed consideration is given to contact between languages, Native American, European and African traditions, as well as influences of experimental theater and popular culture. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

450* Latin American Literature from Independence to Modernism
This course focuses on major authors in the period, emphasizing those genres developed in the postcolonial cultural context. Literary and sociopolitical trends and cultural images and characters from early 19th century to early 20th century are critically examined. The course also includes the impact of Latin American writing on the literature in Spain, especially on Peninsular Modernism. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

460* Spanish Voices: The Twentieth Century
From the turn of the century to our present time, Spanish literature has enjoyed an artistic explosion, the likes of which has not been seen since the Golden Age. A profusion of literary movements—including the Generation of ’98, modernism and avant-garde—reflected the creative vibrancy of the nation even as it slipped into political and social chaos. Major works of prose, poetry and theater are analyzed for their literary innovativeness and relationship to

*Not offered every year
ideological trends and social reality in contemporary Spanish letters. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

470* Latin American Voices: The Twentieth Century
Critical study of selected contemporary Spanish-American texts in light of current modes of writing and interpretation. This course will delineate the major patterns of formal and thematic development within the history of Latin American letters as well as emphasize the analysis of structural and linguistic problems posed by the texts. This course will also explore such tendencies as realism, surrealism and “magic realism,” as well as works of social conscience, revolution and the national situation. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

480* Major Hispanic Authors
Intensive study of the works of the most distinguished authors in the Spanish language. Authors will vary according to instructor's expertise. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

OTHER PERSPECTIVES ON LITERATURE

481* Revisiting the Canon in Peninsular and Latin American Literature
This course is designed to give students the tools necessary to read the major canonical works of Spanish and Latin American literature in order to rebuild the process through which they represent nationality, class, sexual dissidence, and ethnic issues. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

482* Literary Criticism and the Essay Tradition
Major approaches to the history of Spanish literary “ensayos” in Spain and Latin America. This course explores the imaginary of Nation and Identities, the cultural and political debates in sciences and cultures. The course also focus on the construction of literary criticism in Spanish and translations of main trends on contemporary criticism. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

483* Cinema in Spain and/or Latin America
This course examines Peninsular and Latin American cinematic production and introduces new critical approaches in film studies. The course may organize materials from a historical perspective, or focus on a selected period, theme, or director. 355 or higher, equivalent, or permission. One semester, 3 credits.

484* Women's Voices in the Hispanic World
This course explores Peninsular, Latin American, and Latino women voices, whether writers, political activists or in popular culture. Depending on Professor's expertise, the course will be developed as a survey by examining literary or non-literary texts from historical periods, or organized as a seminar focusing on selected texts produced by a particular group of authors or in specific nations or communities. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

485* Subaltern Voices, Diversity and Marginalization
This course explores literature and cultural production in Spain, Latin America and Hispanic American works from diverse theoretical approaches: feminism, cultural theory, subaltern status, and gay and lesbian studies. Students will examine how texts redefine literary forms when writing confronts the process of empowerment of minorities through racial, ethnic, and textual terms. Prerequisite: 355 or higher, equivalent, or permission. One semester, 3 credits.

390/490* Special Topics
Close readings and seminar discussions aim to explore the reception of both classic and contemporary themes of literary expression. Examples: The Novel of the Mexican Revolution; Hispanic Popular Culture; Afro-Latino Voices; Asian Influences in Latin America. Topics vary by semester. May be repeated for credit. One semester, 3 credits.

395/495 Directed Studies.
Credit and time arranged. Permission. May be repeated for credit.

*Not offered every year
All students will find in music a varied and enriching program in performance and study. Exceptional opportunities for both solo and ensemble performance are available, and all students are eligible to audition for membership in the College Choir and Chamber Music ensembles. Through audition, Whittier students may also participate for credit in the Rio Hondo Symphony and the Chorale Bel Canto, strong community ensembles under professional leadership. Individual instruction in voice, instruments, and composition is offered at all levels of proficiency by an outstanding artist faculty. Class instruction is also available in piano and voice.

The Whittier College Music Department offers preparation for a wide range of career opportunities, and students with serious aspirations in music are encouraged to consider a major. In addition to applied music, class instruction is offered in conducting, music education, music literature and materials, theory, music business, and music technology. A digital piano and music technology lab is available for student use and is integrated in several course offerings. Students may also develop areas of specialization or individual projects under faculty supervision in related fields such as church music, management, musicology, ethnomusicology, music theory, music industries, and music theater.
GUIDELINES FOR A MAJOR IN MUSIC

Core Courses (30 Credits):

Introduction to Music Theory and Musicianship, MUS 70, 3 credits
Harmony I, II, III, MUS 100H, 200H, 201H, 9 credits
Musicianship, I, II, III, MUS 100M, 200M, 201M, 3 credits
Instrumentation, MUS 300, 2 credits
Class Piano for Majors, MUS 110 (must be taken concurrently with MUS 100H, and 100M. A student may be exempt from Class Piano for Majors through testing.), 1 credit
Music History I, II, MUS 203 and MUS 204, 6 credits
Introduction to Ethnomusicology, MUS 303, 2 credits
Introduction to Music Technology, MUS 111, 2 credits
Private Instruction (minimum four semesters), 0 credits
Ensembles (chamber or choral; minimum five semesters), 0 credits
Colloquium, MUS 50, 0 credits
Senior Seminar, MUS 400, 2 credits

Additional Elective Requirements (At Least 12 Credits):

Music Business, MUS 104, 2 credits
World Percussion Methods, MUS 105, 2 credits
Music History III, MUS 205, 3 credits
History of Film Music, MUS 206, January 4 credits; Fall/Spring 3 credits
Music Technology II, MUS 211, 2 credits
Conducting, MUS 305, 3 credits
Recording Techniques, MUS 310, 2 credits
Choral Methods, MUS 351, 2 credits
Current Topics in Music, MUS 390/490, variable credits
Recital, MUS 307, 0 credit

Proficiencies

All music majors must pass a piano proficiency examination before graduation. Music majors are expected to demonstrate basic keyboard skills by the end of the first academic year in the department. Students expecting to major in music will be examined for keyboard skills upon entry into the music major. If the audition is not passed, the student is expected to enroll in Class Piano for Majors (MUS 110) or in private piano instruction until the proficiency examination is completed.

Proficiency Requirements:

- Play all major and minor scales and arpeggios, two octaves, hands together.
- Prepare a memorized composition of the intermediate level using the damper pedal.
- Accompany an instrumentalist or vocalist; appropriate assignments based on level and technique will be distributed in class.
- Prepare a harmonization of a simple folk tune.
- Read a piece of the late elementary level at sight.
GUIDELINES FOR A MINOR IN MUSIC

Minimum Requirements (18 credits):
Introduction to Music Theory and Musicianship, MUS 70, Harmony I, MUS 100H, 6 credits
Musicianship I, MUS 100M, 1 credits
Music History I, II, MUS 203 and 204, 6 credits
Introduction to Music Technology, MUS 110, 2 credits
Ensembles (Chamber or Choral), 2 credits
Private Instruction, 1 credit

Music minors are expected to participate in departmental activities and to attend music department performances. A minor must be declared upon enrolling in Music History.

COURSE DESCRIPTIONS

COURSES FULFILLING LIBERAL ARTS REQUIREMENTS

10 Piano Class for Beginners
Elements of notation and introduction of music notation and keyboard technique; basic concepts of keyboard practice, solo and ensemble playing, sight reading and scales. One semester, 1 credit.

12 Intermediate Piano
Continuation and expansion of keyboard skills; emphasizing technical growth, interpretation, and repertoire. Prerequisite: 10 or permission. One semester, 1 credit.

14 Voice Class for Beginners
Singing, the mechanism and the technique; vocal exercises and song literature to develop and control the voice. One semester, 1 credit.

70 Introduction to Music Theory and Musicianship
Introduction to the language of music: notation, rhythm, scales, intervals, melody and chords. Development of musical skills through rhythmic execution, sight singing and basic keyboard facility. Required of majors and minors, encouraged for students in College ensembles, open to all students. One semester, 3 credits.

71 Music in History
This course is designed to help the musically inexperienced gain a better understanding of the elements of music from a listener's perspective, its evolution throughout history, and its current place in a changing society. Emphasis is placed on identification of genres, as well as social and political trends affecting musical development.

74 Music of Latin America
Provides an historical and philosophical survey of music in Latin America, in addition to a basic analysis of generic aspects of origins, influences, style, and development within that geographical area. Discussion of regional folkstyles, of the indigenous factor and popular trends (both traditional and progressive) and of the state of music among the Latin populations of the United States. This class will provide an overall understanding of Latin American music aesthetic and culture. One semester, 3 credits.

75 Music of Africa
Survey of sub-Saharan traditional and contemporary music cultures of Africa. This course examines the musical and extramusical forces that shape, maintain, and perpetuate Africa's musical and cultural expression. Discussion on the general characteristics, concepts, and ethnomusicalogical approach to the organization of sound and its meanings will be emphasized. One semester, 3 credits.

76 A World of Music
Introduction to the musics of non-Western cultures. Course discussions will focus on the music-cultures by geographical regions and socio-cultural performance context. Basic theories and methodologies of ethnomusicology, functions of music in society, and general musical characteristics and concepts are examined. One semester, 3 credits.

Class members will attend a live music performance (extra fee required). One semester, 3 credits.

*Not offered every year*
77* Approachable Opera
After establishing a musical vocabulary, useful in describing and analyzing music from a listener's perspective, the class will embark on a survey of Western opera. The diverse operas will be studied in their entirety and viewed in their historical context. Class members will attend a live operatic performance (extra fee required). One semester, 3 credits.

102 History of Jazz
This course examines the development of jazz from its African and African-American folk origins through the blues, early jazz, swing era, bebop, "cool" jazz, fusion and contemporary styles of Jazz. Discussion on the works of jazz musicians, such as Louis Armstrong, Duke Ellington, Miles Davis, John Coltrane, will emphasize their significance in United States' historical and social contexts. One semester, 3 credits.

103 American Popular Music
This course examines the social and parallel musical development of postwar United States. American popular music will not be viewed as a trend in contemporary society, but as an expression: of commodification, of the incorporation of experience, authenticity, and subjectivity (ideology), of textual schizophrenia, of the postmodern disappearance of reality, and of new forms of cultural resistance. One semester, 3 credits.

COURSES FULFILLING MAJOR REQUIREMENTS

50 Colloquium
An investigation of historical music topics as well as the evolving character and purpose of music in society. Presented in seminar format, the colloquium focuses on specific topics related to performance, interpretation, historical significance and style of all types of music; includes lectures by visiting artists, small group discussions, and concert attendance. Music majors must take four semesters of this course. May be repeated. One semester, 0 credits.

100H Harmony I
The purpose of this course is to develop a deeper understanding of common-practice melody, harmony, and voice leading, and to demonstrate their analytical and compositional uses. Music majors and minors in MUS 100H must enroll concurrently in MUS 100M. Prerequisite: 70 or permission. One semester, 3 credits.

100M Musicianship I
The purpose of this course is to develop sight singing and dictation skills necessary in the performance and teaching of tonal music. Music majors and minors must enroll concurrently in MUS 100H. Prerequisite: 70 or permission. One semester, 1 credit.

104 Music Business
Introduction to non-performance careers within the music business: performing-right payments, music for stage and screen, marketing, etc. Techniques designed to assist in the transfer from academic to work environment will be presented in addition to discussion of current events within the music industry.

105 World Percussion Methods
This course provides students with the opportunity to learn and execute the principles of world percussion. Emphasis is placed on the teaching methods for world percussion through rehearsal techniques and performing experiences. Prerequisite: 70. One semester, 2 credits.

110 Class Piano for Majors
Introduction to the concepts of musicianship and technique at the keyboard while preparing the student for successful completion of the required piano proficiency examination administered by the music department; content includes scales, arpeggios, accompanying skills, repertory. May be repeated for zero credit until proficiency requirement is met. One semester, 1 credit.

111 Music Technology
This course is designed to introduce the student to the practical applications of music software on the Macintosh platform, including Finale, Digital Performer, and Pro Tools. Techniques and exercises are used to discover the capabilities of each program, culminating in a semester project specifically coordinated to individual student interest. Technology fee required. Prerequisite: 70. One semester, 2 credits.

*Not offered every year
200H Harmony II
The purpose of this course is to develop a deeper understanding of common-practice melody, harmony, voice leading, and musical form, and to demonstrate their analytical and compositional uses. Music majors and minors in MUS 200H must enroll concurrently in MUS 200M. Prerequisite: 100H. One semester, 3 credits.

200M Musicianship II
The purpose of this course is to develop sight singing and dictation skills necessary in the performance and teaching of tonal music. Music majors and minors must enroll concurrently in MUS 200H. Prerequisite: 100M or permission. One semester, 1 credit.

201H Harmony III
The purpose of this course is to develop a deeper understanding of common-practice melody, harmony, voice leading, and musical form, to demonstrate their analytical and compositional uses, and to introduce nontonal musical practices. Music majors and minors in MUS 201H must enroll concurrently in MUS 201M. Prerequisite: 200H. One semester, 3 credits.

201M Musicianship III
The purpose of this course is to develop sight singing and dictation skills necessary to perform and teach tonal and nontonal music. Music majors and minors must enroll concurrently in MUS 201H. Prerequisite: MUS 200M or permission. One semester, 2 credits.

203* Music History I
Understanding music through score study and guided listening; principal forms, structures and compositional techniques in instrumental and vocal music from Medieval through Baroque periods. Prerequisite: 100H. One semester, 3 credits.

204* Music History II
Music and its development in Western civilization from 1750 to the present; acquaintance with formal and stylistic problems through representative works; understanding musical concepts in their historical and cultural contexts. Prerequisite: 203. One semester, 3 credits.

205* Music History III
History, literature, and theory; analysis and composition based on resources from Debussy to the present. Prerequisite: 204. One semester, 3 credits.

206 History of Film Music
An introduction to the history of film music, from early dramatic film scores of Max Steiner and Alfred Newman to synthesized scores of Hans Zimmer and Danny Elfman. Extensive viewing and commentary of films; brief technical explanation of film scoring techniques; guest lectures by current film music composers. Prerequisite: permission. One semester, January, 4 credits; Fall/Spring 3 credits.

211* Music Technology II
Continuation of techniques and applications obtained in Introduction to Music Technology with emphasis on integration of software programs for optimal project success. Technology fee required. Prerequisite: 111. One semester, 2 credits.

300* Instrumentation
The purpose of this course is to understand the properties of string, woodwind, brass, and percussion instruments. To understand scoring procedures for small and large ensembles using the above instruments, and to gain a basic understanding of the computer notation software used in this scoring process. Prerequisite: 201H. One semester, 2 credits.

305* Conducting
Score reading and baton technique; study and execution of basic patterns using standard orchestral and choral literature, score reading, performance, and stylistic analysis. Prerequisite: 201H or by Permission. One semester, 3 credits.

310* Recording Techniques
Introduction to the basic principles and properties of sound: frequency, intensity, timbre, resonance; reverberation; study of multi-track recording techniques, signal processing devices, and MIDI techniques including sequencing, analog to digital transfer, and editing. Prerequisite: 211. One semester, 2 credits.

*Not offered every year.
330* Introduction to Ethnomusicology
This course introduces the student to the theory and methodology in the field of Ethnomusicology. Emphasis is placed on the systematic study of non-western music cultures. Topics for discussion include fieldwork, musical transcription, description of musical compositions, organology, historical and geographical approaches, context and communication, and bibliographic resources. Prerequisite: MU 201H, MU 203, and MU 204.

390, 490 Current Topics in Music
Variable credits. Permission. May be repeated for credit.

351* Choral Music Methods
Preparation for work with vocal groups in junior and senior high school. Emphasis on planning, organization, rehearsal techniques, and teaching strategies. One semester, 2 credits.

400 Senior Seminar
Special topics presented by music faculty. Readings will be assigned from major journals, and students will be expected to engage in independent library research. Students will complete a significant independent study project, leading to a major term paper that satisfies Whittier College's Paper in the Major requirement, and a presentation open to the entire college community. Prerequisite: Permission of the instructor. One semester, 2 credits.

ENSEMBLES
All of the ensembles listed below are open to all students, subject to audition or permission of the instructor. All are one credit per semester and may be repeated.

The COLLEGE CHOIR is a large choral ensemble open by audition to all students. It sings a variety of choral literature, and performs on campus throughout the academic year. Its two principal activities are the Christmas Madrigal Feast in December and the annual concert tour in the Spring. Recent tours include the Southeastern States, Northern California, and Mexico.

The COLLEGE CHORALE is a select group of 12 to 16 voices chosen from the College Choir. Its repertoire includes madrigals, chamber choir literature, and popular and show music. It performs in community programs, before service clubs, and in most appearances of the Choir.

The CHAMBER MUSIC ENSEMBLES provide students with the preparation and performance of small group/chamber music. Emphasis is placed upon high degree of musicianship and fine ensemble playing. Areas of concentration include the study of musical styles, phrasing, balance and blending techniques, intonation, rehearsal techniques, and performance. Groups ranging in size from 2 to 10 members are formed for this purpose. Performances take place on regularly scheduled Music Department activities.

In addition, students may earn college credit for participation in either of two community ensembles:

RIO HONDO SYMPHONY: A regional, semi-professional community orchestra for the advanced student. Audition required.

CHORALE BEL CANTO: A community masterworks chorale of 80 voices which performs large choral works with orchestra. The chorale is open to faculty, staff and students by audition.

INDIVIDUAL INSTRUCTION
Private lessons are offered by an outstanding artist faculty in all instruments, voice and composition. One half-hour lesson with a minimum of five hours practice weekly yields one credit per semester; two half-hour lessons with corresponding practice carry two credits. Lessons may be arranged without credit. Fees for lessons are listed in the fees and charges sections.

STUDENT RECITALS
Each month Whittier College students studying privately with an Artist-in-Residence have the opportunity to perform in the Poet Musicale. Majors are strongly encouraged to participate in partial or complete recitals as part of their upper-division work. These recital opportunities exist for all students studying privately, whether or not they are music majors.
PHILOSOPHY

David P. Hunt
Paul Kjellberg, Chair
Michelle Switzer

Philosophy is the study of thinking clearly about ideas. It does not normally lead to any one career in particular, but prepares you for anything. Philosophy deals with everyday problems: Should I go into teaching, law, or business? Should I be a Democrat, a Republican, something else, or nothing? These practical questions prompt major philosophical concerns: Who am I? What is important? What is real?

The study of philosophy brings many benefits. It stimulates self-examination (“The unexamined life,” Socrates said, “is not worth living.”); it provides insights into various cultures, including your own; it explores the inter-connectedness of different kinds of knowledge; it encourages clear thinking; and it offers a view of the big picture that is helpful in all aspects of life.

The department offers two programs in philosophy. The traditional major and minor introduce students to classical philosophical issues while fostering critical skills. The program in applied philosophy offers a solid grounding in philosophy together with a concentration in another discipline, allowing students to use their philosophical training to develop a deeper appreciation of the foundations, controversies, and larger significance of an area of interest outside philosophy.

GUIDELINES FOR A MAJOR IN PHILOSOPHY
A minimum of 30 credits, of which 21 must be at the 300 level or above, including the three “core courses,” Senior Thesis and Colloquium (PHIL 498), and either Seminar in Contemporary Philosophy (PHIL 420) or Seminar in the History of Philosophy (PHIL 430). The core courses, which are required for both major programs as well as the minor program, are the following:

Classical Philosophy, PHIL 310, 3 credits
Modern Philosophy, PHIL 315, 3 credits
Ethical Theories, PHIL 330, 3 credits

GUIDELINES FOR A MAJOR IN APPLIED PHILOSOPHY
A minimum of 42 credits, including 18 from a field of concentration outside philosophy (the particular courses to be chosen in consultation with the faculty advisor), and 24 from within philosophy, of which 18 must be at the 300 level or above, including the three core courses, Senior Thesis and Colloquium (PHIL 498), and one 3-credit course, numbered 300 or above and approved by the advisor, on the philosophy of the field from which the 18 non-philosophy credits are taken. (This requirement may be met by a directed study if no regular course is appropriate.) Ideal fields of concentration for the Major in Applied Philosophy include such disciplines as Art History, Biology, Business, and Political Science.
GUIDELINES FOR A MINOR IN PHILOSOPHY

A minimum of 18 credits, of which 12 must be at the 300 level or above, including the three core courses.

NOTE: Students may petition the Philosophy Department to accept one appropriate course from another discipline as an elective in the major or the minor.

COURSE DESCRIPTIONS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>50*</td>
<td>Meet and Talk</td>
<td>Informal philosophical discussion in the home of one of the faculty members.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>One semester, 1 credit.</td>
</tr>
<tr>
<td>105</td>
<td>Introduction to Ethics</td>
<td>This course presents various traditional and critical approaches to moral and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ethical issues and uses them to understand practical problems in daily life.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preference given to freshmen. One semester, 3 credits.</td>
</tr>
<tr>
<td>120</td>
<td>Theories of Human Nature</td>
<td>A philosophical approach to human nature and the human position in the scheme</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of things. Topics include free will, personal identity, human excellence,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and the difference between human beings, animals, and machines. One semester,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 credits.</td>
</tr>
<tr>
<td>220</td>
<td>Philosophical Issues in Imaginative Literature</td>
<td>Develops an understanding of the philosophical enterprise through discussion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of works of fiction that raise issues of a philosophical nature. One semester,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 credits.</td>
</tr>
<tr>
<td>230*</td>
<td>Philosophical Issues on Film</td>
<td>Addresses philosophical questions posed by some of the masterpieces of world</td>
</tr>
<tr>
<td></td>
<td></td>
<td>cinema; students view feature-length films, read relevant philosophical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>texts, and explore connections between the films and texts. January session,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 credits.</td>
</tr>
<tr>
<td>240*</td>
<td>Bioethics</td>
<td>Moral and social problems in the medical and other biological fields,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>particularly issues raised by the dramatic growth of technology. One</td>
</tr>
<tr>
<td></td>
<td></td>
<td>semester, 3 credits.</td>
</tr>
<tr>
<td>250*</td>
<td>Philosophy of Love and Human Sexuality</td>
<td>An examination of the constructions of male and female sexuality and some of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>their ethical and political implications; contemporary issues including</td>
</tr>
<tr>
<td></td>
<td></td>
<td>promiscuity, child abuse, prostitution, pornography, and marriage. One</td>
</tr>
<tr>
<td></td>
<td></td>
<td>semester, 3 credits.</td>
</tr>
<tr>
<td>270*</td>
<td>History of Social Thought</td>
<td>An examination of some of the dominant historical approaches to the foundation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of the state and its proper role, as a tool for understanding contemporary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>government; classic issues such as the nature of political authority, the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>social contract, and community. One semester, 3 credits.</td>
</tr>
<tr>
<td>300</td>
<td>Early Chinese Philosophy</td>
<td>The early period of Chinese philosophy: Confucianism and Daoism, as well as</td>
</tr>
<tr>
<td></td>
<td></td>
<td>other thinkers and schools of thought, all of which were influential in the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>development of cultures across East Asia. One semester, 3 credits.</td>
</tr>
<tr>
<td>302*</td>
<td>The Development of Buddhist Philosophical Thought</td>
<td>The development of Buddhist philosophical thinking as it began in India and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>flourished in China and Japan. Not open to freshmen; previous course in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>philosophy recommended. One semester, 3 credits.</td>
</tr>
<tr>
<td>310</td>
<td>Classical Philosophy</td>
<td>Greek and Roman thought as the foundation for Western philosophy; systematic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>study of the development of philosophy from Thales to St. Augustine, with</td>
</tr>
<tr>
<td></td>
<td></td>
<td>an emphasis on Plato and Aristotle. Not open to freshmen. One semester, 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>credits.</td>
</tr>
<tr>
<td>312*</td>
<td>Medieval Philosophy</td>
<td>Examines the period from the beginning of Christian philosophy through the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High Middle Ages to the breakdown of the Medieval synthesis; focuses on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Augustine and Aquinas. Not open to freshmen; previous course in philosophy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>recommended. One semester, 3 credits.</td>
</tr>
</tbody>
</table>

*Not offered every year
315* Modern Philosophy
Major Continental and British philosophers of the 17th and 18th centuries, beginning with Descartes and ending with Kant. Not open to freshmen; previous course in philosophy recommended. One semester, 3 credits.

317* Nineteenth Century Philosophy
This course explores the thought of Hegel, Marx, Nietzsche, and Kierkegaard, all very difficult thinkers who were influential in forming the modern “continental” tradition in philosophy. One previous course in philosophy and instructor's permission. One semester, 3 credits.

320* Existentialism
The meaning of human existence as presented in the writings of 19th and 20th century philosophers such as Kierkegaard, Nietzsche, Dostoyevsky, Camus, Sartre, and Buber. Not open to freshmen; previous course in philosophy recommended. One semester, 3 credits.

326* Symbolic Logic
An introduction to formal structures of reasoning through analysis of the logical forms of language and thought; readings and problems in logic and logical theory. Not recommended for freshmen. One semester, 3 credits.

330* Ethical Theories
Problems such as the nature of moral judgments, origin of obligations and responsibility, relation between facts and values, possibility of moral knowledge, and role of rules and consequences in moral reasoning; readings from classical and contemporary sources. Open to juniors, or sophomores with one previous course in philosophy. One semester, 3 credits.

340* Contemporary Issues in Social Philosophy
Concepts in social philosophy such as justice, welfare, the individual, community, and society; contemporary problems such as the just allocation of resources, the individual in relation to society, and the relationship between law and morality. Prerequisite: PHIL 270 or both PHIL 105 and one other course in Philosophy. One semester, 2 or 3 credits.

345* Philosophy of Art
Philosophical reflection on the nature of the arts: the plastic arts (painting, sculpture, etc.), literature, music, and performance; topics include the definition of art, critical appraisal, artistic creativity, aesthetic experience, and the role of audience and institutions. Open to juniors, or to sophomores with one previous course in philosophy. One semester, 3 credits.

350* God and Religion
The idea of God; proofs for the existence of God; the nature of religious language; the problem of evil; arguments for and against the supernatural. Open to juniors, or sophomores with one previous course in philosophy. One semester, 3 credits.

360 Philosophy of Mind
Critical examination of the major theories about the nature of mind; an exploration of selected topics, including the mind-body relationship, personal identity, artificial intelligence, intentionality, and free will. Open to juniors and seniors with one previous course in philosophy and sophomores with two previous course in philosophy. One semester, 2 or 3 credits.

370* Metaphysics
Theories about what sorts of things are fundamental in the universe; readings from classical and contemporary sources. Open to juniors and seniors with one previous course in philosophy, or sophomores with two previous courses in philosophy. One semester, 3 credits.

380* Truth and Knowledge
Various problems of knowledge, such as belief and opinion, the origin of ideas, the certainty of knowledge and truth, and the limits of knowledge. Open to juniors and seniors with one previous course in philosophy, or sophomores with two previous courses in philosophy. One semester, 3 credits.

385 Feminist Philosophy
An examination of the primary feminist responses to the omission of gender as fundamental category of analysis in social and political theory—liberal, socialist, Marxist, psychoanalytic, and radical. Prerequisite: PHIL 105 or 9 credits in Women's Studies.

*Not offered every year.
400* Advanced Philosophical Writing
This is an advanced course in writing for students with experience in philosophy. Prerequisite: two previous courses in philosophy and instructor's permission. One semester, 3 credits.

420* Seminar in Contemporary Philosophy
A close examination of a selected topic and the work philosophers have done on this topic during the last 50 years. Open to juniors and seniors with two previous courses in philosophy. May be repeated for credit. One semester, 2 or 3 credits.

425 Seminar in Philosophy
A focused study of some aspect of philosophy; contact instructor for details. Open to juniors and seniors with two previous courses in philosophy. May be repeated for credit. One semester, 2 or 3 credits.

430* Seminar in the History of Philosophy
A detailed examination of one or two philosophical figures, or of a single philosophical school of thought. Open to juniors and seniors with two previous courses in philosophy. May be repeated for credit. One semester, 2 or 3 credits.

290, 390, 490 Selected Topics in Philosophy
Variable credits. May be repeated for credit.

395, 495 Directed Studies in Philosophy
Credit and time arranged. Permission. May be repeated for credit.

498 Senior Thesis and Colloquium
This advanced seminar supports and directs senior majors in the research and writing of their Senior Thesis. The Senior Thesis, usually a year-long project, is the required paper-in-the-major. Prerequisites: Senior standing and permission. Two semesters, 1 or 2 credits each, for a total of 3 credits.

*Not offered every year.
PHYSICS AND ASTRONOMY

Howard Lukefahr, Chair
Seamus Lagan
Glenn Piner

Physicists seek to understand nature at its most profound level. From the behavior of quarks that are the constituents of protons and neutrons, to superclusters of galaxies, physicists seek to learn the inner workings of nature. As physicists explore new parts of nature, practical applications emerge. In fact, many of the spectacular technologies new to the twentieth and twenty-first centuries are byproducts of physicists' investigation of nature.

At Whittier, Physics and Astronomy is a small department, attracting some of the college's best students to a friendly atmosphere, small classes, opportunities to participate in research, and close interactions between students and faculty. Courses are often taught in a non-traditional Workshop format that emphasizes learning by investigation and extensive use of the department's excellent computing facilities. Physics majors enjoy 24 hour per day access to the Physics Lounge and Physics Library where students work together on homework, play chess, and simply relax.

The Whittier College Physics Club, a chapter of the Society of Physics Students (SPS), is at the core of the intellectual and social life of the department. SPS sponsors several lectures per semester by physicists from other colleges, universities, national labs, and industrial labs who discuss their research. SPS also sponsors overnight astronomy parties in the desert, trips to research facilities off-campus, a pizza and movie night, an annual picnic, and other activities.

The Whittier College Department of Physics and Astronomy offers all of its majors the opportunity to participate in research. Faculty and students engage in research together and have authored papers together. In addition, our students' research experiences have helped them gain admission to top graduate programs and secure positions of responsibility in industry. Moreover, participation in research is just plain fun.

The Physics program at Whittier is rigorous and is designed to prepare students for entry into Ph.D. programs in Physics. But the major is also flexible and offers students options which help prepare them for careers in teaching and employment in industry after graduation. Many of our Physics Majors also complete a major or minor in Mathematics.

The Department's web page, accessible through the Whittier College web page and at www.physics.whittier.edu, provides up-to-date information and announcements important to students interested in physics.

GUIDELINES FOR A MAJOR IN PHYSICS
To receive a B.A. in Physics from Whittier College, students must complete 35 credits of required physics courses, 15 credits of required math courses, and either option I or option II below.
Required Physics Courses:
- Intro Optics and Modern Physics, PHYS 130, 4 credits
- Intro Kinematics and Mechanics, PHYS 150, 4 credits
- Intro Electricity, Magnetism and Thermodynamics, PHYS 190, 5 credits
- Computational Oscillations and Waves, PHYS 250, 3 credits
- Classical Mechanics, PHYS 310, 3 credits
- Advanced Modern Physics, PHYS 325, 3 credits
- Electromagnetic Theory, PHYS 330, 3 credits
- Quantum Mechanics, PHYS 350, 3 credits
- Experimental Physics, PHYS 380A,B, 4 credits
- Senior Seminar, PHYS 499, 3 credits

Required Math Courses:
- Calculus I and II, MATH 141 A,B, 8 credits
- Calculus III, MATH 241, 4 credits
- Differential Equations I, MATH 345A, 3 credits

Option I
Completion of 9 credits from the following list (at least three must be in Physics)
- Electronics and Computer Interfacing, PHYS 205, 3 credits
- Environmental Physics, PHYS 210, 3 credits
- Advanced Electronics and Computer Interfacing, PHYS 305, 3 credits
- Optics, PHYS 320, 3 credits
- Statistical Physics, PHYS 315, 3 credits
- Astrophysics, PHYS 360, 3 credits
- Solid State Physics, PHYS 375, 3 credits
- Selected Topics, PHYS 390,490, 3 credits
- Undergraduate Research, PHYS 396/496, 1-3 credits
- Complex Variables, MATH 344, 3 credits
- Differential Equations II, MATH 345B, 3 credits
- Numerical Analysis, MATH 350, 3 credits
- Linear Algebra, MATH 380, 3 credits
- Programming I, COSC 120, 3 credits

Option II
Completion of 6 credits from the list above (at least 3 in physics) plus a two-semester introductory sequence in another science approved by the department (e.g., CHEM 110).

Maximum Credits in Physics Courses
Physics majors should be aware that a maximum of 48 credits of physics courses can be counted toward the 120 units required for graduation. Physics majors are welcome to take more than 48 credits of physics courses, but doing so will necessitate completion of more than 120 credits in order to receive a B.A. from Whittier College.

Preparation for Graduate Programs
Students planning to enter Ph.D. programs in Physics should plan to take more than the minimum number of Physics and Math courses.
GUIDELINES FOR A MINOR IN PHYSICS
To receive a minor in Physics from Whittier College, students must complete at least 22 credits in physics and 12 credits in math.
- Intro Optics and Modern Physics, PHYS 130, 4 credits
- Intro Kinematics and Mechanics, PHYS 150, 4 credits
- Intro Electricity, Magnetism and Thermodynamics, PHYS 190, 5 credits
- Computational Oscillations and Waves, PHYS 250, 3 credits
- Two upper division physics courses approved by the Physics Department, 6 credits

Math Courses Required for a Minor in Physics
- MATH 141 A,B, Calculus I and II, 8 credits
- MATH 241 Calculus III, 4 credits

GUIDELINES FOR CHOOSING A BEGINNING-LEVEL PHYSICS OR ASTRONOMY COURSE

Students not majoring in science:
PHYS 90 is intended for students who are not majoring in science and is suitable for students who have a limited mathematics background. Interested science majors are also welcome. Does not count toward a physics major. Satisfies the ILS requirement.

Pre-Health students:
PHYS 130 and PHYS 131 together constitute a year in algebra-based physics suitable for most pre-health professional students who will be taking the MCAT and related exams. Both of these courses are algebra-based. Note that these courses can be taken in any order. PHYS 130 satisfies the ILS requirement.

Students majoring in physics or engineering, and well-prepared pre-health or non-science students:
PHYS 130, 150, and 190 together constitute the physics sequence for physics majors and pre-engineering students. This sequence is also recommended for students in other sciences planning to attend graduate school, and interested students with majors outside the sciences. Well-prepared pre-health students can complete this sequence rather than PHYS 130 and 131, and thus strengthen their applications. PHYS 150 should be completed before 190, but PHYS 130 can be taken at any time. All three satisfy the ILS requirement. PHYS 130 is algebra-based, but PHYS 150 and 190 require calculus as a prerequisite (concurrent enrollment allowed).

Students majoring in physics or planning to complete the 3-2 engineering program may occasionally wish to take more than one introductory physics course in a semester. Students with credits in AP physics, A-level physics, or other college-level physics courses should seek advice from the physics faculty, preferably before registering for physics courses at Whittier College.

*Not offered every year
All Physics laboratory courses require a lab fee. Lab courses include Phys 90L, 130, 131, 150, 190, 205, 305, 320, and 380A.B. Contact the Department of Physics and Astronomy for details or see the Whittier College course schedule.

90 Introduction to Astronomy
The earth, solar system, galaxy, and universe; space exploration, exobiology, and cosmology. Optical and radio telescopes, spectroscopy, and space probes. Lecture and laboratory. One semester, 4 credits.

130 Introduction to Optics and Modern Physics
This is a one-semester algebra-based course which can serve as an entry to the major or can be taken to satisfy the one-semester lab science requirement. Topics covered include geometrical optics, physical optics, quantum physics, atomic and nuclear physics. This course is taught in an activity-based workshop format. One semester, 4 credits.

131 Introductory Mechanics and Electromagnetism
This is a one-semester algebra-based physics course which is aimed at students in the pre-health programs. Topics covered include kinematics, Newton's Laws, momentum, energy, electrostatics, circuits, magnetostatics, electromagnetic induction. One semester, 5 credits.

150 Introductory Kinematics and Mechanics
This is a one-semester, calculus-based introductory physics course that can serve as an entry to the major or can be taken to satisfy the one-semester lab science requirement. Topics covered include vectors, projectile motion, Newton's laws, gravitation, momentum, and energy. This course is taught in an activity-based workshop format. Pre-requisite or concurrent enrollment: Math 141A. One semester, 4 credits. Satisfies the ILS requirement.

190 Introductory Electricity, Magnetism, and Thermodynamics
This is a one-semester, calculus-based introductory physics course that is normally taken after PHYS 130. Topics covered include electrostatics, circuits, magnetostatics, electromagnetic induction, heat and temperature, thermodynamic engines, and ideal gasses. This course is taught in an activity-based workshop format. Pre-requisite or concurrent enrollment: Math 141B. Prerequisite: 150. One semester, 5 credits.

196, 296 Research
Independent research under the direction of a faculty member. One semester or January Interim, 1-4 credits. Can be repeated for credit.

205 Electronics and Computer Interfacing
An introduction to electronics and computer interfacing of small-scale laboratory experiments. Open to all science majors. Topics include: An overview of basic electrical circuit theory; the design and use of digital circuits using logic gates, flip-flops, etc; the design and implementation of computer interfacing schemes for small scale experiments in physics, biology, and chemistry using commercial interfacing hardware and software. Combined lecture and lab meets for three hours twice per week. Students will complete a final project involving interfacing of an experiment relevant to their majors/interests. Permission of instructor. One semester, 3 credits.

210 Environmental Physics*
The application of physics to the study of our environment. Topics will vary and may include global climate change, atmospheric physics, radioactivity, radioactive dating techniques, radioactive waste disposal, transport of pollutants, and comparison of Earth to other planets. Prerequisite: Phys 130 and one additional 100-level physics course, or permission of the instructor. One semester, 3 credits.

230 Computational Oscillations and Waves
Analysis of damped and driven oscillators and resonance phenomena in various physical contexts; coupled oscillators and modes. Solutions of the wave equation, superposition, traveling waves, standing waves. Introduction to non-linearity. Heavy use of computers and computational techniques are stressed throughout the course. Prerequisites: PHYS 150, 190. Pre-requisites or concurrent enrollment: PHYS 130, MATH 241. One semester, 3 credits.

*Not offered every year
305 Advanced Electronics and Computer Interfacing*
Continuation of PHYS 205. Topics include: Advanced programming in LabVIEW including state machines, GUI design, debugging techniques, references, calling dlls, making executables, and performance issues. Design of simple analog and digital circuits as needed. Students will each complete a portion of a substantial class interfacing project and will participate in the integration of the individual components to produce a testing station. Permission of instructor. One semester, 3 credits.

310 Mechanics*
Systematic exposition of Newtonian Mechanics; conservation laws, collisions, systems of particles, rigid body motion, central forces and orbital mechanics, non-inertial reference frames, generalized coordinates, and introduction to Lagrange's equations of motion. Pre-requisite or concurrent enrollment: PHYS 250. One semester, 3 credits.

315 Statistical Physics*
Physics of large-scale systems consisting of many particles. Statistical mechanics, kinetic theory, thermodynamics, and heat. Introduction to quantum statistics. Pre-requisite or concurrent enrollment: PHYS 250. One semester, 3 credits.

320 Optics*

325 Advanced Modern Physics*
Concepts of modern physics applied to important physical systems including solids, molecules, nuclei, and elementary particles. Special relativity. Pre-requisite or concurrent enrollment: PHYS 250. One semester, 3 credits.

330 Electromagnetic Theory*
Electro- and magneto- statics in vacuum and in matter, scalar and vector potentials, and electrodynamics. Maxwell's equations and electromagnetic waves. Prerequisite: PHYS 250. One semester, 3 credits.

350 Quantum Mechanics*
General formalism; operators, eigenfunctions and eigenvalues. The Schrodinger equation. One dimensional quantum systems. Angular momentum. Prerequisite: PHYS 250. One semester, 3 credits.

360 Astrophysics*
Stellar structure, stellar spectra, nuclear energy generation, and stellar evolution. The interstellar medium, galaxy structure and dynamics, and cosmology. Pre-requisite or concurrent enrollment: PHYS 250. One semester, 3 credits.

375 Solid State Physics*

380 A,B Experimental Physics*
Laboratory experiments taken from a wide variety of topics in physics including experiments of historical importance, atomic and nuclear physics, x-ray physics, condensed matter physics, and cryogenics. Formal lab reports will be required in the second semester. Pre-requisite or concurrent enrollment: PHYS 250. Two semesters, 2 credits each semester. Physics 380B may be repeated for credit.

390, 490 Selected Topics in Physics*
Variable credits. May be repeated for credit.

396, 496 Research
Independent research under the direction of a faculty member. One semester or January Interim, 1-4 credits. Can be repeated for credit.

499 Senior Seminar
Special topics presented by physics faculty. Readings will be assigned from major journals, and students will be expected to engage in independent library research. Students will complete a significant independent study project, leading to a major term paper that satisfies Whittier College's Paper in the Major requirement, and a presentation open to the entire college community. Permission of the instructor. One semester, 3 credits.

*Not offered every year
Plato once suggested that the wise who refuse to participate in the affairs of government are punished by having to live under the rule of fools. The Political Science Department hopes to develop wisdom in its own majors and all students so that they may be effective participants in the political world, whether as practitioners of politics or as citizens in their community.

To this end, the Department acquaints students with the nature of political behavior and the substance of politics through the systematic analysis of political phenomena. The Department offers special programs such as Model United Nations, the Washington Winterim, the International Negotiations Project, internships, field research experience, and participation in Pi Sigma Alpha, the National Political Science Honor Society. The Department also provides background and career guidance for such areas as law, public and international administration, planning and policy-making, politics, teaching, journalism, pure and applied research, and related fields.

GUIDELINES FOR A MAJOR IN POLITICAL SCIENCE

A minimum of 36 credits, including:

- American Government and Politics, PLSC 110, 3 credits
- Comparative Politics, PLSC 140, 3 credits
- International Relations, PLSC 220, 3 credits
- Political Methodology, PLSC 280, 3 credits
- Normative Political Theory, PLSC 380, 3 credits
- One course in Public Administration (PLSC 260 or 360), and/or Public Law (PLSC 370, 372 or 376)
- One January Session course or approved equivalent
- One Capstone seminar
- Two additional courses, one from the subfields of American/Public Administration/Public Law and one from International Relations/Comparative Politics.

Students wishing to pursue an International Relations track should complete the basic requirements for the Political Science major and the following courses in International Relations and Comparative Politics:

- PLSC 228; 332; 333, 9 credits
- PLSC 330, 339, or 340, 3 credits
- 2 courses in Comparative Politics from at least two regions, 6 credits

In addition, students pursuing this track should take at least 2 years of a foreign language and other appropriate courses as recommended by the Department. Students are also encouraged to participate in an overseas or off-campus program that is either language-based or has a political science or international relations component.
GUIDELINES FOR A MINOR IN POLITICAL SCIENCE

A minimum of 18 credits, including PLSC 100 or 110, selected in consultation with the department minor advisor to fulfill one of the following emphases:

General Emphasis: At least one course in four of the following subfields: American Politics; Public Administration and Law; International Relations; Comparative Politics; and Political Theory.

Subfield Emphasis: 12 credits taken in one or two related subfields.

COURSE DESCRIPTIONS

INTRODUCTORY COURSES

100 Introduction to Political Science
Political Science as the study of political behavior from various perspectives—individual, group, national, and international; exploring the role of science, values, and theories in the study of politics and providing examples of American, comparative, and international politics. Students will learn about the role of interests in elections, campaigning tactics, and different ways that citizens participate in their governance. One semester, 3 credits.

110 American Government and Politics
The governmental institutions and political processes of the American political system; attitudes and behavior of citizens; the policy-making process and the key issues of American politics. Satisfies the state teaching credential requirement in American Constitution. One semester, 3 credits.

140 Comparative Politics
Compares different ways of organizing politics in more and less developed countries in various regions of the world. Primary themes include political legitimacy and authority, representation, and patterns of political change. One semester, 3 credits.

120 California Politics and Government
The political process in California—nominations and elections; structure and operation of state and local institutions; leading policy problems. One semester, 3 credits.

302 The President and Congress
Development of the presidency and Congress, their functions, relationships, and problems; comparative consideration of other political, executive and legislative bodies. One semester, 3 credits.

303 Race and Ethnicity in American Politics
This course looks at the struggle for civil rights and civil liberties among racial minorities since the nation's founding. Special attention will be paid to different theories of race and racism in this course. Prerequisite: PLSC 110 or permission. One semester, 3 credits.

304 Political Parties, Interest Groups, and the Media
The nature, purpose, and functions of American political parties, interest groups, and media are examined in this course. Particular attention is paid to the role of these organizations in the governmental process, nominations, elections, and voting behavior, and their relative influence in American politics. Prerequisite: PLSC 110 or permission. One semester, 3 credits.

305 Washington Winterim
Field work, on-the-scene learning experience in Washington, D.C. Lectures, discussions, briefings, site visits, and individual research projects on aspects of national politics, government, and public policy. Permission. January, 4 credits.

*Not offered every year
**312* Urban Politics**
Political behavior and processes in urban areas; stress on contemporary issues, perspectives, models and interrelationships of politics, policy, and planning. One semester, 3 credits.

**315* Politics Beyond the Classroom**
Direct observation and analysis of practical politics through field trips, personal investigation, and small group discussion; TV, the press, public relations, parties, and lobbying as they relate to campaigns, elections, the political process, and public policy. Involves interviews with political leaders and visits to government institutions. Course culminates with field trip to the state capitol in Sacramento. Additional charge involved, personal transportation may be necessary. Permission. January, 4 credits.

**400 Seminar in American Politics**
Seminar dealing with such subjects as American political parties, nominations, campaign, elections, voting behavior, interest groups, and the political novel. Permission. One semester, 3 credits.

**INTERNATIONAL RELATIONS**

**28 Model UN Conference**
Participation in annual conference of Model United Nations of the Far West. Permission. May be repeated for credit. One semester, 1 or 2 credits.

**220 International Relations**
Development of international politics since World War I; basic concepts and theories regarding political interaction among nation-states, emphasizing national interest and security, the exercise of power and its limits, and international conflict and cooperation. One semester, 3 credits.

**225* Problems and Policies in Contemporary Politics**
Focuses on a major problem in contemporary politics; opportunity for in depth analysis of the problem's background, current status, and prospects for resolution. January, 4 credits.

**228 International Organization**
An examination of the nature of international organization and globalist theory; special emphasis on the United Nations: its role in peace and security, economic and social affairs, sustainable development, humanitarian affairs, and human rights; the role of member states and non-governmental organizations; participation in the Model United Nations of the Far West conference. One semester, 3 credits.

**330 Human Rights**
The nature of human rights and their role in the global community; how human rights are established, defined, monitored, and enforced with special emphasis on the role of the United Nations in this process; major issues and problems in the area of human rights. One semester, 3 credits.

**332 American Foreign Policy**
Historical evolution of American foreign policy from independence to the present; the decision-making process; problems and prospects in contemporary foreign policy. One semester, 3 credits.

**333 International Political Economy**
Surveys an influential area of international relations that analyzes the interplay of politics and economics in the international milieu. While the course focuses on contemporary debates over the importance of economic variables in political systems, these issues are analyzed within the context of formative debates such as realism vs. idealism; neo-mercantilism vs. laissez faire; and dependency vs. neo-institutionalism in a variety of regional settings. Prerequisite: PLSC 220 or permission. One semester, 3 credits.

**335 International Relations of Latin America**
Examines relations between and among Latin American countries, looking at competition, conflicts and efforts at cooperation. Includes attention to cross-border challenges such as migration, narcotics trafficking and political insurgency, as well as dealing with Latin American efforts to enhance regional trade and democratization. Prerequisite: PLSC 220 or PLSC 140 or permission. One semester, 3 credits.

**339* Military Strategy and Arms Control**
An examination of the development and application of military strategy, focusing on concepts such as deterrence, preemption, weapons of mass destruction and counter-
terrorism, with emphasis on the current and future roles of arms control in national security policy. One semester, 3 credits.

420 Seminar in International Relations
Survey of international relations theories and methodological problems in research; completion of independent research project. Permission. One semester, 3 credits.

COMPARATIVE POLITICS
245 From Russia With Feeling
Russia—the interaction of history, culture, literature, and politics; life under the Tsars, the Bolshevik revolution, the Stalinist purges, Russia at war; and modern Russian politics through lectures, serious games, films, and literature. January, 4 credits.

252 Latin American Politics
Comparison of political systems of Latin American nations; emphasizes dynamics of political change and problems of democracy. Prerequisite PLSC 140 or permission. One semester, 3 credits.

253 Politics of Diversity in Latin America: Race, Religion and Gender
Using film, explores the origins, organization and political implications of ethnic, religious and gender diversity in Latin America, from colonialism through the present. January, 4 credits.

340 Political Violence
Explores the motivations and causes of political violence, including guerrilla warfare, terrorism, military coups d’etat and genocide, looking at various regions of the world. Prerequisite: PLSC 140 or PLSC 220 or Permission. One semester, 3 credits.

341* Western European Political Systems
Comparison of political processes in the major nations of Western Europe; the interaction of historical, cultural, economic, and political patterns. One semester, 3 credits.

346* Russian and East European Politics
Eastern Europe in transition: an analysis of the political, cultural, economic, and historical factors that led to changes in the former Soviet Union and Eastern Europe and consideration of future alternatives for the region. One semester, 3 credits.

348* East Asian Political Systems
Comparative analysis of political development and change in China and Japan; problems of ideology; national integration, economic development and post-industrial growth, political participation, and political stability. One semester, 3 credits.

349* Southeast Asian Politics
Analysis of the politics of Southeast Asia with a focus on the post-World War II period; emphasis on Vietnam and Cambodia, and the impact of the Vietnam War on the region and on those countries’ relations with other nations. One semester, 3 credits.

356* Middle Eastern Political Systems
Comparative approach to the heritage and institutions of Islam and Israel; stresses problems of political development and Arab-Israeli relations. One semester, 3 credits.

358* African Political Systems
Comparative study of political change in Africa south of the Sahara; traditional political systems, colonialism, nationalism, and problems of nation-building and development. One semester, 3 credits.

359* North American States and Identities: Historical Transformations
Interprets historical transformations which began in Africa, the Middle East, and Europe and continue in North American society, including the rise of the modern state, the multifarious formations of identities and the continuously changing mechanics of maintaining identities as new ideas challenge the family, everyday life practices, networks of loyalty, and motivational patterns. One semester, 3 credits.

440* Seminar in Comparative Politics
Substantive and methodological problems in comparative politics research; completion of independent research project. Permission. One semester, 3 credits.

PUBLIC ADMINISTRATION AND LAW
260* Public Administration and Policy
Policy-making, management, personnel, and budgeting in the context of political administrative responsibility, tensions between the classic democratic model and bureaucratic
planning; methods used to study public policy; policy formulation, implementation and impacts; contemporary issues and compliance problems. One semester, 3 credits.

**362* Federalism and Urban Life**
Team research considers the impact of federal, state, and local programs on local political and social life; may include housing, poverty, the environment, and mass transportation issues. Permission. May be repeated for credit. One semester, 3 credits.

**364 Complex Organizations**
An analysis of the phenomena and theories of large, complex, formal organizations. Studies the organization as an economic, social, decision-making, bureaucratic, and political system. One semester, 3 credits.

**365 Warfare: In Pursuit of Military Security**
Examines war as a human activity, raising issues of civil-military relations, organizing for war, notions of a military-industrial complex, and philosophical, psychological and political aspects of war. Includes guest speakers, films, and field trips. Designed to capture the reality of combat and its costs; to familiarize students with key political, philosophical, and psychological issues of war and peace. Helps students to understand combat. January, 4 credits.

**370 Introduction to Judicial Process and Behavior**
Judicial decision-making processes; recruitment, socialization, and behavior of judges and lawyers; other participants in the judicial process; relationships with other policy-making institutions. One semester, 3 credits.

**372 American Constitutional Law**
The Supreme Court's role in the governing process; constitutional questions on separation of powers, federalism, and government property relationships; civil rights and liberties. Satisfies the state teaching credential requirement for American Constitution. One semester, 3 credits.

**376* Law and the Courts**
The U.S. judicial process in selected areas of public law and criminal justice; emphasis on reforming and perfecting the system. January, 4 credits.

**460* Seminar in Public Policy**
Seminar will focus on a vital topic of public policy, emphasizing administrative aspects of policy making and implementation. Permission. One semester, 3 credits.

**470 Seminar in Public Law**
Seminar dealing with such subjects as jurisprudence, constitutional law, civil rights, and judicial process. Permission. One semester, 2 or 3 credits.

**POLITICAL THEORY**

**280 Political Methodology**
An examination of the major and issues of empirical political science and the use of simulation in the development of theories or models. One semester, 3 credits. Prerequisite PLSC 110 or 140 or 220 or Permission.

**380 Normative Political Theory**
Western political philosophy from Plato to Marx: the development of normative theory and its relevance to modern political analysis and contemporary politics; emphasis on Plato, Aristotle, Machiavelli, Hobbes, Locke, Rousseau, and Marx. One semester, 3 credits.

**480* Seminar in Political Theory**
Seminar dealing with such subjects as normative political thought, empirical political theory, and political literature. Permission. One semester, 2 or 3 credits.

**ADDITIONAL OFFERINGS**

**390 Current Topics in Political Science**
Variable credits. Permission. May be repeated for credit.

**395 Directed Studies**
Credit and time arranged. Permission. May be repeated for credit.

**496 Internship**
Supervised field experience in local, state or national government, law, and practical politics. International organizations, interest groups, and non-governmental organizations with political missions may be considered. Permission. One semester, variable credits. May be repeated for credit.

*Not offered every year
Career preparation is an important part of a Whittier education. The fields of law, education, and the health services have traditionally drawn upon liberal arts graduates for advanced study in graduate schools or professional programs. Liberal arts students select an increasingly wide variety of careers in science, management, business, social service, government, religious vocations, journalism, and the fine arts.

Certain courses in the natural sciences, social sciences, and the humanities are generally required by professional schools for admission. Whittier College also offers more advanced courses that fulfill certain professional requirements. The following programs are outlined here to help students who intend to seek professional training after graduation. Students interested in professional programs should contact their faculty advisors for additional information.

**Pre-Dental**

Whittier provides excellent preparation in the basic fields required for admission to accredited dental schools. Pre-dental students should plan to complete a Bachelor's degree in a specific major before entering dental school. Although it is possible to enter some schools upon completion of 90 semester credits, three-fourths of freshmen dental students have completed four years of undergraduate work.

Certain minimum requirements are common to most dental schools. These include one year each of the following: biology, inorganic chemistry, organic chemistry, physics, and English. However, it is important that each student determines the specific courses required for the schools to which application is to be made.

**Pre-Engineering (3-2 Program)**

Whittier College has established cooperative programs with engineering schools at a number of universities, allowing students to benefit from the broad intellectual training offered by a liberal arts college and the technical training offered by an engineering school. Students in the 3-2 program normally spend three years at Whittier College and two years attending an engineering school. The five-year program leads to a Bachelor of Arts degree from Whittier College and a Bachelor of Science degree in engineering from a university.

To be recommended for admission to engineering school, students must ordinarily complete the prescribed sequence at Whittier College with at least a 3.0 overall GPA, a minimum grade of “C” in each of the 3-2 Program core courses, and a 3.0 GPA in the core courses. Students recommended by their advisor and the 3-2 Coordinator will normally be admitted to at least one of the cooperating universities. The B.A. from Whittier College will be awarded only after a student has successfully completed all of the graduation requirements at both schools.

Guidelines for the program, a list of participating Engineering Schools, and other information can be obtained from the Coordinator of the 3-2 Program.
Pre-Legal
Courses in the following fields are recommended for those preparing to enter law school: business administration, economics, English, history, philosophy, political science, psychology, sociology, and speech communication. Pre-legal students may take a major in any department or area of their choice. Such students are urged to consult the College's pre-law advisors for more detailed guidance.

Pre-Medical
Whittier provides excellent preparation in the basic fields required for admission to accredited medical schools. There is a Health Sciences Advisory Committee of faculty members that works closely with each student. Pre-medical students should plan to complete a Bachelor's degree in a specific major before entering medical school. Although it is possible to enter some schools upon completion of 90 semester credits, nearly all of the beginning medical students have completed four years of undergraduate work. The Health Sciences Advisory Committee recommends the general guidelines below for a pre-medical program at Whittier College. However, it is important that each student determines the specific courses required for the schools to which application is to be made. Certain minimum requirements are common to most medical schools. These include one year of each of the following: biology, inorganic chemistry, organic chemistry, physics, and English. Strongly recommended courses include: calculus, biochemistry, genetics, embryology, social and behavioral sciences. Additionally recommended courses are: anatomy, physiology, microbiology, and quantitative analysis.

Students intending to pursue a pre-medical program should contact an advisor in the Biology or Chemistry Department immediately after admission to Whittier College to plan their curricula and to determine the specific requirements of the medical schools they are considering.

Pre-Therapy
Early consultation with appropriate faculty is important for a smooth progression through undergraduate requirements and application to appropriate graduate programs.

Occupational Therapy: A major in psychology, music or art is recommended.

Physical Therapy: A major in biology or kinesiology and leisure science (see kinesiology and leisure science major, pre physical therapy emphasis) is recommended. Common prerequisites for application to physical therapy programs include: general biology, one year anatomy/physiology, one year general chemistry, one year physics, three semesters psychology, and one semester statistics (math, psychology, or kinesiology and leisure science). Recommended courses: biomechanics, exercise physiology, movement anatomy, motor control, ethics, human development.

Recreation Therapy: A major in kinesiology and leisure science with the Sport and Recreation Management emphasis is recommended for those who may want to obtain their recreational therapy certificate (see kinesiology and leisure science major, recreation courses).
Social Work
The Social Work Program has a unique role in the undergraduate curriculum of Whittier College. Its mission is consistent with the historical Quaker values of service, concern for the well being of individuals, and respect for diversity. The Social Work Program is accredited by the Council on Social Work Education (CSWE).

The Program offers an excellent education for undergraduates with career interests in social services, especially social work practice. Students gain knowledge and skills to work with numerous interacting systems: the individual, the family, the neighborhood and larger community, and a variety of social welfare organizations and social institutions.

The objective of the program is to prepare students for beginning generalist social work practice and for graduate social work education. Social work majors are required to take 15 units of specified liberal arts courses and 39 units of social work core courses. The core includes 400 hours of field experience in social agencies that provide supervised practice experience appropriate to the students’ level of development. Students may also complete a minor in social work (18 credits).

Students are urged to consult the Social Work Program advisors in the Department of Sociology, Anthropology and Social Work for more information.

Teacher Education
Whittier College has a long and proud tradition in the preparation of elementary and secondary teachers. Although a major in education is not allowed by the State of California, Whittier College is authorized by the State Board of Education and the Commission on Teacher Credentialing to offer courses of study leading to the Multiple Subject (elementary) credential with a CLAD (Cross-cultural Language Academic Development) emphasis, and the Single Subject (secondary) teaching credential.

Multiple Subject credential candidates complete a subject matter competency program that provides academic preparation in all the content areas generally taught in the elementary school. The subject matter competency program is closely aligned with Whittier College's Liberal Education Program, enabling students to work simultaneously toward a credential and completion of Liberal Education requirements. A minor in Elementary Education is also available.

Single Subject credential candidates at Whittier may earn teaching authorization in such areas as English, science, mathematics, physical education, as well as others. Contact the Department of Education and Child Development to obtain a current list of approved subject matter teaching authorizations.

Teacher credentialing programs in California generally require five years of college study. With guidance from academic (major) and Department of Education and Child Development advisors, students complete preliminary credential programs in four-and-one half years.
Continuing Professional Education Program (CPEU)
Whittier College offers a variety of educational opportunities for school teachers and administrators through its Continuing Professional Education Unit (CPEU) Program. CPEU courses are NOT applicable to any Whittier College degree or credential, but they may be applied toward State Continuing Professional Growth requirements for teachers (150 hours each five years), and they may be submitted to school districts for salary enhancement in accordance with certificated agreements.

CPEU courses are clearly distinguished from academic credits by course number. Since the CPEU program is designed for active professionals, the Whittier College instructor is responsible for documenting participation, but not for assessing learning outcomes, progress, or performance.

Information on the CPEU program is available through the Office of Graduate and Teacher Education.

3/3 Baccalaureate/Juris Doctorate Program at Whittier College
This accelerated program identifies prospective and current students who, based upon their performance as undergraduates at Whittier College, are eligible for early admission into the Whittier Law School. A bachelors degree will be awarded upon the satisfactory completion of thirty (30) transferable units of work at Whittier Law School.

Any student may enter into the program at any time during their matriculation. If at the end of three years at Whittier College the student has achieved at least a 3.0 G.P.A. and is in the upper 50% of those who take the L.S.A.T., that student will be eligible for admission to Whittier Law School. The student will be admitted if the student otherwise meets the criteria of admissions to Whittier Law School. The student must, by the end of three years at Whittier College, have completed all of the liberal education requirements and all of the required courses in their chosen major before they take their first year at the Whittier Law School. In addition, they must have completed ninety (90) units.

This program has been approved by the Whittier College Faculty and will be implemented upon approval by the Whittier Law School Faculty.
Psychologists are concerned with advancing knowledge of behavior and experience. Psychology courses provide background in the social, cultural, developmental, mental, emotional, and biological bases of behavior. The primary goal of the psychology curriculum is to enable students to think like psychologists, that is, to view experience and behavior from a psychological perspective. Achieving this goal requires critical thinking and communication skills as well as knowledge of psychological theories and research methods. Students also need to understand relationships between psychology and other disciplines. In addition, the psychology faculty is concerned with individual development, including self-awareness and understanding others of diverse backgrounds. Coordinated programs of writing and research across the curriculum in psychology help prepare students for graduate work or employment in psychology and related fields. Majors or minors in psychology typically seek careers in social services, the arts, education, business, international relations, law, or specific branches of psychology.

GUIDELINES FOR A MAJOR IN PSYCHOLOGY

Those planning to major in Psychology must consult with a Psychology advisor to ensure timely completion of requirements.

A minimum of 36 credits, including:

- Introductory Psychology, PSYC 100, 3 credits
- Biological Bases of Behavior, PSYC 222, 3 credits
  or Introduction to Behavioral Neuroscience, PSYC 224, 4 credits
- Experimental Psychology, PSYC 212, 4 credits
- Statistics, PSYC 314, 4 credits
- Literature Review, PSYC 317, 3 credits
- History of Psychology Seminar, PSYC 484, 3 credits

One additional laboratory course, selected from:

- Behavioral Neuroscience, PSYC 322, 4 credits
- Sensation and Perception, PSYC 332, 4 credits
- Psychology of Learning, PSYC 334, 4 credits
- Techniques of Behavior Change, PSYC 335, 4 credits
- Cognitive Psychology, PSYC 336, 4 credits

At least 12 units of electives in psychology

One additional laboratory science course outside the field of psychology, 4 credits.
Due to prerequisites, the following course sequence is strongly recommended:
Freshman year – 100, 222; Sophomore year – 212, 314 (preferably concurrently);
Junior year – 317, one additional laboratory course; Senior year – 484.
Students planning careers in Education should consult with their advisors and the Education Department regarding specific credential requirements and proper sequence.

**GUIDELINES FOR A MINOR IN PSYCHOLOGY**
Those planning to minor in Psychology must consult with a Psychology faculty member to ensure timely completion of requirements.
Required for a minor are 16 to 20 credits including:
PSYC 100; One laboratory course chosen from: PSYC 212, 322, 332, 334, 335, 336;
Nine credits chosen from: PSYC 212, 222 or 224, 242, 334 or 335, 336, 352, 362; and
One additional 3-credit or 4-credit course at the 200 level or above.

**COURSE DESCRIPTIONS**

| Course Code | Course Title                              | Description                                                                 |
|-------------|-------------------------------------------|                                                                            |
| 78*         | Computers in Psychology                   | Students will be introduced to various uses of computers in psychology, such as computer simulation, data collection and analysis, computer assisted instruction, and on-line literature searches. One semester, 1 credit. |
| 85          | Forensic Psychology                       | Forensic psychology is the application of psychological insights, concepts, and skills to the understanding and functioning of the legal and criminal justice system. This course will address current theoretical and empirical issues in the study of psychology and law. Topics may include eyewitness testimony, credibility assessment, jury decision making, child abuse and memory for traumatic events, juvenile delinquency and criminoLOGY, prediction of violence, and insanity defense. January, 4 credits. |
| 89*         | States of Consciousness                   | Ordinary and non-ordinary states of consciousness; meditation, sleep and dreaming, biofeedback, psychoactive drugs, schizophrenia, depression, sensory deprivation and overload, and social identity. Laboratories, guest speakers, and demonstrations. January, 4 credits. |
| 92          | Psychology of Human Sexuality             | The psychology and psychobiology of human sexual responses; the development of normal sexuality; sexual deviations and incompetencies, and remediation of sexual problems. January, 4 credits. |
| 100         | Introductory Psychology                   | An introduction to major areas of psychology, emphasizing theories, research methods, critical thinking, and communication skills, to enable students to think like psychologists. One semester, 3 credits. |
| 148         | Field Work                                | Participation in psychologically relevant experiences in a supervised setting, plus weekly seminar. Placements arranged to meet interests and goals of individual students, such as working with children or adults in a community agency, etc. Prerequisites: 100, other relevant course work, and permission. May be repeated once for credit. One semester, 2 credits. |
| 212         | Experimental Psychology                   | Basic research designs and scientific methods for testing theories of sensation, perception, motivation, cognition, animal learning, and social psychology. Lecture and laboratory. Prerequisite: 100. One semester, 4 credits. |
| 222         | Biological Bases of Behavior              | Introduces the neural, genetic, biochemical, and structural mechanisms that underlie normal and abnormal human behavior. Lecture, films, and visual aids. Prerequisite: 100. One semester, 3 credits. |
| 224*        | Introduction to Behavioral Neuroscience   | Introduction to the study of the neural mechanisms that underlie normal human and animal behavior and the consequences of brain |
damage and dysfunction. Lectures and laboratories (some dissection required). Prerequisite: 100. Recommended: Some high school biology. (Not open to those who have taken 222.) One semester, 4 credits.

242 Child Psychology
Major theories and issues relevant to children’s physical, emotional, social, and cognitive development from conception through preadolescence. Prerequisite: 100. (Not open to those who have taken CHDV 102 or 315.) One semester, 3 credits.

244 Psychology of Adolescence
Major theories and issues relevant to the physical, emotional, social, and cognitive development of adolescents. Prerequisite: 100. One semester, 3 credits.

314 Statistics
Data analysis in the social sciences; analysis of distributions, central tendency, variability, correlation, and parametric and non-parametric statistical tests; use of computer packages including SPSS. Prerequisites: A college math course and sophomore standing. One semester, 4 credits.

317 Literature Review Seminar
Seminar on conducting literature reviews on psychological topics, resulting in a scholarly paper written by each student. Prepares for 400-level courses in Psychology. Opportunity to begin developing research proposal for 417. Prerequisites: 212 and 314. One semester, 3 credits.

322* Behavioral Neuroscience
Role of our biological nature in psychological experience and behavior. Topics include learning and memory; motivation and emotion; sensation and perception; pain, stress, and psychosomatic illness; sleep, dreaming, and circadian rhythms; brain dysfunction and damage; Alzheimer’s and Parkinson’s Diseases and schizophrenia. Seminar discussion and laboratory. Prerequisite: 222 or 224. One semester, 4 credits.

332* Sensation and Perception
Considers human and animal sensory abilities and limitations, and how they are reflected in their perceptions of the world; the nature and development of these perceptions, and the circumstances that distort them. Lecture, discussion, and laboratory. Prerequisites: 212, and 222 or 224. One semester, 4 credits.

334 Psychology of Learning
Human cognition and animal learning covering basic phenomena in classical and instrumental conditioning, memory, language learning, concept formation, problem solving, and thinking. Lecture and laboratory. Prerequisite: 100. One semester, 4 credits.

335* Techniques of Behavior Change
Principles of learning theory; application of behavior-change techniques to human behavior in various settings, including designing and evaluating behavior-change programs; consideration of ethical issues. Lecture, laboratories, field observations, and guest speakers. Prerequisite: 100. Recommended: 212. January, 4 credits.

336* Cognitive Psychology
The study of human thought processes and mental representations including topics such as attention, perception, memory representation and improvement, mental imagery, thinking, and artificial intelligence. Lecture and laboratory. Prerequisite: 212. One semester, 4 credits.

338* Motivation and Emotion
Theory and research regarding the biological, behavioral, and social bases of motivational and emotional behavior. Prerequisite: 100. Recommended: 212. One semester, 3 credits.

348 Psychology of Aging
Current theories, issues, and research on adulthood, with emphasis on cognitive and personality changes occurring during middle and old age. Prerequisite: 100. One semester, 3 credits.

352 Social Psychology
Issues, theories, and research in social psychology; non-verbal communication, person perception, attitudes, social influence, aggression and helping, social exchange, interpersonal relationships. Prerequisite: 100 or SOC 200. One semester, 3 credits.
354* Diverse Identities
Theory and research on processes of identity formation and change. Topics include ethnic, racial, national, religious, gender, sexual, occupational, familial, and other identities. Analyzes stigma, prejudice, discrimination, and conflict from a global perspective. Prerequisite: 100 or SOC 200 or junior standing. One semester, 3 credits.

362 Psychology of Personality
Study of major theories of personality, as well as the empirical and clinical research that illustrates and tests them. Prerequisite: 100. One semester, 3 credits.

364 Psychology of Women
Theoretical and empirical approaches to the study of the psychology of women; the effects of social context and the interplay of gender, race, class, and culture on psychological development, with special attention to the differential effects on women and men. Prerequisite: 100. One semester, 3 credits.

368* Tests & Measurement
Examines measurement of individual differences in personality, mental ability, motivation, and cognitive styles. Applications, controversies, ethical issues, and research findings. Prerequisite: 100. One semester, 3 credits.

372 Abnormal Psychology
Study of the description, causes, and treatments of dysfunctional behaviors; includes both clinical and empirical research perspectives. Prerequisite: 100. One semester, 3 credits.

374* Psychology of Exceptional Individuals
Characteristics, needs, and impact of atypical people throughout the lifespan; the mentally gifted and creative, as well as those with physical, cognitive, emotional, or behavioral disorders that begin during the developmental period. Prerequisite: 100. Recommended: 242, 244, or 348. One semester, 3 credits.

390/490* Selected Topics in Psychology
Variable topics and credits. Prerequisites: 100 and permission. May be repeated for credit.

395* Directed Study
Credit and time arranged. Prerequisites: 100, permission, and extensive background in psychology or other social sciences. May be repeated for credit.

396* Research Practicum
Opportunity to learn and apply research skills by assisting faculty on research. May include research design, subject recruitment, data collection, data analysis, and writing up findings. Prerequisites: 212, 314, and permission. One semester. Variable credits. May be repeated for credit.

417* Research Seminar
Advanced seminar to gain individual experience in conducting psychological research involving collection and analysis of data to test theoretical models. Recommended for psychology majors planning to attend graduate school. Prerequisites: 212, 314, and 317. One semester, 3 credits.

484 History of Psychology Seminar
History of psychological thought and systems from classical times to the present. Major psychological theories and theorists are studied in relation to the broader context of intellectual and social history. Prerequisites: 317 and senior standing. One semester, 3 credits.

496 Independent Research
Opportunity to conduct independent individual research. Prerequisites: 212, 314, 317, and permission. Credit and time arranged.

*Not offered every year
The Religious Studies Department at Whittier College provides students an opportunity to study the world's religions in one of the most religiously and ethnically diverse places in the world: greater Los Angeles. Our program strives to assist students in understanding both the global aspects of religious traditions and the specific ways in which those traditions are embedded in local environments, especially the local southern California environment. The program views religion as a social institution and sees the inquiry into religious practices and beliefs as an occasion for becoming self-conscious about theoretical issues in the study of religion. The study of religion at Whittier College also contributes to the student's self-knowledge and/or search for meaning and values.

**GUIDELINES FOR A MAJOR IN RELIGIOUS STUDIES**

A minimum of 36 credits, of which 18 must be at the 300 level or above:

- Religious Diversity in America, REL 101, 3 credits
- **Choice of one:**
  - Selected Topics: Seminar in Religion, REL 490, 3 credits
  - Directed Studies, REL 495, 2 or 3 credits
- At least six credits in each of the three categories:
  - Global Religions
  - Religions: Comparisons and Contrasts
  - Religions: Cultural Critique

No more than 6 credits may be simultaneously counted toward the major and toward the fulfillment of College-wide Liberal Education requirements.

Students who major in Religious Studies must have one of the Religious Studies faculty as their advisor.

**GUIDELINES FOR A MINOR IN RELIGIOUS STUDIES**

A minimum of 18 credits, including REL 101 and 12 additional credits chosen from Religious Studies courses taught by faculty whose primary appointment is in the Religious Studies Department.
COURSE DESCRIPTIONS

INTRODUCTORY COURSE
101 Religious Diversity in America
An introduction to religious studies focusing on greater Los Angeles, which some experts claim is the most religiously diverse environment in the world. Attention to traditional Catholic, Protestant, and Jewish religions; recent immigrant traditions; religious innovation and change; and the implications of religious pluralism. Field trips. One semester, 3 credits.

GLOBAL RELIGIONS
201 Monotheism
An introductory survey of major texts, beliefs, and practices of Judaism, Christianity, and Islam. One semester, 3 credits.

202 Religions of Asia
An introductory survey of the major texts, beliefs, and practices of Hinduism, Buddhism, and the religious traditions of China and Japan. One semester, 3 credits.

210* Introduction to the Bible
An introduction to biblical literature and the social contexts in which the Hebrew Bible and New Testament arose. Emphasis on contemporary critical methods used to understand the Bible. One semester, 3 credits.

216* Literature of the Bible
(Same as ENGL 222) One semester, 3 credits.

221* History of Christianity
An introductory survey of Christianity through an examination of its history, rituals, institutions, theology, and social concerns. Sample themes include the Bible, the mass, monasticism, and the relation of church and state. One semester, 3 credits.

222* Judaism
A survey of the major issues, themes, and practices of the Jewish religion and civilization. The Jewish tradition’s place in the development of western civilization as seen in historical overview: from biblical times to rabbinic and medieval times to the modern era. One semester, 3 credits.

235, 236 Arabs and Muslims
(Same as INTD 225,226) Two semesters, 3 credits each.

311* Life and Teachings of Jesus
The four Gospels: Jesus’ birth, baptism, temptation, transfiguration, passion, crucifixion, resurrection; his teachings about war, wealth, divorce, miracles, kingdom of God, end of the age; symbolism in Gospel of John. One semester, 4 credits.

313* Heroes, Gods and Gurus: Introduction to the Literatures of India
Examination of selected texts representative of India’s 3000-year-old religious and literary tradition. Included will be translations from the Sanskrit Epics and Kalidasa’s plays, translations from Tamil classical poetry and devotional hymns, and contemporary Indian novels written in English. One semester, 3 credits.

330* The Buddha and Buddhism
Significance of the life of Buddha and founding of his order for the development of the Buddhist tradition throughout Asia, from philosophical, sociological, and historical perspectives. One semester, 3 credits.

331* Islam
An introductory thematic survey of Islam with some attention to the historical development of the tradition. Principal themes include: the Qur’an, ritual practice, Islamic society, mysticism, the diversity of the Islamic world, Islam and modern politics. Readings from a variety of perspectives. Field trip. One semester, 3 credits.

333* Hindu Religion and Culture
India’s principal religious tradition viewed primarily in terms of its variegated expression in contemporary south India. Topics include Hindu gods, temples, and their festivals, asceticism and monasticism, the caste system, Hindu women and domestic ritual, and the philosophical underpinnings of the tradition. Films and slides. One semester, 3 credits.

*Not offered every year
RELIGIONS: COMPARISONS AND CONTRASTS

241* Sport, Play and Ritual
(Same as INTD 241) January, 4 credits.

231* Monks, Nuns and Ascetics
An introductory examination of the theory and practice of asceticism in Christianity, Hinduism, Buddhism, and Jainism. Discussion of autobiographical works by Mohandas Gandhi and Thomas Merton. Attention to the social and institutional dimensions of asceticism. Field trips, films, short papers. One semester, 3 credits.

253* Women and Religion
An introductory examination of religious definitions of women, of women's religious experiences, and of feminist theologies and transformation of religious traditions. Attention to course topics in cross-cultural perspective. One semester, 3 credits.

307* Religion and the Body
An exploration of the ways in which the corporeal practices and ideologies of diverse religious traditions mediate social meaning. Includes such topics as food and fasting; medicine, healing, and illness; pleasure and pain; representations of the body; sex and reproduction; biological aspects of religion (brain, mind, soul) and religious experience. One semester, 3 credits.

321* Religion in America
Distinct religious movements, themes, and personalities in American history before 1850. Topics include native American religions, Puritanism, California missions, revivalism, frontier religion, and transcendentalism. One semester, 3 credits.

342* Sound and the Religious Experience
An exploration of religious music as a way of understanding the world and constructing meaning. Emphasis on the relationship of rhythm to healing and the importance of chanting for inducing ecstasy. Examples span world cultures, historical periods, and musical styles, including Tibetan chants, African American gospel music, Jewish wedding music, and John Coltrane. One semester, 3 credits.

348* Ritual Studies
This course interrogates theoretical and interdisciplinary perspectives on ritual as sacred performance. It examines the connection between practice and belief in a series of cross-cultural case studies and is organized thematically around such issues as sacrifice, death and dying, food, the body, and lifestage events. One semester, 3 credits.

349* Religious Fundamentalisms
An examination of the roots and expansion of religious fundamentalism throughout the modern world. Topics include Protestant fundamentalism in England and the United States, the Muslim Brotherhood in Egypt, and fundamentalism in Jewish, Buddhist, Hindu, and Sikh traditions, among others. One semester, 3 credits.

352* Pilgrimage
Pilgrimage as a cross-cultural phenomenon. Attention to the history, literature, ritual, and social processes of religious journeys in Christianity, Islam, Buddhism, and the Hindu tradition. One semester, 3 credits.

RELIGIONS: CULTURAL CRITIQUE

240* Cinema and Religion
Contemporary cinema as a medium for raising religious questions in a secular context and as a medium for exploring the religious dimensions of rituals. Movies by Bergman, Buñuel, Fellini, Kubrick, and Capra, among others, are viewed and analyzed. One semester, 3 credits.

340* Contemporary Ethical Issues
An examination of contemporary ethical issues from a theological perspective. Topics include world hunger, nuclear arms, capital punishment, human sexuality, abortion, euthanasia, drug abuse and genocide. One semester, 3 credits.

350* Latin American Liberation Theologies
An introduction to the understanding of justice as the central theological concern for the oppressed peoples of Latin America. Distinctive features of the cultures and theologies in different countries will be examined. One semester, 3 credits.

*Not offered every year
351* Public and Popular Religion
An examination of distinct religious communities and themes in American culture since 1850. Topics include Mormonism, Shakers, utopian communities, civil religion, and televangelism. One semester, 3 credits.

359* Religion and Colonialism
This course explores several classics in the study of religion. It focuses on how these works reflect the connection between European theories about "native" and "primitives," and the expansion of European political and economic power into environments inhabited by these “natives.” One semester, 3 credits.

361* Ways of Understanding Religion
An introduction to the various ways religion has been understood by scholars in the modern western world. Perspectives stressed include the history of religions/phenomenology, psychology, sociology, and anthropology. One semester, 3 credits.

ADDITIONAL OFFERINGS
490* Selected Topics: Religion
Permission. One semester, 3 credits. May be repeated for credit.

495 Directed Studies
Credit and time arranged. Permission. May be repeated for credit.

*Not offered every year.
Computers are now employed throughout our society to perform a very wide variety of tasks. All branches of science and engineering use computing technology extensively. Sophisticated laboratory apparatus is nearly always computer-controlled. Computers are used to collect, store, and analyze large amounts of data quickly, to simulate natural systems, and to control industrial processes, among other tasks.

The Scientific Computing minor at Whittier College is designed to help prepare students majoring in one of the sciences for advanced computing work in their own fields and for work in the computer industry. The minor begins with computer programming and interfacing of computers to apparatus at the introductory level, and then continues with a range of advanced courses that allow students to focus on particular topics in scientific computing and/or broaden their computing skills. Most students will complete a research project with a significant computing component as part of the minor.

GUIDELINES FOR A MINOR IN SCIENTIFIC COMPUTING

To be awarded a minor in Scientific Computing, students must complete nine credits of required courses and nine credits from the list of optional courses for a total of at least eighteen credits. At least six credits of the eighteen must be at the 300 level or higher.

<table>
<thead>
<tr>
<th>Core COSC Courses</th>
<th>Cross-listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 120 Programming I</td>
<td>3 Credits</td>
</tr>
<tr>
<td>COSC 205 Intro Electronics &amp; Computer Interfacing</td>
<td>3 Credits</td>
</tr>
<tr>
<td>COSC 220 Programming II*</td>
<td>3 Credits</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>COSC 305</td>
<td>Advanced Computer Interfacing*</td>
</tr>
<tr>
<td>ES 140</td>
<td>Geographical Information Systems</td>
</tr>
<tr>
<td>Math 220</td>
<td>Discrete Math</td>
</tr>
<tr>
<td>Phys 250</td>
<td>Oscillations and Waves</td>
</tr>
<tr>
<td>Math 350</td>
<td>Numerical Analysis*</td>
</tr>
<tr>
<td>Math 35+</td>
<td>Mathematical Modeling*</td>
</tr>
<tr>
<td>Research**</td>
<td></td>
</tr>
</tbody>
</table>

Other courses with significant computing components can be considered for credit toward the Scientific Computing minor. See either of the co-directors for additional information.

* Not offered every year

** Projects in Biology, Chemistry, Earth Sciences, Mathematics, and Physics that involve significant scientific computing. The research advisor must certify that the project involves significant computing in order for the project to count toward the minor.
Sociology is the study of social relations, associations, and institutions in human societies. It seeks to develop reliable understanding about the nature of social organization. Whittier College’s curriculum is designed to help students understand the principal perspectives, theories, and research methodologies of sociology. Our location within an interdisciplinary department including Anthropology and Social Work helps us to explore the relation of social arrangements to both culture and individual experience and to investigate the relevance of the discipline for various forms of practice, for social policy, and for social action.

A major in sociology provides graduates with a solid liberal arts background for a broad variety of careers. Our graduates are employed in fields such as professional sociology, urban planning, social work, community development, social welfare, health services, education and teaching, juvenile and criminal justice systems, social research and data analysis, public administration, law, politics, racial and minority relations, business, and local, state and federal government.

Guidelines for a Major in Sociology

A minimum of 30 credits, including:

- **One Course in Introductory Sociology**, from courses SOC 100 through 108, 3 credits
- **Two courses in Research Skills**, including: Statistics, SOC 314, 4 credits and one other course numbered SOC 310 through 319, 3 to 4 credits.
- **One course in Cultural and Micro Perspectives**, from courses SOC 320 through 349, 3 credits.
- **One course in Macro Perspectives** from courses numbered SOC 350 through 369, 3 credits.
- **One course in Institutions and Populations** from courses numbered SOC 370 through 389, 3 credits.
- **One course in Historical and Theoretical Context** from courses numbered SOC 302 through 306, 3 credits.
- **Departmental Integrative Seminar**, SOC 408, 2 credits.

At least 18 credits in other social sciences, including:

- **At least one course in Anthropology** numbered 300 - 419, and at least one course in the Social Work offerings.
At least 12 credits above the 300 level or an approved minor must be taken in a particular discipline or program other than Sociology. Many students take minors in language or in regional or Women's Studies.

**Highly recommended:**
At least one internship or practicum experience within the Sociology, Anthropology, or Social Work offerings; proficiency in a second language; and some study outside the United States. Majors planning graduate study should take an additional course in Research Skills and an advanced course in Historical and Theoretical Context (402-406).

**Guidelines for a Minor in Sociology**
A minor in Sociology requires 18 credits, including one course numbered 100 through 108 (or approved 200 level alternative), one course numbered 310 through 319, one course numbered 300 through 306 or 400 through 409, and a total of at least 12 credits above the 300 level.

**Course Descriptions**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Internship in Urban and Organizational Studies</td>
<td>Supervised placement in urban planning agencies and settings or in other specialized organizations. One semester, 2 credits.</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>Introduction to Sociology</td>
<td>A general introduction to the topics, methods, and theories of the discipline. The course will address basic social processes and institution, including social solidarity, inequality, conflict, interaction, ideology, culture, and social structure. Open to freshmen or sophomores who have not taken another introductory sociology course. (100-106). One semester, 3 credits.</td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>American Society</td>
<td>Introduces sociology through analysis focusing on race, class, gender in U.S. social organization and culture in historical perspective. Open to Freshman or Sophomores who have not taken another introductory sociology course (100-106). One semester, 3 credits.</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>Sociology in the Global Context</td>
<td>Introduces Sociology by applying its concepts and methods to an analysis of social phenomena in the context of global social organization. Open to freshman or sophomores who have not taken another introductory sociology course (100-106). One semester, 3 credits.</td>
<td></td>
</tr>
<tr>
<td>215</td>
<td>Geographic Information Systems</td>
<td>(Same as ES 140) One semester or January. 4 credits.</td>
<td></td>
</tr>
<tr>
<td>216</td>
<td>Sociology Through Photography</td>
<td>An introduction to the use of visual tools for the exploration of society. Through the creation and analysis of photographs, students will broaden their understanding of social life and social institutions. Topics covered will include interaction with subjects, selection of images, use of photographic techniques, “truth” and representativeness, integrating photographs and text, and ethical issues. January session, 4 credits.</td>
<td></td>
</tr>
<tr>
<td>221*</td>
<td>Sociology of Religion</td>
<td>Explores diverse sociological understandings of religious ideas and behavior and the social and political implications of different kinds of religious beliefs and organizations. It examines the relation of religion to concepts of history, the natural world, human nature, and social order and the significance of notions of sacredness. January, 4 credits.</td>
<td></td>
</tr>
<tr>
<td>261</td>
<td>Investigating Green Politics</td>
<td>Combines an overview of green political thought with firsthand, field based investigation of the range and relevance of environmental political issues and movements. Permission. January, 4 credits.</td>
<td></td>
</tr>
<tr>
<td>287*</td>
<td>Workshop in Urban Studies</td>
<td>The workshop uses Los Angeles and Tijuana as settings for studying urban spatial and social organization, with special attention to the design and use of public space. It examines the economic, demographic, and cultural linkages between these two areas and locates each city in terms of current global economic, social, and cultural phenomena.</td>
<td>4 credits</td>
</tr>
</tbody>
</table>

*Not offered every year*

289 African American Experience
Analyzes African American social institutions and communities over time, with special attention to the family, to the black church, and to the organization of efforts to secure civil rights. Also examines the implications of racism for African American populations and communities and the relation of these populations and communities to the occupational structure, to athletics, to political processes, and to the welfare and criminal justice systems. One semester, 3 credits.

290 Death, Dying, and Bereavement
Explores historical and cultural variations in attitudes and practices surrounding death, dying and bereavement. We examine major causes of death across age and other social groups, social inequality related to death and dying, individual and social practices of grieving, and the ethics of dying in an age of technology. We study death-related issues both at the level of social organization and in terms of how they affect people at varying stages of the life course. January session, 4 credits.

302 Social Theory in Social Context
An examination of major figures and debates in the history of sociological theory. Original works of Marx, Durkheim, Weber, Simmel, and more recent writers will be read in conjunction with materials on the historical settings in which they wrote. Permission. One semester, 3 credits.

310 Approaches to Social Research
Techniques for basic and applied social research. Research skills will be developed in the complementary use of informant interviews, observations, surveys, and documents in addressing theoretical issues in the social sciences and practical applications in fields such as social work, healthcare delivery, law, and business. Prerequisite: 100 or 102 or 104 or permission. One semester, 3 credits.

311 Field Research: Crossing Cultural Boundaries
(Same as ANTH 311) One semester or January, 3-4 credits.

314 Statistics
(Same as PSYC 314) One semester, 4 credits.

322 Sociology of Culture
Sociological perspectives on the study of cultural practice and representations, with special attention to issues of resistance. Prerequisites: 100, 102, or 104 or Permission. One semester, 3 credits.

340 Social Psychology
(As PSYC 352) One semester, 3 credits.

342 Micro Sociology
Sociology at the level of experience and interaction, with special emphasis on the ways people make sense of social experience. One semester, 3 credits.

344 Diverse Identities
(As PSYC 354) One semester, 3 credits.

350* Modern Society
This course examines forms of social structure, culture, and interaction associated with highly industrialized societies. Topics addressed include the nature of the polity and economy of advanced nations, the growth of the welfare state, work, popular culture, and individualism. Theories of mass society, world systems, and restructuring are reviewed. One semester, 3 credits.

352* Social Class and Inequality
Students will apply contrasting theories concerning who gets what and why, in order to compare social class formations in the contemporary United States with those in other settings. One semester, 3 credits.

356* Comparative Urban Development
A comparative examination of urbanization in varying historical and geographical settings and in the light of major theories of urban growth, organization, and community. One semester, 3 credits.

357* Sociology of Development: Third World Studies
Considers development issues related to economics, politics, inequality, human rights, gender, and environment and examines modernization, dependency, and world-system approaches to the theoretical understanding of these issues. One semester, 3 credits.

358* Population Problems and Policy
Policy-oriented examination of the interplay between demographic processes (fertility, mortality, migration, immigration) and social organization. Techniques of demographic analysis are introduced, and current population issues and policy alternatives are examined against a background of world population history and projections. One semester, 4 credits.

366* Social Planning and Evaluation
Planning of urban physical and social

*Not offered every year
organization; designing organizations and social programs; and evaluating organizational and program effectiveness. Special attention will be given to the relation between the technical and political aspects of planning decisions. One semester, 3 credits.

373 Human Behavior in the Social Environment
(Same as SOWK 373) One semester, 3 credits.

374 The Cultural Contexts of Childhood
(Same as ANTH 374) One semester, 3 credits.

378* Professions, Work and Careers
The organization of work settings, occupations, professions, and careers in contemporary United States, examined in historical and comparative context. Attention is given to the interplay of organizational form, productivity, and the lives of individuals. One semester, 3 credits.

380* Sociology of Health and Welfare
Examines healthcare delivery and social welfare systems as social institutions, attending to the policies, systems, and interactions through which societies provide their members with health and welfare services. Topics to be covered include how health and welfare problems are defined, interest groups that shape service provision, the history of health and welfare systems, professional socialization of service providers, and the integration of various health and welfare systems and functionaries. An introductory course in sociology or social work is strongly recommended. One semester, 3 credits.

381 Criminology
Critically examines the nature and extent of crime, and the causes and prevention of criminality. Covers various strands of criminological theory, including choice theory, trait theory, social structure, social process, conflict theory, and integrated theories. Pays special attention to how particular behaviors and people are defined as criminal. Critically examines the institutions and workings of the criminal justice system. One semester, 3 credits.

382 Sociology of Sport and Recreation
(Same as KLS 382) One semester, 3 credits.

383* Deviance and Social Control
The course will address the social and historical context of behaviors defined as deviant, as well as the role of particular institutions, professions and interest groups in shaping these definitions. One semester, 3 credits.

384* Sex and Society
Examines sexuality as a social system: the changing norms, practices, conceptualizations, meanings, social significance and relations of power producing and organizing sexuality. Particular attention is paid to the ways that gender, race and class structure sexuality. Prerequisite: Junior standing or Permission. One semester, 3 credits.

385 Sociology of Gender
This course will explore the ways that people “do gender,” how gender structures and stratifies the social order and how gender differences are reproduced culturally. It will examine femininity and masculinity in their contemporary, cross-cultural, and historical forms and will study the production and maintenance of gender as a master social status, investigating how gender norms are both constructed and challenged in popular culture, family and work arrangements, organizations, personal relationships, and social movements. One semester, 3 credits.

386 Racial and Ethnic Relations
An examination of central theories and concepts in the field. Specific attention will be paid to topics such as the historical emergence of minorities, ethnic solidarity, and racism. Contemporary trends in the dynamics of intergroup relations in southern California, the United States and abroad will be considered. One semester, 3 credits.

387 Life in Minority Environments
(Same as ANTH 387) One semester, 3 credits.

388 Asians in America
Examines the lives of Asians in America from the earliest Chinese immigrants arriving in the mid-19th Century to the most recent arrivals from Korea, Indo-China, and the Philippines. The culture and values of these peoples will be contrasted with those of receiving communities’ values in order to understand their experiences with cultural conflicts, racism, and assimilation. One semester, 3 credits or January, 4 credits.

390, 490 Selected Topics in Sociology
Variable credits. Permission. May be repeated for credit.

395, 495 Directed Studies
Variable credits. Permission. May be repeated for credit.

404 Topics in Contemporary Sociological Theory
A comparative, in-depth examination of central issues in contemporary sociological thought. Permission. One semester, 3 credits.
406 Feminist Social Theory
Examines the perspective and contribution of feminist theory, particularly the intellectual and social circumstances of their production, their analytic strengths and weaknesses and the political ramifications of their analyses. Introduces a variety of intellectual traditions within feminism, including liberal, Marxist, radical, socialist, psychoanalytic, anti-racist, post-modern and post-colonial. Permission. One semester, 3 credits.

408 Senior Integrative Seminar
A capstone writing-intensive course exploring application of sociological knowledge and skills to the production of public scholarship. Prerequisite: Senior status Sociology major/minor or permission. One semester, 2 credits.

414 Practicum in Urban and Organizational Studies
Supervised field experience in urban planning agencies and settings or in other specialized organizations. Involves a careful examination of the interplay of theory and practice for the advanced student. May be repeated for up to 6 credits. Permission. One semester, 1 to 3 credits.

Anthropology asks the question, “What does it mean to be human?” It seeks the answers to that question by integrating many sources of knowledge: How is being human affected by the dynamics between culture, the environment, and biology? What can we learn about the total repertoire of being human by looking at societies very different from middle-class American society? What do archeological sites reveal about human societies in the past? How can the reflexive nature of anthropology better prepare us for living in today’s diverse world?

The study of anthropology prepares students to 1) better understand themselves, 2) better understand and communicate across cultural boundaries, 3) prepare for careers involving social interaction and policy, for example, academic and applied anthropology, business, education, environmental protection, government, health, law, religion, social work, etc.; and 4) prepare for graduate work in anthropology, business, foreign area studies, law, other social sciences, and related fields.

GUIDELINES FOR A MAJOR THAT INCLUDES COURSES IN ANTHROPOLOGY
Two alternatives are available in Anthropology: (1) intra-departmental majors split between Anthropology and Sociology. These should include a minimum of 30 credits, divided evenly between the two disciplines. Courses in anthropology should be selected according to the Guidelines for a Minor in Cultural Anthropology below, (2) interdisciplinary majors in cross-cultural studies such as in Comparative Cultures (See Catalog description of Comparative Cultures Major).

GUIDELINES FOR AN INTRA-DEPARTMENTAL MINOR IN ANTHROPOLOGY
A minor requires 18 credits including:
- Biological Anthropology, ANTH 200, 3 credits
- One course on Peoples of the World, from courses ANTH 210 through 218, 3 credits
- Myth, Symbol and Meaning, ANTH 307, 3 credits
- One of the following courses:
  - Male and Female: The Anthropological Perspective, ANTH 327, 3 credits
  - The Cultural Contexts of Childhood, ANTH 374, 3 credits
  - Life in Minority Environments, ANTH 387, 3 credits
  - Expressive Arts of Africa, ANTH 321, 3 credits

*Not offered every year.*
Environmental Anthropology, ANTH 323, 3 or 4 credits

One of the following courses:
Field Research: Crossing Cultural Boundaries, ANTH 311, 3 or 4 credits
Approaches to Social Research, SOC 310, 3 credits
At least one January course in Anthropology.

COURSE DESCRIPTIONS

17 Internship in Anthropology
Supervised field experience in a variety of work and organizational settings. May be repeated for credit. Permission. One semester, 1-2 credits.

200 Biological Anthropology
The course studies the physical aspects of human populations and the evolutionary history of our species. This history is studied through fossil records. Our close primate relatives are another major focus of the class, since we share ancestors and general adaptation with them. A third area of study is variation among contemporary humans which underlies observable changes as our species continues to evolve. One semester or January session, 3 credits.

210 Peoples of the World: Global
Detailed studies of several societies that are geographically and culturally distant from mainstream American society. Focus on issues of ecology, political economy, and social and cultural change as they influence the diverse behaviors and traditions of selected peoples. Several regions are studied in the context of their global and internal similarities and differences, as well as their cross-cultural and internal dynamics. One semester, 3 credits.

211 Peoples of the World: Asia
This course offers students a comparative study of the diverse cultures of Asia. The course implements anthropological concepts to examine the internal and cross-cultural mechanisms shaping and reshaping the region. The impact of social and cultural change resulting from shifting local, national, and global dynamics will be examined through detailed ethnographic studies of specific cultures and societies within East, South, and Southeast Asia. One semester, 3 credits.

212 Peoples of the World: Africa
This course is designed to give students an understanding of the diverse cultures of sub-Saharan Africa. An examination of the fundamental patterns of traditional African cultures will be used to understand current events in Africa. Illustrates how the daily lives of the majority of African people are influenced by tenacious indigenous institutions. One semester, 3 credits.

213 Peoples of the World: Native Americans
Who are/were the people native to North America? What has been the role of Native Americans in the formation of “America”? What is unique to their circumstance within a complex state structure and global systems? Where do various Native American groups share cultural patterns and where are there differences among them, for example, in origin, environmental setting, world view, family structure, and political system? How do these patterns influence their responses to contemporary issues? This course will explore the issues raised by such questions through detailed ethnographic studies of selected societies. One semester or January session, 3 credits.

214 Peoples of the World: Latin America
The term “Latin America” covers a wide range of cultures and peoples: from the Caribbean Islands to Mexico, from Central America to South America, from the Amazon to the Andes. Latin America, therefore, is a world of great contrasts—contrasts between megacities and rural hinterlands, between the wealthy and the impoverished, between industrialized zones and areas of rudimentary subsistence production, and between images of a peaceful paradise and those of extreme violence and terror. This course will examine the construction of various cultural identities in this diverse region and introduce students to the key issues confronting Latin Americans today as they are revealed in selected ethnographic studies. One semester, 3 credits.

307 Myth, Symbol and Meaning
Focuses on selected myths, symbols, and systems of meaning to understand the ways in which humans create meaning and communicate ideas. Sophomore standing or above. One semester, 3 credits.

311 Field Research: Crossing Cultural Boundaries
Introduction to ethnographic field research as a general tool for understanding and communicating with people, especially those whose culture is different from one’s own. Teaches the perspectives, aims, and skills of field research through the use of (1) films and written materials that describe field research experiences and which record the results of
such research and (2) a series of fieldwork exercises. Focus is on the nature and meaning of cultural diversity and its implications for cross-cultural communication. One semester or January, 3 or 4 credits.

321 Expressive Arts of Africa
Explores the symbolic and aesthetic representations, implicitly understood and explicitly expressed by selected African peoples in cultural communication. The concepts discussed will center around the relationship between art, ritual, and symbols in cultural expression. The focus is the expressive cultures of sub-Saharan Africa as communicated mainly in the sculpture of the region. The aim is to read culture through art and to understand how Africa's visual arts constitute the cultural encyclopedia of specific African groups. One semester, 3 credits.

323* Environmental Anthropology
The changes that humans make in the natural environment are related to their world views and to their ideas about what the relationship between humans and nature should be. This course will explore these relationships cross-culturally through the readings of ethnographies and the viewing of films. Also included will be field trips within California. Sophomore standing or above or instructor's permission. One semester, 3 credits, or January, 4 credits.

327 Male and Female: The Anthropological Perspective
Bio- and socio-cultural factors that determine feminine and masculine behavior; evidence from non-human behavior; cross-cultural variations in gender identity and role-patterning. Sophomore standing or above. One semester, 3 credits.

342 Sound and the Religious Experience
(same as REL 342) One semester, 3 credits.

374 The Cultural Contexts of Childhood
Childhood in a variety of cultures, primarily focusing on societies in Africa, Asia, Latin America, and Oceania. How does the child become a full member of a particular society and what are the socio-cultural contexts that influence that process? Examines methods of studying childhood cross-culturally. Prerequisites: 210 or 311 and PSYC 342 or CHDV 105. One semester, 3 credits.

387 Life in Minority Environments
Case studies of minority communities, with a primary focus on the United States but drawing on studies from other parts of the world. Focuses on the everyday life, problems, viewpoints, and perceptions of individuals within these settings. Examines the production of marginalization, emphasizing the relation of the local to the global. One semester, 3 credits.

388 Asians in America
(same as SOC 388) One semester, 3 credits.

417 Internship in Anthropology
Supervised field experience in a variety of work and organizational settings. May be repeated for credit. One semester, 1 to 2 credits. Permission.

490 Current Topics in Anthropology
Permission. Variable credits.

495 Directed Studies in Anthropology
Time and credit arranged. Permission. May be repeated for credit.

Social Work is a discipline and a profession committed to the enhancement of human well-being, the alleviation of poverty and oppression, and the promotion of social justice. The discipline of social work provides opportunities for enacting liberal arts values such as critical thinking, problem-solving, and effective communication, as well Whittier College's historical commitment to “practical idealism”. The profession practices in a wide variety of settings including family services, child welfare, corrections, probation, psychiatric and medical centers, drug and alcohol treatment, community organizations, and social policy planning. With awareness of the major social and technological changes taking place in today's society, the Whittier College Social Work program prepares students for entry-level positions in generalist social work practice where they can effectively respond to the variety of human welfare needs prevalent in contemporary society.

The undergraduate program in Social Work is accredited by the Council on Social Work Education. It provides a professional foundation curriculum that contains the common body of knowledge, values, and skills of the profession. The Program specifies

*SocIOLOGY, ANTHROPOLOGY, AND SOCIAL WORK

*Not offered every year
a common base of liberal arts courses to be taken prior to enrollment in the core foundation courses. The foundation courses are sequenced over three years; the program culminates in the senior year with an intensive, professionally supervised field practicum, and an integrative seminar that seeks to assess the outcomes of the social work training. Students are urged to consult Social Work Program advisors in the Department of Sociology, Anthropology and Social Work for information and guidance.

Selected courses are also of interest to students in psychology, child development, sociology, pre-medicine, pre-physical therapy, business administration, and education. Students are urged to consult Social Work Program advisors in the Department of Sociology, Anthropology and Social Work for information and guidance.

**GUIDELINES FOR A MAJOR IN SOCIAL WORK**

Students can begin taking the professional foundation courses required for the major in their sophomore year. Before starting foundation courses, students are advised to take PSYC 100, SOC 200, ECON 200, ANTH 210, or 211, 212, 213 or 214 (select one Anthro course), Psych 222 or other designated course (total 15 credits). SOWK 240, Introduction to Social Work, is a prerequisite for all practice courses (SOWK 340, SOWK 343, SOWK 363). A total of 39 credits of Social Work is required.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction to Social Work, SOWK 240</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Approaches to Social Research, SOWK 310</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Social Work Practice I: Working with Individuals, SOWK 340</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Social Work Practice II: Groups, Families, SOWK 343</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Social Work Practice III: Creating Social Change, SOWK 363</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Social Welfare Policy, SOWK 364</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Human Behavior in the Social Environment, SOWK 373</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Integrative Seminar, SOWK 408</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>Social Work Practicum and Seminar I, SOWK 412</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Social Work Practicum and Seminar II, SOWK 413</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Social Work Practicum and Seminar III, SOWK 414</strong></td>
<td>4</td>
</tr>
</tbody>
</table>

**Plus:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statistics, SOC 314</strong></td>
<td>4</td>
</tr>
</tbody>
</table>


**GUIDELINES FOR A MINOR IN SOCIAL WORK**

The minor in Social Work is designed to prepare students for active and informed participation in our society, where social welfare plays a major role. A minimum of 18 credits is required, including SOWK 10, 100, 240, and 364; and 6 credits selected from 340, 343, or 363.

*Not offered every year*
181

SOCIOLOGY, ANTHROPOLOGY, AND SOCIAL WORK

Course Descriptions

10 Intern in Human Services
60 hours of supervised internship experience and a weekly seminar focus on knowledge and skills in working in governmental or civic agencies/organizations that provide human services to individuals, families, groups, organizations, communities, governmental, and urban settings. Students will participate in an agency setting, explore relevant theoretical and practice models, and assess organizational effectiveness. (Same as SOC 14). One semester, 3 credits.

100 Issues in the Human Services
An introduction to current issues in the human services that provides understanding of how the field of human services responds to individual human needs manifested in the context of broad social issues such as poverty, inequality, oppression, cultural diversity, right to life/right to die, structural family changes, gender, societal violence, and physical and mental health. Values, belief systems, and ethical issues inherent in working with needy populations will be critically examined and analyzed. One semester, 3 credits.

240 Introduction to Social Work
Presents an overview of 1) the profession of social work and its history; 2) social work values, ethics, and principles; 3) generalist social work practice approach in varied settings and with diverse client needs; and 4) process of empowerment as the challenge in working for social & economic justice. Includes self-assessment of aptitude for social work. Two semesters, 3 credits.

290 Death, Dying and Bereavement
Explores historical and cultural variations in attitudes and practices surrounding death, dying and bereavement. We examine major causes of death across age and other social groups, social inequality related to death and dying, individual and social practices of grieving, and the ethics of dying in an age of technology. We study death related issues both at the level of social organization and in terms of how they affect people at varying stages of the life course. Cross-listed with SOC 290. January session, 4 credits.

310 Approaches to Social Research
(Same as SOC 310) One semester, 4 credits.

340 Social Work Practice I: Working with Individuals
This course is designed to provide a foundation in generalist practice knowledge, values, and skills in working with individuals and families. Students will examine the strengths, capacities, and resources of client systems, utilize culturally competent interventions, and evaluate practice effectiveness. Content includes supervision, consultation, and communication skills in providing ethical practice to a diverse range of clients. Prerequisite: SOWK 240. One semester, 3 credits.

343 Social Work Practice II: Groups and Families
This course provides theoretical and practical knowledge, values and skills needed to prepare students for entry-level, generalist practice with groups and diverse family systems. Students apply the planned change approach to working with mezzo-level client groups, including task groups, intervention groups, and diverse family systems. A framework for understanding family systems, groups, group dynamics, power relationships, decision-making approaches skills and empirical research needed to work effectively with groups and family systems will be examined. The relationship of groups and families to larger systems will be reviewed as it relates to the values and responsibilities of the social work profession. Prerequisite: SOWK 240. One semester, 3 credits.

363 Social Work Practice III Creating Social Change
Provides theoretical and practical knowledge, values, and skills needed to prepare students for entry-level social work practice with organizations and communities from a generalist perspective. Examines how the urban community as a system addresses the issue of what it means to have influence and power. Explores how political, economic, social, and religious organizations limit and/or enhance individual functioning and freedom. Prerequisite: SOWK 240. One semester, 3 credits.

364 Social Welfare Policy
Explores the history of social work, the history and current structures of social welfare services, and the role of social policy in service delivery, social work practice, and personal/social well-being. Examines American values and principles

*Not offered every year
that influence choice of social objectives in relation to social work values. Focuses on the skills of formulating, adopting, implementing, and evaluating social welfare policies and policy-related research. Analyzes social policies that influence organizational, local, state, national, and international systems Pre-requisite: ECON 200. One semester, 3 credits.

373 Human Behavior in the Social Environment
This course is designed to develop the student's knowledge of the reciprocal relationships between human behavior and social environments. Content includes empirical theories and knowledge focused on the interactions among and between individuals, families, groups, societies, and economic systems. This includes theories and knowledge of sociological, cultural, psychological, and spiritual development across the life span. The ecological-systems perspective will be used to understand the ways in which social systems enhance or deter people in achieving health and well-being. (Related biological content is addressed in Psych 222). Pre-requisites: SOC 200, PSYC 100, ANTH 210, PSY 222 or other designated course. One semester, 3 credits.

385* Child Abuse and Domestic Violence
Examines multi-dimensional explanations and laws pertaining to sexual and physical child maltreatment, wife/husband beating, and the battered parent syndrome. Students will explore selected issues related to these psychosocial problems by visiting and having discussions with victims and professionals in various agencies and programs who deal with these problems. January or summer, 4 credits.

386* The Welfare of Children
An overview of developmental theories, current practices, and policies that relate to the well-being of children and their families. Child welfare services, programs, and policies will be explored through readings, field trips to agencies, observations/interactions with children, and discussions with child welfare professionals. January, 4 credits. One semester, 3 credits.

388* Asians in America
(Same as SOC 388) One semester or January, 3-4 credits.

390, 490 Current Topics in Social Work
Variable credits. Permission. May be repeated for credit.

395, 495 Directed Studies in Social Work
Credit and time arranged. Permission. May be repeated for credit.

408 Integrative Seminar
Students will assess their development in relation to educational outcomes of the Social Work Program, which are consistent with current CSWE Educational Policy and Accreditation Standards. Writing a paper in the major will be geared to preparation for moving into social work occupational opportunities and/or graduate education. Senior standing. Only for social work majors. Permission. One semester, 2 credits.

412 Social Work Practicum and Seminar I
Internship in medical, social, correctional, and psychiatric agencies under joint College/agency planning and supervision. Helps students apply and integrate knowledge, values, and skills necessary for beginning generalist professional competence. Two full days (16 hours per week) and required seminar, 2.5 hours per week. Only for social work majors. Permission. Prerequisites: 240. One semester, 4 credits.

413 Social Work Practicum and Seminar II
Advanced level internships in community agencies (usually a continuation at the same placement agency as SOWK 412). Structured learning opportunities that enable students to compare and evaluate practice experiences, integrate classroom knowledge, and engage in self-assessment of their own professional development. Two full days (16 hours per week) and required seminar, 2.5 hours per week. Only for social work majors. Permission. Prerequisite: 412. January, 3 credits.

414 Social Work Practicum and Seminar III
Continuation of SOWK 413. Two full days (16 hours per week) and required seminar, 2.5 hours per week. Only for social work majors. Permission. Prerequisite: 413. One Semester, 4 credits.

*Not offered every year.
The Whittier College Summer Program consists of three sessions with the dates specified in the Summer Brochure. Session I is scheduled for four weeks, Session II is scheduled for six weeks and Session III is scheduled for three weeks. Some courses are scheduled according to specific session dates and other courses are offered on dates which overlap into a different session.

During Session I, students may take a maximum of four credits. During Session II, students may take a maximum of six credits. During Session III, students may take a maximum of three credits. The maximum number of credits for which any student may register during the summer is 12.

Some Liberal Education Requirements may be offered through the Summer Program. The Summer Program is of particular interest to graduate students enrolled in credential programs or the Master of Arts in Education Program. The summer curriculum features an intensive professional preparation sequence for Preliminary Multiple Subject (elementary) and Single Subject (secondary) Teaching Credentials.

A Summer Program brochure, including the class schedule, admission requirements and registration procedure is available early in the spring semester. Offerings vary from year to year.

Summer Program courses are taught by members of Whittier College faculty and selected adjunct faculty.

All courses satisfy requirements for Whittier College academic credit and may be applied toward credential and degree requirements. The Summer Intensive Program has separate admissions requirements. Additional information is available from the Office of the Registrar or from the Department of Education and Child Development.
The Theatre and Communication Arts Department offers courses serving students in the areas of performance, directing, theatre history and dramatic literature, and stage design and technology. The department also offers courses in film history and criticism, video production, and speech communication. Students who may desire to major in Theatre Arts should consult an appropriate faculty member for advice.

The Theatre Arts program at Whittier College is firmly based in the liberal arts tradition. Students majoring within the department follow a program of study designed to stimulate awareness of our cultural traditions and to explore the creative abilities of each individual. This program provides pre-professional training for those who plan to seek a career in the performing arts, to prepare for graduate school, or to pursue careers in other allied fields including teaching. Recent graduates have found that their education in the department has prepared them for careers in personnel, education, sales and advertising, business, law, and publishing, as well as acting, directing, design and technical direction, writing, film, television, and the themed entertainment industry.

GUIDELINES FOR A MAJOR IN THEATRE ARTS (Total Requirements: 31–35 credits)

Department Core Requirements for all majors (25–28 credits):
- Theatre Practicum, THEA 50, 1 credit per year of residence
- Introduction to Theatrical Design, THEA 240, 3 credits
- Introduction to Theatre, THEA 150, 3 credits
- Acting I, THEA 210, 3 credits
- Shakespeare, THEA 328, 3 credits
- World Theatre, THEA 372(A and B), 6 credits
- Senior Project, THEA 485, 3 Credits
  either Scenic Design, THEA 340, 3 credits
  or Lighting Design, THEA 345, 3 credits
  or Costume Design, THEA 347, 3 credits

Additional Requirements:
- Theatre Arts—Performance Emphasis (6 credits):
  - Directing I, THEA 410, 3 credits
  - either Voice and Movement, THEA 220, 3 credits
  - or Advanced Voice and Movement, THEA 225, 3 credits
  - or Acting II, THEA 310, 3 credits

  or

- Theatre Arts—Design/Technology Emphasis (6 credits):
  - Drawing and Drafting for the Theatre, THEA 245, 3 credits
  - Scene Painting and Rendering, THEA 246, 3 credits
GUIDELINES FOR A MINOR IN THEATRE ARTS

A minor requires 20 credits, including THEA 50, 2 credits; Introduction to the Theatre, THEA 150, 3 credits, THEA 210, 3 credits; THEA 240, 3 credits; and six credits in courses numbered above 300.

COURSE DESCRIPTIONS

004 Pilates
Based on the work of Joseph Pilates, this course focuses on body awareness through a series of specific exercises that simultaneously strengthen and stretch the body. The Pilates Method encourages a mind and body partnership, establishing inner balance, physical economy and grace. Previous exposure to Pilates is not necessary. May be repeated for credit. One semester, 1 credit. (Same as KLS 004)

005 Yoga
Drawing from various Yoga practices this beginning to intermediate yoga course focusing on harmonizing mind, body, and spirit while strengthening, and lengthening muscles and muscle groups. Various breathing techniques, physical postures, and asanas will be practices, as well as relaxation and meditation exercises. Previous exposure to yoga is not necessary. May be repeated for credit. One semester, 1 credit. (Same as KLS 005)

50 Theatre Practicum
Participation in two major productions, either as an actor or as a member of the stage crew. Actors must audition and are cast by the director of each production. Possible stage crew assignments include scenery construction and painting, properties preparation, stage lighting preparation, costume construction, sound recording, and serving on backstage crews during rehearsals and performances. Enrolled students should contact the instructor at the very beginning of the semester to arrange their production assignments. May be repeated up to a maximum of 5 credits. One semester, 1 credit.

100* Theatrical Creativity
Sources and methods of creative expression through theatrical games, concentration, objects, and sensitivity exercises. One semester, 3 credits.

101 Basic Oral Communication
Theory and practice of the fundamental principles of public speaking and reading aloud. One semester, 3 credits.

150 Introduction to the Theatre
Introduction to the concepts, history, dramatic literature and practice of theatre arts. The class will focus on the development of the American theatre and the evaluation of theatre in performance, locating theatre within its multicultural/historical/social context and tracing its development to roots in previous periods and movements. Field trips to professional theatrical productions in the Los Angeles area and discussions with professional theatre artists will be emphasized. One semester, 3 credits.

160* Theatre for Youth
A seminar/workshop in which students will explore various aspects of creating theatre for young audiences. Performance skills in improvisation and creative dramatics, the use of drama as therapy, adaptation of fairy tales, folklore and other children's literature for plays, and the integration of drama into classroom curriculum will be emphasized. Enrollment in the class will also require participation in the Whittier College Theatre for Youth Ensemble, The Magic Beans, and possible involvement in a college theatre for youth production. One semester, 3 or 4 credits.

170* Fundamentals of Cinema
This course provides a survey of the history and criticism of the cinema. It provides an introduction to the aesthetics and language of film. It also understands film as an artistic expression, an economic product, and a social text. Lectures and discussions are supplemented by class screenings. One semester, 3 credits.

210 Acting I
Various techniques of actor preparation and role creation; scene work and participation in laboratory theatre productions. One semester, 3 credits.

*Not offered every year
220* Voice and Movement for the Actor
Practical laboratory work in vocal production and movement, utilizing developmental techniques of Linklater, Alexander, Feldenkrais, Grotowski, Michael Chekhov, et al., with special emphasis on individual coaching and problem-solving. One semester, 3 credits.

225* Advanced Voice, Movement, and Characterization
Advanced laboratory work in voice, movement and characterization for the actor with emphasis on improvisation, neutral and character mask exploration, work with classical texts, familiarity with the international phonetic alphabet (IPA), acquisition of dialect skills. Prerequisite: Either 220, 210 or permission of instructor. One semester, 3 credits.

240* Intro to Theatrical Design
An introduction to design and technology for the theatre arts. Most of the course focuses on three design specialties: scenery, lighting, and costumes for theatre, with some additional attention given to design for film and television. Concurrent enrollment is required in Theatre 240L, the laboratory component of this course, which will be arranged by the instructor on an individual student basis (usually 2 hours per week). Through the laboratory component, students will participate in the construction of scenery and properties for two productions during the semester. One semester, 3 credits.

245* Drawing and Drafting for the Theatre
Covers drawing and drafting techniques for design and technical production in the theatre. An introduction to the use of CADD (computer-aided design and drafting) will be included. Includes a laboratory component for major productions. One semester, 3 credits.

246* Scene Painting and Rendering
A course covering the study and practice of scene painting for the theatre, along with the use of watercolor in creating design renderings and painter's elevations. Includes a laboratory component for major productions. One semester, 3 credits.

270* Film Genre
This course surveys the major films, filmmakers, themes, and issues of a major film genre. The genres will vary from semester to semester and during any given term, the genre might be the musical, gangster, western, film noir, or horror films. Lectures and discussions are supplemented by class screenings. Offered during January Term and may be repeated for credit. 4 credits

275* Film Movements
This course explores the major films, filmmakers, themes, and issues of a particular critical fashion or period in the history of cinema. During one term, the course may, for example, cover the Hollywood Renaissance, Italian Neo-Realism, or French New Wave. As in THEA 270, the subject matter will vary from term to term. Lectures and discussions are supplemented by class screenings. Offered during January Term and may be repeated for credit. 4 credits

280* Narrative Cinema
A survey of the history, aesthetics, and theory of the narrative film. Lectures and discussions are supplemented by class screenings. One semester, 3 credits.

285* Documentary Cinema
A survey of the history, aesthetics, and theory of the documentary film/video tradition. Lectures and discussions are supplemented by class screenings. One semester, 3 credits.

300* Paradigm Shifts in the Arts
What is the function of art in societies? How have the arts reflected, created, or predicted paradigmatic shifts in societies? This interdisciplinary course focuses on the interconnectedness of the arts and society in the past 100 years. Studying works of art that have had violent and negative reactions when first presented to the public, we will examine the deeply embedded beliefs these works of arts challenged. One semester, 3 credits.

310* Acting II
Scene studies from modern and classical plays are used in developing techniques for building the actor's character. Prerequisite: 210 or permission. One semester, 3 credits.

320* Introduction to Video Production
Scripting, videography, audio, and editing are among the procedures and principles covered in the students' planning, producing, and evaluating video projects. One semester, 3 credits.

325* Documentary Video Production
Video production of a documentary. A fine course to pair with a political science, biology, or sociology course. Prerequisite: 320. One semester, 3 credits.

328 Shakespeare
(Same as ENGL 328) One semester, 3 credits.

*Not offered every year
330* Playwriting
General analysis of dramatic structure and of student-written scenes culminates in completion of a one-act play. One semester, 3 credits.

340* Scenic Design
Study and practice of scenic design techniques, including the development of visual research sources, freehand drawing and mechanical drawing exercises, and scale model construction as applied to design projects for specific plays. Some attention will be given to the basic visual elements of design, to the history of stage design, to the use of computer-aided design software, and to scenic design for film and television. One semester, 3 credits.

345* Stage Lighting
Study of stage lighting technology and stage lighting design theory and practice. Students will develop several lighting design projects. They also will assist in the preparation of the stage lighting for one or two theatre productions. One semester, 3 credits.

347* Costume Design
Study and practice of costume design techniques, including the development of visual research sources, practicing freehand drawing and watercolor painting techniques, and drawing and painting of costume sketches for several plays. Some attention will be given to the basic visual elements of design, to choosing appropriate costume fabrics, and to costume history and period styles. One semester, 3 credits.

372A* World Theatre
Part one of a two-semester survey, integrating a multi-cultural history of world theatre, studying performance traditions and dramatic literature. The course encompasses the foundations of theatre via oral traditions and rituals, Aristotle and Greek theatre, and the early and late Renaissance periods. Emphasis on the importance of historical and literary research is key in formulating critical analysis of period and production and incorporating these insights into research papers. (Does not have to be taken in sequence.) Prerequisite: 150 or permission. One semester, 3 credits.

372B* World Theatre
Part two of a two-semester survey, integrating a multi-cultural history of world theatre for the past 350 years. The class traces the development of theatre from the comedy of Moliere through modern plays of Ibsen and Pirandello, to the post-modern works of contemporary avant-garde theatre. Emphasis on the importance of historical and literary research is key in understanding the production of theatre, its impact on audience, and its production of meaning throughout the centuries. (Does not have to be taken in sequence.) Prerequisite: 150 or permission. One semester, 3 credits.

378* Musical Theatre Workshop
A workshop exploring the unique combination of skills necessary to work in the musical theatre. Acting, singing and movement/dance techniques will be emphasized. Workshop will culminate in a studio full-scale musical theatre production. One semester, 3 or 4 credits.

390, 490 Selected Topics in Theatre
Credit and time arranged. Permission. May be repeated for credit.

393, 495 Directed Studies
Credit and time arranged. Permission. May be repeated for credit.

400* Acting III
Advanced study in the theory and technique of acting with special emphasis on auditioning techniques and the preparation of a professional repertoire. Seminar and laboratory. Prerequisite: 310 or permission.

410 Play Directing I
Principles, procedures, and practice of stage direction; script selection, analysis, casting, and rehearsal problems; culminates in production of two one-act plays. Prerequisites: 240 and 210 or permission. One semester, 3 credits.

415* Play Directing II
Continuation of 410, emphasizing styles of production. Prerequisite: 410 or equivalent. One semester, 3 credits.

420* Directed Study in Video Production
For advanced students wishing to produce independent productions. Prerequisite: 320. One semester, 3 credits.

485 Senior Project
A directed study; this course is the capstone experience for all Theatre Arts majors. Each student will complete a major project either in directing, acting, design or critical research. The project will entail both analytical and creative endeavor and will result in some kind of public presentation or performance. The students will also document their work on the projects justifying the choices and/or conclusions they made. This project is designed to satisfy the college “Paper in the Major” requirement. Prerequisite: Senior Theatre Arts Major. One semester, 3 credits.
There is a substantial interest in urban studies among both students and faculty on campus, and the W.M. Keck Foundation Image Processing Laboratory provides an important resource for the pursuit of these interests. A student can arrange a preprofessional curriculum in urban studies designed as preparation for graduate work in such fields as urban planning, design, architecture, public administration, or social service delivery. Such a curriculum can be constructed around either the Liberal Education Program or the Whittier Scholars Program. The latter option permits a self-designed interdisciplinary major; both options allow a disciplinary concentration complemented by relevant courses from other disciplines forming the core of the program. A student interested in urban planning might major in sociology, political science, or economics, focusing on the relevant urban and planning courses both within the major and in related fields. Someone more interested in design or architecture might major in art or physics and supplement this work with relevant study in other departments. Such flexibility allows for the diversity of career opportunities growing out of urban studies. The faculty listed above are available to help students design a program suited to particular areas of interest and career objectives.
WHITTIER SCHOLARS

Joyce P. Kaufman (Political Science), Associate Academic Dean and Director of the Whittier Scholars Program
Ria O'Foghludha (Art and Art History), Associate Director

The Whittier Scholars Program is governed by the Whittier Scholars Council consisting of appointed faculty members from across the College and elected student representatives.

For a description of the Whittier Scholars Program (WSP), see the “curriculum” section of the catalog, or contact the Whittier Scholars Program Office, located in Wardman Hall.

COURSE DESCRIPTIONS

101 The Individual, Identity and Community
The foundation course for the Scholars Program. Designed to enable students to explore issues such as: human beings in a social context; the relationship between the individual and the community; the role of education and the life of the mind; and the ways in which values and affect play a role in asking and understanding enduring questions and analyzing issues. Themes are addressed in terms of different historical periods, disciplines, cultures and identities. Director's permission required. 3 credits.

201 Designing Your Education
Educational philosophy, values clarification and goal setting, alternatives for courses of study, and preparation of an Educational Design. Director's permission required. 1 credit.

301 Nature, Theory and Bases of Knowledge
Explores various methods of gathering and understanding knowledge from a number of disciplinary perspectives. Develops awareness of what knowledge is and an understanding of the approach most appropriate for completion of the Senior Project. Acceptance into the Program and Director's permission required. 3 credits.

399 Internship
Internship is an area directly related to the Educational Design. This is an off-campus experience under joint college/site planning and supervision. May be repeated for credit. Director's permission required. 1-4 credits.

401 Senior Seminar
Final course in the sequence. Capstone seminar which enables students in the program to share their ideas and to peer review one another's work as they progress through the creation of a Senior Project. Design Board approval and Director's permission required. 3 credits.

499 Senior Project
Design Board approval and Director's permission required. Variable credits.
GRADUATE EDUCATION

Whittier's Graduate Education Programs include both credential and Masters of Arts in Education degree programs that further the institution's tradition of excellence in the preparation of teachers, school administrators, and teacher educators. In-depth study of various pedagogical and administrative issues occurs within the context of Whittier's liberal arts perspective.

The Graduate Program faculty includes outstanding teachers and administrators with advanced academic degrees and professional experience in their specialty areas. Among the themes that unify graduate study at Whittier College are appreciation of diversity, active construction of knowledge, value of critical thinking, and lifelong learning.

OVERVIEW OF GRADUATE PROGRAMS

Graduate offerings include the following credential programs approved by the Commission on Teacher Credentialing (CTC): Preliminary and Professional Clear Multiple Subject Teaching Credential Programs (elementary education); Preliminary and Professional Clear Single Subject Teaching Credential Programs in several subject areas as described in the Teacher Education section of this catalog (secondary education); and Preliminary and Professional Administrative Services Credential Programs. Whittier offers a Cross-Cultural, Language and Academic Development (CLAD) Certificate Program for Multiple Subject and Single Subject credentials and a CLAD Emphasis Program for the Multiple Subject Credential.

Whittier also offers the Master of Arts in Education Degree, with emphases in a variety of concentrations. Qualified students may work simultaneously on the M.A. degree and a credential.

The M.A. Program features an opportunity for each student to work closely with a faculty member in his/her emphasis area to develop an individualized course of study called the Educational Design. All Educational Designs must include specified courses and an area of concentration.

Graduate students have the opportunity to study at the Broadoaks Children's School, Whittier's nationally known campus demonstration school.

Graduate courses are offered in the evening during the fall and spring semesters, and also during the summer sessions.
WHITTIER LAW SCHOOL

THE SCHOOL, TRADITIONS AND GOALS
Whittier Law School, begun in 1975, and rededicated in 1998 at its present state-of-the-art facility in Costa Mesa, reflects the College’s continuing commitment to academic excellence and individual attention. The degree of Juris Doctor (J.D.) is conferred upon successful completion of the program. The School offers full-time day, part-time day and part-time evening programs. Students may specialize in and, upon graduation, receive Certificates in Children’s Rights and Intellectual Property Law. The Law School also offers an exchange program with the University of Paris, as well as, an LL.M. in U.S. Legal Studies for foreign lawyers. The School is fully approved by the American Bar Association and is a member of the Association of American Law Schools.

The Whittier tradition stresses concern for individual students’ intellectual and ethical development. This tradition is reflected in admissions practices stressing diversity, a small student-to-faculty ratio (approximately 20:1), small elective classes, and individual student counseling and placement services. Whittier faculty members recognize that their teaching obligation includes considerable interaction with students. The goal of the Law School is to provide a sound legal education as preparation for careers in law, business, public service, and other fields. Its course of study and instructional policies seek to develop analytical legal reasoning, skill in communications, and a strong foundation in the fundamentals of law. The curriculum emphasizes historical precepts and the changing current of modern law relative to prevailing social needs.

LAW CAMPUS
The Whittier Law School occupies an attractive fifteen-acre campus in Costa Mesa that provides a relaxed atmosphere for the law student. The multimillion dollar, 130,000 sq. ft. facility houses the library, clinic, tiered and seminar classrooms, courtrooms, offices for student organizations, cafeteria, bookstore, and ample study areas. Multimedia interactive classrooms incorporate the most advanced acoustic principles, and network connections are built into student desks. Costa Mesa, in Coastal Central Orange County is convenient to the state and federal courts and law offices in Los Angeles and Orange County.

THE PROGRAM AND ITS STUDENTS
Whittier Law School maintains a program with classes meeting both day and evening, offering full-time and part-time legal education. After three years at Whittier College a student may apply to the Law School. If accepted, the Whittier student would earn a B.A. from the College and a J.D. from the Law School within a six year period. A mid-year admission program begins in January in addition to the regular Fall Admission program. The Academic Success Program includes the Summer Performance Admission program which is provided for a selected group wishing to enter the Law School, but whose qualifications do not meet the high standards for regular admission. The Center for Children’s Rights trains students to provide legal services to children and the Children’s Rights Clinic offers students an opportunity to participate in all aspects of client representation. The Center for Intellectual Property Law offers an I.P. track within the J.D. program as well as a Summer Institute in Intellectual Property.
The school's full-time program is composed primarily of students who have recently obtained their undergraduate degrees and whose interests and aptitudes have led them to seek a career in the legal profession. Students attending the part-time program comprise a variety of age groups, backgrounds, and occupations. In most cases, they are employed on a full-time basis and are seeking to further their positions in their present fields or to make a career change.

Among the current students are physicians, mathematicians, engineers, C.P.A.s, teachers, law enforcement officers, court clerks, legal secretaries, and people representing a multitude of other occupations from a broad spectrum of the community. There is no specifically required academic background for admission to law school; students are admitted from many fields. Whittier Law School has long made special efforts to provide legal educational opportunities for women and members of underrepresented ethnic groups.

**ADMISSION**

It has been the policy of the Law School from its inception to set admission and scholastic standards at a level consistent with academic excellence. The Admissions Committee undertakes an individual analysis of each potential student to determine whether the combination of factors exists which the Committee believes to be essential for the successful completion of the study of law. These factors are many and varied. Considerable emphasis is placed on the applicant's undergraduate record and performance on the Law School Admission Test (LSAT). However, the Committee also assesses such factors as intellectual maturity, capacity for self-discipline, and other intangible attributes essential to success in a law program.

For details regarding admission policies and procedures, scholarships and financial aid, tuition and fees, academic calendar and schedule, physical and library resources, student organizations, honors and wards, academic standards and the course of instruction, please contact the Director of Admission at Whittier Law School 3333 Harbor Blvd., Costa Mesa, CA 92626.
EXPENSES

Tuition, fees, and room and board charges are set in the spring for the following academic year. A Schedule of Charges may be obtained directly from the Business Office or the Office of Student Financing. Tuition, room, and board fees for the January Interim are included in the academic year charges. If, however, a student is enrolled for only one semester (i.e., fall or spring but not both), tuition charges for January Interim will be assessed at the per credit hour fee and room/board on a pro-rated schedule.

Deferred Payment
For students and their parents who desire to budget for the tuition, fees, room, and board charges on an installment basis, the College has engaged the services of independent firms to handle monthly billing and collection. Further information may be obtained from the Office of Student Financing.

Refunds
The registration deposit of $300 (or $2,000 for new international students) is not refundable.

All housing refunds, including the $100 room reservation deposit are made under the conditions stated in the Residential Living License Agreement. The deposit is not refundable if the application for housing is canceled prior to occupancy.

Meal plan fees are refundable according to a pro-rated schedule and upon approval from the Dean of Students. No refund or credit is made for missed meals. Meal tickets are not transferable, and a fine is imposed for unauthorized use. A fee is charged for the replacement or exchange of a meal ticket or identification card.

January Interim meal adjustments will be made by the Business Office, 30 days prior to the session, only for students with approved absences. There is no refund for room or tuition if absent for the January Interim.

Tuition and fees refunds for withdrawal from the College are made according to a pro-rated schedule based on federal refund guidelines for new and continuing students.

All withdrawal notices must be filed with the Dean of Students. The date on such notice determines the refund period. All refunds must be claimed in the Business Office within 30 days of the date of the withdrawal notice.

Upon withdrawal, the Office of Student Financing will apply federal and state regulations to determine the appropriate amounts that must be refunded to the aid programs and/or the student for any student receiving federal, state or institutional assistance.

Detailed information regarding the calculation of refunds may be obtained by contacting the Dean of Students or the Office of Student Financing.

College Policy
The College reserves the right to credit wages earned by students employed by the College or refundable deposits against unpaid accounts. Student will be retained in classes, grades or transcripts will be issued, and degrees conferred only after all financial obligations to the College have been satisfied.
ADMINISTRATION 2003-2005

Adams, Charles
Interim Vice President for Academic Affairs and Dean of Faculty
A.B. University of California, Davis,
M.A., Ph.D., University of Washington

Alex, Bernard
Director, Campus Safety
B.A., University of Southern California

Chabran, Rafael
Associate Dean for Academic Advisement and First Year Experience
B.A., University of California, Berkeley
M.A., San Jose State University
Ph.D., University of California, San Diego

Cheatham, Richard
Director, Media Center
B.A., Whittier College
M.Rel., Claremont School of Theology
M.S., Ph.D., University of Southern California

Coleman, Rebecca
Director of Development
B.A., California State University, Fullerton

Ehlers, James
Director of Planned Giving
B.A., Whittier College

Feng, Jeffrey Y.
Associate Director of Computing and Telecommunication Services
B.A., Beijing Second Foreign Language Institute
M.A., State University of New York, Albany

Greenup, Troy
Director of Computing and Telecommunication Services
B.A., M.B.A., Whittier College

Hau, Hoang
Executive Director of Finance and Business Services
B.A., Saigon University
B.S., California State University, Fresno
M.B.A., California State University, Los Angeles

Hudson, Delaphine
Assistant Dean of Students and Director of Housing
A.S., Wayne County Community College
B.A., Saginaw Valley State College
M.A., Central Michigan University

Jack, Wendell
Director of Athletics
B.S. California State University, Long Beach
M.A. California State University, Long Beach

Lagan, Seamus
Associate Dean and Director of the Liberal Education Program
B.A.(Mod.), Dublin University, Trinity College
M.S., Lehigh University
Ph.D., Lehigh University

Kar, Urmi
Dean of Enrollment
B.A., Wellesley College
M.A., California State University, Fullerton

Kaufman, Joyce
Associate Academic Dean and Director of the Whittier Scholars Program
B.A., M.A., New York University
Ph.D., University of Maryland

Legoza, Jan
Vice President for Finance and Administration
B.A., State University of New York, Plattsburg
M.P.A., State University of New York, Albany

Leidy, Colleen
Director of Student Health Services
A.A., Rio Hondo
R.N., Rio Hondo

Leonard, David
Dean of Students
B.A., State University of New York, Cortland
M.S. Syracuse University
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Education Details</th>
</tr>
</thead>
</table>
| Levasheff, Christina  | Director of Learning Support Services         | B.A., Biola University  
|                       |                                               | M.A., Biola University                                                           |
| Martinez, Nina        | Director of Student Financing                 |                                                                                  |
| Mcintosh, Bedford     | Vice President for Advancement               | B.A., University of California, Los Angeles                                      |
| McKernan, George      | Director of Conferences                       | B.S., East Stroudsburg University  
|                       |                                               | M.S., Shippensburg University                                                     |
| Merideth, Janette     | Executive Director of Human Resources and     |                                                                                  |
|                       | Administrative Services                       | B.A., M.A., Webster University                                                   |
| Miller, Kieron        | Associate Director of Admission              |                                                                                  |
|                       |                                               | B.A., Loyola Marymount University                                                |
| O’Brien, Philip       | College Librarian                             |                                                                                  |
|                       |                                               | B.A., Whittier College  
|                       |                                               | M.S.L.S., Ph.D., University of Southern California                             |
| O’Foghludha, Ria      | Associate Director of Whittier Scholars       |                                                                                  |
|                       | Program                                       |                                                                                  |
|                       |                                               | A.B., M.A., Duke University  
|                       |                                               | M.Phil., Ph.D., Columbia University                                              |
| Palmer, David         | Production Coordinator/Theatre Manager        |                                                                                  |
|                       |                                               | B.A., M.A., M.F.A., California State University, Long Beach                      |
| Parnes, Jane          | Director of Student Counseling Services       |                                                                                  |
|                       |                                               | B.A., Brandeis University  
|                       |                                               | Ph.D., Columbia University                                                      |
| Peake, Barnaby        | Director of Student Activities                |                                                                                  |
|                       |                                               | B.A., Linfield College  
|                       |                                               | M.Ed., Azusa Pacific University                                                 |
| Rankin, Emily         | Director of Alumni Relations                  |                                                                                  |
|                       |                                               | B.A., Scripps College                                                           |
| Riley, Caye           | Director of Public Relations                  |                                                                                  |
|                       |                                               | B.A., Occidental College                                                       |
| Smith, Joan           | Director of Disability Services               |                                                                                  |
|                       |                                               | B.A., California State University Fullerton  
|                       |                                               | M.A., California State University Fullerton                                       |
| Smith, Raymond F.     | Associate Academic Dean                       |                                                                                  |
|                       |                                               | B.A., Pomona College  
|                       |                                               | M.S., California State University, Los Angeles                                  |
|                       |                                               | Ph.D., University of California, Irvine                                           |
| Tambascia, Tracy Poon | Associate Dean of Students and Director of    |                                                                                  |
|                       | the Cultural Center                           |                                                                                  |
|                       |                                               | B.A., Occidental College  
|                       |                                               | M.A., California State University, Los Angeles                                  |
| Van Ellis, Wayne W.   | Registrar                                     |                                                                                  |
|                       |                                               | B.A., Concordia University, River Forest                                          |
| Wagner, Judith        | Director of Broadoaks Children’s School       |                                                                                  |
|                       |                                               | B.S., Longwood College  
|                       |                                               | M.Ed., University of Toledo                                                    |
|                       |                                               | Ph.D., University of Pittsburgh                                                  |
| Wiberg, Kristin       | Executive Assistant to the President          |                                                                                  |
|                       |                                               | B.A., Scripps College                                                          |
|                       |                                               | Ed.M., Harvard University                                                      |
| Will, Katherine Haley | College President                             |                                                                                  |
|                       |                                               | B.A., Tufts University  
|                       |                                               | A.M., University of Illinois                                                 |
|                       |                                               | Ph.D., University of Illinois                                                  |
BOARD OF TRUSTEES

OFFICERS OF THE BOARD
Charlotte D. Graham, L.H.D. ’99
Chairman
Willard V. Harris, Jr. ’55, L.H.D. ’02
Vice Chairman
Rayburn S. Dezember ’53, L.H.D. ’94
Treasurer

TRUSTEES EMERITI
C. Milo Connick, Ph.D.
Ethel K. Eckels ’25
R. Chandler Myers, J.D., LL.D. ’88
Hubert C. Perry ’35
Carl L. Randolph ’43, Ph.D., LL.D. ’82
Homer G. Rosenberger ’34, M.D.
Elden L. Smith, ’62
Benjamin B. Tregoe ’31, Ph.D., LL.D. ’90

PRESIDENT OF THE COLLEGE
Katherine Haley Will, Ph.D., Ex Officio

PRESIDENT EMERITUS
Eugene S. Mills, Ph.D., LL.D.

PRESIDENTS OF WHITTIER COLLEGE
Charles E. Tebbetts, A.B.; Ph.B.; A.M.; D.D.
(1901-1907)
Thomas E. Newlin, B.S.; A.M.; Ph.M.; LL.D.;
D.D.
(1907-1915)
Absolom Rosenberger, A.B.; LL.B.; LL.D.;
D.D.
(1915-1918)
Harry N. Wright, Ph.D.
(1918-1923)
Walter F. Dexter, A.B.; M.A.; Ed.D.; LL.D.
(1923-1934)
Herbert E. Harris, Ph.D.; Litt.D.
(acting President 1933-1934)
William O. Mendenhall, Ph.D.; D.D.
(1934-1943)
William C. Jones, A.B.; M.B.A.; Ph.D.; LL.D.;
L.H.D.
(1943-1951)
Paul S. Smith, A.B.; M.A.; Ph.D.; L.H.D.;
LL.D.
(1951-1969)

Frederick M. Binder, B.A.; M.A.; Ph.D.; LL.D.;
(1970-1975)
W. Roy Newson, B.A.; M.A.; Ph.D.; L.H.D.
(1975-1979)
L.H.D.; LL.D.
(1979-1989)
James L. Ash, Jr., B.A.; M.A.; M.Th.; Ph.D.
(1989-1999)
Katherine Haley Will, B.A.; A.M.; Ph.D.
(1999-

TRUSTEES (YEAR FIRST ELECTED)

Steven C. Ai ’76
President/CEO
City Mill Home Improvement Center
Honolulu, HI (2002)

Dolores L. Ball ’33, L.H.D. ’96
Businesswoman
Whittier, CA (1962)

Richard I. Gilchrist ’68, J.D.
Founding Member
CommonWealth Partners
Alexandria, Virginia (1996)
Alfred J. Gobar ’53, M.A. ’55, Ph.D.
President, Retired
Alfred Gobar Associates, Inc.
Placentia, CA (1992)

Charlotte D. Graham, L.H.D. ’99
Community Leader
Dana Point, CA (1976)

Kenneth S. Greenbaum ’53
President
Greenbaum Homefurnishings
Bellevue, WA (2000)

Barbara Ondrasik Groce ’57
Educator
La Jolla, CA (1992)

Clinton O. Harris ’34, L.H.D. ’95
President
Harris Oldsmobile, Inc.
Whittier, CA (1962)

Willard V. Harris, Jr., ’55, L.H.D. ’02
President
Harris Taylor Management
Santa Ana, CA (1979)

Charles E. Hawley, Jr. ’51
Businessman, Retired
Whittier, CA (2000)

Donald J. Herrema ’74
Chairman and CEO
Atlantic Trust Company

Caroline P. Ireland ’43
Community Leader
Birmingham, AL (1986)

Margaret Liptay
Businesswoman
Somers, NY (2001)

David C. Lizarraga
Chairman of the Board & Chief Executive Officer
TELACU
Los Angeles, CA (1991)

Alice D. Lowe ’37
Community Leader
Baltimore, MD (2000)

Alan H. Lund ’71
Executive Vice President
Vice Chairman-Finance and CFO
International Lease Finance Company
Los Angeles, CA (2000)

David D. Mandarich
President and Chief Executive Officer
Richmond Homes
Denver, CO (1996)

Sharon W. McLaughlin
Community Leader
Santa Fe, NM (1983-90, 1992)

Ernie Z. Park, J.D.
Attorney-at-Law
Bewley, Lassleben & Miller
Whittier, CA (1993)

Ruth B. Shannon, L.H.D. ’92
Community Leader
Whittier, CA (1979)

Willard W. Shepherd, Sr.
General Partner
Shepherd Management Services Group
Whittier, CA (1992)

Judith A. Swayne ’63
Community Leader
Laguna Beach, CA (2000)

Tomio Taki
Chairman
Takihyo, Inc.
New York, NY (1989)

Maxine M. Trotter ’47
Assistant and Treasurer
Murdy Foundation
Santa Ana, CA (1991)

Roberta G. Veloz ’57
CEO and Chairman
Aquafine Corporation
Valencia, CA (1992)
Steven Weston '83
Director of Operations
Sitel Corporation
Baltimore, MD (1997)

Joan M. Woehrmann '52
Community Leader
American Medical Enterprises
Whittier, CA (2000)

Donald E. Wood, L.H.D. '98
President, Community Honda
Whittier, CA (1975)

ALUMNI TRUSTEES
Deborah R. Arroyo '90
President of Alumni Board
Executive Director
Anaheim Memorial Medical Center
Anaheim, CA (2001)

Wayne S. Harvey '60
Managing Partner, Retired
Harvey & Parmelee, LLP
Rancho Mirage, CA (2000)

Clifford H. Pearson, J.D. '81
Wasserman, Comden, & Casselman, LLP
Tarzana, CA (2000)

Amy L. S. Pulver '72
Executive Director
Sand Creek Regional Greenway Partnership
Denver, CO (2000)
Adams, Charles S.  
Interim Vice President for Academic Affairs and Dean of Faculty, 2002  
Professor of English Language and Literature, 1984  
A.B., University of California, Davis  
M.A., Ph.D., University of Washington

Archer, Richard L.  
Professor of History, 1975  
B.A., M.A., Ph.D., University of California, Santa Barbara

Barnstone, Tony D.  
Associate Professor English Language and Literature, 1995  
B.A., University of California, Santa Cruz  
M.A., Ph.D., University of California, Berkeley

Behrens, Maurine G.  
Distinguished Service Professor, 2002  
Professor of Psychology, 1973  
B.S., University of Chattanooga  
M.A., Florida State University  
Ph.D., Claremont Graduate School

Bell, Priscilla B.  
Associate Professor of Chemistry, 1982  
B.S., Mt. Union College  
M.S., Ph.D., The Ohio State University

Bergerson, Frederic A.  
Professor of Political Science, 1971  
B.A., Johns Hopkins University  
Ph.D., Vanderbilt University

Bleich, Lisa  
Visiting Instructor  
B.A., Brandeis University  
M.B.A., Harvard University

Bourgade, David B.  
Professor of Biology, 1997  
The Fletcher Jones Professor of Molecular Genetics, 1996  
B.S., B.A., Ohio Northern University  
Ph.D., University of Massachusetts

Bremme, Donald W.  
Associate Professor of Education and Child Development, 1991  
A.B., A.M., Stanford University  
M.A., University of California, Berkeley  
Ed.D., Stanford University

Calvert, Sherry L.  
Associate Professor of Kinesiology and Leisure Science, 1984  
B.A., M.A., University of Southern California

Camparo, Lorinda B.  
Associate Professor of Psychology, 1996  
B.A., Barnard College of Columbia University  
B.A., California State University, Dominguez Hills  
M.A., Ph.D., University of California, Los Angeles

Chabrán, H. Rafael  
Associate Dean of Academic Advisement and the First Year Experience, 2000  
Professor of Modern Languages and Literatures, 1985  
B.A., University of California, Berkeley  
M.A., San Jose State University  
Ph.D., University of California, San Diego

Chirol, Marie-Magdeleine  
Associate Professor of Modern Languages and Literatures, 1996  
M.A., Ph.D., University of Maryland, College Park

Decker, Jeffrey N.  
Associate Professor of Business Administration, 1992  
B.B.A., M.B.A., Kent State University  
Ph.D., Claremont Graduate University

deVries, Jack H.  
Associate Professor of Theatre and Communication Arts, 1970  
B.A., University of Redlands  
M.F.A., Boston University  
C.Phil., University of California, Los Angeles
<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Title</th>
<th>Degrees and Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dmohowski, Joseph F.</td>
<td>Science Librarian and Associate Professor, 1985</td>
<td>B.A., M.A., California State University, Los Angeles, M.S.I.S., University of Southern California</td>
</tr>
<tr>
<td>Dorrington, Claudia</td>
<td>Associate Professor of Social Work, 1999</td>
<td>B.S., South Bank University, England, M.S.W., Ph.D., University of California, Los Angeles</td>
</tr>
<tr>
<td>Duran, Daniel</td>
<td>Assistant Professor</td>
<td>M.L.S., B.A., University of California, Berkeley, Ph.D., University of Wisconsin, Madison</td>
</tr>
<tr>
<td>Fattahi, Abi</td>
<td>Professor of Mathematics, 1981</td>
<td>B.S., University of Tehran, M.S., Ph.D., University of Chicago</td>
</tr>
<tr>
<td>Furman-Adams, Wendy</td>
<td>Professor of English Language and Literature, 1981</td>
<td>B.A., California State University, Los Angeles, M.A., California State University, Long Beach, Ph.D., University of Southern California</td>
</tr>
<tr>
<td>Garland, David</td>
<td>Associate Professor of Mathematics, 1977</td>
<td>B.A., M.S., Ph.D., University of California, Riverside</td>
</tr>
<tr>
<td>Geiger, William A.</td>
<td>The Albert Upton Professor of English Language and Literature, 1965</td>
<td>B.A., Whittier College, M.A., Ph.D., University of Southern California</td>
</tr>
<tr>
<td>Geirola, Gustavo</td>
<td>Associate Professor of Modern Languages and Literatures, 1995</td>
<td>Prof. of Letters, University de Buenos Aires, Ph.D., University of Arizona</td>
</tr>
<tr>
<td>Goldberg, Stephen R.</td>
<td>The Roy E. and Marie G. Campbell Professor of Biology, 1970</td>
<td>B.A., Boston University, M.S., Ph.D., University of Arizona</td>
</tr>
<tr>
<td>Gottschall, Marilyn</td>
<td>Assistant Professor of Religious Studies, 1998</td>
<td>B.A., Lock Haven University, M.S.W., Carleton University, Canada, Ph.D., University of Southern California</td>
</tr>
<tr>
<td>Hanson, A. Warren</td>
<td>Professor of Biology, 1970</td>
<td>B.S., University of Puget Sound, M.S., Ph.D., Oregon State University</td>
</tr>
<tr>
<td>Heldman, Caroline</td>
<td>Assistant Professor of Political Science, 2002</td>
<td>B.A., Washington State University, M.A., Ph.D., Rutgers University</td>
</tr>
<tr>
<td>Hill, Charles T.</td>
<td>Professor of Psychology, 1982</td>
<td>B.A., University of Oregon, M.S., M.A., University of Washington, Ph.D., Harvard University</td>
</tr>
<tr>
<td>Holmes, Jennifer</td>
<td>Assistant Professor of Theatre and Communication Arts, 2002</td>
<td>B.A., State University of New York, Purchase, M.A., Ph.D., Northwestern University</td>
</tr>
<tr>
<td>Howard, Leslie L.</td>
<td>Professor of Sociology, 1981</td>
<td>B.A., Whittier College, M.A., Ph.D., Harvard University</td>
</tr>
<tr>
<td>Hunt, David P.</td>
<td>Professor of Philosophy, 1981</td>
<td>B.A., Pomona College, M.A., Ph.D., Vanderbilt University</td>
</tr>
<tr>
<td>Ibrahim, Hilmi</td>
<td>Professor of Kinesiology and Leisure Science, 1964</td>
<td>B.P.E., Cairo Institute of Physical Education, B.A., American University, Cairo, M.A., California State University, Fullerton, M.S., M.A., Re.D., Indiana University</td>
</tr>
</tbody>
</table>
Iimoto, Devin S.  
Associate Professor of Chemistry, 1990  
B.A., Carlton College  
M.S., Ph.D., University of California, San Diego

Iyam, David  
Associate Professor of Anthropology, 1999  
B.A., University of Calabar, Nigeria  
M.A., M.F.A., Ph.D., University of California, Los Angeles

Johnston, Sal A.  
Associate Professor of Sociology, 1996  
B.S., M.S., Grand Valley State University, Michigan  
Ph.D., University of Maryland

Kaufman, Joyce P.  
Director of the Whittier Scholars Program, 1997  
Professor of Political Science, 1985  
B.A., M.A., New York University  
Ph.D., University of Maryland

Kenny, Sharad  
Professor of Mathematics, 1986  
M.S., University of Bombay, India  
M.A., Ph.D., University of California, Los Angeles

Kiley, Anne  
Professor of English Language and Literature, 1972  
B.A., Duquesne University  
M.A., Ph.D., University of Wisconsin, Madison

Kjellberg, Paul  
Associate Professor of Philosophy, 1993  
B.A., Yale University  
Ph.D., Stanford University

Lagan, Seamus  
Associate Academic Dean for the Liberal Education Program, 2002  
Associate Professor of Physics and Astronomy, 1988  
B.A., Dublin University, Ireland  
M.S., Ph.D., Lehigh University

Laine, Charles R.  
Professor of Business Administration, 1976  
B.A., California State University, Stanislaus  
M.A., Ph.D., University of California, Davis

LeVelle, Teresa  
Assistant Professor of Music, 2000  
B.M. - Southwestern College, Kansas  
Aspen School of Music  
M.M. - Bowling Green State University  
D.M. - Indiana University

Lozano, Danilo  
Associate Professor of Music, 1993  
B.M., University of Southern California  
M.A., University of California, Los Angeles

Lukefahr, Howard  
Associate Professor of Physics and Astronomy, 1992  
B.S., Georgia Tech  
M.S., North Carolina State University  
Ph.D., University of California, Riverside

Lutgen, Jeffrey  
Associate Professor of Mathematics, 1994  
B.A., California State University, Sacramento  
M.S., Ph.D., University of Oregon

Marks, Robert B.  
The Richard and Billie Deihl Distinguished Professor of History, 1978  
B.A., M.A., Ph.D., University of Wisconsin, Madison

McBride, Michael J.  
Professor of Political Science, 1969  
B.A., M.A., Ph.D., Purdue University

McEnaney, Laura  
Associate Professor of History, 1996  
B.A., M.A., Ph.D., University of Wisconsin, Madison

Morris, Clifton I.  
The James Irvine Foundation Professor of Biology, 1972  
B.S., Waynesburg College  
M.S., West Virginia University  
Ph.D., The Ohio State University

Morris, Sean  
Assistant Professor of English Language and Literature, 2000  
A.B., Vassar College  
M.A., University of Michigan  
Ph.D., State University of New York, Stony Brook
Muller, David J.  
Professor of Music, 1983  
B.M.E., Temple University  
M.M., Cleveland Institute of Music

Neu, John H.  
Professor of Political Science, 1971  
A.B., J.D., Creighton University  
M.A., Harvard University  
Ph.D., University of Nebraska

Nino, Lana  
Visiting Instructor  
B.S., California State University, Long Beach  
M.S., B.A., California State University, Long Beach

Norden, Deborah  
Assistant Professor of Political Science, 2000  
B.A., University of Michigan, Ann Arbor  
M.A., Ph.D., University of California, Berkeley

O’Brien, Philip M.  
College Librarian and Professor, 1962-66, 1973  
B.A., Whittier College  
M.S.I.S., Ph.D., University of Southern California

O’Connor-Gomez, Doreen M.  
Associate Professor of Modern Languages and Literatures, 1991  
B.A., M.A., Ph.D., Catholic University

O’Connor, Lucy A.  
Professor of Psychology, 1970  
B.A., M.A., Oberlin College  
Ph.D., McGill University

O’Foghluadh, Ria M.  
Associate Professor of Art and Art History, 1993  
A.B., M.A., Duke University  
M.Phil., Ph.D., Columbia University

Orozco, Jose  
Associate Professor of History, 1996  
B.A., University of California, Santa Cruz  
M.A., Ph.D., Harvard University

Paddy, David Ian  
Associate Professor of English Language and Literature, 1996  
B.Ph., Miami University  
M.A., American University  
Ph.D., University of Maryland, College Park

Piner, Glenn  
Assistant Professor of Physics and Astronomy, 2000  
B.S., M.S., Ph.D., University of Maryland

Poskovic, Endi  
Associate Professor of Art and Art History, 1996  
B.F.A., University of Sarajevo  
M.F.A., State University of New York

Price, Joseph L.  
Professor of Religious Studies, 1982  
B.A., Georgetown College  
M.Div., Southern Baptist Theological Seminary  
M.A., Ph.D., University of Chicago

Radisich, Paula R.  
Professor of Art and Art History, 1983  
B.A., M.A., Ph.D., University of California, Los Angeles

Ralph, Kathleen  
Associate Professor of Education and Child Development, 1995  
B.S., Washington State University  
M.A., Ph.D., Arizona State University

Reed, Brian A.  
Associate Professor of Theatre and Communication Arts, 1988-89, 1990  
B.A., University of California, Riverside  
M.F.A., Humboldt State University

Reeg, Charles F.  
Professor of Chemistry, 1971  
B.A., Dana College  
Ph.D., University of Colorado

Russo, Kim  
Associate Professor of Art and Art History, 1993  
B.F.A., Tyler School of Art  
M.F.A., Indiana University

Sage, Elizabeth  
Assistant Professor of History, 2000  
B.A., University of California, Los Angeles  
M.A., Ph.D., University of Chicago

Schrum, Kimberley  
Associate Professor of Chemistry, 1999  
B.A., Lawrence University  
Ph.D., Purdue University
Sebanc, Anne  
Assistant Professor of Education and Child Development, 1999  
B.S., University of California, Davis  
Ph.D., University of Minnesota

Sheridan, Paula  
Associate Professor in Social Work, 1997  
Director of Social Work Program, 1997  
B.A., Louisiana Tech University  
M.S.W., Louisiana State University  
M.A., Southwestern Baptist Theological Seminary, Texas  
Ph.D., University of Southern California

Sloan, David  
Associate Professor of Art and Art History, 1988  
B.A., University of Maryland  
M.F.A., Washington University, St. Louis

Smith, R. Fritz  
Associate Dean of Faculty, 2002  
Professor of Mathematics, 1976  
B.A., Pomona College  
M.S., California State University, Los Angeles  
Ph.D., University of California, Irvine

Stoub, Darren  
Assistant Professor of Chemistry, 2000  
B.Sc., Calvin College  
M.Sc., Ph.D., University of Rochester

Swift, Cheryl C.  
Associate Professor of Biology, 1991  
A.B., Occidental College  
Ph.D., University of California, Los Angeles

Switzer, Michelle K.V.  
Assistant Professor of Philosophy, 1998  
B.A., Oberlin College  
M.A., Ph.D., University of Toronto

Thomas, Kim C.  
Assistant Professor of Economics, 1991  
B.S., California Institute of Technology  
M.S., Ph.D., Purdue University

Topjon, Ann J.  
Public Services Librarian and Associate Professor, 1981  
B.A., Occidental College  
M.S.L.S., University of Southern California

Urbizagastegui, Shelley  
Government Documents Librarian and Assistant Professor, 1993  
B.A., Arkansas Technical University  
M.L.S., University of Pittsburgh

Van Oosbree, Patricia A.  
Assistant Professor of Kinesiology and Leisure Science, 1993  
B.A., M.S., Northwestern Missouri State University  
M.S., University of Wisconsin, La Crosse  
Ph.D., Texas Woman's University

Vermilye, Jan  
Assistant Professor of Environmental Science, 1999  
B.A., State University College of New York  
M.S., Ph.D., Columbia University

Vick, Mary Ellen  
Assistant Librarian and Associate Professor, 1970  
B.A., California State University, Long Beach  
M.S.L.S., University of Southern California

Volckmann, David B.  
Professor of Psychology, 1970  
B.A., Hamilton College  
Ph.D., Indiana University

Wagner, Judith T.  
Professor of Education and Child Development, 1984  
Director of Broadaoks, 1984  
B.S., Longwood College  
M.Ed., University of Toledo  
Ph.D., University of Pittsburgh

Wallis, Andrew  
Assistant Professor of Modern Languages and Literatures, 1999  
B.A., Ph.D., University of Georgia, Athens  
M.A., Middlebury College

Weil, Susanne  
Associate Professor of English Language and Literature, 1991  
Director of the Writing Program  
B.A., Swarthmore College  
Ph.D., University of California, Berkeley
Wiedeman, Claudia Ramirez
Assistant Professor of Education and Child Development, 1998
B.A., Ph.D., University of California, Los Angeles
Teaching Credential, University of California, Los Angeles

Will, Katherine Haley
President of the College, 1999
Professor of English Literature and Language, 1999
B.A., Tufts University
A.M., Ph.D., University of Illinois, Champaign/Urbana

Woirol, Gregory R.
The Douglas W. Ferguson Professor of Economics, 1976
The Richard and Billie Deihl Distinguished Professorship
B.A., University of Washington
Ph.D., University of California, Berkeley

Yocum, Glenn E.
The C. Milo Connick Professor of Religious Studies, 1973-77; 1978
B.A., Franklin and Marshall College
Diploma in Theology, Oxford University
M.Div., Union Theological Seminary
Ph.D., University of Pennsylvania

FACULTY EXECUTIVE COUNCIL, 2002-2003
William Geiger, Chair
Doreen O'Connor-Gomez, Vice Chair
Lorinda Camparo, Secretary and Treasurer
Richard Archer, Humanities Representative
Andrew Wallis, At Large Representative
Kimberley Schrum, Natural Science Representative
David Iyam, Social Science Representative

EMERITUS FACULTY
Aranguren, Julia, M.A.
Associate Professor, Modern Languages (1963-1985)

Breese, Donald H., B.A, Ph.D.
Professor, History (1961-1997)

Carlyle, Irene V., B.A., M.A.
Associate Professor of Speech Pathology and Audiology (1978-2001)

Connick, C. Milo, B.A., S.T.B., Ph.D., D.D.
Professor, Religion (1946-1982)

Dean, John F., B.S., M.A., Ed.D.
Professor, Education (1970-1992)

Eaton, Thelma L., B.A., M.S.W., D.S.W.

Fairbanks, Joseph, B.A., M.A., Ph.D.
Professor, History (1970-1997)

Farmer, Ann D., B.A., M.A., Ph.D.
Associate Professor, English (1972-1999)

Finan, Mary Casey, B.A., M.A., Ph.D.
Associate Professor, Business Administration (1987-2002)

Associate Professor, Physical Education (1957-1984)

Grasty, George M., B.A., M.A.
Assistant Professor, German (1957-1980)

Harvey, Richard B., B.A., M.A., Ph.D.
Professor, Political Science (1960-2000)

Kim, Ha Tai, B.A., B.D., M.A., Ph.D.
Professor, Philosophy (1964-1981)

Leighton, Beach, B.S., M.S., Ph.D.
Professor, Geology (1951-1974)

Mass, Amy L., B.A., M.S.W., D.S.W.

McEwen, Gilbert D., B.A., M.A., Ph.D.
Professor, English (1955-1985)

Mills, Eugene S., B.A., M.A., Ph.D., I.L.D., L.H.D.
Professor, Psychology (1952-1962)
President (1979-1989)

Nobert, Frances, B.M., M.M., D.M.A.
Professor, Music (1982-1999)

Nuttall, Donald A., B.A., M.A., Ph.D.
Professor, History (1961-2002)
Ochse, Orpha, B.A., M.M., Ph.D.
Professor, Music (1969-1987)

Olson, Emelie A., B.A., M.A., Ph.D.
Professor, Anthropology (1973-2002)

Overturf, Stephen F., B.A., M.A., Ph.D.
Professor, Economics (1971-2002)

Schambach, Robert, B.S., Ph.D.
Professor, Chemistry (1969-2000)

Speier, Robert, B.F.A., M.F.A.
Associate Professor, Art (1970-1989)

Treser, Robert, M., B.S., M.F.A., Ph.D.
Professor, Theatre Arts (1965-1993)

Tunison, Elizabeth, B.A., M.Ed.
Associate Professor, Education (1979-1988)

Wadsworth, William B., B.A., M.S., Ph.D.
Professor, Geology (1972-1997)

DEPARTMENT CHAIRS 2002-2003

Art and Art History, Paula Radisich
Biology, Warren Hanson
Business Administration, Jeffrey Decker
Chemistry, Devin Imoto
Economics, Kim Thomas
Education and Child Development, Donald Bremme
English Language & Literature, Susanne Weil
Environmental Science, Jan Vermilye
History, Robert Marks
Kinesiology and Leisure Science, Patricia Van Ooshree
Mathematics, Jeffrey Lutgen
Modern Languages & Literatures, Gustavo Geirola
Music, Danilo Lozano
Philosophy, Paul Kjellberg
Physics and Astronomy, Howard Lukefahr
Political Science, Michael McBride
Psychology, Charles Hill
Religious Studies, Glenn Yocum
Sociology, Anthropology & Social Work, Sal Johnston
Theatre & Communication Arts, Jack de Vries
INDEX

ACADEMIC
Achievement ......................................................... 25
Advising .................................................................. 19
Calendar .................................................................. 4-5
Difficulty ................................................................... 33-34
Divisions ................................................................... 51
Honesty ................................................................... 29-32
Honors ..................................................................... 40
Policies & Procedures ............................................... 29-44
Records ..................................................................... 43
Review .................................................................... 33-34
ACCREDITATION .......................................................... 2
ACTIVITIES, STUDENT ................................................. 28
ADMISSION ................................................................. 194-195
ADMISSION .................................................................... 8-11
Application Procedure ............................................. 8
Credential Program .................................................. 10
Early-Decision Plans ................................................. 8
Freshman Admission ................................................ 8
Graduate Program .................................................... 10
International ........................................................... 9, 11
Non-Degree ............................................................. 10, 41
Readmission ............................................................. 41
Transfer Admission ................................................... 9
ADVANCED PLACEMENT ............................................... 121-122
ANTHROPOLOGY .......................................................... 177-179
APPLIED PHILOSOPHY ............................................ 33, 145
APPEALS ................................................................. 35, 38
ART & ART HISTORY ................................................. 52-56
ASIAN STUDIES ......................................................... 57-58
ATTENDANCE POLICIES .............................................. 35
AUDITING ................................................................. 35
BIOLOGY .................................................................. 59-62
BROADOAKS SCHOOL ............................................. 20
BUILDINGS AND FACILITIES ..................................... 208
BUSINESS ADMINISTRATION ..................................... 63-66
CALENDAR, ACADEMIC ............................................ 4-5
CAMPUS FACILITIES .................................................. 208
CAMPUS INN .............................................................. 208
CAMPUS, MAP OF ........................................................ 208
CAREER SERVICES ..................................................... 26
CENTER OF MEXICAN AMERICAN AFFAIRS .......... 20
CHANGE OF MAJOR ..................................................... 49
CHEMISTRY ................................................................. 67-69
CHILD DEVELOPMENT ............................................. 81-83
CHINESE .................................................................. 131-132
CLASS STANDING ....................................................... 35
COLLEGE LIFE ............................................................. 19-28
COLLEGE ORGANIZATIONS ....................................... 25
COLLEGE WRITING PROGRAM ................................. 70-73
COMMENCEMENT .................................................... 4, 5, 7, 35, 40
COMPARATIVE CULTURES ......................................... 74-76
COMPUTER SCIENCE ................................................. 127, 171-172
COMPUTING SERVICES
Clift Microcomputer Lab .......................................... 21
Computer Center ..................................................... 22
Departmental ............................................................ 21
GTE Language Resource Center ............................... 21
W.M. Keck Lab ......................................................... 21
Math Lab .................................................................. 22
Writing Center .......................................................... 23
CONCURRENT ENROLLMENT ...................................... 35
CONVOCATION ........................................................... 7, 25
COUNSELING SERVICES ............................................. 26
COURSE NUMBERING SYSTEM .................................... 51
CREDIT BY EXAMINATION ......................................... 36
CREDIT/NO CREDIT GRADING POLICY ..................... 39
CULTURAL CENTER ..................................................... 26
CURRICULUM ............................................................. 45-50
DIRECTORY
Administrative .......................................................... 194-195
Board of Trustees ..................................................... 196-198
Faculty ..................................................................... 199-205
DISABILITY SERVICES ................................................ 26-27
DIVISIONS ................................................................ 51
DROPPING COURSES ................................................ 43
EARTH SCIENCE ......................................................... 94-97
ECONOMICS ............................................................ 77-79
EDUCATION .............................................................. 50, 80-81, 161
EMPLOYMENT, STUDENT .......................................... 12
ENDOWED COLLEGE SCHOLARSHIPS ................. 14-17
ENDOWED PROFESSORSHIPS .................................... 23-24
ENGINEERING ......................................................... 84-86, 159
ENGLISH LANGUAGE AND LITERATURE .................. 87-93
ENVIRONMENTAL SCIENCE ..................................... 94-95
ENSEMBLES .............................................................. 144
EXPENSES ............................................................... 193
FACULTY MASTERS PROGRAM ................................... 19
FACULTY, WHITTIER COLLEGE ............................... 199-205
FAIRCHILD AERIAL PHOTOGRAPHY
COLLECTION ............................................................. 22
FEES AND EXPENSES ............................................... 42, 193
FERPA ................................................................. 35, 37
FINAL EXAM POLICY ............................................... 37
FINANCIAL AID .......................................................... 11-18
Financing Plans ........................................................ 13
Need-Based Aid ........................................................ 12
Scholarships ............................................................. 11, 14-17
FOREIGN STUDY PROGRAMS .................................... 98-99
FRENCH ................................................................. 132-135
FRESHMAN WRITING PROGRAM ............................. 47, 121
GENDER AND WOMEN'S STUDIES ...................... 100-101
GRADES
Appeal Process .......................................................... 36
Incomplete .............................................................. 41
In Progress .............................................................. 41
Policies and Procedures ............................................ 39-40
Reports ................................................................. 43
GRADUATE PROGRAMS ............................................. 190
GRADUATE STANDING ............................................. 40
GRADUATION REQUIREMENTS ................................ 48-49, 120-122
206
INDEX

HEALTH SERVICES .............................................................. 27
HISTORY ........................................................................... 102-107
HONORS AT COMMENCEMENT ........................................ 40
HONORS LISTS .................................................................. 25, 40
HOUSING .......................................................................... 27
HUMANITIES ........................................................................ 51
IN PROGRESS GRADES .................................................. 41
INCOMPLETE GRADES ................................................... 41
INSTRUCTOR DROP .......................................................... 43
INTERCOLLEGIATE ATHLETICS ....................................... 117
INTERDISCIPLINARY COURSES ........................................ 108-111
INTERNATIONAL BACCALAUREATE ................................ 122
INTERNATIONAL PROGRAMS .......................................... 98-99
INTERNATIONAL STUDENTS ........................................... 9, 11
INTERNATIONAL STUDIES ............................................. 112-113
JANUARY INTERIM ......................................................... 4, 5, 193
JAPANESE .......................................................................... 135
KECK FOUNDATION LABORATORY ................................ 22
KINESIOLOGY AND LEISURE SCIENCE ............................. 114-117
KINESTHETIC PERFORMANCE ......................................... 117-121
LABORATORY FEES .......................................................... 42
LATIN AMERICAN STUDIES PROGRAM ............................. 118-119
LAUTRUP-BALL CINEMA ................................................. 22
LAW SCHOOL .................................................................. 191-192
LEARNING SUPPORT SERVICES ....................................... 27
LIBERAL EDUCATION
  Program .................................................. 45-46, 120-122
  Requirements .................................................. 48-49
LIBRARY ............................................................................ 20
MAJOR REQUIREMENTS ................................................. 49
MAP OF CAMPUS .......................................................... 182-208
MATH LAB ................................................................. 10-11, 50
MATHEMATICS .................................................................. 123-127
MATHEMATICS-BUSINESS ............................................ 128
MEDIA CENTER .............................................................. 22
MINOR REQUIREMENTS .................................................. 49
MISSION STATEMENT ..................................................... 7
MODERN LANGUAGES AND LITERATURES ..................... 129-138
MUSIC ............................................................................. 139-144
NATIONAL HONOR SOCIETIES ....................................... 25
NATIONAL SCIENTIFIC SOCIETIES ................................ 51, 111
NON-DEGREE STUDENTS .............................................. 10, 41
NONTIMESCHEDULE ..................................................... 2
NUMBERING SYSTEM FOR COURSES ............................... 51
ORIENTATION ................................................................. 4, 5
OVERSEAS STUDY .......................................................... 98-99
PERFORMING ARTS CENTER ........................................... 22
PETITION POLICY AND PROCEDURE ............................... 32-33
PHILOSOPHY .................................................................... 145-148
PHYSICAL EDUCATION AND RECREATION .................... 114-117
PHYSICS .......................................................................... 149-153
PLAGIARISM ..................................................................... 29-31
POLITICAL SCIENCE ........................................................ 154-158
PREPROFESSIONAL PROGRAMS ...................................... 159-162
  Baccalaureate/Jurist Doctorate Program 3/3 .................. 162
  Continuing Education ................................................. 162
  Pre-Dental ................................................................. 139
  Pre-Engineering (3-2) ............................................... 84-86, 139
  Pre-Legal ................................................................. 160
  Pre-Medical ............................................................. 160
  Pre-Therapy ............................................................. 160
Social Work ..................................................................... 160
  Teacher Education .................................................... 50, 80-81, 161
PRIVATE INSTRUCTION ................................................... 144
PROBATION ...................................................................... 33-34
PSYCHOLOGY .................................................................. 163-166
READMISSION ............................................................... 41
REFUND POLICY ............................................................ 193
REGISTRATION AND CLASS SCHEDULING .................... 41-42
REGISTRATION CHANGES .............................................. 42
RELIGIOUS STUDIES ..................................................... 167-170
REPEATING COURSEWORK ........................................... 42
RESIDENT FACULTY MASTERS ........................................ 19
RESIDENTIAL LIVING .................................................... 27
ROTIC ............................................................................... 43
SCHOLARSHIPS ............................................................. 11, 12
SCIENTIFIC COMPUTING ............................................... 171-172
SHANNON CENTER FOR THE PERFORMING ARTS .......... 22
SOCIAL SCIENCES .......................................................... 51
SOCIAL WORK ............................................................... 179-182
SOCIOLOGY ...................................................................... 173-177
SPANISH .......................................................................... 135-138
STUDENT
  Academic Achievement ................................................. 25
  Activities ..................................................................... 28
  Grade Report ............................................................. 43
  Life ............................................................................... 25
  Non-Degree ............................................................... 10, 44
  Records ...................................................................... 43
  Rights and Responsibilities ......................................... 18, 28
STANDING
  Academic ..................................................................... 33-34
  Class ............................................................................ 35
  Graduate ................................................................. 40
  Non-Degree ............................................................... 10, 41
STUDIO ART ................................................................. 54-56
STUDY ABROAD FROM WHITTIER COLLEGE ............... 36, 48, 98-99
STUDY LOAD ................................................................. 43
SUMMER PROGRAM ......................................................... 183
SUPPORT PROGRAMS & SERVICES .................................. 20-23
SUSPENSION ..................................................................... 34
THATRE ............................................................................. 22
THEATRE AND COMMUNICATION ARTS ....................... 184-187
TRADITIONS ..................................................................... 7
TRANSCRIPT ................................................................. 43
TRANSFER STUDENTS
  Admission ................................................................. 9
  Credits ........................................................................ 9
  Graduation Requirements .......................................... 49, 122
  Trustee .......................................................................... 196-198
  UNAUTHORIZED WITHDRAWL ..................................... 44
  URBAN STUDIES .......................................................... 188
VALUES ............................................................................. 6
WESTERN ASSOCIATION OF SCHOOLS AND COLLEGES 2
WHITTIER COLLEGE LAW SCHOOL ................................ 191-192
WHITTIER SCHOLARS PROGRAM .................................... 46-47
  Courses ................................................................. 189
  Requirements .......................................................... 50
  Transfer from WSP to Lib Ed Program .......................... 50
  WITHDRAWAL POLICIES ........................................... 43-44
  WOMENS STUDIES .................................................. 100-101
  WRITING CENTER .................................................... 23
WRITING PROGRAM ....................................................... 47