# La Salle University Bulletin 1993-1994 

La Salle University

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BULLETIN 1993-1994

Known worldwide for its commitment to teaching. Nationally renowned for the value of its education. Respected by employers for the quality of its graduates.

Revered by alumni for its timeless liberal arts preparation. Loved by students for its emphasis on the individual.

Quite simply, La Salle is one of the best private colleges you will find anywhere.

La Salle University does not discriminate against any applicant because of race, color, religion, sex, age, national origin, sexual orientation, marital status, or handicap or disability which does not interfere with performance of essential job functions after reasonable accommodation, if any. Admission is based upon an applicant's qualifications and ability to meet the established requirements for admission and for specific programs. This commitment extends to participation in all educational programs and activities of the University.

## ACCREDITATION AND MEMBERSHIPS

La Salle University was chartered in 1863 by the Legislature of the Commonwealth of Pennsylvania and is empowered by that authority to grant academic degrees. It is accredited with the Middle States Association of Colleges and Secondary Schools, the Pennsylvania Department of Education, the Regents of the University of the State of New York, the American Association of Colleges for Teacher Education, the American Chemical Society, the Pennsylvania State Board of Law Examiners, the Council on Social Work Education, and the National League for Nursing.

Member of: American Council on Education, Association of American Colleges, National Collegiate Honors Council, American Assembly of Collegiate Schools of Business, College Entrance Examination Board, American Association of Collegiate Registrars and Admissions Officers, Association of College Admissions Counselors, National Catholic Educational Association, College and University Council of Pennsylvania, Association of Liberal Arts Colleges of Pennsylvania for the Advancement of Teaching, Pennsylvania Catholic Education Association, American Library Association, Urban Studies Association, National Commission on Accrediting, American Catholic Historical Society, Educational Conference of the Brothers of the Christian Schools, National Association for Foreign Student Affairs, National Association of Student Personnel Administrators, Association of College and University Housing Officers, and National Association of College and University Business Officers.

## RIGHTS AND PRIVACYACT PROVISIONS

Each year, La Salle University informs students of the Family Educational Rights and Privacy Act of 1974. This Act was intended to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data through informal or formal hearings.

To fulfill basic requirements for compliance with the Act, each institution must inform each student of his/her right to prevent disclosure of personally identifiable information. Although La Salle does not publish a public directory, the Office of the Registrar, at its discretion, does disclose the following information: Name, address, dates of attendance, class, major field of study, and degree(s) conferred (including dates).

Under the provisions of the Rights and Privacy Act, currently enrolled students may withhold disclosure of such information. To prevent disclosure, written notification must be received by the Office of the Registrar by October 1st in the Fall Semester and February 15th in the Spring Semester. The University will honor each request to withhold any of the categories of information listed above but cannot assume responsibility to contact a student for subsequent permission to release them. Decisions about withholding any information should be made very carefully. Should a student decide to inform the institution not to release any information, any future requests for such information from non-institutional persons or organizations will be refused.

La Salle University assumes that failure to request the withholding of "directory information" indicates approval for disclosure.

To comply fully with the provisions of the Commonweald of Pennsylvania's Act 73, the College and University Security Information Act of 1988, La Salle University has available its Crime Statistics Report for 1992, as well as a publication entitled "Safetyand Securityat La Salle University." Copies of either document may be requested without charge in writing from the News Bureau, La Salle University, Philadelphia, PA 19141.

To comply with Federal Consumer Infornnation Regulations, La Salle makes available upon request a report on job placcinent statistics and graduation rates. A copy of the 1993 report may be requested in writing from the Vice President for Enrollnient Services, La Salle University, Philadelphia, PA 1914 I.

## LA SALLE UNIVERSITY BULLETIN (USPS 299-980)

VOL. 74, NUMBER 2 MAY 1993
Published four times a year in March, May, June, and December by La Salle University, Philadelphia, PA 19141.
Second class postage paid at the post office al Pliladefplia, Pennsyltania. POSIMASTER: Send address changes to La Salle University, 1900 W'. Olney Avenue, Philadelplia, PA 19141.

## Contents

| A Profile |  | Mathematical Sciences | 77 |
| :---: | :---: | :---: | :---: |
| To Introduce Ourselves | 5 | Mathematics | 78 |
| The People of La Salle | 8 | Computer Science | 80 |
| Living at La Salle | 10 | Philosophy | 82 |
| Our History | 11 | Political Science | 84 |
| Our Aims and Traditions | 13 | Political Science/Public Administration | 87 |
|  |  | Psychology | 87 |
| General Reference |  | Religion | 89 |
|  |  | Sociology, Social Work, and Criminal Justice | 92 |
| Admissions | 15 | Sociology | 93 |
| Campus Services | 18 | Criminal Justice | 94 |
| Expenses | 20 | Social Work | 96 |
| Financial Aid | 22 | Urban Studies Minor | 97 |
| Programs \& Procedures | 27 | Women's Studies Minor | 97 |
| Arts $\mathcal{E}^{\circ}$ Sciences |  | Business Administration |  |
| Degree Programs | 37 | Degree Program | 99 |
| Curriculum | 39 | Curriculum | 99 |
| Areas of Study 42 |  | Areas of Study | 105 |
| Asian Studies Minor | 42 | Accounting | 105 |
| Biology | 42 | Business Administration Minor | 106 |
| Central and Eastern European Studies | 45 | Finance | 106 |
| Chemistry/Biochemistry | 46 | Health Care Administration Minor | 107 |
| Communication | 47 | International Studies Minor | 108 |
| Economics | 50 | Law | 109 |
| Education | 52 | Management | 109 |
| English | 56 | Information and Operations Management | 109 |
| Fine Arts | 60 | Organizational Management | 111 |
| Art | 60 | Quantitative Analysis | 112 |
| Music | 61 | Marketing | 112 |
| Foreign Languages and Literatures | 64 | Risk Management and Insurance Minor | 114 |
| Classical Languages | 64 | Risk Management and Insurance Minor | 1 |
| Modern Languages | 65 |  |  |
| French | 65 | Nursing |  |
| German | 66 | Degree Program | 116 |
| 1talian | 66 | Curriculum | 117 |
| Japanese | 67 | Course Descriptions | 118 |
| Russian | 67 |  |  |
| Spanish | 68 | Directory |  |
| Geology and Physics | 69 | Administration | 121 |
| Geology | 69 | Faculty | 126 |
| Physics | 71 |  |  |
| History | 73 |  |  |
| Justice and Society Studies Minor | 77 | Index | 138 |
| Life Science Minor 77 |  |  |  |
|  |  | Academic Calendar | 140 |

## A Profile



In this short profile we'd like to tell you a few important details about La Salle, one of Pennsylvania's oldest colleges and newest universities. Founded in 1863, La Salle College became La Salle University in 1984. La Salle is a private comprehensive university related to the Roman Catholic Church and conducted under the auspices of the Christian Brothers. We hope these facts will help you get to know us better and to share our pride in 130 years of educational excellence.

La Salle University is one of two institutions of higher education in the East conducted by the Christian Brothers (the other being Manhattan College). The Brothers were founded by St. John Baptist de La Salle in the 17th century. For more than 300 years, the order has been known for dedicated teaching and devotion to students. The spirit of the order carries over to the faculty and administration of today's La Salle, where diverse backgrounds unite to carry out the objectives of the University in an atmosphere of respect for the individual.

We think La Salle is big enough for efficiency yet small enough to stimulate personal contacts between students and teachers. The day division enrolls more than 3,000 men and women. The average class size is 20 students; there are no lecture sections numbering in the hundreds and no graduate assistants handling basic courses or marking papers for professors who do not know their own students. Yet the University is large enough to offer more than 45 different degree programs or special concentrations.

La Salle is located in the northwestern portion of Philadelphia on the edge of Germantown, site of a Revolutionary War battle and one of the oldest neighborhoods in Philadelphia. The campus covers nearly 100 acres and includes Belfield, a farm that once belonged to American painter Charles Willson Peale. Entering the campus from one of the busy city streets around it has been described by one visitor as "entering a place of quiet beauty. It's hard to believe you're in a large city." But Philadelphia is a large city, filled with interesting people, places, and events. The University is only minutes away from Center City museums, concert halls, restaurants, sporting events, and shopping. The school is only two hours away from Pocono Mountain ski resorts or the boardwalks and beaches of the Jersey shore.

How good is La Salle academically? It's one of America's leading colleges, according to U.S. News $\mathcal{E}$ World Report, Barron's, Peterson's, Money magazine, and The New York Times.

A top academic institution has a talented faculty, good students, and a solid library. A glance at the faculty directory at the end of this catalog will demonstrate the sound academic credentials of La Salle's professors; what it does not show is the dedication to teaching and to students that is the greatest strength of the faculty. About $80 \%$ of last year's freshmen graduated in the top $40 \%$ of their high school class, but the statistics don't show the many students who entered La Salle with less-thansuperb high school records and matured and blossomed in the atmosphere of this University. The Connelly Library is one of the most beautiful, most advanced academic libraries in the country. It has more than 350,000 volumes and offers the state of the art in computerized information retrieval.

Another measure of La Salle's academic standing: the number of graduates who go on to earn Ph.D. degrees. In a nationwide study of nearly 900 private Baccalaureate institutions, La Salle ranks in the top $4 \%$ since 1977 as an originating school for Ph.D.s.

What do a U.S. arms control official, the CEO of Spiegel, the Dean of the Medical School at the University of Pennsylvania, the president of the Philadelphia Stock Exchange, a Pulitzer Prize-winning author and Academy Award nominee for A Soldier's Story, the drama critic for CBS, the Dean of Villanova University Law School, and the Chief of Staff at Massachusetts General Hospital have in common? You guessed it: a La Salle education. Standard \& Poors ranks La Salle 10th among the nation's liberal arts colleges in the number of graduates who are top corporate leaders.

La Salle graduates have distinguished themselves in the nation's best graduate schools, law schools, and medical schools. In recent years, our students have won scholarships or assistantships to top-rated graduate schools, including Harvard, Cornell, Stanford, University of Chicago, and University of Virginia. La Salle men and women have earned law degrees from Berkeley, Georgetown, Catholic University, Cornell, Dickinson, Duke University, and the University of Notre Dame.

Since 1977, more than $90 \%$ of all students recommended by the University have been admitted into medical schools, including Johns Hopkins, Harvard, Hahnemann, University of Pittsburgh, and University of Pennsylvania. La Salle graduates have won more than 40 Fulbright Scholarships and several Gundacker and Rotary International Fellowships for study abroad, as well as National Science Foundation grants for graduate study at U.S. institutions. La Salle students have also been honored with two of the nation's most prestigious awards: the Marshall and Truman Fellowships.

Many of these graduates participated in the exceptional Honors Program at La Salle. The Newsletter of the National Collegiate Honors Council described the program as "a very special sort not available to larger, general universities" and took note of a "really extraordinary record in terms of garnering Fulbright, Danforth, and Marshall scholarships."

Financial aid is a worrisome but necessary concern for parents. Without it, most students could not attend college today. At La Salle more than $90 \%$ of all undergraduates seeking financial assistance receive aid. Here's something to keep in mind: since aid is calculated on a "needs" formula, a student attending a private college may actually be eligible for more aid than would be available if he or she were attending a public or community college with an apparently lower tuition.

Besides partaking of the Philadelphia cultural scene, La Salle also contributes to it in significant ways. The art columnist for the Philadelphia Inquirer has written that La Salle has "the finest college art gallery in the Philadelphia area" and that "one would have to go to Yale, Harvard, or Prince-ton to find a better one." The summer Music Theatre launched many performers' carcers, including actors Pat Cronin, Russell Licb, and dancer Judith Jamison. Over ibe years, La Salle has welcomed to the campus as speakers a distinguislied array of names, including Joln F. Kcnnedy, Alan l'aton, Ralph Ellison, Buckminster Fuller, Joyce Carol Oates, Joseph l'app, Robert P'enn Warren, and many others. Ia Salle and the University of Peunsylvania are the only two Philadelphia-area institu-
tions to bring the Royal Shakespeare Company's Actors-in-Residence program to their students and the community.

Sports devotees generally think of basketball when they hear the name La Salle, and not without reason. La Salle is one of only ten teams to have won both the NCAA and NIT championships in men's basketball. The men's and women's teams have been ranked among the nation's best in recent years. But basketball is only part of the story. The women's field hockey team won a national title in 1980; its goalie, Diane Moyer, was a part of the 1984 Olympic championslip team. Among other past Olympic participants from La Salle are gold medalist swimmer Joe Verdeur, long jumper Ira Davis, and javelin thrower AI Cantello.

Hayman Hall, one of the East's finer athletic facilities, features a collegiate-sized pool, basketball, squash and handball courts, an indoor track, an exercise room, and virtually anything else an athleti-cally-minded student might want. Organized intercollegiate and intramural sports afford students opportunities to participate according to their interests, but there is plenty of unorganized, free recreation as well. There are men's varsity teams in basketball, baseball, swimming, track, cross country, crew, soccer, golf, tennis, and wrestling. Women's teams include basketball, crew, cross country, field hockey, volleyball, tennis, swimming, softball, soccer, and track. Intramural sports such as touch football, volleyball, basketball, indoor soccer, softball, track, swimming, and tennis have men's, women's, and mixed teams.

Over the past several years, La Salle has constructed six tennis courts on the Belfield Estate, a new varsity softball field, and a state-of-the-art, allweather track. These facilities add a new dimension to both recreation and intercollegiate activities at La Salle.

For those with recreational tastes other than or in addition to athletics, the La Salle Union offers films, plays and concerts in its theater, social events in the ballroom, or a meal or a snack in the Food Court. Trained administrators in Student Affairs work closely with students and their organizations, slaring ideas and helping students to plan and
carry out social and cocurricular activities. They recognize that social life is a vital part of your educational experience at the University, and they will work with you to help you get the most out of your student activities.

Our profile of La Salle is incomplete, but our space and your time are both limited. The Admissions Office cordially invites you to pay us a visit and fill out the rest of the profile through personal experience. Call 215-951-1500 to arrange an appointment.


More than buildings, more than books, more than lectures and examinations, education is a matter of people. It's the people who make up La Salle-the students, teachers, and administrators-who give the community its character.

St. La Salle's dedication to teaching is the informing spirit of the University, and you will be conscious of this spirit in the willingness of your professors to give that extra moment of explanation or advice which can mean so much. While many of these men and women are engaged in their own scholarship or research, their primary focus is always the classroom and their basic obligation is to you, the student.

Making the transition between high school and college is never easy, but at La Salle you will find many people who want to help and who understand some of the problems you face perhaps better than you do yourself.

During the summer months preceding the start of classes, you and your parents will be invited to participate in the Pre-College Counseling Program. At this time you will come to the campus for a full day of meetings with the Counseling Center staff, as well as representatives from Financial Aid, Resident Life, Career Planning and Placement, and other areas of the University. During the progran you will have a personal interview with a counsclor to discuss your educational and career plans, and will meet with an academic advisor who will assist you with your fall roster. In an informal atmosphere of small group discussions, you will also have the opportunity to share your ideas with other freshmen, with upperclassmen who have experienced the same transition, and with faculty members and administrators willing to assist. The overall aim of the summer program is to make your adjustment to college life as pleasant as possible.

In addition to this initial program, the Counseling Center offers counseling services throughout your college years. If you are uncertain of your major or of your career plans, the staff will assist you in making a sound choice based on your interests and capabilities. Sigi-Plus, a computer-assisted career exploration tool which helps students examine their values, interests, and skills systematically, is available for this purpose. The Center also offers personal counscling and psychiatric consultation, as well as informational services about graduate
and professional schools and a variety of occupations. Licensed psychologists are particularly well trained to assist students in overcoming anxiety and depression, interpersonal inadequacies, shyness, low self-esteem, and family conflicts. Besides offering individual counseling, the Center also conducts group sessions on a variety of topics of concern to students. Management of anxietyparticularly test anxiety-assertiveness training, overcoming shyness, self-esteem enhancement, improvement of study skills, and procrastination reduction are but a few of the topics that have been the focus of recent group programs. The sessions have proven popular and effective ways of aiding personal growth. An alcohol and drug program is also part of the Counseling Center's services. The mission of this program is to provide accurate information about psychoactive substances, educate the La Salle community about the realities of alcohol and other drug use, and provide referral and/or treatment for problems associated with abuse.

Being part of a church-related university means you are also part of a community in which people care about one another. Rooted in the commitment to a broad range of human and Christian values held by the University, the Campus Ministry Center plays an important role in maintaining that sense of community by incarnating the belief that ministry is an expression of God acting with us, in us, and through us. In addition to involvement in the planning and celebrating of daily and Sunday liturgies, participating in retreats and days of reflection and prayer, and attending lectures and workshops, you will be invited to develop your sense of Christian commitment by sharing your time and talents through voluntary social involvement in the local community. Supported by the Campus Ministry Ccnter, such service can include working with Philadelphia's loomeless, tutoring inmates in prison, working with children in a latch-key program, raising money for and a wareness about Covenant House, assisting senior citizens with tax problcms, spending your spring break in Appalachia or on a local work project, and helping school children prepare for first reception of the sacraments.

Nor is your physical well-being neglected while you are on campus. A plysician is always on call, and a registered murse is in daily attendance in the dispensary. Medical insurance is available and recommended to all students.

Throughout your college days, the staff of the Career Planning and Placement Bureau will be at your service to help you select a career and assist you in planning job campaigns. This office is sometimes able to assist students in finding part-time or summer jobs related to their career goals.

All in all, you will find the people at La Salle an important part of your education. Long after you have forgotten painfully memorized facts from a textbook or lecture, you will remember the teachers and students with whom you associated in your college years.


## Living at La Salle

When you become part of the community of resident students, you will have greater opportunity for participation in the total collegiate experience. Extracurricular campus life and student activities abound for residents, who also benefit greatly from the convenience and access to academic facilities, student services, and cocurricular programs.

The community of residents is diverse, reflecting the range of backgrounds, personalities, and interests of La Salle's student body. Each residence hall floor and building takes on a character of its own, and the give-and-take of daily life promotes respect and concern for others. The halls are small enough to encourage a spirit of friendship and community.

The Resident Life Staff and the student-run Resident Student Association sponsor a variety of special events, guest speakers, entertainment, and
social and recreational activities. Many University clubs and organizations also sponsor activities in the residence halls and apartments. When combined with the wealth of cultural, historic, entertainment, sports, and educational resources available in the city of Philadelphia, residence life affords students the best combination of a collegiate and metropolitan environment.

Life in a university residence hall is an experience not to be duplicated elsewhere. Living with friends-studying, dining, socializing togetherprovides you with chances to learn about yourself, refine your ability to get along with and learn from others, and formulate goals and clarify values which are critical for personal success after graduation. At La Salle, many things-staff, students, facilities, programs, and location-blend to offer residents a convenient, meaningful, and rewarding living experience.


La Salle University was chartered as La Salle College by the Commonwealth of Pennsylvania in 1863. La Salle's founders were a group of Christian Brothers, some diocesan priests, and several Catholic laymen. The school was first located at St. Michael's, one of the oldest parishes in Philadelphia. As the new college grew, it moved first to a Center City site at Juniper and Filbert Streets and then to the old Bouvier mansion at 1240 North Broad Street.

La Salle moved to its present location at 20th Street and Olney Avenue in 1929, purchasing part of the historic Belfield Farm, once the home of American painter Charles Willson Peale. No sooner had work begun on the collegiate Gothic towers of College Hall than the country plunged into the greatest depression it has ever known. Somehow La Salle College survived the financial doldrums of the 1930's only to be faced by the greater threat posed by the depletion of the allmale student body during World War 1I. At its lowest enrollment, the College had only 90 students.

After the war's end, a tremendous influx of veterans created an entirely new challenge of overcrowding. La Salle began an era of expansion that has continued to the present day. In 1970 La Salle ended its century-old tradition as an all-male institution and accepted its first women students. Today, women make up half of the day school enrollment.

Building and expansion have continued at a rapid pace ever since 1946. A significant resident population of 1,700 students is housed at La Salle. The most recent additions to the campus include a cluster of 75 modern townhouses and the spectacular Connelly Library. Acquiring the remainder of the Belfield Estate in 1984 and the St. Basil's property in 1989 added significantly to the campus, not only in acreage but also in beauty and historical tradition.

The physical growth on campus has been matched by the vitality and innovation of academic and student life programs. The curriculum has been revised after a careful faculty study. New majors and minors have been added. A special honors concentration in business has been developed. Financial aid to students has increased dramatically, as have the activities and services of the Student Affairs area.

In recognition of the growth and diversity of La Salle and the strength of its educational offerings, the Governor of the Commonwealth of Penn-
sylvania bestowed the status of university on La Salle in 1984. A new chapter in our history had begun.



## Our Aims and Traditions

Though often mistakenly connected with the French explorer, the name of the University commemorates the 17th-century French educator and founder of the Christian Brothers, John Baptist de La Salle. The traditions of this saintly, innovative educator have been continued by the Brothers, a non-clerical order of religious who have been teaching in the United States since 1845. Under the auspices of the Brothers, the University strives to continue such LaSallian traditions as devotion to excellence in teaching, concern for ultimate values and for the individual values of its students.

In the light of these traditions, La Salle offers students an education founded on the idea that people's intellectual and spiritual development go hand in hand, complementing and fulfilling one another. The basic purpose of the University is a free search for truth and the development of materials and skills necessary for the search; its religious concern is an extension of that purpose. In a company of mature teachers and scholars, the University urges students to confront the ultimate questions of human experience: who they are; where their destiny lies; how they are to reach it.

La Salle is committed to a liberal education of both general and specialized studies. It wants its students to liberate themselves from narrow interests and prejudices and to learn to observe reality with precision, judge events and opinions critically, think logically, communicate effectively, and sharpen aesthetic perception. The curriculum involves a body of knowledge about the universe; about people-their nature, behavior, and values; about God. It also provides an opportunity to gain specialized knowledge in one field of learning as a preparation for graduate study or entry into professional life. Beyond this breadth and depth of knowledge, the University encourages its students to seek wisdom; that is, to grasp those basic principles which can give order to particular facts.

Although undergraduate education remains its primary purpose, La Salle also offers Master's programs in selected areas of specialization. For the most part, these programs focus on professional goals through advanced study and through application of theoretical knowledge in the fields represented.

As a private Catholic university, La Salle pursues these aims in a religiously diverse community of teachers and students interested in studying secular subjects in their autonomy, undertaking relig-
ious studies in a systematic way, and investigating what interrelations these subjects may have. The community also engages in programs in which the students' personal, social, and religious values may take root and in which the students may grow in mature attitudes and behavior in all human relationships. The ultimate hope of the University is that its graduates will be ready for informed service and progressive leadership in their communities and will be able to fulfill the immediate and final goals of their lives.


## General Reference



If a student is well-motivated toward a college career and can show evidence of academic achievement and ability, the Admissions Committee will welcome an application. In arriving at its decision, the Committee studies the high school record, test scores, and recommendations from high school faculty, guidance counselor, and principal. Each applicant is given personal consideration. La Salle does not discriminate against any applicant for admission because of race, color, creed, sex, national origin, or physical handicap. Admission is based solely upon an applicant's qualifications and ability to meet the established admission requirements.

## APPLYING FOR ADMISSION

The Committee on Admissions will consider a qualified applicant for acceptance any time after completion of the junior year. The following credentials are required for evaluation:

1. A completed application to La Salle University.
2. A transcript of three-year high school scholastic and personality records.
3. The results of the College Board Scholastic Aptitude Test or of the American College Testing Program.
The successful applicant must graduate from high school with creditable grades.

An interested student is encouraged to arrange for a campus visit, which might include a personal interview and tour. Phone 215-951-1500.

In exceptional cases, students may be admitted after completion of the junior year on the recommendation of their high school counselor and evidence of superior achievement.

Applicants may secure application materials from the Office of Admissions. These materials include a form which is to be mailed directly to the University by the high school. Completed applications and the $\$ 30.00$ application fee should be sent to the Office of Admissions. The Director of Admissions will notify applicants as soon as possible after a decision has been made. If accepted, a student is asked to forward a $\$ 100.00$ deposit ( $\$ 200$ for resident students), usually within three months of acceptance. This deposit will be applied to first semester expenses; the entire deposit is forfeited if an applicant chooses not to attend La Salle.

## ADMISSION REQUIREMENTS

## HIGH SCHOOL UNITS

Your record should show successful completion of at least 16 units of high school work, including the following:

English 4 units
Mathematics:
Must include at least two years of Algebra 3 units
History 1 unit

Natural Science 1 unit
Foreign Language 2 units 1] units
The remaining five units may be distributed as follows:
I. Applicants for the Liberal Arts program may present five other units in academic subjects.
2. Applicants for the Science, Mathematics, or Computer Science programs may present five other units in academic subjects but including an additional one-half unit in mathematics.
3. Applicants for the School of Business Administration may present five academic or commercial units, excluding typing.

## LANGUAGE REQUIREMENTS

All applicants should present two units in the same foreign language.

## ENTRANCE EXAMINATIONS

Applicants to the freshman class are required to take either the American College Testing Program or the Scholastic Aptitude Tests given by the College Entrance Examination Board. These tests should be taken no later than January (SAT) or February (ACT) of the senior year. Arrangements may be made through your high school counselor or by writing, six weeks before the test date, to either:

CEEB-The Educational Testing Service, Box 592, Princeton, NJ 08540 or Box 1025, Berkeley, Calif. 94701

OR
ACT-The American College Testing Program Box 451, lowa City, Iowa 52240

La Salle University's identification number: CEEB-2363; ACT-3608

## ACHIEVEMENT TESTS

The CEEB Achievement Tests are not required. These tests are helpful to departmental advisors, however, in determining placement in certain English, mathematics, and foreign language courses.

They are recommended, therefore, to students who:

1. wish to apply for a waiver of the freshman composition requirement;
2. desire immediate placement in a calculus course;
3. plan to continue study of a language in college after having completed at least two years of that language in high school.

## MEDICAL RECORDS

All accepted students are required to have a report of medical history on file in the Dispensary prior to their attendance at the University.

## FOREIGN STUDENT ADMISSIONS

La Salle University is authorized by the Department of Justice, Immigration and Naturalization Service to issue Certificates of Eligibility (Form I20) for non-immigrant "F-1" student status, to foreign students who meet admission requirements. Preliminary application materials are available from the Coordinator of Foreign Admissions, La Salle University, Philadelphia, PA 19141.

## ADVANCED PLACEMENT

La Salle University participates in the Advanced Placement Program of the College Entrance Examination Board. Consequently, the University agrees to give credit and/or advanced placement to students who perform satisfactorily both in collegelevel courses taken in secondary school and in the advanced placement examinations administered by the Board. The equivalents for the grading scale are:

5 or $4=$ Advanced credit and advanced placement.
$3=$ Same, on recommendation of departmental head.
2 = Advanced placement only on recommendation.
$1=$ No advanced placement or advanced credit.
La Salle University also participates in the Col-lege-level Examination Program of the College Entrance Examination Board. Students who wish to be considered for advanced credit through this program should write for information to the CollegeLevel Examination Program, Educational Testing Service, Box 977, Princeton, NJ 08540.

## TRANSFER STUDENTS

La Salle University welcomes qualified transfer students to the Fall and Spring terms and to the Summer Sessions. Candidates for admission from colleges which offer courses of study similar to those of La Salle University should submit transcripts of their college records as soon after applying for admission as is possible. All except A.A. and A.S. degree holders are required to submit their high school transcripts also. Transfer students should submit the results of College Entrance Examination Board tests or of the American College Testing Program, if available. A letter of appraisal from the Dean of Students of the college or university attended is requested in most cases.

All of these records should be in the Admissions Office at least 30 days before the beginning of the semester for which the student is applying. This interval is suggested to provide ample time to process the application, to evaluate transcripts, and to arrange a pre-registration interview.

The previous college record of the applicant must indicate good academic standing. Students applying for transfer from a fully accredited college or university will be considered for admission if their grade point average is 2.25 (on a 4.00 scale), but a 2.50 or higher is preferred. Transfer applicants from colleges which have applied for regional accreditation will be considered if their grade point average is 2.75 or higher (on a 4.00 scale). The decision on each application is based mainly on the grade point average earned at the college or university the student attended before applying to La Salle.

Credit will be allowed for courses completed at the institution from which the applicant is transferring if they have a quality point value equivalent to or above the La Salle C grade (2.00). Normally, 70 credits nay be accepted for transfer.

Transfer students may be required to make up certain courses which belong to the sequence required in the program of studies for which they are applying.

Business students may be required to validate selected transfer business courses.

Interested prospective students should direct their inquiries to the Assistant Director of Admissions for Transfer Sudents.

## Admissions

## ACADEMIC DISCOVERY PROGRAM (ADP)

The Academic Discovery Program (Pennsylvania ACT 101) is a special program which provides free support services for students whose records indicate that they could benefit from extra academic assistance and who also meet certain criteria of financial need. The ADP helps students to develop good study habits, establish clear career goals, and compete successfully in the academic setting. Students who are selected to participate in the ADP must attend a free pre-college summer program before their freshman year, taking courses in mathematics, composition, study skills, and critical thinking. During the academic year, students take courses from the standard curriculum, but are assigned counselors, tutors, and an academic advisor to support them in their efforts. As much as possible, each student's program is tailored to his or her individual needs. To obtain application materials, write or call the Day Admissions Office, 215-9511500. For further information regarding the ADP or the Community Academic Opportunity Program Grant, call the ADP Office, 215-951-1084.

## ADMISSIONS FOR VETERANS

All veterans coming directly from the service with proof of a high school diploma or its equivalent are eligible to enroll as students at La Salle University. For answers to specific questions, veterans may telephone the Registrar's Office, 215-951-1020.

## CONTINULNG EDUCATION FOR WOMEN

The Continuing Education for Women (CEW) program at La Salle is designed to ease the transition for adult women who wish to begin or resume their college education. Women may enter CEW through the day or evening programs, whether they are interested in taking single courses or pursuing a degree. Any woman 24 years or older who has a high school diploma or equivalent is eligible to apply.

CEW has been both a popular and a successful educational program at La Salle, and perhaps the main reason for this is the counseling, direction, and sense of community that it provides. Students are invited to orientation programs which focus on study skills and other "survival techniques" for succeeding at the University and to workshops which are held on various topics of interest, academic and otherwise. Besides being informative, orienta-
tion programs and workshops bring CEW students together, creating an informal network or community for support. After successfully completing 15 credits of academic coursework, the transition to La Salle has been accomplished and students transfer out of the CEW program.

To arrange an interview or to apply for admission through the program, visit the CEW office, located on the second floor of the Administration Center, or telephone 215-951-1060.

## COURSE SELECTION

All accepted students will receive a course selection form in the mail in early April. At this time they may indicate their choice of courses for both Fall and Spring terms. Additional academic counseling is available to freshmen during the Pre-College Counseling Program in the summer.


## Campus Services

## ACCOMMODATIONS FOR RESIDENTS

The residence facilities accommodate more than I800 students and consist of 11 coeducational halls, two apartment complexes, and one townhouse complex. The three-story residence halls contain single, double, and 3-person rooms with a common bathroom on each floor of men or women. Some quad-style rooms consist of adjoining double rooms which share a bathroom. Oneor two-bedroom garden apartments and four-bedroom townhouses are available to upper division students.

An application for housing and the required security deposit should be submitted when confirming acceptance. The Resident Life Office will then inform the student of the application's status. If a space is reserved, and a new student decides after June 15 not to live on campus, the entire security deposit is forfeited.

The residence halls provide living, learning, and recreation facilities. There are lounges, mailrooms, quiet study areas, recreation areas, and card- or coin-operated laundry and vending machines. The Campus Store is a convenience store for magazines, clothes, food, stationery, and personal supplies. Residents are permitted to have cars on campus. More detailed information on resident life and facilities can be found in The Student Handbook.

The resident life program is administered by a staff of professionals. Graduate student Resident Directors and undergraduate Resident Assistants reside in each living unit and serve as counselors, building managers, activity programmers, and resource persons. The staff receive room and board compensation and are an outgoing and diversified group who are interested in working with students to make college life in residence an enjoyable and educational experience.

Both the residence and dining facilities are closed during the Thanksgiving, Christmas, and Spring recesses.

For further information about resident life, conlact the Resident Life Office, North Halls Complex, Tclephonc 215-951-1550.

## OFF-CAMPUS HOUSING

In order to assist members of La Salle in locating available housing in the surrounding community, help is available through the Off-Campus Housing Service. The Service provides: off-campus housing referral listings; roommate referral lists; and general offeampus rental information.

La Salle University does not inspect off-campus accommodations nor screen prospective landlords and tenants. Any questions pertaining to off-campus housing should be directed to Off-Campus Housing, Resident Life Office, North Halls Complex, Telephone 215-951-1550.

## FOOD SERVICES

The Food Service Department provides students with a complete range of services and meal plan alternatives. This department, which has been honored by the National Association of College \& University Food Services (NACUFS) for outstanding menu selection, operates a 550 -seat cafeteria, a Food Court consisting of five different kiosks, a restaurant (Intermissions) and night spot (Backstage), a Faculty Dining Room, Catering Banquet services, and a full range of vending selections throughout campus.

Students who will be living in a residence hall on campus are required to participate in one of the six meal plans available. These meal plans are specifically designed to meet the individual needs and the busy life style of an undergraduate student.

The selection of the meal plan most suited to your needs should be based on:

- Where you will be eating most of your meals (e.g., North Dining or the Food Court).
- How often you will be on campus during the weekends.
- How your appetite would be most satisfied (i.e., an "all you can eat" meal vs. an "a la carte" meal).
For more information on the meal plans, please contact the Food Service Department at 215-951-1388.


## THE LA SALLE GOLD CARD

The La Salle University I.D. card serves as a means of access to a special Gold Card account. After depositing money in the account, students can use their I.D. to make purchases in the Campus Store, the Book Store, the L-Stop (convenience store), all Food Scrvice areas, vending, laundry and copier machines, etc.

Students can add funds to their Gold Card account at any time. At the end of the semester, all leftover funds will be automatically credited toward the following semester's balance.

For more information, contact the Gold Card Office at 215-951-1578.

## STUDENT HEALTH SERVICES

The La Salle University Dispensary provides medical diagnosis and treatment of minor illnesses and injuries and is available to the student body for initial care, first aid, and health information. Located in the North Complex of the Residence Halls on Olney Avenue, directly across from Hayman Hall, it is open Monday through Friday.

The Dispensary is staffed by a registered nurse who serves as the Director. University physicians see students in the Staff Clinic of Germantown Hospital five days a week, and a physician is available in the Dispensary weekly. The Clinic is located on the first floor of the hospital, and referrals to the clinic are made by the nurse from the Dispensary. All students are required to complete the Student Health Services-Health Questionnaire prior to their attendance at the University.

Both medical and dental emergency services have been arranged with local hospitals, and a complete list of private physicians of every medical speciality is also available. Students are responsible for the costs of these treatments.

Health insurance is strongly advised for all students, especially those in residence, and is required for all international students. Students who are under 23 years of age generally can be covered under their family Blue Cross (Hospital Insurance) and Blue Shield (Medical-Surgical Insurance) program while enrolled as full-time college students. Information concerning special Students' Blue Cross and Blue Shield plans for those not covered by family plans is available.

## THE LIBRARY

The Connelly Library was dedicated in March 1988 and opened its doors to La Salle students, faculty, and staff in August of that year. With shelving for 500,000 volumes, seating for over 1,000 people, and a fully automated catalog, the library offers a combination of traditional library services and the latest in information technology. The new building provides not only attractive study spaces but also several new departments and features, including Media Services (videotapes and cassettes), Special Collections, personal computers, and a student lounge with vending machines and lockers. The library presently has more than 350,000 volumes, 1,700 current periodical subscriptions, and 50,000 units of microforms, as well as a growing body of media in electronic formats.

Reference Librarians are available most hours that the library is open to offer assistance with the collection and to provide group and individualized instruction for research projects. Subject-specific library instruction is given in many courses. Librarians can also assist users with the several hundred electronic databases available through dial-up access to vendors such as Dow Jones News Retrieval, or locally on compact disc.

The Special Collections Department houses noteworthy collections of books and manuscripts in various subject areas. Of particular significance is the internationally renowned Imaginative Representations of the Vietnam War Collection. Also of interest to scholars are The Japanese Tea Ceremony and a number of unique holdings of the works of major authors.

La Salle students and faculty can take advantage of the resources of other libraries throughout the United States by using the Interlibrary Loan Service. Librarians can assist users with locating materials in other libraries and can obtain books and photocopies of journal articles on loan; a telefax machine speeds transmittal of urgently needed materials. Through a cooperative borrowing agreement with over 30 local libraries, students and faculty can also directly borrow materials from other academic institutions in the greater Philadelphia area.

## BUILDING BLOCKS: CHIILD DEVELOPMENT CENTER

Established in 1973 by a group of La Salle faculty, students, and staff, Building Blocks is a privately incorporated day care center housed on La Salle's campus. Serving the immediate La Salle community and our neighbors beyond the campus, the center cares for some 50 children whose ages range from 18 months to 6 years. The trained professionals at Building Blocks also supervise work study students, volunteers, and students who fulfill certain course assignments through projects at the center. Interested parents should telephone the Director at 215-951-1573.


In view of rising costs, La Salle University must reserve the right to amend or add to the charges at any time and to makes suclı changes applicable to stukents presently enrolled as well as to new students.

## DEFERRED PAYMENT

If you do not have the entire amount you need to register for the Fall or Spring semester, you can choose the Deferred Payment Plan, which allows you to spread out your payments in three monthly installments throughout the semester. For a $\$ 15.00$ application fee and a small finance charge, you can defer payment on as much as $75 \%$ of your educational expenses (or as little as $\$ 250.00$ if that's all you need). To find out more information or to obtain your application, contact the Student Loan Office, 215-951-1054.

## MONTHLY PAYMENT PLAN

In cooperation with Academic Management Services, La Salle offers a monthly payment plan designed to relieve the pressure of "lump-sum" payments each semester. This plan allows you to spread the cost over a period of months without borrowing money or paying interest charges. Automatic life insurance is provided at no charge. The enrollment fee is $\$ 50$ a year for each enrolled student; there are no other charges. There is no down payment if you enroll in the plan before April 25.

## SEMESTER INVOICES

Full payment of semester invoices is due in midAugust for the Fall term and in mid-December for the Spring term. Students who have not paid in full within the prescribed time are not registered, nor are they included on official class lists.

MasterCard and VISA may be used for payment of invoices.

## REFUNDS

The following refund policies apply to all students with the exception of those students who are attending the University for the first time and are recipients of Federal Title IV Financial Assistance. Those students are subject to the provisions outlined in the PRO RATA REFUNDS section, which appears on page 26 .

## ROOM AND BOARD REFUND POLICY

Meal Plan
Students who are released from their housing contract commitment (which requires Resident Life approval) may receive a pro rata refund of the unused portion of their meal plan.

## Room Rent

Regardless of the reason for vacating, refunds will not be made for a semester's unused rent. The
housing agreement represents an obligation for the academic year.

## REFUND OF TUITION

Under certain circumstances, students who withdraw may receive a partial refund of tuition. There are no exceptions to the following terms and conditions:

Fall and Spring Undergraduate Semesters

| Time of Withdrawal | Refund |
| :--- | :--- |
| Before first day of class | $100 \%$ |
| During first week | $80 \%$ |
| During second week | $60 \%$ |
| During third week | $40 \%$ |
| During fourth week | $20 \%$ |

For the purpose of refund, the student shall be considered to be in continuous attendance up to and including the date of submission of proper notice of withdrawal. The notice of withdrawal must be addressed to the Dean of the particular school. Ceasing to attend or giving notice to an instructor does not constitute proper notice. The allowed percentage of refund shall be based upon the official withdrawal date, which shall be determined by the date the notice of withdrawal is received by the Dean, or the postmark, if mailed.

For the purpose of refund computation, a week shall be defined as the period of seven successive days beginning with the official University opening of classes and NOT the first day in actual attendance by a particular student.

In those instances where a student's educational expenses were satisfied in whole or in part by Title 1V Program Funds, and a refund of these educational expenses is authorized, that refund will be proportioned in accordance with U.S. Department of Education regulations governing refunds and cash disbursements made directly to students. Under those regulations, priority is given to the return of funds to Title IV Assistance Programs in the following order: Federal Stafford Loan, Federal Perkins Loan, Federal Pell Grant, and FSEOG. Students should be aware that the regulations may prevent the refund of any personal funds used for payment of tuition and fees. In instances where a student has received a cash disbursement prior to the recording of his or her withdrawal, the student may be required to return those funds to the University.

Since the primary responsibility for college expenses rests with parents and students, financial assistance is normally granted on the basis of financial need together with demonstrated academic ability. The information below lists sources of aid available to students attending La Salle and the method of application.

## CHRISTLAN BROTHERS' SCHOLARSHIPS

La Salle University offers 15 full tuition scholarships to students graduating from all Catholic high schools in the Philadelphia and Camden dioceses and from high schools conducted by the Christian Brothers of the Baltimore Province. Selection is based on academic excellence and potential for leadership in the La Salle community. Applications are restricted to students nominated by their high school principal. Scholarship application forms will be sent directly to nominees designated by the principals. All completed scholarship materials must be received by the Director of La Salle's Honors Program no later than February 1.

## UNIVERSTTY SCHOLARSHIPS

At least 30 full and partial tuition scholarships are offered annually to high school seniors who have demonstrated exceptional academic aptitude and achievement. This scholarship competition is open to high school seniors who have scored approximately 1300 in the College Board Scholastic Aptitude Test and who have a class rank in the top 10 or top $10 \%$ of the high school graduating class. Application materials may be obtained by contacting the Director of the Honors Program. The completed scholarship materials must be received by the Honors Center no later than February 1.

## NATIONAL MERTT GRANTS AND SCHOLARSHIPS

Students selected as National Merit finalists, semi-finalists, and Ietter of commendation recipients are cligible for grants through the University. Finalists qualify for $\$ 800$ per academic year, semi-finalists receive $\$ 600$ per academic year, and commendation recipients are granted $\$ 300$ per year. These grants are applicable to tuition charges and are renewed yearly pending completion of the Pennsylvania State Grant and Federal Sudent Aid Application.

1a Salle University annually offers two National Merit Scholarships ranging from $\$ 250$ to $\$ 2000$ per
academic year. Students are selected by National Merit Scholarship Corporation from those qualifying in the College Boards and indicating La Salle University as the first choice institution.

## CHRISTIAN BROTHERS' GRANTS

Grants funded by the Christian Brothers are awarded to students who have demonstrated academic excellence and financial need, as determined through a needs analysis system, i.e., Free Application for Federal Student Aid (FAFSA). These awards are renewable, provided the student maintains a 2.5 cumulative average and continues to show financial need.

## LA SALLE UNIVERSITY GRANT

As a reflection of its dedication to providing financial aid to students on the basis of financial need, the University has established the La Salle University Grant program. Awards from this grant are made to students based solely on their financial need as determined through completion of the FAFSA form. Awards are renewable provided the student maintains satisfactory progress and continues to show financial need.

## ATHLETIC GRANTS

La Salle University offers grants to men and women excelling in athletics. Contact with the La Salle University Athletic Department is made by the student's high school coach. These grants can be maintained through the four years of study at La Salle University.

## COMMUNITY ACADEMIC OPPORTUNITY PROGRAM (CAOP)

The Community Academic Opportunity Program is a grant available to students who have been accepted into the Academic Discovery Program. It is designed to give financial assistance to minority students who are residents of Philadelphia.

The amonnt of the grant will be equal to the difference between the total of tuition and fees minus all gift aid which the student is eligible to receive (Federal Pell and PHEAA grants as well as private aid). In addition, the student will receive up to $\$ 500$ per academic year for books and supplies.

## COMMUNITY SERVICE GRANTS

Tuition grants are awarded to entering freshmen who have shown interest in and commitment to community service prior to their undergraduate careers, and who are willing to continue such involvement during their years at La Salle. An applicant must also have total SAT scores of at least 1000 and be ranked in the first or second quintile of his or her class.

The grants will cover $50 \%$ tuition and all registration fees for the two semesters of the regular academic year and are intended to free recipients from the need to seek employment during those two semesters. The grants are renewable each year if the recipient maintains a 2.5 GPA and continues his or her involvement with community service.

The deadline for filing a grant application is February 1.

## LA SALLE UNIVERSITY DIVERSITY SCHOLARSHIP

Consistent with the LaSallian commitment to a culturally and racially diverse student population, La Salle University has established the Diversity Scholarship. La Salle awards tuition scholarships to minority students accepted as entering freshmen. The scholarships supplement state and federal grants up to full tuition and registration fees for the two semesters of the regular academic year. The scholarships are renewable each year if normal progress is made toward the degree.

The La Salle University Diversity Scholarship is open to all minority students who have demonstrated financial need. Recipients must have total SAT scores of at least 950 and a cumulative grade point average of at least $B+(85)$.

All completed scholarship materials must be submitted by February 1 to the Assistant Provost for Multicultural and International Affairs.

## FEDERAL PELL GRANTS

The Pell program is a federally administered program available to needy students taking no fewer than six credits per term. Students may receive up to $\$ 2300$ per academic year. Applications are available from your high school guidance counselor or the La Salle Financial Aid Office. Eligibility is determined by the federal government and notification is sent directly to students. In addition to financial need, a student must make normal progress toward a degree to retain eligibility.

## FEDERAL PERKINS LOANS

The Perkins Loan provides needy students with long-term, low interest loans for educational expenses. The University determines the amount of the loan to be offered within certain federal guidelines. Interest at the rate of $5 \%$ per year on the unpaid balance begins to accrue after the student ceases at least half-time study. The loan repayment period may be as long as ten years, depending upon the total amount borrowed. Students must make normal progress toward a degree to maintain eligibility.

## PENNSYLVANLA STATE GRANTS (PHEAA) AND OTHER STATE GRANT PROGRAMS

Pennsylvania state grants are administered by Pennsylvania Higher Education Assistance Agency and range from $\$ 200$ to $\$ 2400$. Eligible students must demonstrate financial need, maintain Pennsylvania residency, be enrolled on a full-time basis, and complete a minimum of 24 credits per year. Applications are available from high school guidance counselors or the Financial Aid Office.

Other states in addition to Pennsylvania have scholarship programs for their residents. Information and applications are available from the respective State Boards of Education.

## FEDERAL WORK-STUDY PROGRAM

The Federal Work-Study program provides needy students with access to part-ime jobs in both on- and off-campus locations. The funds earned do not provide direct tuition relief, but are intended to help meet incidental expenses encountered by students. Students are paid on a weekly basis for the number of hours worked. The total amount that may be earned through the work program is determined by students' needs and availability of funds at the University. Students work an average of 10 hours a week throughout the academic year. In addition to demonstrating need, students must make normal progress toward a degree to maintain eligibility.

## FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (FSEOG)

The FSEOG program is a federally funded, college administered program available to needy students who are also Federal Pell recipients. La Salle University requires submission of the Free Applica-

## Financial Aid

tion for Federal Student Aid (FAFSA) for eligibility evaluation. In addition to demonstrating financial need, students must make normal progress toward a degree to retain eligibility.

## FEDERAL STAFFORD LOAN (FSL)

Formerly known as the Guaranteed Student . Loan, this program is administered by state and private agencies with the assistance of participating lending institutions. Students enrolled on at least a half-time basis and making normal progress toward a degree may apply to this program. The yearly limits are: $\$ 2625$ for a student's freshman year, $\$ 3500$ for the sophomore year, and $\$ 5500$ for the junior and senior years. The current interest rate is $6.94 \%$. Repayment begins six months after the student ceases half-time enrollment.

## FEDERAL PARENT LOANS FOR UNDERGRADUATE STUDENTS

This program allows parents to borrow up to the cost of attendance per academic year for each dependent undergraduate student. The interest rate varies but is capped at $10 \%$. Monthly repayment begins no later than 60 days after the loan is disbursed. Applications are available from participating banks, savings and loans, and credit unions.

## INSTITUTIONALLY ADMINISTERED SCHOLARSHIPS

Through the generous contributions of foundations, corporations, and individuals, La Salle students are eligible for a variety of private scholarships. You can apply by filling out a single Common Scholarship Application, available from the Financial Aid Office. Scholarships available through La Salle include:

- Berger-Wallace Scholarship
- James J. Binns Scholarship
- John F. Byrne Memorial Scholarship
- Rolsert J. Chicsco Mcmorial Scholarship
- Le John II. Condon Memorial Scholarship
- Bishop Corrigan Memorial Scholarship
- J. Russell Cullen, Sr. Memorial Scholarship
- Josephine Daniclski Mcmorial Scholarship
- Rolert L. Dean Writing Scholarship
- Michael A. DeAugelis Memorial Scholarship
- Brohher Clande Demitras Scholarship
- Anne II. and I larry J. Donaghy Scholarship)
- Brother latrick Fillis Alumni Scholarship
- John and Kamila Fettowicz Scholarship - James A. Finnegan Public Service Fellowship - Julius E. Fioravanti Memorial Scholarship
- J. Anthony Hayden Scholarship
- H. Blake Hayman Scholarship
- Anthony F. Heck Memorial Scholarship
- Jack Keen Memorial Scholarship
- Maurice and Sara Land Foundation Scholarship
- Christian R and Mary F. Lindback Scholarship
- John McShain Scholarship
- Charles E. Merrill Trust Scholarship
- Joseph L. Moran Memorial Scholarship
- James V. Mulvihill Memorial Scholarship
- Charlotte W. Newcombe Foundation Scholarship
- Joseph Lawrence Scheiter Memorial Scholarship
- W. W. Snith Charitable Trust Scholarship
- Lillian and Ralph Tekel Scholarship
- Tri-State Dairy-Deli Association Scholarship
- John H. Veen Memorial Scholarship
- Thomas H. White Memorial Scholarship


## SPONSORED SCHOLARSHIPS

There are many special assistance programs that offer scholarships, grants, and loans to students. You may qualify for one of these programs through religious affiliation, ethnic heritage, parents' employers, organizational memberships, or a special talent. Programs through state and/or federal agencies-e.g., Veterans' Bureau, Office of Vocational Rehabilitation-may also offer financial aid to qualified students. Knowledge of these programs is available through books and pamphlets on scholarships and financial aid in your school or local library.

## APPLICATION PROCEDURES FOR FINANCIAL ASSISTANCE

All applicants for financial aid must file the Free Application for Fedcral Student Aid (FAFSA). The deadline for incoming freshmen and transfer students is February 15. Returning students (sophomore, jumior, or senior) must complete the FAFSA form and an Institutional Aid Application by March 15. All forms are available from the Financial Aid Office.

La Salle University's financial aid programs are organized to help students who need financial assistance. As long as there is continuing evidence of academic progress, as well as financial need, the

## STUDENT RIGHTS AND RESPONSIBILITIES

The following are the rights and responsibilities of students receiving federal funds.

## You have the right to ask a school:

The names of its accrediting or licensing organizations.
About its programs, about its instructional, laboratory, and other physical facilities, and about its faculty.
About its cost of attendance and its policy on refunds to students who drop out.
What financial assistance is available, including information on all federal, state, local, private, and institutional financial aid programs.
What the procedures and deadlines are for submitting applications for each available financial aid program.
What criteria it uses to select financial aid recipients.
How it determines your financial need. This process includes how costs for tuition and fees, room and board, travel, books and supplies, and personal miscellaneous expenses are considered in your cost of education. It also includes how resources (such as parental contribution, other financial aid, assets, etc.) are considered in calculating your need.
How much of your financial need, as determined by the institution, has been met.
How and when you will be paid.
To explain each type and amount of assistance in your financial aid package.
What the interest rate is on any loan that you have, the total amount you must repay, the length of time you have to repay, when you must start repayment, and what cancellation or deferment privileges apply.
How the school determines whether you are making satisfactory progress, and what happens if you are not.
What special facilities and services are available to the handicapped.

If you are offered a College Work-Study job, what kind of job it is, what hours you must work, what your duties will be, and how and when you will be paid.
To reconsider your aid package, if you believe a mistake has been made or if your enrollment or financial circumstances have changed.

## It is your responsibility to:

Review and consider all information about a school's program before you enroll.
Pay special attention to your application for student financial aid, complete it accurately, and submit it on time to the right place. Errors can delay or prevent your receiving aid.
Meet all deadlines for applying for and reapplying for aid.
Notify your school of any information that has changed since you applied.
Provide all additional documentation, verification, corrections, and/or new information requested by either the Financial Aid Office or the agency to which you submitted your application.
Read, understand, and keep copies of all forms you are asked to sign.
Comply with the provisions of any promissory note and other agreements you sign.
Repay any student loans you have. When you sign a promissory note, you're agreeing to repay your loan.
Notify your school of any change in your name, address, or attendance status (half-time, three quarter ume, full-ime). If you have a loan you must also notify your lender of these changes.
Attend an exit interviewat your school if you have a Perkins Loan, Stafford Student Loan, or PLUS/SLS Loan.
Satisfactorily perform the work agreed upon in a College WorkStudy job.
Understand the school's refund policy.

University will make every effort to assist the student.

## SATISFACTORY ACADEMIC PROGRESS

In order for a student to obtain funding from federal, state, and institutional sources, satisfactory academic progress must be maintained. For information regarding the standards by which a student is evaluated, see page 33.

## REFUNDS

Students who are credited with aid in excess of tuition and other charges after all the appropriate forms have been completed will be sent a refund from the Financial Aid Office. Refunds for excess financial aid are disbursed approximately four to six weeks after the start of the semester.

If a student withdraws from school, he or she may receive a partial refund. However, if a student's educational expenses were satisfied in whole or in part by Title IV funds, the refund will be proportioned in accordance with U.S. Department of Education regulations governing refunds and cash disbursements made directly to students.

Under those regulations, priority is given to the return of funds to Title IV assistance programs in the following order: Federal Stafford Loan, Federal Perkins Loan, Federal Pell Grant, and FSEOG. Students should be aware that the regulations may prevent the refund of any personal funds used for payment of tuition and fees. In instances where a student has received a cash disbursement prior to the recording of his or her withdrawal, the student may be required to return those funds to La Salle University.

## Financial Aid

## PRO RATA REFUNDS

In accordance with the Higher Education Amendments of 1992, La Salle University provides a pro rata refund policy for students who are attending the University for the first time and receive Title IV Assistance (including Federal Parent Loans received on the student's behalf). Pro rata refunds are extended to those students who qualify and withdraw prior to the tenth week of class.

The refund will be a percentage determined by dividing the total number of weeks in a semester for which the student has been charged into the number of weeks remaining in the semester as of the last recorded day of attendance by the student, rounded downward to the nearest ten percent. Refunds of tuition, fees, room and board, and other charges to a student will be made according to the following schedules:

## Time of Withdrawal

Before first day of class
During first week
During second or third week
During fourth week
During fifth or sixth week
During seventh or eighth week
During ninth week
After ninth week

Tuition \& Board Refund
$100 \%$
90\%
80\%
$70 \%$
60\%
50\%
40\%
None

## Meal Plan Refund

Balance in Account
Balance in Account
Balance in Account
Balance in Account
Balance in Account
Balance in Account
Balance in Account
Balance in Account


## Programs E® Procedures

## REGISTRATION

During an announced pre-registration period in the Spring term, students meet with their Chair or advisor to plan a roster of courses for the upcoming year. On the basis of this pre-registration, the Registrar's Office publishes a Master Roster listing courses, times scheduled, and teachers assigned. The student then chooses a course section, time, and teacher. The Business Office will bill the student in August and December for the courses chosen, completing the registration process.

Students who have not completed mail registration will register on campus during the week before classes begin.

If students cannot register during this period because of circumstances beyond their control, they may complete registration during the first two days of classes.

Late registration is permitted only in the most unusual circumstances and requires the permission of the dean of the school and the payment of a fee of $\$ 10.00$.

## CLASSIFICATION OF STUDENTS

A full-time student carries a minimum of 12 semester credit hours; many carry an average of 15 semester credit hours. A student's program may require more hours per week in some areas of instruction.

Class level is determined by the number of credit hours earned by the student. Students having 0 to 23 credit hours are considered freshmen; those who have earned 24 to 53 credits are sophomores; those having 54 to 83 hours are juniors; and those with more than 84 credit hours are classified as seniors.

Part-time students carry a roster of less than I2 hours per week. Students in this category will require more than the normal four years in which to earn a degree.

Students who do not fulfill certain admission requirements may be admitted to follow particular courses, and are considered as special students. They do not register for a degree granting program. Credits earned by a special student may be counted towards a degree as soon as he or she has met all the requirements for admission and candidacy for a degree provided that the credits thus earned are applicable to the program of studies. A special student cannot hold a scholarship nor take part in extracurricular activities.

## PROGRAM OF STUDIES

The program of studies prescribed by the student's advisor and approved by the dean of the school in which the student is enrolled is his or her official roster of courses.

It is the student's responsibility to see that all the requirements of this program are fulfilled. He or she should have in writing from the dean any exceptions to the prescribed program which may be granted.

Students may be permitted to change from one program to another, or from one area of instruction to another, only when their previous record indicates that they may profit by such a change. In any change of this type the student must have the written permission of the Chair and the dean of the school. This change may entail taking approved summer courses or an additional semester in college. In no case may students who transfer receive promotion or a degree sooner than they would have received it had they not transferred. No degree may be received less than one year after change of curriculum.

## DUAL MAJORS

In some circumstances, a student with special needs and abilities may be permitted to major in two departments or to follow a special interdepartmental program. After developing the program in consultation with both departments, the student must obtain approvals of both Chairs and of the dean. Arrangements should normally be completed during the Spring semester of the sophomore year.

## MINORS

In addition to their majors, students may also complete up to two minors. These minors will be officially noted on the transcript. Minors may be constructed in these subjects: accounting, art history, biochemistry, biology, chemistry, communication, computer science, criminal justice, economics, education, English, foreign language, geology, history, mathematics, music, philosophy, physics, political science, psychology, religion, and sociology. These minors require six courses within the discipline, not counting foundation courses. Students interested in minoring in a subject should consult with the Chair of that department for advice on the requirements.

## Programs $\mathcal{E}{ }^{\circ}$ Procedures

Special minors may also be taken in these areas: Asian Studies, Business Administration, Central and Eastern European Studies, Health Care Administration, International Studies, Justice and Society Studies, Life Science, Risk Management and Insurance, Urban Studies, and Women's Studies. The requirements are listed in their proper alphabetical place in the Course Requirements section of this Bulletin.

## URBAN STUDIES MINOR

Students may design a minor concentration by choosing requirements and electives in Urban Studies. The Economics Department supervises this program but it is multidisciplinary in all essentials. At all levels, students and faculty work closely with the staff of the La Salle Urban Studies and Community Services Center.

## INTERNATIONAL STUDIES MINOR

Any student, regardless of his or her major field, can pursue as an interest the Minor in International Studies. This multidisciplinary program allows the student to select courses offered by many departments.

The Minor in International Studies requires a total of six courses. At least three of these can also fulfill other university requirements.

Economics, Political Science, and Business students will have to use only two or three electives in order to complete the program. Other students will have to devote about four elective courses for this purpose.

Students planning to spend one or two semesters abroad will probably be able to complete a portion of the program there and should meet with the Director before departing.

Interested students should see Dr. Joshua Buch, the Program Director, Collcge Hall 415B, ext. 1030.

## WOMEN'S STUDIES MINOR

The interdisciplinary Women's Studics Minor provides a contrast and balance to the traditional curriculum by putting women, their accomplishments and contributions, and traditional sex roles at the center of study. By choosing six courses from the interdisciplinary offerings, women and men students of any major may design a minor that complements their major. In addition to an introductory seminar (WST 270), courses are offered in the disciplines of communication, criminal justice, econom-
ics, English, foreign languages, history, nursing, philosophy, physics, psychology, religion, and sociology. A field internship or independent study may constitute one of the six required courses.

Interested students should see Dr. Barbara Millard, Program Director, Olney Hall 155, ext. 1157.

## JUSTICE AND SOCIETY STUDIES MINOR

The Minor in Justice and Society Studies takes an interdisciplinary approach to an academic and existential concern which is central to the mission of La Salle University. In light of the University's commitment to social justice, it is fitting that students be encouraged to select courses which, by their content and methodologies, focus on: understanding the notion of justice, thinking critically about the forms of injustice in contemporary society, envisioning more just social, economic and political structures, and reflecting upon the religious and philosophical foundations of justice.

The Justice and Society Minor is especially appropriate for students interested in learning about social justice and those considering careers in public service, law, education, social work, criminal justice, management, ministry, and finance.

For more information, students should contact Dr. David Efroymson, Director of the Project on Justice and Society, McShain Hall 213, ext. 1666.

## CENTRAL AND EASTERN EUROPEAN STUDIES MINOR

The demise of Communism and the unprecented political upheavals of recent years necessitate a greater American awareness of the state of affairs in Central and Eastern Europe. For that reason, La Salle's faculty developed a multidisciplinary Minor Program in Central and Eastern European Studies.

The program is open to any La Salle student interested in examining the nature of Communism and analyzing the reasons for the recent political, cultural, and social changes in the various countries of Central and Eastern Europe.

Students planning to participate in the La Salle-in-Europe Program or to study one or two semesters at another miversity should make arrangements with the Program Director prior to their departure to cusure completion of program requirements.

Other options and requirements are listed in the Central and Eastern European Studies bro-

## Programs $\mathcal{E}$ Procedures

chure available from the Program Director, Dr. Leo Rudnytzky, Olney Hall 240, ext. 1200.

## LA SALLE IN <br> EUROPE-FRIBOURG/FREIBURG, SWITZERLAND

Consistent with the stated objective of La Salle University to aid students "to judge events and opinions critically (and) to communicate effectively," La Salle established in 1960 a year-abroad program at the University of Fribourg/Freiburg for all undergraduate students with French and/or German language background. La Salle admits students with a minimum GPA of 2.5/4.0 for sophomore or junior year studies from among its own undergraduates, as well as students from other accredited U.S. colleges and universities.
In conjunction with Providence College, La Salle forms part of the "Consortium Helveticum of the University of Fribourg/Freiburg." This program enjoys official recognition by the University of Fribourg/Freiburg; thus, La Salle-in-Europe students are also full-time students of the University of Fribourg/Freiburg, and the university's entire academic program is available to them. At the same time, the Consortium Helveticum supplements the offerings of the university with courses designed to satisfy the specific requirements of American curricula.

Interested students should contact Dr. Bernhardt Blumenthal, Director of the La Salle in Europe Program, Olney Hall 241, ext. 1200.

## SPANISH LANGUAGE PROGRAM-UNIVERSITY OF MADRID

La Salle University is a member of the Academic Year Abroad Foundation, which is affiliated with the University of Madrid, Spain. This program is for one semester or a full year. Courses are offered in the language, literature, history, and art of Spain. In addition there is a special program for business students. Participants are placed with Spanish families. Meals are taken at the place of residence.

The principal aims of the program are:

1. To help the student achieve fluency in the spoken and written language.
2. To give the student the opportunity to experience and understand the nature of Spanish society and institutions through constant and
direct exposure to the nation's history, art, and contemporary life.
3. To prepare the future teacher of Spanish for the role which he or she will play in the classroom situation.
Interested students should see Dr. Leonard Brownstein, Professor of Spanish, Administration Center 207, ext. 1203.

## JAPAN CENTER

The Japan Center assists students in: planning a variety of academic programs with an emphasis on Japanese language and culture; choosing appropriate overseas educational opportunities in Japan; and identifying career paths that will capitalize on the knowledge and skills developed through such courses of study.

Interested students should contact Eric Sackheim, Director of the Japan Center, ext. 1685.

## HONORS PROGRAM

The Honors Program provides the most academically talented students with an enriched program of general studies that will be both challenging and stimulating.

The freshman honors student, as an apprentice in the program, studies in honors sections of two or three required courses. Students who prove themselves able and interested continue with honors courses in such areas as religion, philosophy, and English, which offer more depth and more advanced reading. In the upper division, such courses will frequently be given by distinguished visiting professors. In the last two years, the honors student may, with the approval of the Honors Program Director, substitute an independent study course for any regularly scheduled course except religion or seminar. Class meetings in these courses are less frequent, and emphasis is on individual reading and research. Students who complete the requirements of the Honors Program are graduated with General University Honors.

Further information on the program is available from the Director of the Honors Program.

## THE WRITING FELLIOWS PROGRAM

The Writing Fellows Program offers a unique opportunity for good student writers to serve as undergraduate peer tutors in writing in courses throughout the University. Students selected to be Writing Fellows receive special training. Interested

## Programs Ev Procedures

students should see Dr. Margot Soven, Program Coordinator, Olney Hall 140, ext. 1148.

## COOPERATTVE EDUCATION PROGRAM

The Cooperative Education Program (Co-op) is a learning experience that extends beyond the campus of La Salle University. Students have the opportunity to work in a job related to their major or career goal, while earning money and credit for the experience. This program offers the unique opportunity to apply classroom theory to an actual work situation. Co-op can add relevance to a student's academic program, afford an understanding of human relationships outside one's peer group, and provide realistic vocational information as well as financial assistance.

These full-time employment commitments range from three to six months, thus requiring the student to dedicate either a Fall or Spring semester toward the Co-op Program. In order for the student to graduate in four years, early academic planning is crucial (see model rosters on pages 103 and 104). Co-op is an optional program open to all majors (except education) who have completed the sophomore year and have maintained at least a 2.25 GPA .

It is sugggested that students apply to the Co-op Program before completing their freshman year. During the sophomore year students will prepare for a co-op placement. With the help of the Co-op counselor, each student will wite a resume to be submitted to participating companies and prepare for the interview process. Co-op placements are usually completed during the junior year. Sixmonth assignments are as follows:

Fall Cycle: July-December
Spring Cycle: January-June
Three-month assignments occur during the regular academic semesters:

Fall: September-Dccember
Spring: January-April
While Summer Co-op is available, the Career Planning and Placement Bureau conducts a Summer Jobs Program for those students who wish to obsain summer employment.

Sudents interested in learning more about the Cooperative Education l'rogram should contact the Co-op Coordinator in the Career Planning and Placement Burcans, 14, floor of the Administration Center, ext. 1075.

## URBAN STUDIES AND COMMUNTTY SERVICES CENTER

The Urban Studies Center seeks to involve the resources of the University in the larger urban community. Its major programs are: (1) the Communi-versity-non-credit adult education designed for area residents, (2) technical assistance to neighborhood groups in grant and program development, and (3) community organization services focused on the needs of the low-income, multi-racial, and ethnic communities bordering the University. The Center also draws upon the experience of neighborhood leaders to enrich its programs and La Salle's Urban Studies curriculum. Students and faculty with urban research and social service interests are encouraged to contact the Center at 215-951-1188.

## NURSES' COOPERATIVE PROGRAM

La Salle participates in a cooperative program with a number of area hospitals in teaching the basic sciences to the students from these hospital schools. The essential program remains under the control of the parent schools. These students receive college credit for those courses attended at La Salle.

## PRE-ALLIED HEALTH PROGRAM

La Salle provides students preparing for careers in the allied health professions with courses in the basic sciences and with other courses required by allied health institutions. The prerequisite courses vary with the allied health profession and with the professional schools.

A special agreement with Thomas Jefferson University enables La Salle students to transfer to Jefferson's College of Allied Health Sciences for certain upper division degree programs not available at La Salle. Students who satisfactorily complete their first two years of study at La Salle may apply to transfer to Jefferson to pursue a Bachelor's degree in cytogenctic technology, cytotechnology, dental hygiene, diagnostic imaging, medical technology, occupational therapy, and the entry level Master's degrec program in physical therapy.

For more information, students should contact Brother Thomas McPhillips, Holroyd Science Center 202, ext. 1253.

## COURSES AT CHESTNUT HILL COLLEGE

The cooperation of La Salle with Chestnut Hill College, a Catholic college for women situated about five miles from La Salle, results in a valuable coordination of programs. Students from either of the associated colleges can register for courses at the other college, with full credits, and without the payment of extra tuition. The calendar for the academic year in both colleges is identical. Students wishing to register for courses offered at Chestnut Hill will follow the same procedure as when they register for courses at La Salle. Classes at Chestnut Hill begin on the hour, at La Salle on the half-hour.

## SUMMER SESSIONS

A variety of courses are offered in both day and evening sessions during the summer. Students may use these courses to enrich their academic programs, to lighten their regular schedules, to make up failures, or, in some instances, to accelerate progress toward a degree. The Summer Sessions are administered by the Dean of the School of Continuing Studies.

Properly qualified applicants from other accredited institutions are also admitted to the Summer Sessions.

## ARMY RESERVE OFFICERS' TRAINING CORPS PROGRAM

Students at La Salle can participate in Army Reserve Officers' Training Corps (ROTC) through a cross-enrollment agreement with the University of Pennsylvania. Students get leadership and management training in the military science program. They graduate with an officer's commission as well as a degree in their chosen academic major. Successful completion of the advanced ROTC program results in second lieutenant status in the active or reserve components of the U.S. Army.

Military science courses and other ROTC activities will take place on the University of Pennsylvania campus.

For more information on the cross-enrollment program and on scholarship and career opportunities, contact the Department of Military Science, University of Pennsylvania, Philadelphia, PA 19104, (215) 898-7756.

## AIR FORCE RESERVE OFFICERS' TRAINING CORPS

La Salle students are eligible to participate in Air Force Reserve Officers' Training Corps (AFROTC) through a cross-enrollment agreement with St. Joseph's University.

All Aerospace Studies courses will be held on the St. Joseph's campus. The AFROTC program enables a college student to earn a commission as an Air Force officer while concurrently satisfying requirements for a baccalaureate degree.

For further information on the crossenrollment program, scholarships, and career opportunities, write or telephone the Professor of Aerospace Studies, AFROTC Det750, St. Joseph's University, Philadelphia, PA 19131, (215) 660-1190.

## NAVAL RESERVE OFFICERS' TRAINING CORPS

Through a cross-enrollment agreement with the NROTC unit at the University of Pennsylvania, La Salle students may earn commissions as naval officers while concurrently satisfying requirements for baccalaureate degrees at La Salle. NROTC courses will be held on the campus of the University of Pennsylvania. For further information on this cross-enrollment program or on scholarship aid, write or telephone: Professor of Naval Science, NROTC Unit, University of Pennsylvania, Philadelphia, PA 19104, (215) 898-7436.

## UNIVERSITY ATTENDANCE POLICY

Students are expected to attend classes regularly. Absence required to provide for conditions beyond the control of the student, such as illness or serious personal or family situations, should be explained to the instructor. If an absence extends over a protracted period of time, the Office of the Dean of the individual student's school should be notified. Attendance is taken from the first regular class day regardless of the time of registration.

## EXAMINATIONS

The last week of each semester is set apart for final examinations. Examinations to measure student progress are given at mid-term. Students who, for satisfactory reasons, fail to take a semester examination as scheduled may take a delayed examination.

## GRADES

The following system of grades is used in measuring the quality of student achievement.

| A | Superior | I | Incomplete |
| :--- | :--- | :--- | :--- |
| B | Very Good | W | Withdrawal |
| C | Average | S | Satisfactory |
| D | Passable | U | Unsatisfactory |
| F | Failure | X | Audit |

In the determination of final grades for courses, recitations, written assignments, and the results of the final examination are considered.

Incomplete: The I grade is a provisional grade given by an instructor to a student who has otherwise maintained throughout the semester a passing grade in the course, but who has failed to take the semester examination for reasons beyond his control. Make-up examinations for the fall semester must be completed before the opening day of the spring semester. All I grades that have not been removed within three weeks after the last regular examination of the semester become F's. When it is physically impossible for the student to remove this grade within the time limit, he must obtain a written extension of time from the dean of his school.

Withdrawal: The $W$ grade is assigned when a student withdraws from a course with the dean's permission before its completion. Ordinarily, permission for withdrawal is not granted after midterm examinations.

Satisfactory or Unsatisfactory: Students may take up to two free electives under a pass/fail option. If they indicate this option to the Registrar within three weeks after the course begins, the grade for the coursc will be recorded as S or U . Such a grade will not affect the cumulative index, but semester hours graded $S$ will be counted toward the total required for graduation. The purpose of this option is to encourage choice of challenging electives, including those outside the student's major field.

Audit: The X grade is assigned for courses audited. After obtaining permission from the course instructor and the dean, a student wishing to audir a course may sign up in the appropriate dean's office before the first day of class.

Courses repeated: If a student repeats a course, only the higher grade is comited in the academic index. A student may not repeat a course more than once without permission from his dean.

## CLEP EXAMINATIONS

Students may receive credit for approved courses taught in the La Salle University curriculum through participation in the College Level Examination Program (CLEP) of the College Entrance Examination Board, or through other authorized standardized testing procedures or inhouse tests. Students who wish to attempt credit through examination must receive permission from their Dean's Office to determine which examinations are acceptable to La Salle, and to obtain permission for participation.

While the Academic Dean determines the credits to be granted for CLEP and other authorized standardized testing procedures, the individual department designates the subject examinations which are applicable to specific courses at La Salle University. Students may not be granted credit for a general examination CLEP course after completion of the freshman year, and a student who has received credit through conventional courses or through standardized testing for one or more advanced courses in a discipline may not challenge a beginning course in that discipline. No grades are assigned to courses credited through authorized standardized testing procedures.

Students who elect to receive credit through authorized standardized testing procedures or approved in-house tests will pay an administrative fee of $\$ 45.00$ for each course examination taken.

## STUDENT RESPONSIBILITIES

A student's matriculation at La Salle University is a voluntary decision which involves acceptance of the responsibility to perform academically and to behave socially in ways consistent with the goals and objectives of the University. When registering at La Salle, the student accepts University rules and regulations and the authority of the University to exercise disciplinary powers, including suspension and dismissal. As a member of student organizations and as an individual, the student assumes responsibility for knowing and complying with all existing regulations in the Unizersity Bulletin, the Student IIandbook, The Resident Student Guidebook, and any rules and regulations subsequently promulgated through appropriate publication to the University commmity. Copies of the Student Handbook may be obtained from the Student Life Office.

## STUDENT REPORTS

A progress report is submitted to the Dean's Office by each instructor at the middle of each term. Final grades are submitted to the Registrar's Office at the end of a semester and these are made part of a student's permanent record. A report of semester grades is mailed to the student within two weeks after final examinations.

## SCHOLARSHIP INDEX

A scholarship index system is used at La Salle to determine a student's average grade. In determining the index, each letter grade is ascribed a numerical value, called grade points. A is valued at 4 grade points; $B$ is valued at 3 grade points; C is valued at 2 grade points; $D$ is valued at 1 grade point; $F$ is valued at zero grade points.

A grade point score is calculated for each course by multiplying the numerical equivalent of the letter grade by the number of semester hours. The index, or the average grade of all courses, is found by dividing the sum of the grade point scores for all courses by the total number of semester hours of course work attempted.

## ACADEMIC PROGRESS

A full-time student is making adequate progress toward the degree if he or she has:

1. completed within the academic year (fall, spring, and summer) eighteen hours of new course work at satisfactory academic levels as indicated:
a) completed freshman status- 1.50 or above*
b) completed sophomore status- 1.75 or above*
c) completed junior status- 2.00 or above*
d) within the senior year- 2.00 or above*
*See "Classification of Students" on page 27 for definitions of status.
2. completed graduation requirements within a maximum of seven years of full-time study. For justifiable reason, exceptions may be determined by the dean.
This policy statement defines the parameters within which the University will define the progress of the student for aid and funding purposes. Since the decisions rest with the granting agencies, "adequate progress" does not guarantee such aid.

## DEANS' HONOR LIST

The Deans' Honor List is published at the termination of each semester. Those students who have a cumulative average of 3.4 and above are placed on the Deans' List. To be eligible for this list, a student must have complied with all the requirements of the University and must have earned 24 credits with letter grades A, B, C, or D at La Salle University.

Deans' List students are eligible for courses in the University's Honors Program.

## ACADEMIC CENSURE

Academic censure is intended to be a service to the student who is in academic difficulty. It serves to alert some to the severity of their academic problem and to encourage them to seek help and counsel they need. For others, it is the imposition of a time period away from academic endeavors to permit adjustment of priorities.

Academic censure may assume any one of three forms, depending on the student's academic standing. During the evaluation of student records at the end of each semester, a student will normally be subject to the form of academic censure indicated if the cumulative grade point average falls below the levels outlined.

1. Probation. A student is placed on probation who has attained a cumulative grade point average of (a) less than 1.50 after the first or second term of freshman year, (b) less than 1.75 after the first or second term of sophomore year, (c) less than 1.90 after the first term of junior year, (d) less than 2.00 after the second term of junior year or during senior year.
Such a student will be continued on probation until he or she has satisfied the conditions for good academic standing.
2. Suspension. This is involuntary separation of the student from the University for a definite period of time, usually for two semesters. No academic work during a period of suspension will be accepted for a student's academic record at the University.
3. Dismissal. This is involuntary separation of the student from the University for an indefinite period of time. No academic work during a period of dismissal will be accepted for a student's academic record at the University.

A student is liable to suspension or dismissal:

1. when he/she has attained a cumulative scholarship index (a) less than 1.00 after the freshman year, (b) less than 1.50 after the sophomore year, (c) less than 1.90 after the junior year, or
2. when he/slie is on probation for two successive semesters.
Decisions on probation will be made following determination of grades after the Fall semester, and after the final La Salle summer session. Decisions on suspension and dismissal will be made on August lst of each year. Any makeup work must be completed and grades submitted to the Deans' offices by that date.

## CREDIT FOR COURSES TAKEN AT OTHER INSTITUTIONS

Course work taken at other institutions by regu-larly-enrolled students at La Salle University may not be offered for credit unless the student has had written permission in advance from the dean of his school to take such courses. Credit is transferred only for marks of C or better.

## REQUIREMENTS FOR A DEGREE

Sudents are responsible for filing an applicaLion for degree with the Registrar one year before the expected date of graduation.

Beginning with the graduating class of 1987, a candidate for the baccalaureate degree must have completed 120 semester credit hours which satisfy curricular requirements and which include at least 38 courses of 3 credit hours or more.

Certain curricula may require a number of hours exceeding this minimum. In addition to completing the required number of courses and hours, the student must also:

1. have obtained a C average or cumulative index of 2.00 in the total program of studies,
2. have fulfilled all course requirements controlled by the major deparıment with a C average or a cumulative index of 2.00 in those courses,
3. have fulfilled the Foundation and Core Requirements.
Requirements for a Sccond Bachelor's Degree: La Salle will award cither a B.A. or a B.S. degree to a student who has already carned a bachelor's degree from an accredited institution if iliese conditions are met:
4. The student will obtain writen permission from the appropriate dean and chair.
5. If the student holds a bachelor's degree from La Salle, he or she will meet substantial requirements for the major as determined at the time the student matriculates in the second degree program. A minimum of 30 credit hours would be required.
6. If the student holds a bachelor's degree from another institution, a maximum of 70 credit hours may be transferred toward the second degree. The student must fulfill all core requirements as well as substantial requirements of the major as determined at the time the student enrolls in the second degree program.

## HONORS

The bachelor's degree with honors is conferred on a student who has completed his or her courses at the University with an average of all marks not lower than 3.4 and who has not incurred the penalty of loss of good standing for disciplinary reasons.

The candidate for the bachelor's degree who has earned an average of 3.8 in all courses is graduated with the distinction Maxima Cum Laude.

The candidate who has earned an average of 3.6 is graduated with the distinction Magna Cum Laude.

The candidate who has earned an average of 3.4 is graduated with the distinction Cum Laude.

## WITHDRAWALS

A student who withdraws from the University must submit a withdrawal notice to the dean of his school. The date of filing the withdrawal notice is considered as the date of withdrawal in all cases. Resident students must also notify the Resident Life Office.

## TRANSCRIPTS

Students may apply at the Registrar's Office for a transcript of their collegiate work. Official transcripts bearing the signature of the Registrar and the seal of the University are sent, at the request of the student, to other institutions and organizations.

Students requesting transcripts for their own use are given copies marked "student copy." Each student is sent a copy of his or her transcript at the time of graduation. A fec of $\$ 2.00$ is charged for an official transcript. The University requires at least one week's notice for the issuance of transcripts. No transcripts can be issucd until all financial obligations to the University have been satisfactorily settled.


## Arts \& Sciences



TThe School of Arts and Sciences offers general or liberal arts programs and programs in science and mathematics. Within these two areas you may further specialize in a major field of study. In the liberal arts, the Bachelor of Arts degree is offered in art history, communication, economics, English, foreign languages, history, music, philosophy, political science, religion, and sociology. Concentration in the science area may lead to a B.A. degree in biochemistry, biology, chemistry, computer science, geology, mathematics, physics, or psychology, or a B.S. degree in computer science.

The School also offers programs designed as preparation for health professions, law, public administration, teaching, social work, and work in criminal justice. The Bachelor of Social Work degree is conferred upon social work graduates.

## PREPARATION FOR THE HEALTH PROFESSIONS

Students preparing for careers in the health professions (medicine, dentistry, veterinary medicine, podiatric medicine, optometry) generally major in biology or chemistry, but may elect to major in any program provided they schedule the required minimum science and mathematics courses to support their applications. The courses specified by the Association of American Medical Colleges for Medical School applicants are generally applicable as minimal requirement for any of the health professions. They are:

Chemistry
Physics
Biology
Mathematics
$0-6$ semester hours
Most professional schools will accept these as minimal preparation, but recommend additional courses. Students should be alert to the fact that professional schools are interested in demonstration of aptitude in science and mathematics, and the courses taken must be those normally rostered by majors in these areas, not courses offered for non-major election.

In the normal review process in these schools, the applicant's full undergraduate record is scrutinized. The strong liberal arts component in the La Salle curriculum will provide evidence of broad interest and rounded academic development. Evidence of leadership and active interest in associated activities will lend strong additional support to applications.

Normally the competition for placement in these programs results in high acceptance standards. Grade point averages ranging from 3.0 to 3.5 are representative of levels expected in these programs. Students are encouraged to consult with the health professions advisor concerning admissions criteria at various schools.

## PREPARATION FOR TEACHING

The teacher preparation program leads to eligibility for an Instructional I certificate to teach in either the elementary or secondary schools or to teach mentally and/or physically handicapped students in the elementary and secondary schools of Pennsylvania. The Pennsylvania Department of Education has granted program approval in the preparation of teachers of biology, chemistry, communication, earth and space science, elementary education, English, French, German, Italian, Latin, mathematics, physics, Spanish, special education, and comprehensive social studies. Students who satisfactorily complete the University's requirements in these areas are recommended by the Education Department faculty for a teaching certificate. Those planning to teach outside of Pennsylvania should familiarize themselves with certification requirements elsewhere.

The Education Departmental Board, consisting of faculty members from the Education Department, one faculty representative for each of the subject areas of teacher preparation, and student representatives in the teacher preparation program, makes final intradepartmental decisions on planning, conducting, and evaluating the teacher preparation program. The University's Career Planning and Placement Bureau aids graduates in obtaining positions.

For details on specific requirements in each area of certification, please see the director of the appropriate program (elementary and special education, or secondary education).

## PREPARATION FOR LAW

Law schools do not prescribe particular curricula for admissions. La Salle University, therefore, approaches the preparation for law on an individualized basis, tailoring the program of each student to individual needs and desires. Thus, students may major in English, political science, history, etc., as preparation for law.

## Degree Programs

The Pre-Law Program offers the student a coordinated approach to course selection, preparation for the Law School Admission Test (LSAT), and both academic and admissions counseling. In addition, it provides many programs and panel discussions through the St. Thomas More Pre-Law Society. Pre-Law advisor for the School of Business Administration is Professor David Culp. Professor Gerard Downey serves as advisor for the School of Arts and Sciences. Students are encouraged to contact any of the professors if they are interested in a career in law.

## PREPARATION FOR CRIMINAL JUSTICE PROFESSIONS

Students preparing for careers in criminal justice professions pursue a curriculum which combines liberal arts with intensive coursework in the behavioral and social sciences and specialized courses in criminal justice. A major in criminal justice qualifies the student for admission to graduate programs in criminal justice and prepares the student for entry-level positions in law enforcement, judicial administration, probation, parole, and correctional administration.

## PREPARATION FOR SOCIAL WORK

The primary objective of the social work program is to prepare competent, generalist practitioners for entry-level positions in the social work profession. Building on a liberal arts foundation, a knowledge of basic social work theory, values, and skills is acquired. The student explores the biological, psychological, social, economic, and political phenomena that have an impact on people. There is a heavy emphasis on the development of skills necded to mobilize systems and resources for the enhancement of individual and family social functioning, for the lumanizing of institutions, and for the promotion of social change.

A sccondary objective of the program is to prepare students for graduate studies in social work and other human service professions. To this end, a firm theoretical base is laid to support advanced study.

Graduates of the program have developed carecrs in both public and voluntary agencies, industry, and education. Graduates are in such fields as child welfare, family services, mental health, corrections, aging, and public welfare. Many graduates
choose to go on to graduate school either directly or after having gained work experience.


## THE CORE CURRICULUM

The Core Curriculum provides you with an opportunity to build a strong foundation for the future. It encourages you to work out a system of values rooted in the best thinking of the great minds of the past and present.

Whatever your eventual major, your core courses will have allowed you to acquire a basic body of knowledge and habits of thinking that are independent of career interests. The Core Curriculum at La Salle has been revised after several years of study and debate on the part of students, faculty, and administrators. This new curriculum will give you a real advantage as you attempt to build your life and your career after graduation. It will help you learn how to learn by giving you experience in researching information, understanding relationships, and communicating effectively with others.

While the Core allows you some freedom of choice, it includes guidelines which should provide coherence in your college education. The Core Curriculum prepares you to adapt to the ever-changing world by exposing you to a well-thought-out plan aimed at encouraging four years of intellectual and personal growth. The Core Curriculum consists of three parts: Foundation, Core I, and Core II.

Foundation Courses (7-9 courses, normally completed by end of sophomore year)

These courses are most directly related to the liberal education approach that is basic to La Salle's aims and traditions. Depending upon your previous preparation, you will take foundation courses in writing, literature, history, computer science, philosophy, science, religion, and social science. The writing and computer science courses are intended to give you the tools you need; the others will acquaint you with some of the best that has been written or thought in each field. The University may waive a writing course or a computer science course if your background so warrants. Foundation courses may not be used to fulfill any other curricular requirement (core, major, or elective). However, an individual Foundation course may be waived for a student majoring in a department represented in the Foundation area.

Core I Courses ( 6 courses, normally completed by end of junior year. Foundation courses may not satisfy this requirement unless required by your major department.)

These courses are an opportunity to build upon the foundations you have in place.

In Core I A, you take three courses in Religion and Philosophy (two in one subject and one in the other).

In Core I B, you also take a sequence of three courses in one of these:

- History
- Fine Arts (Art or Music)
- Foreign Languages (Classical languages, French, German, Italian, Russian, Spanish)
- Literature

Each sequence has been planned by the individual department to provide growth in the knowledge and skills of that subject.

Core II Courses ( 2 courses from a subject or combination of subjects listed below. May not be in your major subject or in the subject you chose for your Core I sequence.)

- Fine Arts (Art or Music)
- Foreign Language (Must be in same language.)
- History
- Literature
- Social Science (Economics, Psychology, Political Science, Sociology)


## MAJOR REQUIREMENTS

Requirements for majors in each department are listed along with that department's course descriptions in this catalog. All students are required to take a writing emphasis course in their major discipline at the Junior/Senior level.

## FREE ELECTIVES

Students may choose to concentrate free electives in a particular discipline to build a minor or may use these electives to diversify their background or broaden their interests. Students may not take additional Foundation courses as electives in satisfaction of graduation requirements without express permission from the Dean's Office. Such permission will be granted only in the following exceptional cases: (I) In the event that a course serves both as a foundation course and as the introductory course to a discipline in which the student intends to do additional work. (2) For some defensible academic reason acceptable to the Dean.

No more than two free electives may be taken on a pass/fail basis.

## DESIGNATED MINORS

A student may designate up to two minors, which will be officially recorded on the transcript as minors. The School of Arts and Sciences offers minors in the following disciplines: art history, biochemistry, biology, chemistry, communication, computer science, criminal justice, economics, education, English, foreign language, geology, history, mathematics, music, philosophy, physics, political science, psychology, religion, sociology.

Special minors are also available in Asian Studies, Business Administration, Central and Eastern European Studies, Health Care Administration, International Studies, Justice and Society Studies, Life Science, Risk Management and Insurance, Urban Studies, and Women's Studies.

Requirements: To minor in a discipline listed above, you must complete six courses within the discipline (not counting Foundation courses). Courses used to meet Core I or Core II requirements may also be used in constructing a minor. At least two of the six must be at the 300400 level. No more than two may be at the 100 -level. The remaining two or three may be at the intermediate level.

The requirements for the special minors are listed in their proper alphabetical positions in the Course Descriptions section of this catalog.

## MODEL ROSTER-ARTS \& SCIENCES

## FRESHMAN YEAR

Fall
Major Course
Major Course or Elective*
Writing or Foundation
Literature or Computer Science Foundation
Religion or Philosophy
Foundation

## SOPHOMORE YEAR

Fall
Major Course
Major Course or Core
Science or Other Foundation
Core Course
Core Course

## JUNIOR YEAR

Fall
Major Course
Major Course
Core Course
Core or Elective*
Elective*

## SENIOR YEAR

Fall
Major Course
Major Course
Major or Elective*
Elective*
Elective*

Spring
Major Course
Major Course or Elective*
Writing or Foundation
Literature or Computer Science Foundation
Religion or Philosophy Foundation

## Spring

Major Course
Major Course or Core
Science or
Other Foundation
Core Course
Core Course

## Spring

Major Course
Major Course
Core Course
Core or Elective* Elective*

## Spring

Major Course
Major Course
Major or Elective* Elective* Eleciive*
*Elective Courses in the Freshman and Sophomore years should be used to complete the Core. Elective Courses in the Junior and Senior years should be used to complete dual majors, minors, or for personal enrichment.

## PROGRESS RECORD

## FOUNDATION (7-9 courses)

1. Writing $1^{1}$
2. Writing II $\qquad$
3. Literature ${ }^{2}$ $\qquad$
4. Religion $\qquad$
$\qquad$
$\qquad$
5. Philosophy
${ }^{1}$ May be waived by decision of the University before you begin course work.
${ }^{2}$ May be in English or in Foreign Language Literature in English translations.
${ }^{3}$ May be waived by challenge examination before you begin course work.

CORE I ( 6 courses)
IA (3 courses)
Religion and Philosophy

1. REL $\qquad$
2. Social Science $\qquad$
3. History $\qquad$
4. Science $\qquad$
5. Computer Science ${ }^{3}$ $\qquad$

IB (3 courses from any one of these disciplines)
2. PHL $\qquad$
Fine Arts History
3. REL or PHL $\qquad$

Foreign Language Literature
1.
2.
3.

CORE II
(2 courses from one discipline or from a combination of disciplines) ${ }^{4}$
Fine Arts Literature Foreign Languages ${ }^{5}$
Social Science History
1.
2.
${ }^{4}$ Also approved to fulfill Core 11 requirement: COM 202, 204, and 254; EDC 201 and 203.
${ }^{5}$ Both courses must be in same foreign language.

## MAJOR COURSES



## Key:

(F)-Offered in Fall term;
(S)-Offered in Spring term; ( $\mathrm{F}, \mathrm{S}$ )-Course may be rostered in either Fall or Spring term. The year is indicated if the course is offered in alternate years. When a course number has been changed this year, the former number is given in parenthesis. Courses approved for Foundation, Core I (3-course sequence) or Core II (2-course option) are so indicated.
Courses listed in this section are subject to change through normal academic channels. New courses and changes in existing course work are initiated in the departments and approved by the curriculum committee consisting of faculty, student, and administrative representatives.
identifies courses that have been designated as writing intensive.

## ART HISTORY

(See Fine Arts.)

## ASIAN STUDIES MINOR

Directed by: Charles Desnoyers, Ph.D., History Department

## REQUIREMENTS

Asian Studies minors must take six courses, including a two-course sequence of an Asian language.
ECONOMICS

- ECN 330
- Senior Seminar: Economics of the Pacific Rim


## FINE: ARTS

- ART 207
- ART 208

FOREICN IANCUACES

- JPN 101-102
- JPN 150
- JPN 260
(Please Note: In order to fulfill the language requirement, students must take either 101-102, 101-260, $102-260$, or $150-260$.)

HISTORY

- HIS 103, 203, 303
- HIS 346
- HIS 350
- HIS 351
- HIS 352
- HIS 353
- HIS 370-371*
- HIS 447
- Seminar in Modern Chinese History
*For Asian Special Topics only
HONORS
- HON 245
- HON 443
- HON 458
(Please Note: Students taking 245, 443,458 must obtain permission from the Honors Director.)
LITERATURE (in translation)
- LIT 270

MANAGEMENT

- MGT 371

RELIGION

- REL 240
- REL 340
- REL 341

BILINGUAL/BICULTURAL STUDIES

- Vietnamese 531
- Khıner 541
(Please Note: 531 and 541 require the permission of the Director of Bilingual/Bicultural Studies.)


## BIOLOGY

## FACULTY

Norbert F. Belzer, Plı.D., Chair Associate Professors: Belzer, Franz, McPhillips, Mickle, Muldoon, Scitchik
Assistant Professors: O'Comor, Shurina

FOUNDATION COURSES
BIO 154, 155, 156

## REQUIREMENTS

Required for Major in Biology:

- BIO 210, 220, 230, 325 and 412, and additional biology courses to total a minimum of 33 credit hours.
- BIO 210 is a prerequisite for all bigher courses. BIO 210, 220 and 230 form a "core."
Normally, the courses are taken in this order and must be successfully completed before registering for higher level courses.
- CHM 111-112, 201-202
- PHY 105-106
- MTH 120
- PHY 105-106
(Please note: 100-level biology courses do not fulfill biology major requirements; college chemistry is a prerequisite for $300 / 400$-level BIO courses.)

Required for Minor in Biology:

- BIO 210, 220, 230
- 3 additional courses from the 300/400 level (these courses must be approved by the Biology Department Claiairperson)
(Please note: 100-level biology courses do not fulfill biology minor requirements. BIO 210 is a prerequisite for all higher numbered BIO courses; college chemistry is a prerequisite for 300/400-level BIO courses.)

Required for Life Science Minor:

- CHM 111 or 161
- BIO 210
- 4 additional biology courses from the $160 / 200 / 300 / 400$ level with at least two from the 300/400 level (these courses must be approved by the Biology Department Chairperson)
(Please note: BIO 210 is a prerequisite for all higher
numbered BIO courses; college chemistry is a prerequisite for $300 / 400-\mathrm{level}$ BIO courses.)

Required for Major in Secondary
Education/Biology

- MTH 120
- PHY 105-106
- CHM 111-112 and 201-202
- BIO 210, 220, 230
- A minimum of 4 additional BIO courses from the $300 / 400$ level (these courses must be approved by the Biology Department Chairperson)
(Please note: 100-level biology courses do not fulfill BIO requirements.)

Non-biology majors planning to elect 200/300/400-level BIO courses must secure the permission of the Biology Department Chairperson.

## COURSE DESCRIPTIONS

BIO 154 (F, S)
ECOLOGY AND
ENVIRONMENTAL ISSUES
3 credits Foundation
Lectures, visuals, and demonstrations to introduce basic ecological principles and environmental issues from a scientific and sociological viewpoint. Topics include: ecosystems, trophic levels and food webs, populations, natural resources, and pollution. Three hours lecture, no laboratory.

BIO 155 (F, S)
LIFE BEFORE BIRTH
3 credits
Foundation
Lectures, visuals, demonstrations, and student investigation will illustrate the sequential formation of the human body from production of the reproductive cells, through fertilization and organ formation, to birth. In addition, common developmental problems and their causes will be discussed. Three hours lecture, no laboratory.

BIO 156 (F, S) HUMAN GENETICS
3 credits
Foundation
Lectures, supplemented with visuals and demonstrations to illustrate the general principles of genetic transmission and their application. Discussion of currently developing technologies and procedures for genetic control which might have an impact on humans and of problems arising from gene and/or chromosomal abnormalities. Three hours lecture, no laboratory.
BIO I61-162 (F, S) ANATOMY AND PHYSIOLOGY $4-8$ credits
A basic course in the structure and functioning of the human body with emphasis placed on the interrelationships of the major organ systems. Intended for Allied Health students. Three hours lecture, two hours laboratory; two terms.

BIO 163 (F)
CLINICAL MICROBIOLOGY 4 credits
Structure, growth, and identification of medically important microorganisms; role of specific pathogens in the etiology of human disease; immunology; chemotherapeutic and antibiotic control of infectious diseases. Intended for Allied Health students. Three hours lecture, two hours laboratory.

BIO 165 (S)
NUTRITION
3 credits
An introduction to the nutritional composition of foods, the functions of the nutrients in normal human physiology, and the importance of a well-balanced diet. The topics of world malnutrition, food economics, sanitation, and the relationship of food selection based on ethnic, religious and other factors are addressed. Intended for Allied Health students. Three hours lecture.

## BIO 210 (F, S)

CELLULAR BIOLOGY AND GENETICS
4 credits
An introduction to the principles of cellular and molecular biology and genetics. Topics include basic biochemistry, cell structure and function, cellular reproduction, molecular and classical genetics. Three hours lecture, two hours laboratory. Prerequisite: high school or college chemistry.

BIO 220 (F, S)
STRUCTURE AND FUNCTION OF ORGANISMS
4 credits
An introduction to the principles of plant and animal form and function. Emphasis will be placed on the correlation of structure and function of the major organ systems of plants and animals. Laboratory sessions will focus on physiological phenomena. Three hours lecture, two hours laboratory.

BIO 230 ( $\mathrm{F}, \mathrm{S}$ )

## DIVERSITY, EVOLUTION AND

## ECOLOGY

4 credits
An integrated study of evolutionary principles and mechanisms, the diversity of life, ecosystem structure and dynamics, human interaction with ecosystem components, and the biological basis of behavior. Three hours lecture, two hours laboratory.

BIO 301 (F)
COMPARATIVE VERTEBRATE ANATOMY
4 credits
Comparative systemic anatomy of the vertebrate classes; hypotheses of origin and radiation of the phylum Chordata. Laboratory dissections of representative Chordates from amphioxus to mammal. Two hours lecture, four hours laboratory.

BIO 303 (F, S)
MICROBIOLOGY
3 credits
Structure, growth, identification, and control of microorganisms of
major medical, environmental, and industrial importance; molecular control and genetics of bacteria and viruses; immunology; microbial pathogenesis; epidemiology of infectious diseases of humans. Two hours lecture, two hours laboratory.

BIO 305 (F)
GENERAL PHYSIOLOGY 3 credits
A lecture-laboratory course that examines the metabolic processes and associated physiochemical phenomena of vertebrates. Current hypotheses of neural, endocrine, respiratory, cardiovascular and digestive physiology will be studied. Two hours lecture, two hours
laboratory.
BIO 306 (S)
NEUROMUSCULAR
PHYSIOLOGY
3 credits
A lecture-laboratory study of the nervous system and its interaction with the muscular system of vertebrates. Two hours lecture, two hours laboratory.

BIO 308 (F)
METHODS IN BIOLOGICAL RESEARCH
3 credits
A laboratory course designed to give hands-on experience in proper use of laboratory equipment, care of laboratory animals, common histological and cytological techniques, tissue culture, use of radioisotopes in research and experimental design; for students interested in a research carcer. One hour lecture, four hours laboratory. Permission of Cl air required.

BIO 310 (S)
GENETICS
3 credits
An introduction to genetics at the molccular, cytological and organisınal level. Iucluded are the thorough coverage of Mendelian and other basic transmission genetics phenomena in the light of our knowledge of DNA and cell structure and function; Mutation and Mutogenesis; and an introduction to Recombinant DNA.

Two hours lecture, two hours laboratory.
BIO 312 (F 1994, 1996)

## RADIOBIOLOGY

3 credits
Theory of the production, detection, and measurement of ionizing radiations; use of ionizing radiations in research and medicine; effect of ionizing radiations on life forms. Two hours lecture, two hours laboratory.

## BIO 314 (S)

BIOMETRICS
3 credits
Analysis of experiments and research data in quantitative biology. Descriptive and inferential statistics, including: probability distributions, analysis of variance, regression and correlation. Three hours lecture.

BIO 315 (S 1995, 1997)
PLANT PHYSIOLOGY
3 credits
Metabolic and physical processes of plants. Emphasis on photosynthesis, photorespiration, mineral nutrition, transpiration, phloem transport, intermediary metabolism, and hormonal activity. Recommended prerequisite: BIO 203. Two hours lecture, two hours laboratory.

BIO 316 (S 1996)

## PLANT ANATOMY

## 3 credits

Structure of plant tissues and organs, particularly those of higher vascular plants. Emphasis on vegetative organs, but reproductive organs are discussed. Structure correlated with function and/or habitat. Recommended prerequisite: BIO 203. Two hours lecture, two hours laboratory.

BIO 317 (S 1995, 1997) INVERTEBRATE ZOOLOGY 4 credits
Life processes, phylogenetic advances, and basic classification of the major pre-chordate pliyla with cmplasis on their evolution and ecology. 'Threc hours lecture, two lıours laboratory.

BIO 318 (F 1994, 1996)
EVOLUTION
3 credits
A presentation and analysis of the evidence for the evolution of life. Major topics include the origin of life and cellular organelles as well as the development of the diversity of life present today. Heavy emphasis on the ideas of Charles Darwin as expanded and modified by evidence from modern population genetics, cytogenetics and molecular biology. Three hours lecture.

BIO 3 I9 (S 1994, 1996)
THE PLANT KINGDOM

## 4 credits

Functional anatomy, phylogeny, and basic systematics of non-vascular and vascular plants. Three hours lecture, two hours laboratory.

BIO 325 (F, S)

## MOLECULAR BIOLOGY

 3 creditsA survey course that will examine the basic concepts of molecular biology. Topics include mechanisms and regulation of DNA replication, transcription and translation, recombinant DNA technology, molecular aspects of gene interaction and recombination, cellular transformation, and the molecular biology of the nervous and immune systems. Three hours lecture (taken alone or concurrently with BIO 326).

BIO 326 (S)
MOLECULAR BIOLOGY

## LABORATORY

1 credit
This course focuses on exercises that emplasize the basic techniques currently utilized in molecular biology. Students will isolate, clone, and characterize a bacterial gene. Laboratory techniques will include gel electrophoresis, restriction cndonuclease digestion analysis, nucleic acid purification and identification, genetic recombination, molccular cloning, recombinant selection, and ELISA.

Three hours laboratory.
Corequisite or prerequisite: BIO 325.

BIO 400 (F)
MARINE BIOLOGY
3 credits
A contemporary view of the dynamics establishing community structure in pelagic, estuarine, mangrove tidepool, coral reef, hydrothermal vent, and intertidal ecosystems. Structural, functional, behavioral, and adaptive modifications of marine organisms will be examined. Three hours lecture; field trip(s) typically included.

## BIO 401 (F) <br> TAXONOMY OF THE SEED <br> PLANTS

3 credits
A survey of seed forming plants with emphasis on flowering plants. Lectures emphasize the principles of identification, classification, systematics as well as economic importance of selected families of seed plants. Two hours lecture, two hours laboratory.

BlO 402 (F)
CELL BIOLOGY
3 credits
Physical properties, chemical structure, and metabolism of simple and specialized cells; recent advances in the techniques of cell culture and investigation. Two hours lecture, two hours laboratory.

BIO 403 (F)
PRINCIPLES OF ECOLOGY

## 3 credits

Basic concepts of ecology and a
broad introduction to overall biosphere functioning. Major topics include energy flows; nutrient cycles; environmental conditions and their importance; Plants and animals at the individual, population and community level; and the overall functioning and development of the major terrestrial and aquatic ecosystems. Three hours lecture.

B1O 404 (S 1994, 1996)
FIELD ECOLOGY
3 credits
Project laboratory at La Salle Penllyn Biostation; supervised student research projects in terrestrial and aquatic ecology.
Prerequisite: BIO 403. Six hours laboratory and field work.

BIO 405 (S)
HISTOLOGY
4 credits
An examination of the minute and ultra structure of mammalian primary tissues together with their functional relationships in the formation of major organ systems; histological basis of function is stressed. Three hours lecture, three hours laboratory.

B1O 406 (S)
DEVELOPMENTAL BIOLOGY 3 credits
The molecular and genetic analysis of development and differentiation. Some descriptive morphogenesis is considered. Two hours lecture, two hours lab.

B1O 407 (F)-408 (S) BIOLOGICAL/PHYSICAL CHEMISTRY
48 credits
The principles of physical chemistry as they apply to biochemical reactions and the principal biochemical species and reaction sequences, the role of these reactions in specific biological functions. Laboratory application of techniques of analytical chemistry to analysis of biochemical reactivity. Three hours lecture, three hours laboratory; two terms.
BIO 412 (F 1995)
BIOCHEMISTRY
4 credits
The course demonstrates the principles of basic biochemistry while focusing on the interrelationships between those biochemical pathways which provide energy and those which provide the basic molecular species for synthesis. Topics include bioenergetics, low molecular weight
biosynthesis, enzyme function and kinetics, metabolic control. Three hours lecture, three hours laboratory.

B1O 470 (F, S)
SPECIAL TOPICS IN BIOLOGY 3 credits
Periodically, a course will be offered that deals in detail with a topic of interest in current biological research. Students may be asked to write library research paper(s) and present a seminar.

BIO 480-481 (F, S)
BIOLOGICAL RESEARCH 3 credits
For election by qualified students contemplating advanced studies. Intended to provide actual research experience under staff supervision. Permission of Chair required. Hours to be arranged.

## CENTRAL AND EASTERN EUROPEAN STUDIES MINOR

Directed by: Leo D. Rudnytzky, Ph.D., Foreign Languages and Literatures Department

## REQUIREMENTS

Component I-Foreign Language
Competency
A student may demonstrate this competency and fulfill the requirements through one of the following:

- Fulfillment of the University's two-course sequence in either German or Russian. (This student is required to roster four field courses.)
- Fulfillment of the University's three-course sequence in either German or Russian. (This student is required to roster three field courses.)
- Participation in the German or Russian major programs. (This student is required to roster six field courses.)
- Native fluency in an Eastern European language within the scope of our focus. (This student is required to roster six field courses.)
Component II-Field Information To complete the minor, a student must select the appropriate number of courses (two of which must be at the 300 or 400 level) from the
following list:
- ECN 23I, 412
- GER 320
- HIS 240, 248, 452
- PHL 305
- POL 240, 322
- RUS 241-242, 245-246
- SLA 320
- Special Topics (as approved by the Director)


## CHEMISTRY/ BIOCHEMISTRY

## $\overline{\text { FACULTY }}$

George M. Shalhoub, Ph.D., Chair Associate Professors: Cichowicz, Jones, Shalhoub, Straub Assistant Professors: Price,
St. Raymond
Lecturer: Polek
FOUNDATION COURSE
CIIM 150

## REQUIREMENTS

Required for Major in Chemistry:

## 15 courses

- CHIM 111-112, 201-202, 212, 301-302, 311, 101, 103
- MTH 120, 221 (It is strongly suggested that chemistry majors begin with Mathematics 120 as freshmen.)
- PHY 105-106


## Required for Major in

Biochemistry: 15 courses

- Requirements are identical to those for chemistry major, except that CHM 409 is substituted for CHM 401.

The department suggests that all majors have at least 400 hours of lecture and 500 hours of laboratory work, CSC 152, a second computer-based course, and/or a reading knowledge of a foreign language. Advanced work in chemistry and research experience are recommended. This additional work may qualify a major for accreditation by the American Chemical Society. The chemistry program is accredited by the American Chemical Society.

## COURSE DESCRIPTIONS

## CHM 111-112 <br> CENERAL CHEMISTRY

## $4-8$ credits

A general course based on physical principles; emphasis on elementary thermodynamics with applications to gases, solutions, heats of reaction, electrochemistry, ionic and non-ionic equilibria. Concepts of elementary quantum mechanics applied to spectral concepts and the theory of the chemical bond. Reaction kinetics applied to reaction mechanisms. Descriptive chemistry of the representative clements and transition metal complexes. Laboratory examines qualitative and quantitative aspects of chemistry. Three hours lecture, three hours laboratory.

CIIM 150 (F, S)
CONSUMER CIIEMISTRY
3 credits Foundation
A non-mathematical examination of the development of fact and theory in chensistry and slic utilization of
chemistry by society. Topics may include energy, pharmaceuticals, environmental effects, food additives, and synthetic materials. No prior knowledge of chemistry required.

## CHM 161 (F) <br> CHEMISTRY OF THE LIFE SCIENCES

4 credits
A terminal course for students who wish to obtain a general knowledge of chemistry with emphasis on the processes in the body and in nature. Descriptive and some quantitative principles discussed. Three hours lecture, three hours laboratory.

## CIIM 201-202

## ORGANIC CHEMISTRY

## $4-8$ credits

Chemistry of carbon compounds with emphasis on structure, stereochemistry, synthesis and reaction mechanisms. Application in allied fields. Laboratory introduces techniques involved in organic synthesis, analysis, and study of reaction mechanisms. Intended for majors in chemistry, biology, and all students pursuing careers in the health professions. Prerequisites: CHM II I-I I2. Three hours lecture, three hours laboratory; two terms.

CIIM 212 (305) (S) QUANTITATIVE ANALYSIS 4 credits
Neutralization, oxidation-reduction, chemical equilibria, colorimetry, and the methods of quantitative chemical analysis. Thorough training in volumetric, gravimetric, and colorimetric techniques. Two hours lecture, six hours laboratory. Prerequisitc: CHM 112.

## CIIM 301-302

## PHYSICAL CHEMISTRY

## $4-8$ credics

Elementary principles of physical chemistry discussed and illustrated by suitable laboratory experiments. The ideal gas, real gases, liquids, solids, clementary thermodynamics, thermochemistry, solutions,
equilibria, kinetics, electromotive force, electrical conductivity, and chemical thermodynamics. Prerequisites: CHM 201-202, MTH 221. Three bours lecture, three hours laboratory; two terms.

## CHM 306 (S)

QUANTUM CHEMISTRY
3 credits
Quantum mechanics applied to the solution of some elementary systems. Discussion of chemical bonding. Introduction to elementary statistical mechanics using results derived from quantum mechanics. Prerequisites: CHM 301-302.

## CHM 308 (S)

## BIOCHEMISTRY I

4 credits
The chemistry of carbohydrates, fats, proteins, vitamins, enzymes, and hormones; emphasis on their roles in biochemical processes. Laboratory work illustrates common techniques used to prepare, identify, and assay biochemical materials. Prerequisites: CHM 201-202, 301. Three hours lecture, three hours laboratory.
CHM 311 (402) (F)

## INSTRUMENTAL ANALYSIS

## 4 credits

Theory and practice of physical measuring instruments with particular attention to modern trends in analytical chemistry. Prerequisites: CHM 30I, 212. Two hours lecture, six hours laboratory.

## CHM 401 (F)

ORGANIC LABORATORY

## METHODS

4 credits
A course in current methods of organic synthesis with emphasis on the separation and identification of reaction products. A one-hour lecture per week devoted to advanced spectral methods as applied to structure determination. One hour lecture, seven hours laboratory per week. Prerequisites: CHM 20I-202.

CHM 403 (F)
ADVANCED INORGANIC

## CHEMISTRY

4 credits
Theoretical aspects of chemical bonding, descriptive chemistry trends relative to the periodic table, molecular structure and symmetry of molecules, and general discussion of the transition metals, their complex ions, and their organometallic chemistry. Prerequisites: CHM 201-202, 301-302. Three hours lecture, three hours laboratory.

## CIIM 404 (S)

## ADVANCED ORGANIC TOPICS

## 3 credits

Designed to extend the knowledge of organic chemistry; emphasis on those topics not fully developed in the elementary course. An introduction to the literature of chemistry is also included. Prerequisites: CHM 20I-202, 30I. Three hours of lecture.

## CIIM 409 (F)

BIOCHEMISTRY II
4 credits
The storage, transmission and expression of genetic information, recombinant DNA methodology, and physiological processes at the molecular level will be explored. Laboratory work will illustrate techniques necessary to acquire information presented in lecture. Prerequisite: CHM 308.

CHM 450 (F, S, Summer)
COOPERATIVE CHEMICAL EDUCATION
3 credits
A cooperative experience between the chemistry department and chemical industry to provide on-the-job training in fields relating to chemistry and industry. On approval of the Chair only.
CHM 470 ( $\mathrm{F}, \mathrm{S}$ )
SPECIAL TOPICS
3 credits
Courses in "Polymers and Polymer
Coatings" and in "Chemical
Marketing" are offered as Special

Topics in the Evening Division and are open to day students.

## ClIM 480 and/or 481 ( $\mathrm{F}, \mathrm{S}$ ) <br> CHEMICAL RESEARCH

4-8 credits
Individual laboratory or theoretical work under supervision of a staff member. Restricted to chemistry majors. Hours to be arranged.

## COMMUNICATION

## $\overline{\text { FACULTY }}$

Gerard F. Molyneaux, F.S.C., Ph.D., Chair Associate Professors: Goedkoop, Molyneaux, Wine
Assistant Professors: Hall, Kirk,
MacLeod, Schoening, Texter
Lecturers: Asch, Barbera, Fuller, Lyons, MacLeod, O'Neill, Perrello, Templeton

## CORE COURSES

Approved courses for Core II:
COM 202, 204, and 254.

## REQUIREMENTS

Required for Major in
Communication: 15 courses

## COMMUNICATION CORE:

(6 courses)

- COM 201, 202, 203, 204, 205, 254.


## TRACKS: (5 courses)

- Human Communication Track: COM 312, 315, 316, 311 or 313 or 314, 410.
- Mass Communication Track: COM 301, 302 or 303, 304, 305, 404.
- Public Relations Track: COM 306, 307, 312, 316, 407.
- Writing Track: At least three from COM 206, 302, 303, 306. The remaining one or two from ENG 303, 307, 318, 409, 410.


## ELECTIVES: (3 courses)

- Three Communication electives, at least two of which must be from other Communication tracks.


## CAPSTONE COURSE:

- COM 400


## COURSE DESCRIPTIONS

## Communication Core

COM 201 (F, S)
INTRODUCTION TO MASS
MEDIA
3 credits
Investigation of newspapers, magazines, radio, television, and film as mass media. Influence of the medium on content. Internal and external efforts at regulation.
COM 202 (F, S)
INTERPERSONAL COMMUNICATION
3 credits
Core II
Through lectures, demonstrations, and laboratory experiences, students learn current theories of communication and improve their skills in communicating personally and through media. Group and individual analysis of the dynamics of communication processes.

COM 203 ( $\mathrm{F}, \mathrm{S}$ )
AUDIO/VIDEO PRODUCTION: THEORY AND PRACTICE
3 credits
Theory of sound and visual image recording. Planning and production practices in composition of audio and video messages.

## COM 204 (F, S)

## FILM AS ART

3 credits
Analyses of the development of film as a medium. Consideration of various film genres and styles and of critical approaches to a filen. Screcning of outstanding Amcrican and foreign films.

COM 205 ( $\mathrm{F}, \mathrm{S}$ )
COMMUNICATION AND RHETORICAL THEORY 3 credits
This course explores communication theories and research methods. Students learn the theoretical underpinnings of Mass Communication, Public
Relations, and Human
Communication.
COM 254 ( $\mathrm{F}, \mathrm{S}$ )
PUBLIC SPEAKING 3 credits

Core II
Students develop skills in effective research, organization, presentation, and analysis of various types of speeches.

## AREAS OF CONCENTRATION

## Human Communication <br> Track

COM 3 II ( $\mathrm{F}, \mathrm{S}$ )
FAMILY COMMUNICATION
3 credits
Course examines the theory and practice of families, and focuses on healthy and unhealthy patterns of communication. Aside from examination of personal family experiences, course explores skills for promoting satisfying communication.

COM 312 (F, S) PERSUASION, PROPAGANDA, AND THE MEDIA

## 3 credits

Examines persuasion from the perspective of the humanistic and social science traditions. It explores both theory and practice with the goal of enlancing the student's abilities as consumer and practicioner.

COM 313 (F)
BUSINESS AND PROFESSIONAL COMMUNICATION
3 credits
Develops maderstanding of underlying communication processes
in business and professional settings. Communication activities include: employment interviews, oral reports, group discussions, and proposal presentations.
COM 314 ( F ) SEX ROLES AND COMMUNICATION 3 credits
Focuses on communication between sexes. Examines research on gender and communication in interpersonal, public, and mass media contexts.

COM 315 (S)
RHETORICAL CRITICISM

## 3 credits

Examines the history, methods and practice of rhetorical criticism, surveying critical theories and orientations as well as a variety of speeches and persuasive artifacts. Students will practice and demonstrate their understanding through written essays.

COM 316 (S)
ADVANCED COMMUNICATION THEORY AND RESEARCH 3 credits
This course examines advanced comnunication theories, methods and research. Students learn how to interpret and conduct
communication research.

## COM 410 (F, S)

HUMAN COMMUNICATION
SEMINARS
3 credits
Designed to expose students to theories of human communication in specific arcas of research. Among topics offered are: organizational communication, fanily communication, persuasion theory, communication theories and methods, intercultural communication, philosophy of communication, and gender commmication.

## Mass Communication Track

COM 301 (F, S)
BROADCASTING IN AMERICA 3 credits
A study of the structure of broadcasting in America and of its interaction with society.
Prerequisite: COM 201.
COM 302 (F, S)
BROADCAST NEWSWRITING

## 3 credits

Introduction to and application of newswriting for radio and television, including hard news features and documentary formats.

COM 303 (F, S)
SCRIPTWRITING

## 3 credits

Introduction to and application of scriptwriting techniques in formats appropriate for the media of radio, television, and film.

COM 304 (F, S) RADIO PRODUCTION
3 credits
Introduces students to the fundamental theories and practices of radio production. Topics include: arranging the programming day; scripting news, dramatic and commercial presentations; training of personnel for actual programming.
Prerequisite: COM 203.
COM 305 (F, S)
TELEVISION PRODUCTION

## 3 credits

Introduction to the planning, production, and editing methods of television. Includes pre-production scripting and participation in production of videotaped television shows. Prerequisite: COM 203.

COM 403 ( $\mathrm{F}, \mathrm{S}$ )
FILM SEMINARS
3 credits
In-depth study of film as art and as cultural document. Topics vary and include: American Film Comedy, Films of Alfred Hitchcock, The New York Films:

Woody Allen and Michael Scorsese, Film Noir, The Vietnam War Films, and others.

COM 404 ( $\mathrm{F}, \mathrm{S}$ )
MASS COMMUNICATION SEMINARS
3 credits
Communication law, mass communication effects, and broadcast case studies are offered as separate mass communication seminar topics. Junior and Senior students may select one or more of these topics for their seminar course(s).

## Public Relations Track

COM 306 ( $\mathrm{F}, \mathrm{S}$ )
PUBLIC RELATIONS AND ADVERTISING WRITING 3 credits
How to write for advertising and public relations campaigns. The communication process, campaign strategy, communication research, and creativity are explored. Students prepare a total communication campaign, requiring oral and written presentations.

## COM 307 (F, S) PRINCIPLES OF PUBLIC RELATIONS

3 credits
An introduction to the theory and practice of Public Relations.
Emphasis on Public Relations tasks and responsibilities, goals and objectives, decision-making, and evaluation.

COM 312 ( $\mathrm{F}, \mathrm{S}$ )
PERSUASION, PROPAGANDA, AND THE MEDIA
3 credits
Examines persuasion from the perspective of the humanistic and social science traditions. It explores both theory and practice with the goal of enhancing the student's abilities as consumer and practitioner.

COM 316 (S)
ADVANCED COMMUNICATION THEORY AND RESEARCH 3 credits
This course examines advanced communication theories, methods and research. Students learn how to interpret and conduct communication research.

COM 407 (F, S)
PUBLIC RELATIONS SEMINAR 3 credits
Advanced study of public relations theory and research. Topics include: Public Opinion and Public Relations Research, Public
Relations Case Studies, Campaigns, and Management. Prerequisites: Junior standing and above, COM 306, 307, 312.

## Writing Track

COM 206 (F, S)
FUNDAMENTALS OF
JOURNALISM
3 credits
Reporting and interviewing techniques, newswriting, copy editing and headline writing, the editorial, the feature story, newspaper makeup and design, libel, and the responsibility of the press. Two hours lecture, one hour of field assignment weekly.

COM 302 (F, S)
BROADCAST NEWSWRITING 3 credits
Introduction to and application of newswriting for radio and television, including hard news
features and documentary formats.
COM 303 ( $\mathrm{F}, \mathrm{S}$ )
SCRIPTWRITING
3 credits
Introduction to and application of scriptwriting techniques in formats appropriate for the media of radio, television, and film.

## Arts and Sciences

Areas of Study

COM 306 (F, S)
PUBLIC RELATIONS AND ADVERTISING WRITING

## 3 credits

How to write copy for print advertising and press releases, with an emphasis on creativity. The marketing process, campaign strategy, and advertising research. Preparation of a total campaign, requiring oral and written presentations in either advertising or public relations.

## Capstone Course

## COM 400 (F, S)

## COMMUNICATION ETHICS

 3 creditsProvides students with an overview of ethical standards relevant to social behavior and an in-depth study of contemporary ethical issues facing communicators. Concepts of truth, confidentiality, conflict of interest, social justice and other issues will be studied. Prerequisite: Junior standing and above.

## Other Communication Courses: May be taken as University Free Electives.

COM 450
COOPERATIVE EDUCATION
3 credits
Consult with Department Chair. Prerequisite: Junior or Senior standing.

COM 461 ( $F$, S)
INTERNSHIP
3 or 6 credits
Students may intern at advertising, public relations, publisling and broadcasting companics. Working approximatcly 15 hours a wcek under professional supervision, they learn how to apply their education to the everyday demands of these positions.

Required: Junior or Senior standing, 2.75 grade point average, and recommendation of the Chair.

COM 462 (F, S)
INTERNSHIP
6 credits
Intern will work approximately 25-30 hours per week.

## COMPUTER SCIENCE

(See Mathematical Sciences.)

## CRIMINAL

 JUSTICE(See Sociology, Social Work, and Criminal Justice.)

## ECONOMICS

## FACULTY

Richard T. Geruson, Ph.D., Chair
Professors: Kane, Mooney
Associate Professors: Duffy, George, Geruson, Grady, Robison Assistant Professors: Cairo, Mshomba, Paulin, Ratkus

## FOUNDATION COURSE

ECN 150

## CORE COURSES

Approved courses for Core II: ECN I50, 20I, 203, 330, 33I. You may choose one or two cconomics courses to fulfill Core II requirements.

## REQUIREMENTS

Required for Major in Economics:
15 courses

- ECN 150, 201, 202, 203, 213 , $214,303,304,361$ or 412,411 , 480
- MTH 115-116 (MTH 113, 120, 240 recommended in preparation for graduate school)
- Two courses in the social sciences (psychology, political science, or sociology)


## COURSE DESCRIPTIONS

ECN 150 (F, S)
INTRODUCTORY MACROECONOMICS
3 credits Foundation/Core II This course begins with an overview of the methods and content of economics. Focus then turns to the U.S. Macroeconomy. Major issues introduced include gross national product, inflation, unemployment, foreign trade.

## ECN 201 (F, S)

INTRODUCTORY MICROECONOMICS
3 credits
Core II
This course discusses pricing and output determination in competitive and less than competitive markets. Topics include demand, costs of production, market structures, resource allocation, and efficiency.
Other topics covered are international trade and finance, and economic growth and development. Prerequisite: ECN 150.

ECN 202 (F)
MONETARY ECONOMICS
3 credits
A study of the monetary and financial system of the U.S. economy. Emplasis on the importance of the money supply, the demand for money, and interest rates, along with more recent developments in the study of monctary variables. Instruments of monetary policy discussed and
evaluated in the context of contemporary economic theory. The position of the American financial system in the international financial network is also considered. Prerequisites: ECN 150, 201.

ECN 203 (S)
AMERICAN ECONOMIC HISTORY
3 credits Core II
Describes and analyzes long-term economic growth and development since colonization. Stresses changes in demographic, technological, and institutional factors as they interact with the market system. Applies basic economic concepts and theories of growth to significant historical questions.

## ECN 213 (F) <br> ECONOMICS AND BUSINESS STATISTICS

3 credits
Basic statistical methods used in the analysis of business and economic decision problems. Emphasis on valid applicability of techniques, sound interpretation of statistical results, as well as successful execution of statistical methods. Topics include: descriptive statistics, both graphical and numerical; probability and probability distributions; sampling distributions; statistical estimation and hypothesis testing; and simple regression and correlation. Students will be introduced to a microcomputer statistical software package.
ECN 214 (S)
INTRODUCTION TO ECONOMETRICS
3 credits
This course focuses on a statistical technique known as regression analysis. Students will learn how to put together single equation and simultaneous equation regression models that will enable them to explain or predict actual economic and business phenomena. Students will also learn how to access existing public databases and how to utilize statistical software to
estimate regression models. Prerequisite: ECN 213 or QNT 213 or permission of the Department Chair.

ECN 270, 370, 470 (F, S)
SPECIAL TOPICS IN ECONOMICS
3 credits
Topics include: Labor Markets, Employment and Wages; Women in the Economy; European Economic Community. Prerequisite: permission of instructor.

ECN 301 ( $\mathrm{F}, \mathrm{S}$ )
LABOR ECONOMICS
3 credits
Analyzes the determination of wages, employment, and working conditions. Focus is on neoclassical, institutional, and Marxist theories of the labor market and the implications of each for public policy. Prerequisite:
ECN 150.
ECN 302 ( $\mathrm{F}, \mathrm{S}$ )
MANAGERIAL ECONOMICS
3 credits
This course covers the applied economic theory of the firm. The emphasis throughout is on the elements of economics most useful in business decision making. Topics include forms of competitive behavior, uses of marginal cost analysis, pricing techniques, profit and demand measurement, and forecasting. Prerequisites: ECN 150 and 201; ECN 2I3, QNT 2I3, MTH 115, 116; CSC 151.
ECN 303 (F)

## INTERMEDIATE

MICROECONOMIC THEORY
4 credits
This course examines the inter-relationships among consumers, firms, and industries as these microeconomic units interact to resolve pricing and output questions in various types of product and resource markets. Central topics include the theory of consumer behavior, production theory and related costs of
production, profit maximizing principles for firms in various markets, product market structures, resource pricing, general equilibrium analysis, and welfare economics. Prerequisites: ECN 150, 201; MTH 115, 116 or equivalent.

ECN 304 (S)
INTERMEDLATE
MACROECONOMIC THEORY 4 credits
This course studies the main descriptive, theoretical, and policy aspects of issues of national economic concern such as unemployment, inflation, and balance of payments equilibrium.
The course notes the history of both macroeconomic fluctuations in the U.S. and efforts at utilizing macroeconomic stabilization policies. Prerequisites: ECN 150; MTH 115, 116 or equivalent.

ECN 330 (S)

## THIRD WORLD POVERTY AND ECONOMIC DEVELOPMENT 3 credits Core III

This course describes and documents the poverty besetting the majority of humankind, and analyzes its causes, utilizing economic concepts and theories in conjunction with social, political, cultural, religious, and philosophical factors. Prospects for the future and policies aiming to promote development are also examined. Prerequisite: ECN 150.

ECN 331 ( $\mathrm{F}, \mathrm{S}$ )
INTERNATIONAL ECONOMICS 3 credits Core III An introduction to the theory of international trade. Topics include specialization and the gains from trade, tariffs and protectionist policies, trade imbalances, foreign exchange markets, evolution of international monetary systems, and the role of international institutions. Prerequisites: ECN 150, 201.

ECN 341 (F)
APPLIED ECONOMETRIC RESEARCH
3 credits
This course focuses on the application, rather than theoretical development, of regression analysis. While some time will be spent introducing and reviewing statistical techniques, the majority of the course is devoted to specification, estimation, interpretation, and evaluation of regression models. Additional emphasis is placed on using regression models to forecast. Prerequisites: ECN 150 and 201, ECN 214 or QNT 215, or permission of Department Chair.

## ECN 351 (S)

ENVIRONMENTAL ECONOMICS 3 credits
Provides an introduction to the tradeoffs (costs versus benefits) associated with environmental issues. Evaluating tradeoffs requires an examination of the magnitude or current environmental problems and some consideration of how to measure the costs and benefits of regulatory changes. Approximately half the course will be devoted to examining the current regulations, how the regulatory process works, and the economic implications of the regulations. Prerequisite: ECN 150 or permission.

ECN 361 (F)
COMPARATIVE ECONOMIC SYSTEMS
3 credits
This course compares and contrasts various market, planned, and mixed economics with respect to
(1) the state goals of each system,
(2) the means for achieving those goals, and (3) the cvaluative criteria used to judge the success of each system. Economies representative of these varions systems will be discussed. P'rerequisite: ECN 150.

## ECN 404 (F)

## PUBLIC FINANCE

3 credits
An analysis of the revenue and expenditure activity of government with particular emphasis on the rationale of Federal government activity. Also considered are the issues of distribution, efficiency, equity, and stability in the economy. Prerequisites: ECN 150, 201.

## ECN 411 (F) <br> HISTORY OF ECONOMIC THOUCHT <br> 3 credits

The development of economics as a coherent analytical discipline through a detailed historical study of its main schools and contributors, including: the Physiocrats; the Classical Economists (especially Jevons, Walras, and Clark); Marshall; Keynes. Lesser figures treated as time allows. Attention throughout to the changing philosophical and cultural background of economic thought. Prerequisites: ECN 150, 201.

## ECN 412 (S) <br> MODERN ECONOMIC <br> THOUGHT <br> 3 credits

Explores the intersection of economics with social and political philosophy through the writings of leading 20th century American and European economists and social theorists, including Veblen, Keynes, Schumpeter, Mises, Hayek, Friedman, Galbraith, Rawls, and others. Emphasis on the perennial questions that market capitalism and authoritarian centralism compel the thoughtful person to confront, such as private wants vs. public needs; the efficiency-equity tradcoff; cconomic progress vs. economic security; the impulse of self-interest vs. the need for social coluesion; the drive for expanded personal freedom vs. the perceived need for government regulation.
Themes treated will vary from year to year. Extensive readings from
original texts. Prerequisites: ECN 150, 201.

ECN 480 (F)
SEMINAR
3 credits
This course is intended to be a capstone course for economics majors, one that aids the student in integrating the material from diverse economic courses. Stressed are techniques for the preparation of written research reports. Students will ordinarily deliver to the seminar an oral presentation of their research results. Prerequisite: Senior standing in economics.

ECN 489 (F, S) ECONOMICS INTERNSHIP 3 credits
Placement arranged by Department or individuals. Intern will work approximately 15-20 hours per week.

## EDUCATION

## $\overline{\text { FACULTY }}$

Lawrence Colhocker, F.S.C., Ed.D., Chair
Maryanne Bednar, Ph.D., Director of
Elementary and Special Education
Francis Ryan, Ed.D., Director of
Secondary Education
Gary Clabaugh, Ed.D., Director of
Graduate Education
Professor: Clabaugh
Associate Professors: Bangs, Feden,
Lambert, Schoen, Vogel
Assistant Professors: Bednar,
Collıocker, Freeman, Ryan,
Sentner, J. Sweeder
Lecturers: Heath, Klein, M. Sweeder

## CORE COURSES

Approved courses for Core II:
EDC 201, 203.

## REQUIREMENTS

La Salle Uuiversity offers teacher preparation programs in secondary,
elementary, and special education (see below). These programs are approved by the Pennsylvania Department of Education and lead to a B.A. degree and, upon successful completion, recommendation for Instructional I certification in the area(s) pursued by the certification candidate.

Students may declare a major in education in the Freshman year. Because of the nature of the requirements for certification, declaring the major as early as possible is highly recommended.

Application for admission to candidacy for certification is normally made at the end of the Freshman year. The policies and procedures for applying for admission to candidacy and for advancement through the various stages of candidacy are contained in the Department of Education Student Handbook. All education majors are responsible for knowing and adhering to these policies and procedures for candidacy.

Before being accepted into the Professional Semester (secondary education majors) or the Professional Year (elementary and special education majors) students must be recommended by the Education Department faculty. Recommendations are predicated upon successful completion of all course requirements with the indexes and grades specified in the Student Handbook and on the fitness of the individual for the professional position he or she has selected.

Upon successful completion of the Professional Semester or the Professional Year, a student may apply for Instructional I certification. State certification regulations require that an applicant for a teacher's certificate be known by the preparing institution as a person of good moral character, possessing personal qualities, professional knowledge, and pedagogical competencies which warrant issuance of a teacher's certificate. In addition, all applicants must
meet certain physical and medical standards to obtain an lnstructional I certificate to teach in the public schools of Pennsylvania.

Anyone applying for an Instructional I certificate is required by Pennsylvania State Board regulations to pass the appropriate sections of the National Teachers Exams. Information about the National Teachers Exams is available in the Department of Education office (Olney 254). Other states may also require prospective teachers to take the National Teacher Exams. In accordance with the provisions of Act 34 of 1985 of the Commonwealth of Pennsylvania, applicants for an Instructional I certificate in the Commonwealth must undergo background checks. For residents of the Commonwealth, a check must be performed by the Pennsylvania State Police. Non-resident applicants will require a check by the FBI. For more information about these requirements, see the appropriate program director. Further information about applying for certification is contained in the Department of Education Student Handbook and the Student Teaching Handbook. All education majors are responsible for knowing and adhering to the policies and procedures for applying for certification.

Students not majoring in education are invited to register for education courses that carry no prerequisites. Students plaming to minor in education must see Brother Lawrence Colhocker, Chair (Olney Hall 254).

Requirements for Major in Secondary Education:

- EDC 101, 203, 204, 304, 306, 401, 470
- EDC 218 (required of Comprehensive Social Studies and Earth and Space Science majors)
- Courses designated for associated discipline (See Education Department Student Handbook and area advisors for specific courses.)
La Salle University offers a program of studies that is approved by the Pennsylvania Department of Education and leads to recommendation for Instructional I certification in Comprehensive Social Studies, Communications (Non-Print media), English, Earth and Space Sciences, Biology, Chemistry, Physics, Mathematics, French, German, Italian, Latin and Spanish. (Foreign language students are certified to teach K-12.) For further information, see Dr. Francis Ryan, Director of Secondary Education (Olney Hall 259).


## Requirements for Major in

 Elementary and Special Education:- EDC 101, 201, 203, 204, 217, $218,301,302,304,306,343$, 344, 474, 475, 476, 477
- ECN 150, MUS 101, ART 101, HIS 101, 201 or 301 La Salle University offers a combined program of studies that is approved by the Pennsylvania Department of Education. Successful completion of the required course of studies leads to recommendation for Instructional I certification as an elementary educator, a teacher of the mentally and/or physically handicapped (K-12), or both. The mentally and/or physically handicapped certificate enables successful graduates to teach individuals with mental retardation, pervasive developmental disorders, serious emotional disturbance, neurological impairment, specific learning disability, and physical disability. The elementary certificate allows graduates to teach non-handicapped students in grades K-6. All elementary and special education majors are required to complete a full year of student teaching. All elementary and special education majors must
meet with a department faculty member during each preregistration period throughout the entire four-year program. This insures that all students are following the prescribed sequence of courses leading to a degree and to certification. For further information, see Dr. Maryanne Bednar, Director of Elementary and Special Education (Olney Hall 251).


## Requirements for

Religion-Education:

- EDC 101, 203, 204, 304, 306, 401, 470
- Courses designated by the Religion Department.
This program has been designed for those students who wish to teach religion in the secondary school. Because religion is not an accredited subject in any state, no Pennsylvania Instructional certificate can be issued.

Requirements for Master of Arts in Education:
See Dr. Gary Clabaugh, Director of Graduate Education
(Administration Building 206).
COURSE DESCRIPTIONS

EDC IOI (F, S)
THE ROLE OF THE
DEVELOPMENTALLY-ORIENTED TEACHER
3 credits
A field-based introduction to the various roles teachers play in American education. Reflective tcaching experionces. Also highlights current issucs in cducation and outlines certification practices and procedures. Field experience required (two hours each week). Open to freslmen and sophomores only.

## EDC 201 (F, S)

HUMAN EXCEPTIONALITY 3 credits Core II A study of human exceptionality, which is actually a study of being luman. Examines methods used to label people, reasons why we label,
and effects that labeling may have on a person, all from a multi-disciplinary perspective. Each area of exceptionality is defined and studied in terms of characteristics, causes, prevention, and intervention strategies.

EDC 203 (F, S)
EDUCATIONAL PSYCHOLOGY I: LEARNING AND DEVELOPMENT 3 credits Core II
Study of the nature and scope of educational psychology as well as basic principles and terminology that constitute educational research. The student will study basic developmental theory with an emphasis on the cognitive, moral, and social aspects. After identifying the major types and levels of learning, the course will explore the topic from the behavioral, cognitive structuralist, and information processing points of view. Finally, the course will treat the major distinctions and definitions of motivation theory. Througlsout, the course will seek to adapt developmental, learning, and motivation theories to instructional settings.
EDC 204 (F, S) EDUCATIONAL PSYCHOLOGY
II: CURRICULAR AND
INSTRUCTIONAL
APPLICATIONS
3 credits
Assuming the student's knowledge of human development and learning theory, this course focuses on instructional applications of that theory. Topics: instructional design, research on effective instruction, modes of instruction, the transfer and retention of learning, individual differences, learners with special characteristics, educational tests and measurements, and the evaluation of student performance. Ficld experience required (two hours each week). Prerequisite: EDC 203.

EDC 217 (F, S)
MATHEMATICS FOR TEACHERS 3 credits
Reflects contemporary beliefs about how children learn math and how teachers should present the subject to handicapped and non-handicapped learners. Focuses upon the development of underlying concepts, principles, generalizations, and applications through explorations, investigations, critical thinking, and communication.

## EDC 218 ( $\mathrm{F}, \mathrm{S}$ )

## GEOGRAPHY FOR TEACHERS

 3 creditsProvides educators with the knowledge base necessary to institute, update, and enrich geography curricula in the schools. Surveys the major research traditions of geography, including the earth science tradition, the culture-environment tradition, and the area analysis tradition.
Addresses geographical illiteracy. Promotes learning place name geography.
EDC 301 ( $\mathrm{F}, \mathrm{S}$ )
GENERAL METHODS AND CLASSROOM MANAGEMENT 3 credits
Emphasizes teaching learners within the framework of a developmentally-oriented, student-centered curriculum. Focuses on strategic instructional planning, teaching styles, presentation skills, questioning techniques, concept development, cooperative learning, and classroom management/discipline systems. This course has been designated as the writing emphasis course for elementary and special education majors. Field experience required (two hours each week). A major research paper will also be required. For clementary and special education majors only. Prercquisites: junior standing and acceptance into candidacy for certification, or permission of the Chair.

EDC 302 (F, S)
INSTRUCTIONAL MEDIA AND TECHNOLOGY

## 3 credits

Focuses on helping prospective teachers incorporate the modern technologies of instruction into their classroom practices. Emphasis on the impact of those technologies on human growth and development, and the ways that teachers can most effectively use them to bring about learning. Includes media design and production, still photography, television, and computers. Students will be required to purchase approximately $\$ 50.00$ in materials.
For elementary and special education majors only.

## EDC 304 (F, S) <br> DEVELOPMENTAL READING

 3 creditsProvides an understanding of the developmental nature of the reading process and its relationship to the other language arts. One section is directed to elementary and special education majors; another section is directed to secondary education majors. Prerequisites: junior standing and acceptance into candidacy for certification, or permission of the Chair.

EDC 306 ( $\mathrm{F}, \mathrm{S}$ )
FOUNDATIONS OF
EDUCATION: A DEVELOPMENTAL PERSPECTIVE 3 credits
Promotes disciplined analysis of the meaning and effects of educational institutions. Provides resources for developing a critical understanding of educational thought and practice. Encourages the development of value positions regarding education and schooling based on critical study. Supplies resources for the development of policy making perspectives and skills. Open to non-majors.

EDC 330 (F, S)

## THE EDUCATION OF URBAN POPULATIONS

3 credits
A multidisciplinary examination of the social, economic, political, and demographic aspects of urban populations as they affect formal education.

## EDC 343 ( $\mathrm{F}, \mathrm{S}$ ) <br> DEVELOPING AND ADJUSTING INSTRUCTION TO MEET THE NEEDS OF ELEMENTARY AND SPECIAL NEEDS LEARNERS

 3 creditsEnables elementary and special education teachers to use a cognitively-oriented developmental perspective in the design of instruction and to adjust instruction to accommodate the wide spectrum of needs commonly found among learners, both handicapped and non-handicapped, in a variety of instructional settings. Field experience required (two hours each week). Prerequisites: junior standing and acceptance into candidacy for certification, or permission of the Chair.

EDC 344 ( $\mathrm{F}, \mathrm{S}$ )
ASSESSING THE LEARNING ABILITIES AND DISABILITIES OF ELEMENTARY AND SPECIAL NEEDS LEARNERS 3 credits
Focuses on providing elementary and special education teachers with a thorough knowledge of standardized test scores and what they mean. In addition, helps teachers to gather curriculum-based assessment data in the areas of oral and written language, mathematics, social and affective behaviors, and perceptual motor performance and to develop interventions that may be necessary based on their data. Field experience required (two hours each week). Prerequisites: junior standing and acceptance into candidacy for certification, or permission of the Chair.

EDC 40I (F)
4
THE ART AND SCIENCE OF TEACHING
6 credits
Methods of teaching within the framework of student-centered rather than a teacher-centered environment. Focuses on elements of the educational process characterized by teacher involvement in decision-making: school-based curriculum development, instructional design, instructional methods, instructional materials and resources, educational technology, methods of evaluation, classroom management, adjusting curriculum and instruction to the needs of special populations. Emphasis placed upon the act of teaching as both art and science. Field experience required (two hours each week). Research paper also required. For secondary education majors only. This course has been designated as the writing emphasis course for secondary education majors.
Students will be rquired to purchase approximately $\$ 50.00$ in materials. Prerequisites: junior standing, acceptance into candidacy or permission of the Chair, and EDC I01, 203, 204, 304, and 306.

EDC 470 (S)
THE PRACTICE AND PROFESSION OF TEACHING 12 credits
Provides the secondary education major with full-time student teaching experience in a selected middle, junior or senior high school. Under the direction of a certified cooperating teacher and a university supervisor, the student teaches for fourteen weeks on a five-day-a-week, full-day schedule. The student teaching experience is supplemented by regularly scheduled tutorials held both on campus and at the placement site as well as a series of seminars on selected professional issues. The student is required to make formal application to the student teaching program. Prerequisites: senior
status and EDC 101, 203, 204, 304, 306 , and 401.

EDC 474 ( $\mathrm{F}, \mathrm{S}$ )
THE PROFESSIONAL YEAR-STUDENT TEACHING IN ELEMENTARY EDUCATION 12 credits
For one semester of the Professional Year, the elementary and special education major is engaged in student teaching in elementary education classrooms under the guidance of experienced teachers and a University supervisor. This experience takes place in either a public or private school in Philadelphia or the surrounding suburbs.
Prerequisites: Acceptance into the Professional Year by July 1 or November 1 (the date immediately preceding the semester in which student teaching will begin); completion of all required courses in accordance with the criteria outlined in the Department of Education Student Handbook; approval of the department faculty.

EDC 475 ( $\mathrm{F}, \mathrm{S}$ )
THE PROFESSIONAL
YEAR-TEACHING AND RESEARCH METHODS I 3 credits
Course content focuses on curient trends in educational research as they are applied to the art of teaching. Classroom management, mainstreaming, the integration of specific subject fields in the elementary curriculum, and decisions concerning instructional strategies are examined from the perspective of the teacher/rescarcher. Taken concurrently with EDC 474. Prerequisite: acceptance in EDC 474.

EDC 476 ( $\mathrm{F}, \mathrm{S}$ )
TlIE PROFESSIONAL
YEAR-STUDENT TEACHING IN SPECIAL EDUCATION 12 credits Flementary and special education majors engage in student teaching in special education classrooms servicing mildly, moderately, or scverely mentally and/or physically handicapped chiklecn. Student
teachers are supervised by University faculty and experienced teachers in private or public schools located in Philadelphia or surrounding suburbs. Prerequisites: acceptance into the Professional Year by July 1 or November 1 (the date immediately preceding the semester in which student teaching will begin); completion of all required courses in accordance with the criteria outlined in the Department of Education Student Handbook; approval of the faculty.

EDC 477 (F, S)
THE PROFESSIONAL
YEAR-TEACHING AND RESEARCH METHODS II 3 credits
Course modules focus on data-based instruction, behavior management and instructional strategies for moderately and severely handicapped children. Sessions addressing legal issues, community resources, and career planning are inserted to meet state standards, as well as programmatic and personal needs. Taken concurrently with EDC 476. Prerequisite: acceptance into EDC 476.

## ENGLISH

## FACULTY

James A. Butler, Ph.D., Chair Gabriel Fagan, F.S.C., Ph.D., Assistant Chair
Professors: Burke, Butler, Fallon, Harty, Keenan, Millard, Seydow Associate Professors: Fagan, Haberstroh, Hannum, Kleis, Merians, Mollenhauer, Smith, Soven Assistant Professors: Allen, Culjak, Kling, Molyncaux, Rao, White Instructor: Pelliam
Lecturers: Colsen, Cornelison, Craig, Grande, Lelır, Tiedeken,
Trachtenberg, Varane
Director; Sheckey Writing Center:
Robertson
Writer-in-Residence: Cronin

FOUNDATION COURSES

Writing
ENG 107, 108
Literature
ENG 150

## CORE COURSES

Approved sequences for Core I: First course: ENG 160 or 166. Second course: ENG 201, 202, or 203. Third course: If you took 201, select one from $313,320,321,335$, $340,341,371$. If you took 202, select one from $312,324,340,355$, 371. If you took 203, select one from $311,315,335,340,342,371$. Approved courses for Core II: ENG 160, 166, 201, 202, 203.

## REQUIREMENTS

Required for Major in English: 15 courses; Dual Majors: 10 courses. English majors may choose one of several "majors within the major": (1) Liberal Arts; (2) English- Education; (3) Writing; (4) Dual Majors, e.g., English-Accounting, English-Biology, English-Psychology. English majors may intern at advertising, public relations, publishing, and newspaper positions. See course description under ENG 461 for requirements.

The usual requirements for each program are as follows: (Exceptions require the approval of the Chair or Assistant Chair.)

- Liberal Arts: ENG 150; 201; 202; either 311 or 312 or 313 or 355 ; 320 ; 321; either 341 or 342 or 343; three period courses (choices include 422, 423, 426 through 432); 424; either 301 or 304 or 411 or 412; three English electives (not to include 107, 108, or more than one 160 -level course).
- English-Education: LIT 150 or ENG 371; ENG 201; 202; 203; 300 ; 304; 315; 320; 321; either 324 or 424 ; two American literature courses (choices include 341, 342, 343 ); cither 352 or COM 254 ; one advanced writing course (choices include 207, 303, 305, 306, 307,

318, 408, COM 206); either ENG 422 or 423 or 426 through 432; EDC 101, 203, 204, 304, 306, 401, 470.

- Writing: ENG 150; either 201 or 202 or 203; 318; 320; 321; 311 or 312 or 313 or 355 ; 424; either 302 or 304 ; either 341 or 342 or 343; four writing courses (choices include ENG 207, 303, $305,306,307,360,408,409$, 410,461 ; COM 206, 302 or 303, 306); two English electives (not to include 107, 108, or more than one 160 -level course).
- Dual Major: Individual program to be worked out in consultation with Chair or Assistant Chair.


## COURSE DESCRIPTIONS

ENG 107 (F, S)
COLLEGE WRITING I
3 credits
Foundation
Instruction in the writing process, in invention, and in necessary grammatical and organizational skills. Emphasis on writing from personal experience.

ENG 108 ( $\mathrm{F}, \mathrm{S}$ )
COLLEGE WRITING II

## 3 credits

Foundation
Instruction in planning and executing writing assignments common to all disciplines.
Emphasis on essays about readings and on the library paper.
Prerequisite: ENG 107 or waiver of it.

## ENG 150 ( $\mathrm{F}, \mathrm{S}$ )

THE LITERARY EXPERIENCE 3 credits Foundation
Reading, analysis, and discussion of the three prominent forms of literary expression-drama, poetry, and prose fiction-with attention to the cultural context of works written from the ancient world to the present. Short critical papers, some requiring use of secondary sources.

ENG 160 ( $\mathrm{F}, \mathrm{S}$ )
LITERATURE AND THE SEXES 3 credits Core I, II
Examines literature as a reflection of the different ways women and men are shaped by their society and of the ways they have related to each other in the private and public spheres. Short critical papers.

## ENG 166 ( $\mathrm{F}, \mathrm{S}$ ) <br> AMERICAN DREAMS AND AMERICAN NIGHTMARES

 3 creditsCore I, II
A study of the literary expression of the pioneer "dreams" of progress and freedom, and the "nightmares" they became in the face of war, poverty, discrimination, and industrial and technological revolutions. Readings include fiction, poetry, and drama. Short critical papers.

## ENG 201 (F, S) <br> THE EXPERIENCE OF POETRY

3 credits
Core I, II
A study of the uses of language in
English poetry-meter, metaphor, symbol, and other linguistic features-and of the major conventional forms of English poetry.

## ENG 202 ( $\mathrm{F}, \mathrm{S}$ )

## THE EXPERIENCE OF DRAMA

 3 creditsCore I, II
A study of the development of the dramatic arts of comedy and tragedy from the ritual drama of Greece to the realism and naturalism of the 20th Century.

ENG 203 (F, S)
THE EXPERIENCE OF PROSE FICTION
3 credits Core I, II
Reading, analysis, and discussion of prose fiction.
ENG 207 (F, S)
CREATIVE WRITING I

## 3 credits

Workshop in the writing of fiction and verse.

ENG 243 (F)
RELIGIOUS ATTITUDES IN
MODERN LITERATURE
3 credits
Identical with REL 243.
ENG 300 (S)
UNDERSTANDING THE WRITING PROCESS
3 credits
Students examine their own writing process in the light of discussion of readings on topics such as: how writing connects with thinking, how proficient writers discover ideas, plan messages, and revise them; how the writing process changes in the world of work; how to supervise or instruct others in writing.

ENG 301 (S 1994)
HISTORY OF THE ENGLISH
LANGUAGE
3 credits
Development of modern English
from Old and Middle English; dialects and dialect geography.
ENG 302 (S)
LANGUAGE AND PREJUDICE 3 credits
A study of how language affects the way we view ourselves and others in our culture. Case studies of language in relation to sexism, racism, and politics, supplemented by introductory concepts of language systems and stylistic analysis.

ENG 303 ( $\mathrm{F}, \mathrm{S}$ )
WRITING FOR BUSINESS
3 credits
Provides instruction in planning and executing effective business writing. Students learn to write the documents required of them as professionals: letters, resumes, memos, proposals, abstracts, and reports. Prerequisites: ENG 108, junior or senior status.

ENG 304 (F)
THE GRAMMARS OF ENGLISH 3 credits
History of the English language and introduction to modern linguistic systems (traditional, structural, transformational) as applicable to
selected secondary school grammar texts.

ENG 305-306 (F, S)
CREATTVE WRITING II, III

## 3 credits

Workshops in the writing of fiction and verse. Prerequisites: ENG 207
and permission of the instructor.

## ENG 307

PLAYWRITING
3 credits
Study of the art of playwriting from the traditional and contemporary point of view. Guided writing of a one-act play.

ENG 311 (S)
CONTEMPORARY BRITISH AND AMERICAN NOVEL
3 credits
Core I
Selected major novelists of the 20th Century in England and America. Structure and trends.

ENG 312 (F)
READINGS IN MODERN DRAMA 3 credits Core I
Selected plays of the modern theatre from Ibsen to Ionesco and other contemporary dramatists.

ENG 313 (F)
CONTEMPORARY POETRY
3 credits
Core I
An examination of representative 20th century poetic practice in English.

ENG 3 I5 (F)
YOUNG ADULT LITERATURE
3 credits
Aimed at preparing prospective and actual teachers, librarians, and parents to understand and to direct the reading of young adults. Attention will be paid to the reading and discussion of contemporary young adult fiction representing a varicty of themes and genres. Other topics include adolescent psychology, the history and development of young adult literature, current trends in young adnlt literature, and the young adult in film and other mass media.

ENG 318 ( $\mathrm{F}, \mathrm{S}$ )
ADVANCED COMPOSITION
3 credits
A course in writing and rewriting skills designed to show students how to write more effectively for different purposes and to different audiences: essays, articles, and reviews. Students should already demonstrate basic writing proficiency. Attention will be paid to a writer's methods and resources.

ENG 320-321 (F, S)
THE LITERATURE OF ENGLAND $3-6$ credits Core I
Survey course in English literature showing development in types and forms. Fall: Beounlf to Blake.
Spring: since 1800 .
ENG 324 ( $\mathrm{F}, \mathrm{S}$ )
SHAKESPEARE'S ART AND

## TIMES

3 credits
Core I
Readings in Shakespeare's plays, emphasizing his success as a writer for the stage. Some consideration of the cultural background. A course designed with the non-English major in mind.

ENG 335 ( $\mathrm{F}, \mathrm{S}$ )
WOMEN WRITERS
3 credits Core I
This course examines women's literary tradition by surveying works of women writers from several historical periods.

ENG 340 ( $\mathrm{F}, \mathrm{S}$ )

## RECENT AMERICAN WRITING

 3 credits Core IStudents will be introduced to literary developments in the post-modern era, serious American authors as well as those emerging as promising figures. Novel, short story, poem, play, essay, non-fictional narrative.

ENC 341 (F)
AMERICAN LITERATURE (to I860) 3 credits Core I
Literary historical movements of the periorl; major figures include living, Poc, llawihome, Melville, Emerson, Thorean, and Whitman.

ENG 342 (S)
AMERICAN LITERATURE (1860-1900)
3 credits
Core I
Rise of realism; naturalism. Figures include Whitman, Twain, Dickinson, Howells, James, Chopin, Crane, and Dreiser.

ENG 343 (F, S)
AMERICAN LITERATURE: 20th CENTURY
3 credits
Figures include: Hemingway, O'Neill, Fitzgerald, Faulkner, Frost, Eliot, Steinbeck, Porter, Welty, O'Connor, Ellison, Malamud, and Bellow.

## ENG 350-351 (S) <br> DRAMA WORKSHOP <br> 3 credits

Theory and practice in the arts of acting and directing for the theatre; brief historical perspectives and graduated individual and/or group work on speeches and scenes; specific assignments and projects designed to meet the needs of the beginning or advanced student. May be repeated for credit.

ENC 352 ( F )
ORAL INTERPRETATION OF PROSE AND POETRY 3 credits
Theory and practice in the training of the speaking voice for the demands of reading aloud; graduated work in the preparation, interpretation, and public performance of literary and dramatic works.

ENG 354
ORAL COMMUNICATION
(This course in now offered as Communication 254.)

ENG 355 (S)
THEATRE NOW
3 credits
Core I
Study of contemporary
developments in American, British, and world drama, including works performed on and off Broadway and in London's West End and Fringe. Special attention to third world, minority, and women dramatists.

ENG 360 ( F )
WRITING INSTRUCTION: THEORY AND PRACTICE 3 credits
The study of peer tutoring strategies and the rhetoric of academic prose.

ENG 371 ( $\mathrm{F}, \mathrm{S}$ )
OTHER VOICES, OTHER
CULTURES
3 credits
Core I
Readings in selected works from Africa, Asia, Europe, and the Pacific Rim, emphasizing literature as a reflection of its cultural background. Designed with the non-major in mind.

ENG 408 ( F )
PROFESSIONAL WRITING
3 credits
A course in professional writing aimed primarily at audiences outside the organization. Directed practice in writing promotional literature: public relations materials, sales literature, pamphlets, brochures, and annual reports. Students should already demonstrate basic writing proficiency.

ENG 409 (S)
TECHNICAL AND SCIENTIFIC WRITING
3 credits
Directed practice in writing popular technical and scientific articles, technical reports and proposals, abstracts, and in using technical reference materials. Students should already demonstrate basic writing proficiency.

ENG 410 (S)
EDITING AND PUBLISHING
3 credits
Workshop approach to provide students with experience in judging manuscripts, editing copy, proofreading, typographical design, and production. Introduction to desktop publishing. Some field trips to printing and graphic arts centers. Guest lectures by practicing professionals.

## ENG 411 ( F )

LITERARY THEORY AND CRITICISM
3 credits
An introduction to the theory of literary structure and literary value; exercises in the description and evaluation of literary works; reports on assigned readings.

ENG 412 (S)
HISTORY OF LITERARY

## CRITICISM

3 credits
Readings and discussion of major critical texts in historical setting. Short critical papers.

ENG 422 (F 1994, S 1996)
CHAUCER AND HIS WORLD

## 3 credits

Readings in The Canterbury Tales:
short selections from medieval drama, romance, and allegory.

ENG 423 (F 1994, S 1996) RENAISSANCE LITERATURE 3 credits
The intellectual, political, religious, and scientific ferment that accompanied the birth of Humanism and the death of Medieval order as expressed in the works of More, Machiavelli, Shakespeare, Donne, Bacon, and Milton.

ENG 424 ( $\mathrm{F}, \mathrm{S}$ )
SHAKESPEARE
3 credits
Intensive study of selected poems and plays, including tragedies, comedies, and chronicles, exploring the dramatic, literary, and historical dimensions of his art.

ENG 426 (S 1995)
MILTON IN AN AGE OF

## REVOLUTION

3 credits
The works of the great English poet as they reflect the conflicting values of the Renaissance and Reformation, presented against a backdrop of Civil War and the short-lived English Republic.

ENG 427 (F 1993, S 1995) 左
ENGLISH LITERATURE OF THE
RESTORATION AND I8th

## CENTURY

3 credits
The historical approach will include the chief figures: Dryden, Pope, Swift, Addison and Steele, Johnson, and their more outstanding contemporaries.

ENG 428 (S 1994, F 1995) THE ENGLISH NOVEL TO 1900 3 credits
The roots of modern fiction.
Historical development of the novel from Defoe to Hardy. Analysis of structures and themes.

> ENG 429 (F 1993, S 1995) ENGLISH LITERATURE OF THE ROMANTIC PERIOD 3 credits
> An historical survey of the lyric and narrative poets Coleridge, Wordsworth, Byron, Shelley, Keats; their practice and theory. Pertinent references to their contemporaries.

ENG 430 ( F 1994, S 1996)

## ENGLISH LITERATURE OF THE

## VICTORIAN PERIOD

## 3 credits

The chief literary figures of the period-Tennyson, Arnold, Browning, Hopkins, Carlyle, Newman, Ruskin-and their contemporaries placed against their milieu. Lyric and essay stressed.

## ENG 432 (S 1994, F 1995) \&

 MODERN BRITISH LITERATURE 3 creditsBeginning with Shaw and Yeats and covering the major figures up to the present. Drama, fiction, poetry with some attention to the cultural, social, and artistic influences.

ENG 435 (F 1993, S 1995)
WOMEN, LITERATURE, AND
CULTURE
3 credits
A study of feminist literary theory and an application of feminist literary criticism to a major writer, coterie, movement, or era.

ENG 461 (F, S)

## INTERNSHIP

3 credits
Students may intern at advertising, public relations, publishing and broadcasting companies. Working approximately 12 hours a week under professional supervision, they learn how to apply their education to the everyday demands of these positions. Required: Junior or senior standing, 2.75 grade point average, and recommendation of the internship coordinator, Professor John Keenan.

ENG 462 ( $\mathrm{F}, \mathrm{S}$ )
INTERNSHIP
6 credits
Intern will work approximately 25-30 hours each week.

## FINE ARTS

## FACULTY

Beverly T. Marchant, Ph.D., Chair
Professor: Diehl
Associate Professor: White
Assistant Professors: Lang, Marchant
ART

## CORE COURSES

Approved sequence for Core I:

- Art 101
- Any 200 level course in the Art History section.
- Any 300 level course in the Art History section.
Studio courses are not available in the Core I sequence.


## Approved courses for Core 1I:

## - Art 101

- Any 200 or 300 level course in the Art I Iistory section.
Studio conrses are not available in Core II.


## REQUIREMENTS

Required for Major in Art History:
12 courses

- ART 101, 201-202, 311, 312, $313,315,319,470$
- Any two studio courses. (Additional studio courses available at Chestnut Hill College.)
- One art history elective

Students are advised to elect related courses in other disciplines that will be meaningful in enriching their concentration in art history. It is recommended that art history majors take at least two years of either German or French, especially if they intend to pursue graduate study. The art history major is to consider ART 201-202 as prerequisite for other art history courses.

## COURSE DESCRIPTIONS

## ART 101 (F, S)

INTRODUCTION TO THE VISUAL ARTS
3 credits
Core 1, II
An introduction to painting, sculpture, and architecture, with emphasis on major materials and techniques, styles and traditions.

ART 201-202 (F, S)

## HISTORY OF ART I \& 11

3-6 credits
Core I, II A chronological survey of architecture, painting, sculpture, and minor arts from major cultures, especially in the West. Emphasis is on identification and comprehension of styles, monuments, and traditions. Art 201 covers pre-historic art to ca. I400; Art 202 covers the Renaissance to the 20th century.

## ART 206

PAINTING FROM DAVID TO VAN GOGH
3 credits
Core I, II
Painting's evolution, content, and style, from ca. 1780 to the turn of
the 20th century. Emphasis is on
major schools and artists, including
Romanticism, Realism,
Impressionism, and
Post-Impressionism.

## ART 207

## ASLAN ART (SUB-CONTINENT)

 3 credits Core I, II Explores the evolution of the visual arts in India, Sri Lanka and Southeast Asia from early history to modern times. Navigating the course of art and culture along the historic Spice Route as Indian merchants, monks, and artisans followed the lure of precious metals and spices to exotic Southeast Asia.
## ART 208 <br> THE ARTISTIC GLORY OF CHINA AND JAPAN

3 credits
Core I, II
A study of the visual splendor of Chinese art and culture from the Early Bronze Age to the Cultural Revolution of the 20 th century. An examination of the golden ages of visual arts and dynamic creativity that brought Japan to high international status in the 20th century.

## ART 209

AMERICAN ART
3 credits
Core I, II
Painting, sculpture, architecture, and minor arts in the United States from colonial times to the present, with particular emphasis on art and artists from the Philadelphia area.

## ART 277 <br> HISTORY OF GRAPHIC ART

3 credits
Core 1, II
A chronology of graphic art from its inception in the 15 th century to the present. Emphasis will be on the development of printmaking techmiques and the social functions that make graphics unique among the visual arts.

## ART 309

ROME-THE POLITICS OF ART 3 credits Core I, II
Republican and Imperial Roman use of painting, sculpture, and architecture as instruments of
power which carried multiple meanings. The dissemination of this approach and associated styles in other periods demonstrates the effectiveness and longevity of such an approach.

## ART 310 <br> PARIS-ART AND RELIGION <br> 3 credits <br> Core 1, II

French art from the fall of Rome to the early 20 th century, emphasizing the building and decoration of cathedrals and palaces as well as the painting of panels and illumination of manuscripts.

## ART 3II

ANCIENT ART

## 3 credits

Core I, II
Study of selected early civilizations
to the 4th century A.D. and the
Early Christian era, emphasizing
Greek, Roman, and other
Mediterranean cultures.

## ART 3 I2 <br> MEDIEVAL ART

3 credits
Core I, II
The development of the visual arts from the late Roman period to the late Gothic of the 15th century. Special emphasis is on the establishment of Christian iconography and the evolution of church types.

## ART 313

THE RENAISSANCE IN ITALY 3 credits

Core I, II
A study of Renaissance civilization concentrating on the architecture, painting, and sculpture of Italy from 1200 to 1570. Emphasis will be on such masters as Donatello, Michelangelo, Raphael, Leonardo da Vinci, and Titian.

ART 315 (F) BAROQUE AND ROCOCO ART 3 credits Core I, II
Styles, trends, and major forces in the visual arts of Western Europe during the I7th and 18th centuries, with special focus on the works of Bernini, Rubens, and Rembrandt.

## ART 319

TWENTIETH CENTURY ART
3 credits
Core I, II
The development of modern
painting, sculpture, and architecture from
Post-Impressionism through such movements as Cubism, Surrealism, and Abstract Expressionism. Special emphasis is on major figures including Matisse and Picasso.

## ART 470 <br> RESEARCH TOPICS IN ART

 HISTORY3 credits
Analysis and application of methods used in art criticism and research, with emphasis on writing. Subjects of study will vary.
Required for art history major but open to qualified advanced general students, with permission of instructor.

## STUDIO COURSES:

ART 250-25I (F, S)

## OIL PAINTING

## 3-6 credits

Introduction to basic techniques of painting, drawing, and perspective. Preparation of canvas and media. Exercises in indoor and outdoor painting.

## ART 252-253 (F, S) <br> PRINT MAKING

3-6 credits
Introduction to basic print processes. Relief, intaglio, collograph printing, followed by mixed-media projects.
Experimentation encouraged.

## MUSIC

## CORE COURSES

Approved sequence for Core I (Music History):

- Music 101
- Any 200 level course in the Music History section.
- Any 300 level course in the Music History section.

Approved sequence for Core I (Theory and Composition):

- Music 105
- Any 200 level course in the Music Theory and Composition section.
- Any 300 level course in the Music Theory and Composition section.

Approved courses for Core 11:

- Music 101
- Any 200 or 300 level course in the Music History section.


## REQUIREMENTS

Required for Major in Music: 12 courses

- In Music History: Six courses from the Music History section.
- In Theory and Composition: MUS I05, I06, 214-215, 225, 30I.

Students are advised to elect related courses in other disciplines that will be meaningful in enriching their concentration in music. Those anticipating graduate work in musicology are also advised to elect courses in German, French, Italian, Latin and Greek as preparation for advanced studies.
The music major is expected to demonstrate a basic keyboard facility. It is desirable that such facility be achieved before entering the program or acquired through private study in the early stages of the program. Further, the music major is to adhere to the following establishment of prerequisites: MUS I05 and 106 as prerequisite for other courses in theory and composition. Students who feel qualified to take a placement examination in MUS 105 and 106 may arrange to do so. Any required theory courses not given at La Salle are taken at Chestnut Hill College.

Arts and Sciences
Areas of Study

## COURSE DESCRIPTIONS

## Music History

For the general student, courses in music history do not carry prerequisites; however, the nature of their content will vary in degree of sophistication.

## MUS 101 ( $\mathrm{F}, \mathrm{S}$ )

THE ART OF LISTENING 3 credits Core I, II An exploration of the ways and means of musical composition as a denominator for experiencing music from different time periods and cultures. Popular and classical music, American and European, old and new.

MUS 110
JAZZ
3 credits
Core I, II
The evolution of jazz as a style and form, including Dixieland, Ragume, Swing, Boogie, Bop, Cool, Funky and recent jazz-rock innovations.

## MUS 115

ANATOMY OF THE OPERA 3 credits Core I, II Concentrated study of selected works representing the stylistic and historical development of the opera. Orpheus, Marriage of Figaro, Carmen, Otello, Porgy and Bess.

## MUS 203

AMERICA'S MUSIC

## 3 credits

Core I, II
From Plymouth Rock to
Woodstock-the cultivated and vernacular traditions in American music. New England psalmody, the Yankec tunesmiths, the camp meetings, minstrelsy, the rise of musical culture in the 19 th century, the popular and classical music of the 20 th century.

MUS 204
MASTER COMPOSERS: THE
CIASSICISTS AND THE

## ROMANTICISTS

3 credits
Corc I, II
The Classical style of IIaydin,
Mozart, and Becthoven. The

Romantic Movement in Germany, France, and Italy. Major works, principal forms, evolving concepts.

## MUS 211 ( F ) <br> EIGHTEENTH CENTURY CLASSICAL MUSIC

3 credits Core I, II
The development of the classical style in Western European music from the age of the rococo to the time of Beethoven, with special emphasis upon the contributions of Haydn and Mozart.

MUS 212 (S)
NINETEENTH CENTURY ROMANTIC MUSIC
3 credits
Core I, II
A study of 19th-century
developments in music. The
symphonic poem, art-song, and
music-drama. Expansion of instrumental technique; development of orchestral and chamber music forms; growth of nationalism.

MUS 213 (S)
TWENTIETH CENTURY MUSICAL REVOLUTIONS 3 credits Core I, II
The emergence of new developments in musical composition in the 20th century. Examination of techniques and styles from impressionism to electronic music.

MUS 300
TOPICS IN THE HISTORY OF MUSIC
3 credits Core I, II
Subject matter will vary from semester to semester. Open to the general student and to the music major. May be repeated for credit.

MUS 304
MASTER COMPOSERS: THE IMPRESSIONISTS AND THE MODERNS
3 credits
Core I, II
The cross-pollination of poctry, art, and music leading to the impressionistic style of Clande Debussy. The spirit of artistic revolutions in the 20 th century that produced the major changes in music in our own time.

MUS 305
THE SYMPHONY
3 credits
Core I, II
An examination of the development of one of the musical world's most widely cultivated forms. The growth of the orchestra and orchestral instruments from simple ensembles of the eighteenth century to the mammoth post-romantic orchestra of the late nineteenth and early twentieth centuries. The emergence of the conductor. Masterworks of principal European and American composers.

## MUS 310 <br> MINIATURES IN JAZZ AND THE CLASSICS

3 credits
Core I, II
An exploration of the chamber music medium in both popular and classical styles. Improvisational and non-improvisational approaches.
The different social backgrounds of the two principal areas. The likenesses and the differences of the musical end-results.

MUS 311 ( F )
EARLY MUSIC
3 credits
Core I, II
The evolution of sacred and secular music from the early Christian church to the time of Bach. The great periods of vocal music, the creation of new forms, and the development of dramatic and instrumental music.

## Theory and Composition

For the general student, courses in theory and composition do not carry prerequisites; however, the general student who has not had MUS 105 and 106 is advised to use discretion in the selection of other theory and composition courses.

## MUS 105 (F) <br> FUNDAMENTALS OF MUSIC TIIEORY

3 credits
Core I
Introduction to the basic
theoretical concepts of music: staff notation, calligraphy, scalcs, key
signatures, intervals, chords, rhythm. Elementary ear training stressing the ability to take melodic and rhythmic dictation and to sing a simple melody at sight. No prior knowledge of music necessary.

## MUS 106 (S) <br> THEORY IN PRACTICE

## 3 credits

Creative implementation of the theoretical foundations and principles of musical structures. Prerequisite: ability to read music or permission of instructor.

MUS 214-215 (F, S)
HARMONY
3-6 credits Core I
Fall: Basic elements of harmony as found in tonal music: chord succession, voice leading, non-harmonic tones, figured bass. Spring: Stylistic analysis of representative works from the baroque through the romantic period, concentrating on the evolution of harmonic language. Creative work in imitation of each style studied. Open to the general student with permission of instructor.

MUS 218
ELECTRONIC MUSIC I
3 credits
Core I
An introduction to the development and application of electronic music from Pierre Schaeffer to Philip Glass. Analog and FM Digital synthesis will be studied.

MUS 225 (F)
ORCHESTRATION
3 credits
Core I
A study of the properties, capacities, and functions of orchestral instruments and voices. Analysis of scores and practices of orchestration.

MUS 301 (S)
COUNTERPOINT

## 3 credits

Core II
Principles and techniques of linear writing. Introduction to canon and fugue. Exercises in construction on progressive levels. Open to the
general student with permission of instructor.

MUS 316

## TOPICS IN THE THEORY OF MUSIC

3 credits
Core I
Subject matter will vary from semester to semester. Open to the general student and to the music major. May be repeated for credit.

## MUS 320

ELECTRONIC MUSIC II 3 credits
Multi-media processing. Designing, drawing, and digitizing images with Macintosh tools and techniques. Sound and image processing to create multi-media projects on video tape. Prerequisite: MUS 218 or permission of instructor.

## Applied Music

## MUS 151

APPLIED MUSIC
1 credit
Available to the general student as well as the music major in accordance with the following conditions: Students applying for academic credit for study of an instrument (limited to keyboard, classical guitar, and all instruments of the standard symphony orchestra) or voice must demonstrate the ability to undertake such study at least at an intermediate level.

Arrangements to work with a teacher of the applicant's choice and the financial obligations for such study are the responsibility of the student. At the close of the semester in which the student is applying for credit, the teacher will submit a written report on the student's progress.

The student will demonstrate his or her accomplishment in a proficiency performance arranged by the department and will be graded on a credit/no credit basis. Upon successful demonstration of achievement, the student will receive one academic credit, which will count as elective credit and will not be counted toward the major. A permissible total of six credits will be allowed. Students wishing to apply for applied music credit may register for MUS 151 upon approval of the department.

Collegium Musicum: A vocal and instrumental performing ensemble devoted to the study of musical repertory of all periods which is designed for small groups.

## FOREIGN <br> LANGUAGES <br> AND <br> LITERATURES

## FACULTY

Bernhardt G. Blumenthal, Ph.D., Chair
Professors: Blumenthal, Brownstein, Perfecky, Rudnytzky
Associate Professors: Angerosa, Mall, McCann, Morocco
Assistant Professor: Trovato
Lecturers: DiMarco, Hazzard, Sackheim

FOUNDATION COURSE
LIT 150

## CORE COURSES

Approved Language sequences for Core I:
Language 101, 102, 201. Language 201, 202, 301. Language 301, 302, $300-400$ level. The sequence you will follow depends upon your initial placement according to your previous language training.

Approved Language options for Core II:
Language 201, 202 or Language 301, 302.

Approved Literature sequences in Foreign Literatures for Core 1 : Erencl 311, 312, and one from FRN $411,425,431,447,453,455$, 457. German 311, 312, and one from GER 405, 421, 431, 441, 451, 480, 481. Italian 311, 312, and one from ITL $331,332,451,480,481$. Spanish 311, 312, and one from SPN 313, 405, 411, 415, 419, 442, $443,448,457,480$. To follow one of these sequences, you must have a gool reading knowledge of the language.

Approved Literature options in Foreign Literatures for Core II: FRN 311, 312; GER 311, 312; 1TL 311, 312; or SPN 311, 312.

## COURSE DESCRIPTION

## LIT 150

MODERN EUROPEAN AND LATIN AMERICAN WRITERS 3 credits Foundation An examination of modern French, German, Hispanic, Italian and Russian literatures in English translation. A study of attempts by representative men and women to comprehend their times and their cultures and to provide literary expression to their understandings of modern life. Selected works of prose, poetry and drama. Short critical papers.

Descriptions of major programs follow; for dual majors, greater flexibility in individual programs can be arranged in consultation with departmental advisor.

## CLASSICAL LANGUAGES

## REQUIREMENTS

Required for Major in Classical Languages: 14 courses

- Ten courses in Latin (beyond 100-level)
- Four courses in Greck


## COURSE DESCRIPTIONS

## Greek

GRK 101-102
ELEMENTARY GREEK
36 credits
Core I
An introrluctory stucly of forms and syntax; includes reading and translation exercises and frequent practice in prose composition.

GRK 201-202
INTERMEDIATE GREEK
3-6 credits
Core 1, II
Review of elementary grammar;
readings of selected prose and
poetry.
GRK 301-302
GREEK READINGS
3-6 credits
Core I, II
Readings selected to meet the individual needs of the students from Homer, lyric poetry, the Greek New Testament, Plato and the drama. May be repeated for credit.

## Latin

LAT 101-102
ELEMENTARY LATIN
3-6 credits
Core I
Thorough grounding in forms and vocabulary.

## LAT 201-202

## INTERMEDIATE LATIN

3-6 credits
Core I, II
Review of elementary grammar;
readings of selected prose and poetry.

## LAT 301-302

LATIN READINGS
3-6 credits
Core I, II
Readings selected to meet the individual needs of the students from Cicero, Livy, Horace, Vergil, Catullus, Ovid, Martial, patristic Latin, medieval Latin, Roman comedy and Latin inscriptions. May be repeated for credit.

## RELATED STUDIES:

CLS 211 (F)
CLASSICAL MYTHOLOGY
3 credits
A study of the legends of Greece and Rome: what they are, how they have survived, their value to us. The legend of Troy emplasized.
Audio-visual presentations, discussions, and rescarch. All readings in English.

CLS 212 (S)
CLASSICAL DRAMA
3 credits
Greek and Roman tragedies and comedies in English translation discussed and interpreted in their historical and social environment and compared to modern and contemporary drama. No previous knowledge of Greck and Latin is required.

CLS 311 (F)
GREEK MASTERPIECES IN

## ENGLISH

3 credits
Some significant works in Greek literature read in English translation and interpreted in terms of their original setting. Application made to contemporary problems. No knowledge of Greek required.
CLS 3 I2 (S)
LATIN MASTERPIECES IN ENGLISH
3 credits
The more important works in Latin literature read and discussed in terms of the history of the times. Their influence on later literature noted. No knowledge of Latin required.

## MODERN <br> LANGUAGES

## FRENCH

## REQUIREMENTS

Required for Major in French: 14 courses

- Ten French courses beyond I00-level (two from 400 list)
- Four courses in second language


## COURSE DESCRIPTIONS

## FRN 101-102

ELEMENTARY FRENCH
$3-6$ credits
Core I
A study of the phonetics and grammar of French with graded work in reading, oral practice, and
composition. One required hour per week in the Language Laboratory.
FRN 201-202
INTERMEDIATE FRENCH $3-6$ credits Core I, II Review exercises in
comprehending, speaking, reading
and writing French. Cultural information on France. Weekly assignments in the Language Laboratory.

FRN 301-302
STRUCTURE AND STYLE
3-6 credits Core I, 1I

Review of grammatical principles and their practical application in written exercises and in the translation of standard English prose into French.

FRN 303-304
CONVERSATION AND
COMPOSITION
3-6 credits
Oral and written practice aimed at providing students with varied experiences in communicating in French while improving their pronunciation, intonation, and fluency.

FRN 311-312
SURVEY OF FRENCH

## LITERATURE

3-6 credits Core I, II
Readings and discussions in French of selected literary works from the beginnings to 1800 and from 1800 to the present.

FRN 321-322
CIVILIZATION
36 credits
The first semester treats the political, social, intellectual, and artistic developments in France from earliest times to 1870, while the second semester emphasizes these cultural structures as they exist in contemporary French society. Lectures and readings serve as a basis for class discussion in French.

FRN 401 (S)
OLD FRENCH LANGUAGE AND LITERATURE
3 credits
The history of the formation of the French language, with special attention to the phonological and morphological development from Latin. Literary study, using texts in the original, of Alexis, Roland, Guigemar, Aucassin, Vergi, and the poetry of Villon.

## FRN 411 (F, S) <br> SIXTEENTH-CENTURY <br> LITERATURE

3 credits
Core I
Readings and reports on works of representative authors of the 16 th century.

FRN 425 (F, S)
CLASSICAL THEATRE
3 credits
Core I
A study of the plays of Corneille, Moliere, and Racine.

FRN 431 ( $\mathrm{F}, \mathrm{S}$ )
EIGHTEENTH-CENTURY
LITERATURE
3 credits
Core I
Readings and reports on works of representative authors of the 18th century.
FRN 447 (F, S)
NINETEENTH-CENTURY NOVEL 3 credits Core I A study of some of the major novels of the 19th century, including works by Constant, Stendhal, Balzac, Flaubert, Zola, and Huysmans.

## FRN 453 (F, S)

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## MODERN POETRY

3 credits
Core I
A study of French poetry from
Nerval and Baudelaire through the symbolists and surrealists to the present.
FRN 455 ( $\mathrm{F}, \mathrm{S}$ ) 10
MODERN THEATRE
3 credits

## Core I

A study of the plays of Claudel, Cocteau, Giraudoux, Anouilh, Montherlant, Sartre, Camus, Beckett, Ionesco, and Genet.

FRN 457 ( $\mathrm{F}, \mathrm{S}$ )
MODERN NOVEL
3 credits
Core I
A study of the novels of Proust, Gide, Bernanos, Malraux, Sartre, Camus, and Robbe-Grillet.

## GERMAN

## REQUIREMENTS

Required for Major in German: 14 courses

- GER 401, 431,480 or 481
- Seven electives in German (beyond 100-level)
- Four courses in second language


## COURSE DESCRIPTIONS

GER 101-102
ELEMENTARY GERMAN
3-6 credits
Core I
An introductory study of the phonetics and grammar of the language including graded work in reading and composition. Weekly audio-oral laboratory assignments.

GER 201-202
INTERMEDIATE GERMAN
3-6 credits Core I, II
Review exercises in comprehending, speaking, reading and writing German. Cultural information on German-speaking countries. Weekly assignments in the Language Laboratory.

GER 209-210 (S)
TRANSLATION OF SCIENTIFIC AND TECHNICAL GERMAN 3-6 credits
Translation of selected scientific and technical articles from contemporary journals in bio-medicinc, clicmistry, geology, computer science, and physics. Emphasis on the practical aspects of translating; training in use of specialized dictionarics and reference sources.

GER 301-302
CONVERSATION AND COMPOSITION
$3-6$ credits
Core I, II
Oral practice for the development of skill in conversation. Special attention to remedial work in pronunciation and diction.

## GER 311-312

THEMES IN GERMAN
LITERATURE
3-6 credits Core I, II
Major themes from medieval to modern times (love, death, suffering, political, and social involvement). Practice in conversation and composition. May be repeated for credit. Readings and discussions in German.

GER 320 ( $\mathrm{F}, \mathrm{S}$ )
STUDIES IN GERMAN CULTURE 3 credits
Analysis of the contemporary culture of the two Germanies: life styles, national characteristics, folk tradition. Emphasis on the Germans' view of themselves, their view of their recent past. Focus varies from semester to semester. May be repeated for credit.

GER 330 (F, S)
GERMAN SCRIPT
3 credits
Development of the ability to read texts in German Script from mid-20th century Europe to 18 th century America. Brief history of German Script.

GER 401 (F) HISTORY OF THE GERMAN LANGUAGE
3 credits
The German language from its beginning to the present; particularly, the development of sounds, vocabulary, and the formation of standard High German.

GER 405 (F, S)
MEDIEVAL LITERATURE
3 credits
Core I
Study and discussion of German literature from its beginnings to the end of the medieval period.

GER 421 (F, S)
LITERATURE OF THE 17th AND 18th CENTURIES
3 credits
Core I
Study and discussion of the
literature of the 17 th and 18th centuries excluding the works of Goethe and Schiller.

GER 431 ( $\mathrm{F}, \mathrm{S}$ )
THE CLASSICAL AGE 3 credits

Core I
Study and discussion of the literature of the classical age with special attention to the works of Goethe and Schiller.

## GER 441 (F, S) <br> LITERATURE OF THE 19th CENTURY

3 credits
Core I
Study and discussion of the literature of romanticism, realism, and naturalism.

## GER 451 ( $\mathrm{F}, \mathrm{S}$ ) <br> LITERATURE OF THE 20th CENTURY

3 credits
Core I
Study and discussion of modern German literature from 1880 to the present.

GER 480-481
10
SEMINAR
3-6 credits
Core I
Topics of investigation vary from semester to semester. Readings, reports, and discussion in a selected genre (novel, drama, lyric, short story). Seminar paper.

## ITALIAN

## REQUIREMENTS

Required for Major in Italian: 14 courses

- ITL 312, 451, 480 or 481
- Seven electives in Italian (beyond 100-level)
- Four courses in second language


## COURSE DESCRIPTIONS

ITL 101-102 ELEMENTARY ITALIAN
$3-6$ credits
Core I
An introductory study of the phonetics and grammar of the language including graded work in reading and composition. Intended for those who are beginning the study of Italian. One required hour per week in Language Laboratory.

ITL 201-202
INTERMEDIATE ITALIAN
3-6 credits Core I, II
Exercises in composition, grammatical review, and selected readings with a view to introducing the student to the literature and civilization of the country.

ITL 301-302
LANGUAGE AND STYLE
3-6 credits
Core I, II
Training in the use of correct idiomatic Italian and in the practical application of grammatical principles with a view toward improving the student's pronunciation and increasing his active vocabulary. Frequent use of audiovisual aids.

ITL 311-312
SURVEY OF ITALIAN LITERATURE
$3-6$ credits
Core I, II
A comprehensive study of Italian literature from the Middle Ages to modern times, with comparative references to European literatures. Readings and discussions in Italian.

## ITL 320 (F, S)

STUDIES IN ITALIAN CULTURE 3 credits
Analysis of contemporary Italian culture: life styles, national characteristics, folk tradition. Emphasis on the Italians' view of themselves, their place in and contributions to contemporary European civilization. Focus varies from semester to semester. May be repeated for credit.

ITL 331-332
READING LIST
3-6 credits
Core I
Gives students an acquaintance with excerpts of Italian writers from Saint Francis of Assisi to the poets of knighthood (Pulci, Boiardo, Ariosto, Tasso).

ITL 401 (F, S)
HISTORY OF THE ITALIAN LANGUAGE
3 credits
Deals with the Italian language in its origins in the 7th century up to modern times. By means of a very few philologic and glottologic rules, the student will acquire a knowledge of the origins and transformation of Italian from Vulgar Latin, in chronological progression.

## ITL 451 (F, S) <br> MODERN AUTHORS

3 credits Core I
Includes a survey of Italian narrative and poetic production in the late 19 th century and in the 20th century.

## ITL 480-48I <br> SEMINAR <br> 3-6 credits <br> Core 1

Topics of investigation vary from semester to semester. Readings, reports and discussions of a selected genre (novel, drama, short story), with special reference to the works of Dante, Leopardi, and Manzoni. Seminar paper.

## JAPANESE

JPN 101-102
ELEMENTARY JAPANESE 3-6 credits
An introductory study of the Japanese language; provides practice in comprehending, speaking, reading, and writing the language, as well as cultural information. Stress is on the development of conversational skills. Introduction to the KATAKANA writing system.

## RUSSIAN

## REQUIREMENTS

Required for Major in Russian: 14 courses

- RUS 301-302 or 303-304, 401-402; SLA 403-404
- Four Russian or Slavic electives (beyond 100-level)
- Four courses in second language


## COURSE DESCRIPTIONS

## RUS 101-102

## ELEMENTARY RUSSIAN

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3-6 \text { credits }
$$ Core I

A modified audio-lingual approach;
regular exercises in Language
Laboratory stress fundamental structural features of the contemporary spoken language.

## RUS 201-202

## INTERMEDIATE RUSSIAN

$3-6$ credits Core I, II
Second part of two-year program based on modified audio-lingual principles. Continued emphasis on Language Laboratory work. Introduction to literature and civilization. Translation of business correspondence and readings in general science.

RUS 241-242
RUSSIAN LITERATURE OF THE 19th CENTURY
3-6 credits
Romanticism and realism in
Russian literature. Readings from Pushkin, Griboedov, Lermontov, Gogol, Turgenev, Ostrovsky, Dostoevsky, L. Tolstoy, Saltykov-Shchedrin, Leskov, Chekhov, Kuprin, Bunin, and Andreev.

RUS 245-246
SOVIET LITERATURE
3-6 credits
Socialist realism as a doctrine of art and literature in the Soviet Union. Readings from Gorky, Mayakovsky, Babel, Olesha, Leonov, Zamyatin, Zoshchenko, Sholokhov, Ilf and

Petrov, Simonov, Pasternak, Yevtushenko, Solzhenitsyn, and others.

## RUS 301 (F) <br> ADVANCED GRAMMAR AND CONVERSATION

3 credits
Core I, II
Advanced grammar exercises and conversation. Reading of a Russian newspaper. May be repeated for credit.

RUS 302 (S)
SCIENTIFIC RUSSIAN
3 credits
Core I, II
Theory and practice in translating scientific texts. Selected readings in chemistry, physics, mathematics, geology, anatomy, and astronomy. May be repeated for credit.

## RUS 303-304 <br> ADVANCED READINGS AND COMPOSITION

3-6 credits Core I, II
Selected readings of 19 th and 20 th century Russian prose and verse. Translation of selected scientific articles. Intensive exercises in translating standard English prose into Russian. May be repeated for credit.

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RUS 401 (F)
HISTORY OF THE RUSSIAN
LANGUAGE
3 credits
Historical background for an
understanding of the phonology,
morphology, syntax, and
vocabulary of modern Russian.
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RUS 402 (S)
OLD RUS' LITERATURE
3 credits
Selected readings from the epic, annalistic, and hagiographic literature from the 11 th to the 17th centurics with special emphasis on Igor Tale and the Primary, Kievan, and Galician-Volynian chronicles. The beginnings of fiction.

## RELATED STUDIES:

SLA 320 (S)
THE CULTURES OF THE COMMONWEALTH OF INDEPENDENT STATES 3 credits
Lectures and readings on independent nations of the Commonwealth of Independent States, plus the Tatars and the Jews. An in-depth view of the territory, demography, culture, media, education, language, arid national attitudes of the various nations of this new union.

SLA 403 (F)
UKRAINIAN
3 credits
The study of the phonology, morphology, syntax, and vocabulary of a second Eastern Slavic language, Ukrainian, by noting the differences that exist between it and Russian.

SLA 404 (S)
POLISH
3 credits
The study of the phonology, morphology, syntax, and vocabulary of a Western Slavic language, Polish, by noting the differences that exist between Polish, Russian, and Ukrainian.

## SPANISH

## REQUIREMENTS

Required for Major in Spanish: 14 courses

- SPN 311-312, 313
- Seven Spanish electives beyond 100 -level (two from 400 list)
- Four courses in second language
- Recommended: History 231, 232


## COURSE DESCRIPTIONS

## SPN 101-102

l:LEMENTARY SPANISH
$3-6$ credits
Core I
Desigued io provide a fundanental capacity in conversation; audiooral
method employed. Grammar is presented strictly on a functional basis to facilitate speech and comprehension. One required hour per week in the Language Laboratory.

## SPN 20I-202 (F, S) <br> INTERMEDIATE SPANISH

3 credits
Core I, II
Review exercises in
comprehending, speaking, reading, and writing Spanish. Cultural information on Spanish-speaking countries. Weekly assignments in the Language Laboratory.
SPN 30I-302
ADVANCED CONVERSATION AND COMPOSITION
$3-6$ credits
Core I, II
Includes intensive oral and written exercises with a view towards improving the student's speaking and writing skills. Students make frequent use of audio aids.

## SPN 307 (F, S) <br> COMMERCIAL SPANISH

3 credits
Intended to acquaint the student
with commercial Spanish
terminology combined with
lectures, readings, and translations of business letters. Introduction of new vocabulary used in the business world with emphasis on Spanish American idiomatic expressions.

SPN 311-312
SURVEY OF SPANISH

## LITERATURE

$3-6$ credits
Core I, II
An introduction to the study of peninsular Spanish literature from the Middle Ages to the present.
Readings and discussions in
Spanish.
SPN 313 (F, S)
SURVEY OF SPANISH AMERICAN LITERATURE 3 credits

## Core I

Reading and discussion of works from the colonial period to the 20tla century, with special emphasis upon contemporary Latin American literature.

## SPN 321 (F)

SURVEY OF SPANISH

## CIVILIZATION

3 credits
A cultural and historic study of Spain's past, examining the effects of Rome and Islam, the period of Spanish domination and later decline, and the status of present-day Spain.
SPN 322 (S)
SURVEY OF SPANISH AMERICAN CIVILIZATION

## 3 credits

A cultural and historic presentation of the diversity of Latin America from the Aztecs and Incas to the Conquest, the viceroyalties, and the establishment of independent nations; course concludes with a thorough study of today's Latin America.

## SPN 350-351

INTRODUCTION TO BILINGUAL-BICULTURAL

## STUDIES

3-6 credits
Linguistic and cultural problems in teaching English to speakers of other languages. Emphasis on materials, techniques and attitudes of teachers and students. Special emphasis on the vocabulary and idiom of the Caribbean. Cultural survey of present day problems in Puerto Rico and other Caribbean countries.

SPN 401 (F)
HISTORY OF THE SPANISH
LANGUAGE
3 credits
Study of the formation of the language, its evolution and phonetic changes from Latin to the present modern pronunciations. Reading and discussion of the early Spanish texts and the development of the language in the early period.

SPN 405 (F, S)
LITERATURE OF THE MIDDLE AGES
3 credits
Core I
Emphasis is placed on such works as Cantar de Mio Cid, Poema de Fernan Gomzalez, and Amadis de Gaula;
authors include Berceo, Alfonso X, Juan Manuel, Juan Ruiz, Marques deSantillana, and los Manrique.

SPN 411 (F, S)
RENAISSANCE LITERATURE
3 credits Core I
The works of Boscan, Garcilaso,
Encina, Nebrija, Torres Naliarro, and
Lope de Rueda, and such works as Tirant lo Blanc, Celestina, and Lazarillo de Tormes form the basis of this period of literary activity.

SPN 415 (F, S)
DRAMA OF THE GOLDEN AGE 3 credits Core I
Readings, reports, and discussions of the principal dramatists of the Golden Age: Lope deVega, Tirso de Molina, Calderon, Alarcon, and others.

SPN 419 (F, S)
CERVANTES
3 credits
Core I
Readings and discussions of Don Quixote. Other important works by Cervantes also discussed.

SPN 442 (F, S)
ROMANTICISM
3 credits Core II
A study of the early 19 th century which analyzes works of such authors and poets as Larra, Duque de Rivas, Zorilla, Espronceda, Garcia
Gutierrez, Hartzenbusch, and
Becquer.
SPN 443 (F, S)
POETRY OF THE 19th AND 20th CENTURIES
3 credits
Core I
Works by Gabriel y Galan, de
Castro, Dario, los Machado, Jimenez, Lorca, Guillen, Otero, and Salinas are considered.

SPN 448 (F, S)
THE SPANISH AMERICAN NOVEL
3 credits
Core I
Introduces students to the development of the contemporary Latin American novel through an analysis of the sociological and literary aspects of the work of various leading authors. Special attention to works by and about
women. Class discussions and examinations in Spanish.
SPN 457 (F, S)
THE SPANISH NOVEL OF THE 19th AND 20th CENTURIES 3 credits

Core I
Reading and discussion of Spanish authors, their ideology and philosophies: Fernan Caballero, Galdos, Valera, Pio Baroja, Ala, Cela, Delibes, and Goytisolo.

SPN 480 ( $\mathrm{F}, \mathrm{S}$ ) SEMINAR
3 credits
Core I
Topics of investigation vary from semester to semester.

## GEOLOGY AND PHYSICS

## FACULTY

H. A. Bart, Ph.D., Chair

Professors: Hoersch, Longo
Associate Professors: Bart, Guttmann
Assistant Professors: Smith, Strieb

## GEOLOGY

## FOUNDATION COURSES

GEO 151, 152, 153, 154, 155

## REQUIREMENTS

Required for Major in Geology: 15 courses

- GEO 151, 152, 202, 203, 204 , 205, 301, 302, 303, 401, 402, plus one elective geology course at the 200 level or above.
- CHM 111-112. MTH 113.
- Suggested courses: Students anticipating graduate work in geology or closely related areas are advised to elect courses in basic sciences, mathematics, computer science, Russian, German, or French.


## COURSE DESCRIPTIONS

CEO 151 ( $\mathrm{F}, \mathrm{S}$ )

## PLANET EARTH

3 credits Foundation
An introduction to the physical processes that interact to change the interior and the surface of the earth, including weathering, earthquakes, volcanos, glaciation, marine erosion, "Continental Drift," and mountain building. Two hours lecture, two hours laboratory and field trip.

## GEO 152 ( $\mathrm{F}, \mathrm{S}$ )

## EARTH HISTORY

3 credits Foundation
An introduction to the physical and biological processes that have modified the earth through geologic time. Emphasis will be on earth changes through geologic time, and the evolution of life from simple cells to the higher vertebrates. Laboratory experience will include study of fossils, and basic geologic principles. Two hours lecture, two hours
laboratory, and field trip.
GEO 153 ( $\mathrm{F}, \mathrm{S}$ )
OCEANOGRAPHY
3 credits Foundation
A study of the physical processes that affect the oceans of the earth. Emphasis will be on tides, currents, waves, chemistry of the sea, and geology of ocean basins. Three hours lecture.

GEO 154 ( $\mathrm{F}, \mathrm{S}$ )
ASTRONOMY
3 credits Foundation
A contemporary view of the universe from the big bang to its possible ends, our sun and its planets, galaxics, the life and death of stars, white dwarfs, neutron stars, quasars, black holes, life on earth, and the possibility of extraterrestrial intelligence.

## GEO 155

ENVIRONMENTAL GEOL,OGY (S) 3 credits Foundation
An introduction to the geologic processes that sliape our planet and modify enviromments. Such
fundamental concepts as land-use planning, development of urban areas, hazardous waste disposal in natural systems, use of resources, and soil development and modification will be emphasized. Two hours lecture, two hours laboratory.

GEO 202 (F)
MINERALOGY AND CRYSTALLOGRAPHY

## 4 credits

The identification of minerals using physical characteristics. An introduction to crystal chemistry and symmetry. Three hours lecture, two hours laboratory. Prerequisites: GEO 151, 152.

GEO 203 (S)
OPTICAL MINERALOGY 4 credits
An introduction to the theory of light transmission in crystals. Use is made of the polarizing microscope to study light phenomena in minerals. Lab is concerned with identification of minerals using thin section and oil immersion techniques. Two hours lecture, four hours laboratory. Prerequisite: GEO 202.

GEO 204 (S)

## PETROLOGY

4 credits
Descriptive classifications of textures and processes of igneous, metamorphic, and sedimentary rocks with emphasis on hand specimen identification. Three hours lecture, two hours laboratory. Prerequisite: GEO 202.

CEO 205 (F)
PALEONTOLOGY
4 credits
A review of the invertebrate and vertebrate fossil record. Correlation of biological development with the stratigraplic record. Includes recent advances in paleoecology. Two hours lecture, three hours laboratory.

## CEO 301 (F)

## SEDIMENTOLOGY

4 credits
Analysis and interpretation of sedimentary processes; classification and analysis of the common sedimentary rocks. Three hours lecture, three hours
laboratory.
GEO 302 (S)

## STRATIGRAPHY

## 4 credits

An introduction to physical stratigraphy, methods of correlation of rock and time rock units; the interpretation of paleogeography. Two hours lecture, three hours laboratory.

## GEO 303 (F) <br> STRUCTUAL GEOLOGY

4 credits
Description and mechanics of structural features such as: folds, joints, faults, lineations and foliations features. Laboratory is concerned with problem solving using geometric and stereographic techniques, cross-sections, and the examination of tectonic forces that cause deformation. Three hours lecture, two hours laboratory.
Prerequisites: MTH 113, GEO 151, 152, 202, 204.

CEO 304 (S)

## GLOBAL TECTONICS

## 3 credits

A review of the literature on the theory of plate movement and study of the dynamic earth system with implications as to the origins of magma, earthquakes, and sea-floor spreading. Three hours lecture, one hour laboratory. Prerequisites: GEO 151, 152.
GEO 305 (S)
GEOCHEMISTRY
3 credits
Discussions of the geochemical behavior of the elements comprising the earth. A look at the chemical processes involved with weathering, oxidation, and the crystal chemistry of solids with application to the formation of stable compounds (phase theory).

Three hours lecture. Prerequisites: CHM I11-112; GEO 151, I52, 202.

GEO 401 ( F )
IGNEOUS PETROLOGY
4 credits
Classification, examination, and analysis of igneous rocks. Petrographic analysis of rock suites in thin section will be used to determine the cooling histories of the rocks. Two hours lecture, four hours laboratory, field trips.
Prerequisites: GEO 202, 203, 204; CHM III, 112.

GEO 402 (S)
METAMORPHIC PETROLOGY
4 credits
A review of the metamorphic facies concept with a look at the physical, thermodynamic, and geochemical processes concerned with mineral recrystallization. Detailed thin-section examination of the various metamorphic zones. Two hours lecture, four hours laboratory, field trips. Prerequisites: GEO 202, 203, 204; CHM 111, 112.

GEO 403 (S)
ECONOMIC GEOLOGY
3 credits
The study of ore deposits associated with igneous, metamorphic, and sedimentary rocks. Emphasis on classical ore deposits. A survey of the various origins for metallic and non-metallic deposits. Three hours lecture. Prerequisites: GEO 202, 204; CHM 111, 112.

## GEO 404 ENVIRONMENTAL GEOLOGY

 4 creditsAn introduction to the fundamentals of environmental geology as related to land-use planning, development of urban areas, geologic processes and land form analyses, and engineering properties of Earth materials. Global development and environmental impact will be emphasized. Two hours lecture, three hours lab. Prerequisites: GEO 202, 204.

GEO 470 (F)
TOPICS IN ADVANCED
GEOLOGY
3 credits
Selected topics dealing with contemporary developments in geology.

GEO 480 ( $\mathrm{F}, \mathrm{S}$ )
RESEARCH
14 credits
Supervised research in geology. Can be elected in fall, spring, or summer. Permission of Chair required.

## PHYSICS

FOUNDATION COURSE

PHY 150

## REQUIREMENTS

Required for Major in Physics: 15 courses

- PHY 105-106, 207, 208, 305, 307, 308, 311, 313, 411, 413.
- PHY 30I and 302 or 351 and 352.
- MTH I20, 22 I.


## COURSE DESCRIPTIONS

## PHY 102

FROM THE ATOM DOWN
3 credits
For science and non-science majors.
General relativity and cosmology.
The conservation laws and their relation to elementary particle physics. The role of chance in physics from thermodynamics to the quantum revolution. Matter theory. Physics and life. Concepts rather than mathematics stressed.

## PHY 105-106

## GENERAL PHYSICS

$4-8$ credits
Vectors, elementary mechanics of point particles and rigid bodies, gravitation, simple harmonic motion and waves. Elementary optics, electromagnetism and DC
circuits. Prerequisite:MTH 120.
Three hours lecture, two hours
laboratory; two terms.

## PHY 120

SCIENCE, TECHNOLOGY, AND

## SOCIETY

3 credits
A study of some interactions between science, technology, and society. Topics include: the scientific community; history of technology; weapons; science, technology, and the arts; technology and change.

## PIHY 12I

WOMEN, MEN; SCIENCE, TECHNOLOGY
3 credits
An exploration of gender components in science and technology. Extra-scientific influences on scientific theories; why there are not more female engineers and scientists; how science views male/female differences; use of science to reinforce social attitudes; the political content of technology and how technology impacts differently on men and women. No prerequisites.

PHY 150 ( $\mathrm{F}, \mathrm{S}$ )
SOME REVOLUTIONS IN

## PHYSICS

3 credits Foundation
A non-mathematical introduction
to physics with emphasis on studying the processes of scientific change. Ancient astronomy and mechanics. The
Copernican/Newtonian
Revolution, Special Relativity.
Current ideas in elementary particle physics.

## PIIY 207 (F)

MODERN PHYSICS I
3 credits
The breakdown of classical physics around the turn of the century and its replacement by relativity theory and quantum mechanics. Attention to the experiments leading to this break down. Course culminates with the Schrodinger equation and its application to simple potentials.

Prerequisites: PHY 105-106; MTH 221 concurrently; or permission of instructor.

## PHY 208 (S)

MODERN PHYSICS II
4 credits
Applies basic quantum theory developed in PHY 207 (the Schrodinger equation) to a series of problems in which it has had marked success. They include: atomic spectra; the physics of molecules including the chemical bond; condensed matter; the nucleus and fundamental particles. Three hours lecture, two hours laboratory. Prerequisite: PHY 207.

PHY 301 (F)
ELECTRONICS
3 credits
Elementary DC and AC circuit theory; diodes, bipolar and field effect transistors; small signal analysis, feedback; operational amplifiers. Prerequisites: PHY 105-106 or permission of instructor. Laboratory required.

## PHY 302 (S)

INTRODUCTION TO DIGITAL COMPUTER ELECTRONICS
3 credits
Diodes and transistors used as switching devices, Boolean algebra, 7400 integrated circuit series, counters, adders, general registers and basic computer hardware.
Prerequisite: PHY 301 or permission of instructor. Laboratory required.
PIIY 305 (S)
THERMAL PHYSICS
3 credits
The laws of thermodynamics; techniques of statistical mechanics. Applications to classical and quantum ideal gases and other systems. Kinetic theory and transport phenomena. Prerequisites: PHY 105, 106, 207 (or permission of instructor).

PIIY 307 (F)
MATHEMATICAI, IPIYSICS I 4 credits
Infinite series, Taylor expansions, partial differcntiation, multiple
integration, differential and integral vector calculus, Fourier series. Partial differential equations, special functions, boundary value problems. Prerequisite: MTH 221.

PHY 308 (S)
MATHEMATICAL PHYSICS II 34 credits
Calculus of variations, linear algebra and eigenvalue problems, complex variables, the Fourier and Laplace transforms with applications to ordinary and partial differential equations. Prerequisite: PHY 307 or equivalent.
PHY 311 (F)
ELECTRICITY AND MAGNETISM I

## 3 credits

Electrostatics, magnetostatics, dielectrics and magnetic materials, Maxwell's equations, electromagnetic waves. Prerequisite: PHY 307 or equivalent.

## PHY 312 (S)

## ELECTRICITY AND

MAGNETISM II
3 credits
Radiating systems; accelerated point charge, electric and magnetic dipoles, electric quadrupole radiation, antennas. Lorentz invariance of the Maxwell equations and some consequences thereof. Prerequisite: PHY 311.

## PHY 313 (S) 0

 STATES, WAVES, AND PHOTONS 4 creditsA modern introduction to optics encompassing matrix representations of optical systems and polarization states of light; the Jones calculus, the Mucller calculus and the Stokes representation; states of light as eigenstates of operators, expectation values, the bra-ket product and probability amplitudes; an approach to scalar diffraction through Grecu's theorem and Fourier Transforms; the electromaguetic field and its quantization. Threc hours lecture, two hours laboratory. Prerequisite: PHY 311.

PHY 321
INTRODUCTION TO
ASTROPHYSICS
3 credits
Methods for determining the basic properties of stars, such as temperatures, masses, and radii; stellar energy and structure.

## PHY 351

ADVANCED LABORATORY I
3 credits
Laboratory work with close faculty guidance, but emphasizing independent work and a professional approach. A selection of experiments from mechanics, acoustics, electricity and magnetism, atomic and nuclear physics, experimental methods and instrumentation, error and data analysis. Prerequisite: PHY 207.

## PHY 352

ADVANCED LABORATORY II 3 credits
Similar in purpose to PHY 351 but with material selected which will not duplicate the student's previous experience. Prerequisite: PHY 207.

## PIIY 353 (S)

## INTRODUCTION TO MICROPROCESSORS <br> 3 credits

Hardware and software of a well known microprocessor chip will be dealt with. CPU'S, I/O, memories and $A / D$ will be some of the topics treated. Microprocessors available to conduct required experiments.
Prerequisite: PHY 302 or
permission of instructor.

## PIIY 411-412

MECHANICS

## 3-6 credits

Topics include the single particle and systems of particles in one, two, and three dimensions; rigid body motion; moving coordinate systems; the mechanics of continuous media; Lagrangian and Hamiltonian formulations; tensor methods; special relativity. I'rerequisites: General Plıysics, PHY 307 or MTH 222 or permission of instructor.

## PHY 413-414 <br> QUANTUM PHYSICS

3-6 credits
The Schrodinger equation and its application to one dimensional systems and the hydrogen atom. Heisenberg's uncertainty relations, perturbation theory for degenerate and nondegenerate states.
Quantization of the electromagnetic field and applications of quantum mechanics to atomic, nuclear and solid state physics. Prerequisite: PHY 105-106, PHY 307 or equivalent.

## PHY 470

## SPECIAL TOPICS

3 credits
As interests dictate, special programs may be introduced into the curriculum, discussing specialized areas for group or independent study.

## PHY 480-481

## RESEARCH

1-2 credits
Individual studies and research, presentation of papers, familiarization with the literature.

## HISTORY

## $\overline{\text { FACULTY }}$

Theopolis Fair, Ph.D., Chair
Professors: O'Grady, Rossi, Stow
Associate Professors: Cziraky, Fair, Hennessy
Assistant Professors: Desnoyers, Sheehy

## FOUNDATION COURSE

## HIS 150

## CORE COURSES

Approved sequences for Core I:

- American: (HIS 101, 201, 301).
- European Civilization: (HIS 102, 202, 302).
- Third World: $(103,203,303)$.

When you select one of these three sequences, you must take all three courses within that same sequence.

Approved courses for Core II: 200 and 300 -level Core I courses and $307,308,325,328,329,331$, $333,335,336,337,338,339,340$, $342,344,346,347,348,370,415$, $447,452,458$, and 470.

For Core I, take 300 -level courses last. For elective or Core II, take courses in any order.

## REQUIREMENTS

Required for History Majors: 15 courses
History majors are required to take, in addition to the foundation course (HIS I50), a three (3) course sequence in one Area of Concentration (American, European, or Third World), four (4) additional courses in the same Area of Concentration ( 300 level or above) five (5) more courses ( 300 level or above) from the other Areas (3 from one and 2 from another), and two seminars.

Dual Majors: The seminar requirement is waived for those whose second major is history if a seminar is required of the other major. Depending on the other courses taken by the student whose second major is history, the number of courses required ranges from II to I3.

Minors: Minors in history are required to take six (6) courses in addition to the Foundation Course (150).

Recommended Courses: The Department does not require, but strongly recommends, that majors take courses in a foreign language. Many graduate schools require a language for a degree.

Advanced Placement credit in history is granted to students who score 3 or above and, in the case of the history sequences, counts toward 100 and 200 -level courses.

## COURSE DESCRIPTIONS

## HIS 150

## GLOBAL HISTORY

3 credits Foundation
A study of the evolution and interactions of the cultures of Europe, America, Africa, and Asia from 1500 to the present, designed to give students a greater understanding of the relationships among modern nations so necessary in today's shrinking globe.

## American Sequence

HIS 101
THE UNITED STATES TO 1840 3 credits Core I
Traces the unfolding of American history from colonial times through Jacksonian America. The coming of the Revolution, the Revolution and its results, the Federalist experiment, and the Jeffersonian concept of democracy.

HIS 201
THE UNITED STATES FROM I840 TO 1920
3 credits Core I, II
Covers from the Jacksonian era to the end of World War I. The coming of the Civil War, the War and its results, Reconstruction, the Progressive Movement, and American involvement in World War I.

## HIS 301

THE UNITED STATES IN THE 20TH CENTURY
3 credits Core I, II Covers from the end of World War I to the present. The Roaring Twenties, America between the wars, American involvement in World War II, America and Russia in the Cold War, the Vietnam era,
and the U.S. and the world in the current era.

## European Sequence

## HIS 102

ANCIENT AND MEDIEVAL EUROPE TO 1400
3 credits
Core I
Traces the unfolding of western civilization from pre-history to the Renaissance. The legacies of Greece and Rome: the heritage of both early Christian Europe and the Byzantine and Islamic civilizations; the contribution of later medieval Europe to the governmental, economic, and intellectual growth of Europe.

## HIS 202

EUROPE FROM THE 15TH CENTURY TO NAPOLEON 3 credits Core I, II Surveys profound changes in political, social, economic, cultural, and religious life of European society between the 15 th and the end of the 18 th centuries. Decline of feudal institutions, emergence of modern European states, and discoveries in the western hemisphere.

HIS 302
MODERN EUROPE SINCE 1815 3 credits Core I, II
Industrialism and its impact on European society; decline of political liberalism and subsequent rise of nationalism; development of modern totalitarianism and the impact of two world wars on western society.

## Third World Sequence

IIIS 103
ASIA, AFRICA, AND THE AMERICAS TO 1500
3 credits
Core I
Beginning with pre-history, course examines and compares such diverse civilizations as ancient Egyptian, Hindu, Buddhist, Confucian, Inca, Kushitic, Mayan, Hebraic, Islamic, and Malian.

HIS 203
ASIA, AFRICA, AND THE
AMERICAS: 1500-1920
3 credits
Core I, II
Focuses upon imperialism and its various manifestations in the non-western world and the emerging desire for independence among colonial nations after World War 1.

HIS 303
ASIA, AFRICA, AND THE AMERICAS: 1920-PRESENT 3 credits

Core I, II
The devolution of European power to the independence of nation states and problems associated with that independence. North-South differences, Arab-Israeli conflict, the Cold War and the Third World, communism vs. capitalism, rise of Japan, apartheid, and terrorism.

## AREAS OF CONCENTRATION

## Area I: American History

HIS 324 ( $\mathrm{F}, \mathrm{S}$ )
HISTORY OF PHILADELPHIA 3 credits
The historical development of Philadelphia from colonial times to the present, emphasizing the way people lived, the impact of transportation upon city growth, and the changing nature of industrialization. Lectures combined with field trips. Cost of field trips requires an additional fee of $\$ 40.00$.

## HIS 329 (S)

THE AMERICAN WOMAN
3 credits
Core II
An in-depth analysis of the experience of women in American culture. Special attention to the women's rights movement, women in the Industrial Revolution, and women in World War I and World War II.

IIIS 331 (F, S)
AMERICA'S MIIITTARY PAST
3 credits
Core II
The impact of the American military establishment upon American
society, and the formation of defense strategy and foreign policy.

HIS 333 (F, S)
THE AMERICAN IMMIGRANT 3 credits

Core II
The history of immigration to America and the ethnic impact upon American institutions.

HIS 337 (F, S)
THE BLACK EXPERIENCE IN AMERICA
3 credits
Core II
The main themes in black history from the African experience to the present, with special attention given to slavery, protest movements, civil rights, and black achievement.

## HIS 341 <br> RUSSIAN-AMERICAN DIPLOMATIC HISTORY <br> 3 credits

This course will survey the diplomatic
relations between the United States and the Soviet Union from the
American Revolution to the
Reagan-Gorbachev summit of 1987.
HIS 342 (F, S)
HISTORY OF THE WESTWARD MOVEMENT IN AMERICA 3 credits Core II A study of the American frontier emphasizing pioneer life, federal Indian policy, and the settlement of the Great Plains and Far West.

HIS 347 (F, S)
PRESIDENTIAL POLITICS; ROOSEVELT TO REAGAN 3 credits

Core II
Historical analysis of presidential campaigns from 1900 to 1980, stressing the evolution of political techniques, issues, political parties, and presidential personalities.

## IIIS 402 (F, S)

THE AMERICAN REVOLUTION 3 credits
An intensive analysis of concepts and movements generated in the American colonies which resulted in revolution and separation of the Britisli settlements.

HIS 413 ( $\mathrm{F}, \mathrm{S}$ )
JEFFERSONIAN-JACKSONIAN DEMOCRACY

## 3 credits

A detailed analysis of the development of the American political system in an increasingly democratic society.

HIS 415 (F, S)
THE AMERICAN CIVIL WAR

## 3 credits

Core II
A detailed study of the disruption of the Union, stressing the causes, personalities, and human drama of the military events leading to Appomattox.

HIS 425 (F, S)
AMERICA AS A WORLD POWER, 1939-PRESENT

## 3 credits

The growth of government involvement at home and abroad since 1939; reading and analysis of original documents.
HIS 429 (F, S)
THE EMERGENCE OF MODERN AMERICA, 1877-1913
3 credits
The nationalization of American life, including the building of the railroad network, the rise of industry, the labor movement, immigration, and urbanization.

HIS 447 (F, S)
THE UNITED STATES IN THE PACIFIC BASIN
3 credits
Core II
The interrelationship of the United States and the East Asian world in the modern period.

## Area II: European Concentration

[^0]HIS 328 (F)
WOMEN AND HISTORY
3 credits Core II
The history of women and their changing role and position in Western Europe from the Classical Period to the 20th century. Particular attention to explanations of changed status in successive historical eras; e.g., the Greeks, the Romans, etc.

HIS 335 ( $\mathrm{F}, \mathrm{S}$ )

## GREEK CIVILIZATION

## 3 credits

Core II
A survey that stresses the development of Greek civilization until the death of Alexander the Great.

HIS 336 (F, S)
THE ROMAN EMPIRE

## 3 credits

Core II
A survey that places a special emphasis upon the Roman
Republic and the Empire until 476
A.D.

HIS 338 ( $\mathrm{F}, \mathrm{S}$ )
THE EARLY MIDDLE AGES

## 3 credits

Core II
A study of the period from 284
A.D. until c. 1000 A.D., emphasizing the synthesis of Roman, Christian, and barbarian cultures.

HIS 339 (F, S)

## THE LATER MIDDLE AGES

## 3 credits

Core II
A study of the period from c. 1000
A.D. until the Renaissance,
focusing on the social, economic, intellectual, and political revival of Europe.

HIS 343 (F, S)
MODERN EUROPE TO 1870: THE AGE OF REVOLUTIONS 3 credits
A survey of Europe centered on the political and social development in Germany and France, and the impact of Russia's rise to world power.

IIIS 345 ( $\mathrm{F}, \mathrm{S}$ )
MODERN EUROPE SINCE 1870:
THE AGE OF VIOLENCE 3 credits
A detailed survey of Enrope in the
last hundred years.
HIS 348 ( $\mathrm{F}, \mathrm{S}$ )
SLAVIC AND EASTERN EUROPEAN HISTORY 3 credits Core II An examination of the rise of Slavic civilization and the present problems of Eastern Europe.
HIS 440 ( $\mathrm{F}, \mathrm{S}$ )
MODERN IRELAND
3 credits
An examination of the major
political, social, and economic developments in Ireland since the Famine of 1845.

HIS 452 ( $\mathrm{F}, \mathrm{S}$ )
THE SOVIET UNION
3 credits
Core II
The history of the Soviet Union,
from 1917 to the present.
HIS 458 ( $\mathrm{F}, \mathrm{S}$ )
RECENT BRITAIN: EMPIRE TO WELFARE STATE
3 credits Core II
A detailed analysis of the decay of
the Empire, the rise of the welfare state, and the impact of both on English life.

## Area III: Third <br> World/Non-Western

HIS 307 (F, S)
LATIN AMERICA: THE
COLONIAL PERIOD
3 credits
Core II
A survey that treats the Inca, Aztec, and Maya cultures. African influences as well as Spanish and Portuguese contributions to the development of Latin America.

HIS 308 ( $\mathrm{F}, \mathrm{S}$ )
LATIN AMERICA IN
REVOLUTION
3 credits Core II
Revolutionary movements in Latin
America from Independence to the present, with special emphasis on

Cuba, Chile, Mexico, Brazil, and Central America.

HIS 325 (F, S)
IMPERIALISM IN THE MODERN WORLD
3 credits
Core II
A study of the expansion of western nations into the world of Asia and Africa in the 191h century, and the contraction of western influence in these areas in the 20th century.

HIS 344 ( $\mathrm{F}, \mathrm{S}$ )
TOPICS IN AFRICAN HISTORY 3 credits Core II
An account of the empires, tribes, and development of Africa from earliest times to the present.
HIS 346 ( $\mathrm{F}, \mathrm{S}$ )
EAST ASIA IN THE MODERN WORLD
3 credits Core II
Changes in Modern Asia as a result of the rise of industrialism, urbanism, nationalism, and western influence.

HIS 350 (F)
TRADITIONAL CHINA TO 1840 3 credits Core II
This course will trace the social, political, cultural, and economic origins of the Chinese dynastic system, the elaboration and triumph of Confucianism, and the expansion of the empire south of the Yangtze and west to Central Asia. The course will conclude with an overview of the initial western intrusion into this wealthiest and most populous of traditional civilizations.

HIS 351 (S)
MODERN CHINA, 1840 TO THE PRESENT
3 credits
Core II
Bcginning with the traumas of the Opium Wars and Taiping Rebellion, this course will provide an overview of China's initial attempts at using foreign technology to safeguard the Confucian polity, the rending of the social falbric during the Republican and Civil War eras, the eventual trimmph of Chinese Communism. 'The cconomic
reforms of Deng Xiaoping and the events leading to Tiananmen Square will receive particular attention.

HIS 352 (F) TRADITIONAL JAPAN TO 1840 3 credits Core II For nearly two millennia, the people of Japan have shown a remarkable ability to marry religious, political, and cultural innovations from abroad with vigorous indigenous institutions. The result has been one of the world's most remarkable cultural syntheses. This course will trace the origins and development of the imperial system, the influence of Shinto and Buddhism, the development and elaboration of the early Shogunates, and conclude with an examination of Tokugawa society on the eve of Japan's "opening" to the west.

HIS 353 (S)
MODERN JAPAN, 1840 TO THE PRESENT
3 credits
Core II
This course will assess the astounding transformation of Japan from Tokugawa seclusion to the dynamic superpower of today. Along the way such topics as the impact of the Meiji Restoration, Japan's "special relationship" with China and the Asian mainland, the grand catastrophe of World War II, and the resurgence of a demilitarized economic colossus in the Pacific Rim will be examined.

IIIS 354 (F, S)
THE MODERN MIDDLE EAST
3 credits Core II
This course will focus on the Middle East from the Crimean War to the present, with emphasis on the dissolution of the Ottoman Empire, the role of Western imperialism in the creation of modern state in North Africa and West Asia, the Arab-Israeli conflict, oil and Arab nationalism.

HIS 370/470
SPECIAL TOPICS IN THIRD WORLD AREAS
3 credits
Core II
Central America, the Middle East, China, India, etc.

## Other Courses: Depending on the specific topic, these courses can be taken for either Area I, II, or III.

HIS 340 ( $\mathrm{F}, \mathrm{S}$ )
TOPICS IN MODERN HISTORY 3 credits Core II
An examination of selected topics illustrating the political, social, and cultural history of the modern world.

## HIS 460 (F, S) <br> DIRECTED READINGS

3 credits
Readings of certain basic books relating to a specific historical topic, theme, or era; assignments discussed in seminar-tutorial fashion.

HIS 480 (F, S)
SEMINAR
3 credits
Methodology and historiography; bibliographical essay required.

HIS 481 ( $\mathrm{F}, \mathrm{S}$ )
SEMINAR
3 credits
Writing a research paper.
HIS 482-485
SEMINARS
3-6 credits

## INTERNATIONAL STUDIES MINOR

Directed by: Joshua Buch, Ph.D.,
Finance Department
(See requirements for International Studies Minor on page 108.)

## JUSTICE AND SOCIETY STUDIES MINOR

Directed by: David Efroymson, Ph.D., Religion Department

## REQUIREMENTS

## Required:

Two courses from the following:

- ECN 201 (prerequisite is ECN 150), PHL 206, POL 232, REL 321.

Two courses from the following Humanties group:

- ENG 160, 302; HIS 333, 337; PHL 212, 338; REL 212, 223, 323.

Two courses from the following group of Social Science, Physical Science, and Business courses:

- CRJ 221; ECN 203, 330 (prerequisite is ECN 150); EDC 201; HCA 371; HRM 301; PHY 120; POL 343; SOC 212, 363-364 (identical with SWK 363-364); SWK 202.


## LIFE SCIENCE MINOR

Directed by: Norbert F. Belzer, Ph.D., Biology Department

## REQUIREMENTS

## Required: 6 Courses

- CHM 111 or CHM 161
- BIO 201
- 4 additional biology courses from the $160 / 200 / 300 / 400$ level with at least two from the 300/400 level (these courses must be approved by the Biology Department Chairperson)
(Please note: BIO 210 is a prerequisite for all higher numbered BIO courses; college chemistry is a prerequisite for $300 / 400$-level BIO courses.)


## MATHEMATICAL SCIENCES

## FACULTY

Charles E. Hofmann III, Ph.D., Chair
Professors: Albright, Longo, McCarty
Associate Professors: Andrilli, DiDio, Hofmann, O'Neill, Pomerance, van Rossum, Wiley
Assistant Professors: Elliott, Kirsch, McManus, Michalek, Mooney, Turk

## FOUNDATION COURSES

$\operatorname{CSC} 151,152,157$
Which foundation course should you take?

- Mathematics and computer science majors are required to take CSC 157.
- Students who plan to minor in computer science or take a significant number of computer science courses should also take CSC 157.
- Other science majors should take CSC 152 or CSC 157.
- Business majors are advised to take CSC 151.
- Students in the remaining majors should choose between CSC 151 and CSC 152.


## REQUIREMENTS

- Required for a Major in Mathematics: 15 courses
- Required for a Major in Mathematics-Education: 12+ courses
- Required for a Major in Computer Science: 18 courses (B.A.) or 22 courses (B.S.)

Major programs are offered in mathematics, mathematics education, and computer science. The choice of program should depend on career objectives and personal interests. If there are any questions, the student should consult with the Department Chair or a departmental advisor.

## Mathematics: (I5 courses)

MTH 120, 221, 222, 240, 321, 341; CSC 157; PHY 105 and one from PHY 106, MTH 322, MTH 410, MTH 425; six additional mathematics courses from Section $B$ below.

Mathematics-Education: (12+ courses)

MTH 140, 120, 221, 222, 240, 321, 330, 341; CSC 157; PHY 105 and one from PHY 106, МTH 322, MTH 410, MTH 425; one additional mathematics course from Section B below; courses specified by the Education Department.

## Computer Science

Two major programs provide a strong foundation in the discipline of computing; one leads to a B.A. degree and the other to a B.S. degree. A major goal of these programs is the preparation of graduates for direct entry into the computing profession with sufficient background to make continuing contributions. The B.S. program in computer science
provides the foundation for remaining current in computing science. It requires courses in related fields and provides breadth and depth in the discipline. The B.A. program is applicationsoriented and has fewer required courses to provide greater flexibility. It is strongly recommended that students in the B.A. program choose an appropriate minor in consultation with a departmental advisor. Students selecting computer science as a major will normally choose either the B.A. or the B.S. program by the end of the sophomore year.

Computer Science (B.A.): (18 courses)
CSC 157, 162, 254, 257, 264, 351, 354,459 , four computer science courses chosen from sections $C$ and $D$ below with at least one from section C; MTH 120, 140, MTH 221 or MTH 240; PHY 270-271; one approved course in probability and statistics.

Computer Science (B.S.): (22 courses)
CSC 157, 162, 257, 264, 354, 362, $366,457,459,464$, two computer science courses chosen from section D below; MTH 120, 140, 221, 240; PHY 105-106, 270-271, one approved science course; one approved course in probability and statistics.

Students wishing to take advanced level (300-400) courses in Computer Science must be admitted to advanced standing in the program or have permission of the Chair. A certificate of advanced standing in Computer Science will be awarded when a student has completed MTH 120, MTH 140, and the required 100-200 level computer science courses with a C (2.00) average or better. Students may preregister for advanced level courses before certification of advanced standing in Computer Science but they will
not be permitted to take such courses until certified.

Computer Science-Mathematics: A dual major in Computer Science(B.A.)-Mathematics (25 courses) can be obtained by taking : CSC 157, 162, 254, 257, 264, 351, 354,459 ; four additional computer science courses from Sections C and D below with at least one from section C; MTH 120, 221, 222, 240, 321, 341, 410; four additional MTH courses from Section B below; PHY 270-271.
A dual major in Computer Science(B.S.)-Mathematics (27 courses) can be obtained by taking : CSC 157, 162, 257, 264, 354, 362, $366,457,459$, and 464; two additional computer science courses from Section D below; MTH 120, 221, 222, 240, 321, 341, 410; four additional MTH courses from Section B below with at least one from MTH 322,345 , or 425 ; PHY 105-106 and PHY 270-271.
These dual majors require approval of the Dean and Department Chair.

## COURSE DESCRIPTIONS

## MATHEMATICS

## SECTION A:

MTH 101 (F, S)
INTERMEDIATE ALGEBRA
3 credits
Algebraic operations; linear and quadratic equations; exponents and radicals; elementary functions; graphs; systems of lincar equations. NOTE : Not to be taken to fulfill major requirements. Students who have other collcge credits in mathematics must obtain permission of the Department Chair to enroll in this course.

MTLI 113 ( $\mathrm{F}, \mathrm{S}$ )
ALGEBRA AND TRIGONOMETRY 4 credits
Revicw of algebra; simultancous cquations; Irigonometry; functions and graphs; propertics of logaritlmic, exponcutial, and
trigonometric functions; problem solving and modeling.

## MTH 115 (F, S) <br> FINITE MATHEMATICS <br> 3 credits

Linear systems, matrices and linear programming; permutations and combinations; elementary probability. Intended for business, social science and liberal arts majors who have had at least two years of high school algebra.

## MTH 116 ( $\mathrm{F}, \mathrm{S}$ )

## INTRODUCTION TO CALCULUS

 3 creditsFundamentals of differential and integral calculus with applications of calculus to the management and social sciences. Prerequisite: MTH 115.

MTII 120 (F, S)
CALCULUS AND ANALYTIC GEOMETRY 1
4 credits
Functions of various types: rational, trigonometric, exponential, logarithmic; limits and continuity; the derivative of a function and its interpretation; applications of derivatives including maxima and minima and curve sketching; antiderivatives; the definite integral and approximations; the fundamental theorem of calculus; applications of integration including areas and volumes. Prerequisite: MTH 113 or equivalent in secondary school mathematics.

## MTH 140 (S)

DISCRETE MATHEMATICS 3 credits
Propositional logic; methods of proof; sets; basic properties of integers; matrix operations; permutations and combinations; elcmentary probability; functions and rclations; equivalence rclations; partial orderings; graphs and digraphs; Boolean algelsras and logic circuits; Karnaugh maps.

## MTH 221 (F, S)

CALCULUS AND ANALYTIC GEOMETRY II

## 4 credits

Techniques of integration for various functions including algebraic, trigonometric, logarithmic, and exponential functions; inverse functions; growth and decay problems; improper integrals; applications of the integral including volume, work, surface area and arc length; parametric equations; polar coordinates and integration; conic sections; introduction to infinite series; Maclaurin series.
Prerequisite: MTH 120.
MTH 222 ( $\mathrm{F}, \mathrm{S}$ ) CALCULUS AND ANALYTIC GEOMETRY III
4 credits
Vectors; vector functions; partial differentiation; multiple integration; infinite series; Taylor expansions. Prerequisite: MTH 221.

## MTH 240 (F, S) <br> LINEAR ALGEBRA

3 credits
Systems of linear equations; matrices; determinants; real vector spaces; subspaces; span and linear independence; basis and dimension; Gram-Schmidt process; linear transformations; change of basis; eigenvalues and eigenvectors; diagonalization; applications.

## MTH 321 (F) <br> INTRODUCTION TO REAL ANALYSIS

3 credits
Introduction to the foundations of the calculus; topology of the reals; limit theorems; fundamental theorems of the differential and integral calculus. Prerequisite : MTH 222.

MTH 341 (F)
ABSTRACT ALGEBRA
3 credits
Sets and mappings; groups, rings, fields, and integral domains; substructures and quotient structures; homomorphisms and isomorphisms; abelian and cyclic
groups; symmetric and alternating groups; polynomial rings.
Prerequisite: MTH 240, or
permission of instructor.
MTH 470, 471, 472, 473
SELECTED TOPICS IN MATHEMATICS
3 credits
An introduction to specialized research, concentrating on one particular aspect of mathematics. The subject matter will vary from term to term. With approval of the Department Chair these courses may count in Section B.

## SECTION B:

MTH 322 (S)

## DIFFERENTIAL EQUATIONS

3 credits
Differential equations of the first order; linear differential equations of higher order; Laplace transforms; series solutions; applications to the physical sciences. Prerequisite: MTH 222.

MTH 330 (F 1994, 1996)
MODERN GEOMETRIES
3 credits
Topics from Euclidean geometry, projective geometry, the classical non-Euclidean geometries; recent developments in geometry. Prerequisite: MTH 240.

MTH 345 (F 1993, 1995)

## COMBINATORICS

3 credits
Permutations and combinations; generating functions; recurrence relations and difference equations; inclusion/exclusion principle; derangements; other counting techniques, including cycle indexing and Polya's method of enumeration. Prerequisite: MTH 221.

MTH 410 (F 1993, 1995) PROBABILITY AND STATISTICS I 3 credits
Sample spaces and probability measures; descriptive statistics; combinatorics; conditional probability and independence;
random variables; joint densities and distributions; conditional distributions; functions of a random variable; expected value and variance; Chebyshev's inequality; correlation coefficient; laws of large numbers; the Central Limit Theorem; various distribution models. Prerequisite: MTH 222.

MTH 411 (S 1994, 1996)

## PROBABILITY AND

## STATISTICS II

## 3 credits

Measures of central tendency and variability; random sampling from normal and non-normal populations; estimation of parameters; maximum likelihood estimates; confidence intervals and hypothesis testing; normal, chi-square, Student's $t$, and $F$ distributions; analysis of variance; randomized block design; correlation and regression. Prerequisite: MTH 410.

MTIII 421 (S 1995, 1997)
NUMERICAL ANALYSIS

## 4 credits

Basic concepts; interpolation and approximations; summation and finite differences; numerical differentiation and integration; roots of equations. Prerequisites: MTH 222, CSC 157.

MTH 424 (S 1994, 1996) COMPLEX VARIABLES 3 credits
Analytic functions; Cauchy-Riemann equations; Cauchy's integral theorem; power series; infinite series; calculus of residues; contour integration; conformal mapping. Prerequisite: MTH 222, or permission of instructor.

MTH 425 (F 1994, 1996) MATHEMATICAL MODELING 3 credits
Uses of mathematical methods to model real-world situations, including energy management, assembly-line control, inventory problems, population growth, predator-prey models. Other topics

## Arts and Sciences

include: least squares, optimization methods, interpolation, interactive dynamic systems, and simulation modeling. Prerequisite: MTH 221.

MTH 430 (S 1995, 1997)

## TOPOLOGY

3 credits
Topological spaces; subspaces; product spaces; quotient spaces; connectedness; compactness; metric spaces; applications to analysis. Prerequisite: MTH 321 or 341.

## COMPUTER SCIENCE

## CSC 151 (F, S)

## INTRODUCTION TO

COMPUTING USING PACKAGES 3 credits Foundation
Survey of computers and systems; data representation; problem solving using a computer. Use of several software packages including a word processor, spreadsheet and database management system. Applications for business and social science.

## CSC 152 (F, S) <br> INTRODUCTION TO <br> COMPUTING INCLUDING BASIC 3 credits Foundation <br> Survey of computers and systems; data representation; problem solving using a computer. <br> Introduction to BASIC programming including control structures, arrays and files. Introduction to software packages including a word processor and spreadsheet. Applications to several types of problems in business, science and social science.

## CSC 157 ( $\mathrm{F}, \mathrm{S}$ ) COMPUTING AND PROBLEM SOLVING

4 credits
Foundation
Software design methodology using
C+ + . Includes data representation, character, array and structure data types, data files, and functions. Development of algorithons for
problem solutions with an emphasis on mathematical and scientific applications. Three hours of lecture and two hours of laboratory per week. Prerequisite: one semester of college level mathematics (or taken concurrently).

CSC 162 ( $\mathrm{F}, \mathrm{S}$ )
INTRODUCTION TO DATA
STRUCTURES AND

## ALGORITHMS

4 credits
Continuation of CSC 157. Data structures, including linked lists, stacks, quenes and binary trees.
Recursive techniques; searching and sorting algorithms. Three hours of lecture and two hours of laboratory per week. Prerequisite: CSC 157.

CSC 254 (S)
FILE AND DATA MANAGEMENT SYSTEMS
3 credits
Logical and physical data organization. Secondary storage devices, blocks, buffers and files. File types and file management: sequential, indexed and direct. File processing: control breaks, master file update, sort. Record addressing techniques, hashing, multikey processing. Structured programming in COBOL. Prerequisite: CSC 162 or permission of the Department Chair.

CSC 257 (F)
COMPUTER STRUCTURE AND ARCHITECTURE

## 3 credits

Introduction to computer structure and architecture with programming assignments done in assembly language. Machine language; assembly language; addressing techniques; Cl'U structure and function; interconnects; bus operations; input/output; subroutines; interrupts; error handling; alternative architectures. Prerequisite: CSC I 62 or permission of the Department Chair.

CSC 264 (S)
DATA BASE MANAGEMENT SYSTEMS
3 credits
Components of data base systems, data base models:
entity-relationship, relational, hierarchical, network; normalization, integrity, relational algebra, query languages, system security, distributed databases, social and ethical concerns.
Implementation of case studies using a relational DBMS.
Prerequisite: CSC 162 or permission of the Department Chair.

## $\operatorname{CSC} 350$ (S)

## INTRODUCTION TO DATABASE

 MANAGEMENT3 credits
Database design from requirements phase through implementation. Data models: relational, hierarchical and network. Relational algebra and implementation of case studies using a relational DBMS. Functions of database administration, concurrency, backup and recovery, security, integrity and redundancy control. This course may not be used as part of the major program in Computer Science. Prerequisite: CSC 151 or 152.
CSC 351 (S)
PC APPLICATIONS
3 credits
The use of various application packages for the personal computer including spreadsheets, databases, commmnications, graphics, and desktop puhlishing; graphical user interfaces, windows, and multi-media technology; emphasis on sharing data between applications. Two hours of lecture and two hours of laboratory per week. Prerequisite: Advanced Standing or permission of Chair.

CSC 354 (F)
DATA STRUCTURES
3 credits
An in-depth treatment of a variety of data structures and their associated algorithms. Stacks, queues, arrays and their address mapping functions. Linear lists, list operations, sequential and linked storage allocation, and garbage collection. Trees, binary trees, tree operations, and use of trees in sorting and searching. Multi-linked structures. Dynamic storage allocation; files and file structures; hash codes and comparison of search methods. Prerequisite: CSC 162.

CSC 450, 451 ( $\mathrm{F}, \mathrm{S}$ )
COOPERATIVE EDUCATION
3-6 credits
Prerequisite: permission of Department Chair.
$\operatorname{CSC} 459$ (F)
SOFTWARE ENGINEERING 4 credits
Basic concepts and major issues of software engineering; project planning; cost estimation; requirement definition; software design; implementation issues; programming language features; validation techniques; software maintenance. Requires a team project to design, develop, document, test, and maintain a software system. Three hours of lecture and two hours of laboratory per week. Prerequisite: Advanced and Senior Standing.

CSC 470, 471, 472, 473
SELECTED TOPICS IN
COMPUTER SCIENCE
3 credits
An introduction to specialized research in computers and computing, concentrating on one particular aspect of computer science. The subject matter will vary from term to term. With approval of the department chair these courses may count in section D.

## SECTION C:

CSC 362 (F)
COMMUNICATION NETWORKS AND COOPERATIVE PROCESSING

## 3 credits

This course focuses on current methods and practices in the use of computer networks to enable communication and processor sharing. Topics include: physical layers, architectural layers, design, operation, management, the ISO standards, basic parallel technology and its demands, and the relationship between distributed processing and computer networks. Prerequisite: CSC 257.
CSC 366 (S 1994, 1996)
LANGUAGE THEORY AND DESIGN
4 credits
Programming languages: historical perspective and underlying serial computation model; theory: finite automata, Backus-Naur Form, representations, and grammars; and design: syntax, semantics, run-time implementation and application domains. Language paradigms including procedural, functional, logic, object-oriented, and non-sequential processing. Mapping language paradigms onto problem domains and using UNIX tools. Three hours of lecture and two hours of laboratory per week. (Note: Credit will not be granted for both CSC 356 and CSC 366.) Prerequisite: CSC 257.

CSC 457 (S)
OPERATING SYSTEMS
3 credits
Principles and concepts of process and resource management in operating systems. I/O programming; interrupt mechanism; memory management; processor management; scheduler; traffic controller; device management and information management and file systems. Concepts will be illustrated in the context of modern computers. Prerequisite: CSC 354.

CSC 464 (S 1995, 1997)
THEORY OF ALGORITHMS
3 credits
Problem solving strategies including: divide and conquer, greedy, backtracking, and dynamic programming. Complexity analysis of algorithms. Introduction to complexity classes $P$ and NP, with strategies for NP-complete problems. Iterative approximation methods. Introduction to parallel and distributed algorithms.
Prerequisite: CSC 354.

## SECTION D:

CSC 356 ( F )
PROGRAMMING LANGUAGES 3 credits
Formal definition of programming languages including specification of syntax and semantics; simple statements including precedence, infix, prefix, and postfix notation; global properties of algorithmic languages including scope of declarations, storage allocation, binding, and subprograms; list processing, string manipulation, data description, and simulation languages; run-time representation of programs and data structures. (Note: Credit will not be granted for both $\operatorname{CSC} 356$ and $\operatorname{CSC} 366$. )

CSC 453 (S 1995, 1997) COMPUTER GRAPHICS

## 3 credits

Introduction to computer graphics, beginning with elementary methods for picture generation. Graphical methods for forming various geometric figures (e.g., lines, circles, polygons). Representations of two- and three-dimensional objects. Other topics include: transformations, windows and clipping, hidden line/surface removal. Prerequisites: CSC 354 and MTH 240.

CSC 456 (F 1994, 1996) ARTIFICIAL INTELLIGENCE 3 credits
Introduction to an AI programming language such as LISP or PROLOG; AI in theory:
knowledge representation and problem-solving techniques with production, blackboard, logic-based, and object-oriented systems; AI in practice: game playing, expert, natural language understanding, learning, perceiving, and robotic systems. Prerequisite: Advanced Standing.

CSC 458 (S 1994, 1996)
COMPUTER
COMMUNICATIONS AND INTERFACING
3 credits
Serial transmission of data. Theory and applications of operational amplifiers. Digital to analog, and analog to digital conversion. Elements of alternating current theory. Bus functions, transmission lines and modem theory. The course includes several required construction projects. Prerequisite: PHY 271.

## MUSIC

(See Fine Arts.)

## PHILOSOPHY

## FACULTY

Michael Kerlin, Ph.D., Chair
Professors: Kerlin, Sullivan Associate Professors: Dallery, Fitzgerald, Lashchyk, Van Fleteren Assistant Professors: Fallon, Moreau, Phillips, Tsakiridou, Volpe

## FOUNDATION COURSES

PIIL, 151, 152

## CORE COURSES

Approved for Corc I:

- General Topics: Plll 201, 206, 212, 264, 267, 269.
- Special Interest: PHL 270, 303, 305, 308, 309, 310, 311, 313, $323,325,326,327,328,329$, 330-336, 338, 341, 350, 370, 470. You may take one or two courses in philosophy to fulfill your Core IA requirement.


## REQUIREMENTS

Required for Major in Philosophy: 13 courses

- Foundation course
- PHL 311 or 323
- PHL 264 or 325
- PHL 326, 327, 328, 329, 330, 480
- Four other courses beyond the Foundation level.


## COURSE DESCRIPTIONS

## PHL 151

CONCEPTS OF HUMANITY 3 credits

Foundation
A study of the concepts of humanity which underlie and affect thought, values, and actions in personal life and society.

## PHL 152

MORAL INQUIRY AND MORAL CHOICE
3 credits
Foundation A study of the major moral theories related to how human beings do and ought to make moral decisions. Applications of these moral frameworks to contemporary moral issues will be an integral part of the course.

PHLL 201 (F, S)
ART AND CREATIVITY (AESTHETICS)
3 credits Core I

A consideration of the philosophical basis for making judgments about the art experience. Designed to acquaint the student with the major features and thinkers of the classical, romantic, and modern periods.

PHIL 206 (S)
SOCIAL AND POLITICAL PHILOSOPHY
3 credits
Core 1
A critical examination of the nature of society through the reading and discussion of primary philosophical texts. Themes include: person and society, the foundation of the political order, human rights and law, justice and society, the natural and the social sciences.

## PHL 212 (F)

CURRENT ETHICAL ISSUES
3 credits
Core 1
An application of ethical principles to present-day moral problems and controversies. Issues include sexual behavior, nuclear war, abortion and economic justice. Readings drawn mainly from contemporary philosophical authors.

## PLIL 213 (F)

## PHILOSOPHY OF SPORTS

3 credits
A philosophical investigation of sports and athletics and their significance as a basic human experience. Topics include sports and the achievement of human excellence; sports as a basis of social and cultural structure; and the analysis of sports in philosophical movements such as Marxism and existentialism.

PHLL 222 (S)

## LOVE AND HUMAN SEXUALITY

 3 creditsA philosophical exploration of human love and sexuality. Attention will be given to the connection between the philosophical approach and that of other disciplines. Works by authors such as Plato, Aristotle, Thomas Aquinas, Santayana, Ortcga y Gasset and Sartre will be read.

PIIL 223 (S)
PERSPECTIVES ON DEATH 3 credits
A study of various philosophical strategies for coming to terms with human death. Western and non-Western sources will be used. Philosophical views on death
applied to problems such as aging and dying, suicide and euthanasia, the medical conquest of death, and definitions of death. Of particular value for students choosing careers in the health professions.

PHL 264 (F, S)

## CRITICAL THINKING

3 credits
Core I
Aims at developing the skill of analyzing, interpreting and criticizing arguments from a variety of disciplines. Topics include: clarification of concepts, distinguishing between conclusions and reasons for conclusions, evaluation of arguments, and the recognition of fallacies.

PHL 267 (F, S)
PHILOSOPHICAL APPROACHES TO GOD
3 credits Core I
A study of philosophical positions about the existence and nature of God. Themes discussed include various concepts of God; the possibility of proof for the existence of God; and the philosophical dimensions of the religious experience.
PHL 269 (F, S)
WORK AND CULTURE
3 credits
Core I
A philosophical consideration of the relationship between work and other dimensions of human life. Topics include: work and society, work and rationality, work and morality, work and play, work and creativity, work and alienation.

PHLL 270
SPECIAL TOPICS
3 credits
PHL 303 (S)
AMERICAN PHILOSOPHY 3 credits Core I
Broadly conceived as American intellectual history, the history of ideas that shape the American angle of vision: from the Puritan's errand into the wilderness to the birth of the Great Yankee, from democracy as the last, best hope of

Earth to William James' courage to believe.

PHL 305 (F) PHILOSOPHY OF COMMUNISM 3 credits Core I
An historical and systematic study of the Communist movement with special emphasis on the writings of Marx and Engels, but with attention to the development of theory and practice among contemporary Marxists.

PHL 308 (S)
THE PHILOSOPHY OF HISTORY 3 credits Core I
A study of some of the principal viewpoints about historical knowledge and historical development. Problems discussed include: subjectivity and objectivity, causality and explanation, perspective and relativity in history. The great schemes of historical interpretation also considered.
PHL 309 (F)
THE PHILOSOPHY OF THOMAS AQUINAS
3 credits
Core I
A study of the philosophical problems which arose in the Middle Ages and of the solutions proposed by Thomas Aquinas. Texts principally from Essence and Existence and the Summa Theologiae.

PHL 310 (S)

## EXISTENTIALISM

3 credits
Core I
An approach to contemporary phenomenology and existentialism through philosophers such as Husserl, Heidegger, and Sartre.
Topics include: the
phenomenological method, human existence as process, meaning vs. absurdity, and the overcoming of alienation.

## PHL 3 Il

PROBLEMS OF KNOWLEDGE
3 credits
Core I
A systematic investigation into the sources, limits, and nature of knowledge. Topics include: meaning and its relation to truth of statements; nature and criteria of
truth, role of observation, perspective and conceptualization in the justification of knowledge claims.

## PHL 313

METAPHYSICS
3 credits
Core II
A study of the ways in which major philosophers have answered questions about the basic nature of reality.

PHL 323
THE PHILOSOPHY OF SCIENCE
3 credits

## Core I

The impact of scientific revolutions on observations and rationality in science studied through the writings of Kuhn and Feyerabend and others. Critical examinations of such concepts in science as scientific method, induction, verification, and falsification.

PHL 325 (S)
SYMBOLIC LOGIC
3 credits
Core I
A study of the following aspects of symbolic logic: truth functional logic, quantificational logic, logic of relations, proofs of adequacy for the system used, undecidability and incompleteness, the relationship between modern logic and Aristotelian logic.

PHL 326 (F 1993)
HISTORY OF WESTERN
PHILOSOPHY: ANCIENT PERIOD
3 credits Core I
Philosophy in ancient Greece and
Rome, with concentration on Plato and Aristotle.

PHL 327 (S 1994)
HISTORY OF WESTERN
PHILOSOPHY: MEDIEVAL AND RENAISSANCE PERIODS 3 credits Core I
From St. Augustine through the age of scholasticism to the Renaissance.

## PHL 328

HISTORY OF WESTERN
PHILOSOPHY: MODERN PERIOD
3 credits Core I
From Hobbes and Descartes to the
Enlightenment, with concentration

Arts and Sciences
Areas of Study
on the rationalists, empiricists, and Kant.

## PHL 329

HISTORY OF PH1LOSOPHY: CONTEMPORARY PERIOD 3 credits Core I
A survey of the principal philosophical movements of the last 100 years. Logical positivism, linguistic analysis, phenomenology, existentialism, and
deconstructionism.
PHL 330-336 (F)
THE GREAT PHILOSOPHERS 3 credits

Core I
An in-depth study of a single major thinker from the philosophical tradition. Emphasis on the critical reading of texts, although attention will be given to the historical setting of the thinker and his/her work. Previous thinkers have included Beauvoir, Heidegger, Augustine, and Wittgenstein.

## PHL 338

CONCEPTS OF LIBERATION: WOMEN AND MEN
3 credits Core I
A critical study of the different accounts of inequality and oppression in the lives of men and women. Special attention to the ideals of liberation in the context of family, work and sexual relations and to the question of innate, or natural, differences between the sexes.

PHL 341
BRAINS AND MACHINES

## 3 credits

Core I
An examination of human consciousness with a special emplaasis on theories influenced by recent developments in psychology, in computer science, and in neurobiology. Topics include the relation between the mind and the brain, the possibility of building conscious maclines, and the mental life of animals.

## PIIL 350 (F)

BUSINFSS ETHIICS
3 credits
Core I
Business practices evaluated in the light of ethical principles. Special
concern given to moral dimensions of management decision making and to the ethical problems of consumerism and government control.

PHL 370
SPECIAL TOPICS
3 credits
Core I
PHL 470
SPECIAL TOPICS
3 credits
Core I
PHL 480 (S)

## SEMINAR

3 credits
An investigation of a philosophical theme chosen each year by the department. Students will write a paper on the theme and present their work to the seminar. The seminar has for its purpose the integration of previous philosophical study. Required of philosophy majors; open to others with approval of Chair.

## PHYSICS

(See Geology and Physics.)

## POLITICAL SCIENCE

## FACULTY

Kenneth L. Hill, Chair
Associate Professor: Nathans
Assistant Professors: Balchunis, Brogan, Hill
Lecturers: Burns, Foley, Turzanski
$\overline{\text { FOUNDATION COURSE }}$

POL 152
CORE COURSES
Approved courses for Core 11:

- Anmerican Government: POL 110, 211, 215, 301, 302, 303, 304, 305, 310, 311, 314
- Comparative Government/Area Studies: POL 120, 221, 322
- International Politics: POL 240, 341, 342, 343, 344
- Political Theory: POL 260, 361, 362, 363


## REQUIREMENTS

Required for Major in Political
Science: 15 courses

- American Government: POL 110, 211
- Comparative Government: POL 120, 221
- International Politics: POL 240, 341
- Political Theory: POL 260, 361
- Five electives in political science
- Senior Seminar: POL 480-481

All political science courses except $460-461$ and 480-481 are open to all students.

POL 152 does not count for credit toward the major in political science.

Dual Majors: The seminar requirement is waived for those whose second major is political science if a seminar is required in the other major. Depending on the other courses taken by the student whose second major is political science, the number of courses required ranges from 11 to 13 .

Required for Minor in Political Science: 6 courses

- POL 110, 211
- Four electives in political science

POL 152 does not count for credit toward the minor in political science.

## COURSE DESCRIPTIONS

POL 152 (F, S)
INTRODUCTION TO POLITICS AND GOVERNMENT
3 credits Foundation
An introduction to the questions, principles, and methodologies of the study of politics and government through the examination of contemporary issues in American and international politics. This course does not fulfill major or minor requirements in political science.

## American Government

POL 110 (150) (F, S) PRINCIPLES OF AMERICAN GOVERNMENT I
3 credits
Core II
An examination of the political processes underlying American Government. Topics include: constitutional development, federalism, political culture, public opinion, political parties and interest groups, elections and campaigns, politics and the media, and civil rights and liberties. Required of all political science majors and minors.

POL 211 (150) (S)
PRINCIPLES OF AMERICAN GOVERNMENT II 3 credits

Core II
Study of the structure and functions of American political institutions and their role in the making of public policy. Emphasis is on the study of Congress, the Presidency, the Bureaucracy, and the Supreme Court. Includes an introduction to the role of state and local governments and an overview of key issues of domestic and foreign policy. Required of all political science majors and minors. Prerequisite: POL 110 is recommended.

POL 215 (S)
PUBLIC ADMINISTRATION 3 credits

Core II
An introduction to different concepts and aspects of public administration from a variety of theoretical viewpoints. Topics include: bureaucratic organization and leadership styles, program evaluation and productivity, budgeting, civil service, and public policy making.

POL 301 (240) (S)
STATE AND LOCAL
GOVERNMENT
3 credits
Core 11
A study of the state as a partner in the federal system; the states' constitutional development; and principles underlying state governmental organization, reorganization, and functions.

POL 302 (243) (F) AMERICAN CONSTITUTIONAL LAW I
3 credits Core II
A case study approach utilizing Supreme Court decisions provides an analysis of the governmental structure of the United States. Principal topics include: judicial review, separation of powers, federalism, extent and limit of Congressional and Presidential authority, the commerce and fiscal clauses of the Constitution.

POL 303 (343) (S)
AMERICAN CONSTITUTIONAL LAW 11
3 credits
Core II
A case study approach utilizing Supreme Court decisions provides an analysis of the individual's relationship to the government under our Constitution. Principal topics include rights under the early Constitution, the incorporating process, First Amendment rights, procedural rights of the accused, equal protection and political rights. (Strongly recommended: Constitutional Law I).

POL 304 (341) (S)
CONGRESS AND THE LEGISLATIVE PROCESS
3 credits
Core II
The role of Congress in the legislative process; its internal operations and external political relations, especially with the President. Comparison of the characteristics of Congress with those of state legislatures and European legislative bodies.

POL 305 (S)
THE PRESIDENT AND THE EXECUTIVE BRANCH 3 credits Core 11
An examination of the growth, both in size and power, of the Executive Branch of the national government. Topics covered include: the mechanics and significance of Presidential elections, the institution of the Presidency, PresidentialCongressional relations, and the limits of Presidential power.

POL 310 (242) (F)
POLITICAL PARTIES AND

## ELECTIONS

3 credits
Core II
A view of the political problems of the United States as revealed in the major and minor political parties that have arisen during the country's history.

POL 311 (S)

## WOMEN IN POLITICS

## 3 credits

Core II
An introduction to the history and issues associated with the movement for women's political equality. Topics include: women's suffrage, equal protection and the ERA, job discrimination, and women in political campaigns and elected offices.

POL 314 (F)
MASS MEDIA AND POLITICS 3 credits Core II
An examination of the influence of the mass media upon the American political process. Emphasis is on the role of the media in campaigns and elections.

## Comparative Government

POL 120 (230) (F)
GOVERNMENTS OF WESTERN EUROPE
3 credits Core II
A political analysis of the constitutional principles and governmental organizations of England, France, and Germany. Required of all political science majors.
POL 22I (333) (S) LATIN AMERICAN POLITICS 3 credits Core II An examination of the common institutions and political practices that characterize Latin American governments. Mexico examined as an illustration of these institutions and practices. Required of all political science majors.

POL 322 (332) (F)
THE GOVERNMENTS OF EASTERN EUROPE AND RUSSIA 3 credits Core II
A study of the politics and government in the former Soviet Union and Warsaw Pact nations of Eastern Europe, including the rise and fall of totalitarian communism and the prospects for democratic development.

## International Politics

POL 240 (23I) (F)
INTERNATIONAL RELATIONS 3 credits Core II
An analysis of the basic patterns and major factors underlying international politics.
Consideration of current international problems. Required of all political science majors.

POL 341 (S)
TIIE GLOBAL VILLAGE 3 credits

Core II
An analysis of the increasing functional obsolescence of the nation slate under the pressures of transnational problems such as drugs, AIDS, and the environment.

The emergence of regional and international organizations such as the European Community, the Organization of African States, and the Association of South East Asian Nations to meet these challenges. Required of all political science majors. Prerequisite: POL 240.

POL 342 (330) (F)
U.S. FOREIGN RELATIONS I 3 credits Core II
A study of the diplomatic and military instruments of American foreign relations, the formal and informal powers and processes by which policy is made, and the basic patterns of national interest and policy prior to World War II.
POL 343 (331) (S)
U.S. FOREIGN RELATIONS II 3 credits Core II An analysis of the main problems of American foreign relations from 1945 to the present. Prerequisite: POL 342.

POL 344 (334) (F)
THE MIDDLE EAST AND THE WORLD
3 credits Core III
A study of modern Middle Eastern politics, with emphasis on the origins, issues, and present stage of the Arab-Israeli conflict; an analysis of Western and Soviet foreign policies in the area, with the emphasis on America's mideast diplomacy.

## Political Theory

POL 260 (232) (F)
SURVEY OF POLITICAL

## THOUCHT

## 3 credits

## Core II

An analysis of the major political writers from Plato to the present. Emphasis on each author's concept of the state, its function and cnd, and his solution to the problem of the reconciliation of the common good with individual frcedom. Required of all political science majors.

POL 361 (S)
LIBERAL DEMOCRACY AND ITS CRITICS
3 credits
Core II
Analysis of modern liberal democratic thought and the various criticisms of it from both the left and the right. Emphasis is on the reading of original sources by Locke, J.S. Mill, Rousseau, Burke, Marx, Nietzsche, etc. Required of all political science majors. Prerequisite: POL 260 is recommended.

## POL 362 (342) (F) <br> MODERN POLITICAL IDEOLOGIES

3 credits
Core II
An inquiry into the nature of modern ideological movements such as National Socialism and Marxism against the background of pre-modern ideological movements. Emphasis on examination of the conceptions of man, history, state, and revolution. Includes analysis of current trends in "post-modern" ideological movements.

POL 363 (S)
THE AMERICAN POLITICAL TRADITION
3 credits
Core II
An inquiry into various religious and philosophical threads, from the Puritan "city on a hill" to the '60s counter culture, which combine to form the fabric of American political thought. Analysis of original source material is stressed.

## Other Courses

POL 270, 370, 470 (F, S)
SPECIAL TOPICS AND
INDEPENDENT STUDY
3 credits
As interests indicate, special programs may be introduced into the curriculum discussing highly specialized problems for group or independent study.

POL 460 (345) (F, S)
POLITICAL SCIENCE

## INTERNSHIP 1

3 credits
Designed to give students the opportunity to apply their academic interest to relevant positions in the community. Placements will be provided and the students will be expected to give a comprehensive report on their experiences. Prerequisite: permission of the Chair.

POL 461 (346) (F, S)
POLITICAL SCIENCE
INTERNSHIP 11
3 credits
With the permission of the Chair, a second semester involving a different experience may be undertaken.

POL 480 (F)

## SEMINAR I

3 credits
A study of methods of research and scholarly writing. Directed research and reports on individual assignments. Required of all political science majors.

POL 481 (S)
SEMINAR II
3 credits
Supervised research and writing on major topic. Weekly presentation and group discussion of individual papers. Submission of written thesis. Required of all political science majors.

## POLITICAL SCIENCE/PUBLIC ADMINISTRATION

(Administered by the Chair, Political Science Department)

Required for Major in Political Science/Public Administration: 13 courses

- POL 110, 211, 215, 260, 301, 302, 480, 481
- ECN 150, 201, 213 or QNT 213.
- ACC 101, 102


## PSYCHOLOGY

## FACULTY

David J. Falcone Ph.D., Chair
Professors: Burke, McCarthy, Rooney Associate Professors: Falcone, Filicetti, Gilligan, Kovatch, Oden, Schreiner, Smith
Assistant Professor: Pritchard
Emeritus Professor: Dondero

## FOUNDATION COURSE

PSY 150

## CORE COURSES

Approved Courses for Core II: 205, $210,215,220,225,230$. You may choose one or two psychology courses to fulfill Core II requirements.

## REQUIREMENTS

Required for Major in Psychology:
Track 1: 12 courses; Track 2: 12
courses; Track 3: 13 courses

Track 1: Pre-Graduate

- PSY 180, 310, 311, 330, 331
- Six electives in psychology, including three of the following: PSY 410, 415, 420, 425, 430
- MTH 115 or above (students anticipating graduate work in psychology are strongly advised to elect a second math course)

Track 2: General Studies

- PSY 180, 310, 311, 325 or 330
- Seven electives in psychology, including two of the following: PSY $410,415,420,425,430$
- MTH 115 or above (students anticipating graduate work in psychology are strongly advised to elect a second math course)


## Track 3: Work Psychology

Preparation for careers and graduate study in Consumer Psychology, Human Factors, Industrial/Organizational Psychology, and Personnel Psychology.

- PSY 180, 230, 310, 311, 330, 331, 340, 345, and SPSS-X
- Two electives in psychology from the following: PSY 410, $415,420,425,430$
- MTH 115 or above (students anticipating graduate work in psychology are strongly advised to elect a second math course)
- CSC 350

Students are strongly advised to engage in relevant business or corporate activities through the PSY 485 practicum course

## COURSE DESCRIPTIONS

## PSY 150 (F, S) <br> INTRODUCTION TO <br> PSYCHOLOGY

## 3 Credits Foundation

Introduction to the study of human
behavior for the non-psychology major or non-psychology minor. Emphasis on methods, theories, and findings of psychological research. Areas covered include social behavior, developmental psychology and personality, among others.

PSY 180 (F, S)
PRINCIPLES OF PSYCHOLOGY
3 credits

A survey of the field of psychology designed for the psychology major and minor. Areas covered will focus on the fundamental findings of psychological research and on the methodological issues. Areas covered include motivation, learning, cognition and perception, among others. Required for all psychology majors and minors; taken as first major course.

PSY 205 ( $\mathrm{F}, \mathrm{S}$ )
PERSONALITY DYNAMICS AND ADJUSTMENT
3 credits
An analysis of the human system, the dynamics of individual behavior, and a consideration of resources necessary for effective living as they are related to a better understanding of personal adjustments in healthy persons developing toward maturity.
PSY 210 ( $\mathrm{F}, \mathrm{S}$ )
DEVELOPMENTAL

## PSYCHOLOGY

## 3 credits

A general study of the development of behavior and the human personality from conception through adulthood; special emphasis on childhood and adolescence.

## PSY 215 (S)

AGING: PSYCHOLOGICAL ISSUES
3 credits
An introduction to the scientific study of aging. Theories, principles and research findings that are of a psychological nature will be studied.

PSY 220 (F, S, )
ABNORMAL PSYCHOLOGY 3 credits
An introductory course surveying the principal forms of mental disorders, with emphasis on causes, symptoms, and treatment. Au analysis of the problem of maladaptive belavior and the study of certain persouality and belhavior patterns.

## PSY 225 (S)

SOCIAL PSYCHOLOGY 3 credits
A study of the facts and theories dealing with the phenomena of social behavior. Focuses on individual behavior as it affects and is affected by the behavior of others.

PSY 230 (F)
INDUSTRIAL AND BUSINESS PSYCHOLOGY
3 credits
A study of those psychological principles, methods, and techniques which are especially relevant to an understanding of bureaucratic personnel, budgetary relationships, innovation, and the relationships of bureaucracy with clientele groups and the general public.

PSY 250 (F, S)

## EFFECTIVE COMMUNICATION

 3 creditsA deepening understanding of, and personal growth experiences in, the art of interpersonal
communication. Attention given to listening and empathy, discussion and decision making, confrontation and conflict management, attitudinal systems and Gestalt, verbal and non-verbal communication, creative goal-setting, individual and social growth.

## PSY 310 (F)

## STATISTICS I

3 credits
An introduction to statistics,
emphasizing such descriptive measures as central tendency, variability and correlation.
Prerequisites: MTH 115 or higher.

## PSY 311 (S)

STATISTICS II
3 credits
An intermediate course in inferential statistics, emphasizing such techniques as the analysis of variance and $t$-tests.
Prerequisite: PSY 310.

## PSY 315 (F)

## BAYESIAN STATISTICS FOR SOCIAL SCIENTISTS

## 3 credits

Clarification of the meaning of statistical calculations and analysis from the Bayesian point of view. Data descriptions and the problem of inferences are contrasted with traditional statistical treatments.
Prerequisite: a two semester course in introductory statistics.

## PSY 325 (S)

## RESEARCH METHODOLOGY

## 3 credits

A study of the nature of scientific research methodology; emphasis on critical reading and evaluating reports of studies and research; development of skill in writing review papers; utilization of research literature in the behavioral sciences; data analysis and critiques of extant research. Prerequisites: PSY 180, 311.

## PSY 330 (F) <br> EXPERIMENTAL <br> PSYCHOLOGYI <br> 4 credits

A laboratory course designed to introduce the student to the classical psychological experiments and the methods of experimental design and research. Experiments on the sensory processes, perception, learning, memory, thought processes, and emotions. Prerequisites: PSY 180 and 311. Three hours lecture, two hours laboratory.

## PSY 331 (S)

## EXPERIMENTAL

## PSYCHOLOGY II

4 credits
Lectures and discussions on modern experimental psychology.
For laboratory work, the student
plans, designs, and performs an original research experiment.
Prerequisite: PSY 330.
Threc hours lecture, two hours laboratory.

## PSY 340 (S)

TESTS AND MEASUREMENTS 3 credits
The selection, administration, and interpretation of psychological tests used in the measurement of aptitudes, achievement, interest, and personality. Prerequisites: PSY 180 and 311.

PSY 345 (S)

## HUMAN FACTORS

## 3 credits

Human Factors deals with the study of people in their working and living environments, and the application of this knowledge to practical problems encountered in the home, business, and industry. Prerequisites: PSY 311 and 230.

## PSY 350 (F, S) <br> COUNSELING THEORIES AND PRINCIPLES <br> 3 credits

Theories and principles of the counseling process. The dynamics of human change. The objectives, work, and continuing problems of counseling. Prerequisite: PSY 180.

PSY 360 (F)
READINGS IN PSYCHOLOGY 3 credits
Readings consist of basic books and periodicals having relevance for the broad field of psychology; assignments discussed in seminar fashion. Prerequisite: PSY 180.

## PSY 410 (F) <br> THEORIES OF LEARNING

3 credits
An analysis of the principal theories of learning in light of recent experiments in animal and human learning. Prerequisite: PSY 180.

## PSY 415 (S) <br> COGNITIVE PSYCHOLOGY

3 credits
A systematic study of the research and theories developed to explain human memory, language, thinking, and consciousness. Prerequisite: PSY 180.

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PSY 420 (S)
PHYSIOLOGICAL PSYCHOLOGY
3 credits
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An introduction to the neurological and endocrinological bases of behavior. Consideration of sensory and motor processes, motivation and emotion, learning and memory. Prerequisite: PSY 180. Two hours lecture, two hours laboratory.

PSY 425 (F)
THEORIES OF PERSONALITY 3 credits
A systematic study of the principal theories of personality with particular emphasis on recent trends, research methodology, and personality measurement.
Prerequisite: PSY 180.
PSY 430 (F)
HISTORY AND SYSTEMS OF PSYCHOLOGY
3 credits
An examination of the beginnings and development of psychology as a science and profession and of its various approaches, systems, fields, problems, and applications; the historical roots of these in philosophy, biology, and national culture. Prerequisite: PSY I80.

PSY 470-471 (F, S)
SPECIAL TOPICS IN

## PSYCHOLOGY

3-6 credits
Content will vary each year to present the psychological underpinnings of issues on the contemporary American scene. Such topics as the psychology of drug use, of prejudice, of human sexuality, of attitude change, of religion, and of gender issues will be treated in various semesters. Prerequisite: varies with topics.

PSY 480-481 (F, S)

## SEMINAR

3-6 credits
Readings, discussion, and analysis of contemporary psychological theories and research; individual student research and presentation of paper. Prerequisite: Junior or Senior standing as psychology major.

PSY 485-486 (F, S) PSYCHOLOG]CAL RESEARCH OR PRACTICUM
3-6 credits
Offers the student the option of conducting a research project under the direction of a faculty member or of obtaining practical experience serving in an institutional setting under professional supervision. Students preparing for careers or graduate study in clinical areas of psychology can select from numerous practicum placements. Program planned in advance.
Prerequisite: Junior or Senior standing as a psychology major. One or two terms.

## RELIGION

## FACULTY

Michael J. McGinniss, F.S.C., Ph.D., Chair
Professors: Efroymson, Grosnick, Kelly, McGinniss
Associate Professors: Davis, Kecnan,
Ramshaw, Schepers
Assistant Professors: Devlin, Halligan, TePas
Lecturers: Angeles, Barnett,
Echelmeier, Hallahan, Humm,
Raphael, Utz, Van Everbroeck, Wojnicki

## FOUNDATION COURSES

REL 151, 152, 153

## CORE COURSES

Approved for Core I: You may fulfill the requirements for Core I A by selecting any one or two religion course(s) except REL 151, 152, 153, 480.

## REQUIREMENTS

Required for Major in Religion: 13 courses

- REL 151 and either 152 or 153.
- Eleven religion electives, including at least one from each of the four study areas (biblical, theological, historical, and religious) and REL. 480. At least one of these electives must be in a religious tradition outside of Judeo-Christianity.

Religion majors may choose the major program as described above or:

## Religion-Education:

- The religion major requirensents (chosen, with the guidance of the Chairperson, in view of a career in teaching), plus EDC 101, 203, 204, 304, 306, 401, 470.

Note: Religion is a subject not accredited by the various states; therefore the Pennsylvania Instructional I Certificate is not issued to Religion-Education majors. This forms no impediment whatever to placement in schools which teach religion.

## COURSE DESCRIPTIONS

REL 151 (F, S)
THE BIBLE
3 credits
Foundation
A study of the foundational religious literature of Jews and Christians; its origins and growth; the history and the religious and theological ideas of the people who produced these writings, and the Near-Eastern cultures and literature which contributed to them.

REL 152 (F, S) CATHOLICISM IN THE MODERN WORLD
3 credits Foundation
A historical and theological introduction to the study of Catholicism as it shapes and is shaped by the social, economic, political, and religious comexts of the late twenticth century. Selected contemporary issues facing Catholicison will be studiced in light of the listory of the issues and current theological thought.

## REL 153 (F, S)

## THE DYNAMICS OF RELIGION 3 credits <br> Foundation

A study of the diverse patterns of thought, behavior, and social structures which express human religious experience. Designed to foster an understanding of the importance of religion in society, in social change, and in personal identity and transformation.

## Biblical Studies

## REL 212 (S)

THE PROPHETS OF ANCIENT ISRAEL
3 credits
Core I
Prophecy and prophetical literature in the Bible. Prophecy as an institution in the Near East; its unique development in Israel. Theological message of the biblical prophets.

## REL 214 (F)

THE SYNOPTIC GOSPELS

## 3 credits

Core I
How did the Gospels develop? How historically reliable are they? What value have they as sources for a study of the person of Jesus of Nazareth? What is Form Criticism? Source Criticism? The state of contemporary biblical scholarship? These points will be illustrated through a guided study in the synoptic Gospels: Matthew, Mark, Luke.

REL 215 (S)
THE GOSPEL OF JOHN

## 3 credits

Core I
What is a gospel? The place of the Fourth Gospel in the context of early Christianity. A study of the meaning, literary tcchnique, and theological themes of John. Brief study of other works in the Johanninc group of writings.

## REL 216 (F)

## ST. PAUL

## 3 credits

Core I
A study of the carlicst Christian literature: the letters of Paul:
background and context-the primitive church; analysis of the
texts; problems and tentative solutions; Paul's contribution to Christianity yesterday and today.

REL 311 (S)
CONTEMPORARY BIBLICAL ISSUES
3 credits
Core I
Specific problems in Israel or in New Testament Christianity as reflected in their literature.
Content to be specified at registration.

## Theological Studies

REL 220 (S)
THE CHURCH: ISSUES AND PROBLEMS
3 credits
Core I
A brief study of the origins of the Church, and an examination of the various modes in which Church has been and can be understood. Social structure and dynamics of the Church and her mission in today's world.

REL. 221 (F)
ISSUES IN CHRISTOLOGY: JESUS AND HIS ACHIEVEMENT 3 credits Core I
The person, mission, and achievement of Jesus in the New Testament. Post-biblical church reflections on the tradition. Contemporary attempts to reinterpret Christology and to draw existential implications.

REL. 222 (F)
THE SACRAMENTS
3 credits
Core I
An inquiry into the origin and
development of the Christian symbols highlighting some of the problems of modern sacramental theology.

REL 223 (F)
CONTEMPORARY MORAL ISSUES
3 credits
Core 1
Study discussion of a varicty of moral perspectives on selected current issues: War. Racism. Sexual Conduct. Abortion. Euthanasia.

Women's Rights. Capital
Punishment.
REL 224
HUMAN EXISTENCE AND RELIGIOUS BELIEF
3 credits
Core I
An inquiry into the nature of religious faith and into the issues that surface when believers come alive to the realities of modern life. The relation between action and contemplation. The question of faith and history. The combination of religious belief and morality. The influence of faith on social institutions and vice versa.

REL 225 ( $\mathrm{F}, \mathrm{S}$ )
A CONTEMPORARY THEOLOGY OF MARRLAGE
3 credits
Core I
Critical investigation and re-evaluation of traditional assumptions about the meaning and function of human sexuality and inter-sexual relationships. The historical and ideological circumstances in which they developed. The construction of a theology of marriage which takes critical account of contemporary physical and psycho-social sciences.

## REL 320

THEOLOGICAL ISSUES 3 credits

Core I
Selected theological topics of current controversy. Content to be specified at registration.

REL 321 (S)
PEACE, JUSTICE, AND THE CHRISTIAN TRADITION 3 credits

Core I
Fundamental principles which have influenced religious thinking about and action for peace and justice. Principal focus on Western Christian thought, but peace and justice traditions of other world religions may also be included.

REL 322 (S)
WORSHIP, ART, AND LIFE

## 3 credits <br> Core I

A study of the shape and practice of worship, especially in Roman Catholic liturgy. Skills in planning
and criticizing liturgy. Past and present role of arts in liturgy: architecture, music, dance, etc. The Japanese tea ceremony demonstrating how ritual operates in a foreign but analogous ceremony.

## REL 323 (F) BIOMEDICAL PROBLEMS

3 credits
Core I
Study/discussion of selected ethical dilemmas arising from recent advances in biology, medicine, and the behavioral sciences. E.g., Abortion/Euthanasia. Death. Genetic Intervention. Informed Consent. Human Experimentation. Presupposes no special knowledge of biology or medicine.

REL 324 (S)
CHRISTIAN SPIRITUALITY: THE SEARCH FOR GOD, FREEDOM, AND COMMUNITY

## 3 credits

Historical and reflective study of the ways people in the Christian West strive to find God, and thus to achieve self-integration in the context of ecclesial community. The origins and development of monasticism; the clerical ideal; the emergence of lay spiritualities; the means employed in reaching for perfection (asceticism, prayer, mysticism) and the call to discipleship.

## Historical Studies

## REL 330 (S) <br> EARLY CHRISTIANITY: CRISIS AND PROCESS

3 credits Core I
An exploration of the issues around which Christianity of the first four centuries took form: the struggle with the Roman Empire; the confrontation with Hellenistic philosophy and religion; Jewish Christianity, gnosticism, and the development of "orthodoxy." The effect of all this on the origin and shape of certain ideas and institutions such as Christology,
church, papacy, interpretation of history, and sex.

## REL 331

DEVELOPMENT OF CHRISTIANITY IN THE MIDDLE AGES
3 credits Core I
A study of religion in the Middle Ages and Renaissance periods concentrating on such popular movements as the Cathars, Waldensians, Fraticelli, Lollards, and Beguines, as well as on such phenomena as millenarism, reformation, and conciliarism. Relation of these movements and phenomena to the evolution of art, the inquisition, papacy, universities, and monasteries. The religious and ethical implications of humanism and capitalism.

## REL 332 (F)

THE REFORMATION AND THE CATHOLIC RESPONSE
3 credits Core I
A critical audition of the religious voices of the Reformation era, with attention to their origins, context, and peculiarities. Special treatment to the important reformers both on the Continent (Luther, Calvin, Zwingli, Bucer) and in the British Isles (Cranmer, Knox), as well as to pertinent Catholic thought (Council of Trent).

REL 334 (S)
MODERN RELIGIOUS THOUGHT 3 credits Core I
A critical examination of the great religious movements of the I9th and 20 th centuries that have most contributed to the present religious situation. The encounter between Christian thought and philosophy and natural science. The confrontation between Existentialism and religious Idealism; the Oxford Movement; the Marxist critique of religion; the origins of biblical criticism; and the clash between conservatism and liberalism in Protestant and Catholic Church circles.

REL 336 (S)<br>RELIGION IN AMERICA 3 credits<br>Core I<br>A study of the major religious movements within the Roman Catholic and Protestant churches in the United States from the American Revolution to the present day. Theological implications for the churches of such movements as the American Revolution, the Great Awakening, the Abolitionist Movement, the Civil War, the Gospel of Wealth, the Great Depression, World War II, Vatican II, and the nuclear threat.

## Religious Studies

REL 240 (F)
THE GREAT RELIGIONS OF THE WORLD
3 credits
Core I
A survey of great world religions, e.g.: Judaism, Christianity, Islam, Hinduism, Buddhism, Confucianism, and Taoism. Topics covered include: world view, basic doctrines and practices, major figures, role of women, and impact on contemporary world culture. Readings from scripture texts of traditions studied, as well as secondary sources.

## REL 243 (F) <br> RELIGIOUS ATTITUDES IN MODERN LITERATURE 3 credits

Core I
An introduction to the meeting of religion and literature as found in the writings of various authors-both modern and contemporary. A variety of literary forms will be examined to discern the artists' religious intentions and/or attitudes. Topics include: the use of religion and religious language to critique the modern experience; modern visions of and attitudes toward religious experience; religion and technology; the confrontation between literature and a post-religious world. Identical with ENG 243.

REL 244 (F)
WOMEN AND WESTERN RELIGION
3 credits
Core I
The influence of religion through history in the shaping and legitimation of women's roles and identity. The religious experience of women, and the extent to which feminine religiousness and holiness might be different. The recovery or refashioning of leadership roles. The feminist critique of "patriarchal" religion and theology; the consequent alternatives of disaffiliation or reconstruction.

REL 340 (F)
THE RELIGIONS OF INDIA 3 credits

## Core I

A study of the origin, development, and structure of Hindu traditions. Vedic beginnings. Major reform movements. Sects and schools of interpretation. Yoga, bhakti, and mystical traditions. Recent developments.

## REL 341 (S)

BUDDHISM AND THE RELIGIONS OF CHINA AND JAPAN
3 credits
Core I
A study and discussion of the rise of Buddhism and its subsequent division into Theravada and Mahayana Buddhism. Its Chinese and Japanese mutations (Pure Land and Zen). Confucianism, Taoism, Shinto, Modern phenomena: Soka Gakkai and Maoism.

REL 342 (F)
JUDAISM
3 credits
Core I
A study of the historical origin, roots, and developments of Judaism as a religion, as well as a cultural, civil, and ethnic group. The course will evaluate Jewish social and educational values as well as religious problems and attitudes among Jews today.

REL 344 (S)
ISLAM
3 credits
Core 1
Background and development: the prophet, the Qur'an, Muslim traditions and values; theological
development, inner tensions, contemporary movements, confrontation with the non-Muslim world.

## Special Studies

REL 270, 370, 470 (S)
SPECIAL TOPICS IN RELIGION 3 credits Core I Content of the course will be announced whenever it is offered. May be repeated for credit.

REL 480 (F)
SEMINAR
3 credits
An introduction to scholarly research through the selection, writing, and small-group presentation of formal papers in a specific area determined by the instructor. Required of all religion majors; open to others approved by Chair. Prerequisite: 15 hours of religion. May be taken in junior or senior year.

## SOCIOLOGY, SOCIAL WORK, AND CRIMINAL JUSTICE

## FACULTY

Finn Hornum, M.A., Chair<br>Professor: Connors<br>Associate Professor: Tri Nguyen, Stull Assistant Professors: Hornum, Montgomery, Otten<br>Instructor: Mariscotti

## $\overline{\text { FOUNDATION COURSES }}$

SOC 150, 155

## CORE COURSES

Approved courses for Core II:
SOC 253, 257, 258, 260 (SWK 260), 262, 263, 305, 306, 308, 309, 310, 363, 364 (SWK 363, 364).

## REQUIREMENTS

Required for Sociology Majors: SOC 150, 301-302, 310, 480-481, three sociology courses above the 250 level, and three electives in sociology, social work, or criminal justice. At least one of the latter six courses must come from the following list of courses: SOC 260, $262,265,308$, CRJ 387 , or SWK
364. Also recommended: ECN 150, 201; POL 150; CSC 151 or 155 .

## COURSE DESCRIPTIONS

## SOC 150

## PRINCIPLES OF SOCIOLOGY

 3 creditsFoundationAn introduction to the structure and functioning of society with emphasis on American society but with cross cultural comparisons. Theoretical concepts, empirical findings, and research methods are stressed.

## SOC 155 <br> CONTEMPORARY AMERICAN SOCIETY

3 credits Foundation
An investigation of selected aspects of present day American society such as discrimination, deviance, the role of religion, and family life. The emphasis is on experiential learning in that students participate in exercises designed to gather impressions and data which are then used to formulate concepts and theories.

SOC 201
SOCIAL PROBLEMS AND SOCIAL JUSTICE

## 3 credits

An exploration of how social conflict and social organization affect human and societal well-being. Topics: mental health, personal safety, economic well-being, and intergroup relations in an industrial society and a developing nation.

## SOC 211 (F, S) MARRIAGE AND FAMILY

 3 creditsA consideration of the historical development of the family, variations of family structure in contemporary societies, and current trends in American family patterns.

SOC 253 (F)

## SOCIOLOGY OF WORK

 3 creditsCore II
Analysis of the social organization of work in modern societies, the concept of career, the development of professionalization, the nature of work-satisfaction and the impact of bureaucratization. Occupational subcultures such as law, medicine, public service, the military, and education considered.

SOC 257 (S)
THE CITY: CONFLICT AND CHANGE
3 credits Core II
A study of world cities; their growth and impact on personality; urban violence and its control;
fragmentation, economic problems and city/suburban conflicts. Efforts at neighborhood development and metropolitan planning will also be discussed.

SOC 258 (F)

## POPULATION AND ECOLOGY

 3 credits Core IIA study of the effects on the quality of life caused by population growth and patterns of consumption in developing and industrial nations. Trends in mortality and fertility, causes and consequences of these trends, and population policies explored.

## SOC 260 (S) <br> SEX, POWER, AND <br> SOCLALIZATION

3 credits Core II
An exploration of male and female gender roles in the contemporary United States. An examination of socialization in childhood and adulthood, sexual politics, and power structures and dynamics within the family and the
workplace. Special attention to the effects of class and race on gender role formation. Identical with SWK 210.

SOC 262 (F, S)
DISCRIMINATION AND
DIVERSITY
3 credits
Core Il
An analysis of the structure and dynamics of dominant/minority relations in historical and contemporary contexts. Emphasis on the sociological analysis of ethnic and racial discrimination and inquiry into the sources of conflict between dominant and minority groups.

SOC 263 (F)
ANTHROPOLOGY
3 credits
Core II
An anthropological study of the origin and descent of humans and of the role of culture in explaining the variations and constants in human behavior.

SOC 265 (F)
THE SOCIOLOGY OF THE LAW 3 credits
The analysis of law as a social process in both historical and comparative perspectives.
Emphasis will be on those who frame, implement, and administer the law. Other topics to be covered are: professional associations, professional ethics, and the changing nature of the legal system.

SOC 270, 370, 470 (F, S)

## SPECIAL TOPICS IN SOCIOLOGY

 3 creditsDesigned to cover special or emerging interests in sociology.
Topics have included: sociology of conflict, the Holocaust and its causes, computers and society, juvenile delinquency, and gerontology. Special permission needed to be used to meet major requirements.

SOC 301 (F)
SOCLAL STATISTICS I
3 credits
An introduction to such descriptive
statistics as central tendency
measures, variability, correlation and regression. Analysis of cross-tabulated data will be facilitated through the use of SPSSX computer software programs. No prior knowledge of computers assumed.

SOC 302 (S)
SOCIAL STATISTICS II

## 3 credits

Basically a course in inferential statistics beginning with a discussion of probability, binomial distributions, and normality. Both parametric and non-parametric statistics covered. Continued use of computer technology in the analysis of survey research results as well as those collected using qualitative methodologies. Prerequisite: SOC 301 or permission of instructor.

SOC 305 (F)
SOCIETY AND THE INDIVIDUAL 3 credits Core II
The study of the influence of society and culture, as mediated by the social group, on the social, cultural, and personal behavior of the individual. Prerequisite: SOC 150 or 155 , or permission of instructor.

SOC 306 (F)
COMPLEX ORGANIZATIONS 3 credits Core II
An examination of the nature and effects of modern, large-scale organizations. Focus on both private sector corporations and public sector bureaucracies. Prercquisite: SOC 150 or 155 , or permission of instructor.

## SOC 308 (S)

CLASS, STATUS, AND POWER 3 credits

Core II
A study of economic, social and political inequalitics and of social molitity. Emphasis on the causes, patterns, and conscquences of such incqualitics. The United States compared with other industrial as well as mon-industrialized nations. Prerequisitc: SOC 150 or 155 , or permission of instructor.

## SOC 309 (S)

## MEDICAL SOCIOLOGY

 3 creditsCore II
A study of the relationship between social factors and health, the interaction between practitioners and patients, the health care delivery system, and some contemporary issues such as malpractice and human experimentation.

## SOC 310 (F, S)

## SOCIOLOGICAL THEORY

## 3 credits

## Core II

A survey of the development of social thought from August Comte to contemporary theorists. An attempt to see the evolution of social theory within the social context of the theorist's milieu. Prerequisite: SOC 150 or 155 , or permission of instructor.

SOC 312
SOCIAL CHANGE AND SOCIAL MOVEMENTS
3 credits Core II
An examination of the dynamics of social change, of sustained collective movements seeking change, and of the reactions they generate.

SOC 340 (F, S)

## SOCIOLOGICAL PRACTICE

 3 creditsSociological practice, through internships, provides opportunities to undertake, on-site, academically structured learning experiences in work settings related to their career interests and academic programs.
Prerequisites: junior or senior status, GPA greater than 2.50, permission of coordinator.

SOC 363-364 (F, S)
SOClAL WELFARE POLICY 1 and II

3 creclits
Core II
(Identical with Social Work
363-364.)
SOC 480 (F)
RISEARCII SEMINAR I
3 creclits
An overvicw of rescarch mecthodology. Such research data
collection methorls as
questionnaire designs, interviewing and observations will be discussed. Topics covered will include the ethics of human experimentation and evaluation techniques. Offered in alternate years.

## SOC 481 (S) <br> RESEARCH SEMINAR $1 I$

 80
## 3 credits

Original research in one area of social reality employing a research method of the student's choosing. Offered in alternate years. Prerequisite: SOC 480.

## CRIMINAL JUSTICE

## FACULTY

Laura Otten, Ph.D., Director and Field Coordinator
Finn Hornum, M.A.

## REQUIREMENTS

Required for Criminal Justice Majors: CRJ 22I, 222, 385, 485486 and two additional criminal justice courses; SOC 150, 301-302, 310 and two sociology courses above the 250 level. At least one of the two criminal justice electives or one of the two sociology electives must come from the following list of courses: SOC 260, 262, 265, 308, CRJ 387, or SWK 364.

## COURSE DESCRIPTIONS

## CRJ 220 (S) <br> JUVENILE DELINQUENCY

3 credits
Comparative and historical survey of juvenile delinquency and juvenilc justice. Study of the nature, magnitude, and social location of youth crime; analysis of causal theories; overview of programs aimed at delinquency prevention and control.

CRJ 221 (F)
CRIME AND ITS CAUSES
3 credits
A study of the sociological and social psychological foundations of crime and delinquency. Topics include: the definition and meaning of crime and delinquency, the etiology of crime and delinquency, the history and development of the criminal law, criminal behavior systems.

CRJ 222 (S)
INTRODUCTION TO CRIMINAL JUSTICE
3 credits
A consideration of law enforcement, the administration of justice and the punishment and treatment of criminals. A survey of the sociological and social psychological processes affecting the criminal justice system. Topics include: the police function, crime prevention programs, the prosecutorial and defense functions, judicial administration and decision-making, institutional and community-based corrections, probation and parole.

CRJ 223 (S)
CRIMINAL LAW
3 credits
An exploration of the basic concepts and legal and sociological issues in criminal law. Attention to: development of law, legal elements of crime-both in general and specific offenses; legal requirements for criminal defenses; differing theories of punishment. Pennsylvania Crimes Code used as a reference.

CRJ 225 (F)

## CRIMINAL PROCEDURE

3 credits
Constitutional issues related to the criminal justice process. Case analysis deals with issues such as search and seizure, stop and frisk, arrest, confessions, right to counsel, jury trials, and other significant
Supreme Court decisions.

CRJ 270, 370, 470 (F, S)
SPECIAL TOPICS IN CRIMINAL JUSTICE
3 credits
Designed to address current issues in criminal justice. Topics: victimology, crime prevention, forensic criminology, counseling, criminal justice administration, and criminological research.

CRJ 324 (S)
POLICE: ORGANIZATION AND

## FUNCTIONS

3 credits
An investigation of the organization, legal powers, and functions of the police. Topics include: police organizational structure, police responsibilities such as patrol, arrest, and investigation, police-community relations, and topical issues on police and society, such as police use of force, police corruption, and required education and training for police.

CRJ 325 (S)
THE COURTS: ORGANIZATION AND FUNCTIONS

## 3 credits

An in-depth exploration of the structure, players, functions, and issues that make up the criminal courts of America. This exploration employs an adversarial approach, thereby mimicking the very essence of court procedure and developing students' awareness of the strengths and weaknesses of our criminal courts.

## CRJ 326 (F) <br> CORRECTIONS: PRISONS, PROBATION AND PAROLE 3 credits

Intensive examination of the correctional process in the United States and other countries. Topics include: the objectives of punislıment, sentencing policies and procedures, capital punishment, imprisonment and community corrections.

CRJ 385 (F)
*
THEORIES OF DEVIANCE 3 credits
An intensive analysis of contemporary theories of deviant behavior. Theories examined through seminar discussions of primary materials and critiqued by consideration of research findings. Social policy implications discussed and specific criminal justice programs considered in the light of these theories.

CRJ 386 (S)
SYSTEMS OF CRIMINAL

## BEHAVIOR

## 3 credits

Selected criminal behavior systems examined in depth through readings, group projects, field interviews, and field trips. Offerings include such forms of criminal behavior as organized crime, elite deviance, violent crime, crimes without victims, and international terrorism.

CRJ 387 (F)
GENDER, CRIME, AND JUSTICE 3 credits
An investigation of the facts and ramifications of being female and involved in the criminal justice system. Females considered in their roles as offenders, victims, and practitioners and contrasted with males to see whether sex makes a difference in handling, system response, outcome, practitioner success, etc. Efforts will be made to explain whatever differences are found between females and males.

CRJ 485 ( $\mathrm{F}, \mathrm{S}$ )
SEMINAR IN CRIMINAL JUSTICE 6 credits
Students will be expected to conduct research in a criminal justice setting. The course will meet each week for two hours. Taken concurrently with CRJ 486. Prerequisite: CRJ 385.

CRJ 486 (F, S)
CRIMINAL JUSTICE INTERNSHIP
6 credits
Field placement in law
enforcement, legal, and
correctional agencies. Students are placed according to their interests and receive individual supervision by the agency. Field requirements are for 4 days per week, 6 hours per day for the entire semester. Must be taken concurrently with CRJ 485. Prerequisite: CRJ 385.

## SOCIAL WORK

Council on Social Work Education Accredited Baccalaureate Program

## FACULTY

Sybil Montgomery, M.S.S., Ph.D., A.C.S.W., L.S.W., Director Janine Mariscotti, M.S.W., L.S.W., Field Instruction Coordinator

## REQUIREMENTS

Required for Social Work Majors: SWK 202, 361-362, 363-364, 461-462, 463-464, 465; PSY I80 and 210; ECN 150; POL 150; BIO 156; SOC 150, 301-302, 310; and two 200-300 level professional development courses to be selected with your advisor. At least one of these two professional development courses may come from the following list of courses: SOC 260 , 262, 265, 308; CRJ 387.

## COURSE DESCRIPTIONS

SWK 202 (F)
INTRODUCTION TO SOCIAL WORK AND SOCIAL WELFARE 3 credits
A survey course that provides an overvicw of the social work profession, the social welfare system, social work methods, and fields of practice. A basic understanding of human needs, of populations at risk in socicty, and of the social service delivery system will be provided.

SWK 260 (S)
SEX, POWER, AND
SOCIALIZATION
3 credits
Core III
Identical with SOC 260.
SWK 270, 370, 470 (F, S)
SPECIAL TOPICS IN SOCIAL WORK
3 credits
Designed to address contemporary issues in social policy and social work practice. Topics include gerontology, mental health, child welfare, family violence, and human sexuality. Students are advised to check with the Program Director about current offerings and to provide suggestions for future topics.

## SWK 361 (F) <br> FOUNDATION OF SOCIAL WORK

## 3 credits

Designed to develop students' knowledge base, skills, and values in social work. Historical writings of prominent social work theorists will be examined. Social problems will be explored from a
bio-psycho-social perspective.
Social work roles will be delineated. Prerequisites: SWK 202, PSY 150, BIO 156.

SWK 362 (S)
INTRODUCTION TO SOCIAL WORK PRACTICE
3 credits
Provides an understanding of the generalist framework of social work practice. Student will develop skills in working with individuals, families, and communities. The contributions of personality and system theory to social work practice will be explored. Concurrent with an educationally directed field practicum, the course introduces the student to the role of the social worker in an organizational setting. Prerequisite: SWK 36I. Taken concurrently with PSY 203.

SWK 363 (F)
SOCIAL WELFARE POLICY I
3 credits
Provides a historical examination of the development of the social welfare system in the United States, and societal values as they impact on policy formulation and implementation. A framework for analysis of social welfare policies is delineated and applied to historical and contemporary social welfare policies and programs. Identical with SOC 363. Prerequisites: SOC 150, POL 150.

## SWK 364 (S) <br> SOCIAL WELFARE POLICY II

 3 credits Core II Explores contemporary social welfare policy in the United States including income supports, health, aging, child welfare, mental health, and family policy. The role of political process in policy formulation and the impact of social welfare policies on minority groups and women will be examined. Identical with SOC 364. Prerequisites: SWK 363, ECN 150, SOC 310.
## SWK 461 (F)

SOCIAL WORK THEORY AND PRACTICE I

## 3 credits

Provides an overview of the five stages of the social work process. Three stages will be studied in depth: engagement, assessment, and planning. These stages will be examined for application to both direct and indirect practice. Prerequisites: SWK 361-362.

SWK 462 (S)
SOCIAL WORK THEORY AND PRACTICE II
3 credits
A continuation of SWK 461, this course examines the two remaining stages of the social work process: intervention and evaluation. Methods of intervention with individuals, groups, families, and communities will be examined in depth. Students will have an opportunity to evaluate their own practice and engage in program
evaluation. Prerequisites: SWK 46I, SGC 301-302.

## SWK 463 (F)

FIELD INSTRUCTION I
6 credits
An educationally directed practicum for two days per week provides the student with an opportunity to develop the relationship between social work theory and practice. Taken concurrently with SWK 46 I.

SWK 464 (S)
FIELD INSTRUCTION II
6 credits
A continuation of Field Instruction I, this course provides a social work practice experience in which the student integrates the social work theory, skills and values that he or she is learning in the classroom.
Taken concurrently with SWK 462.
SWK 465 (S)
PROFESSIONAL
CONSIDERATIONS IN SOCIAL WORK
3 credits
Examines the nature of professions and the history of social work. Professional dilemmas and ethical decision making with special populations are explored. Students will be given an opportunity to assess their own values as they assimilate the value base of the social work profession. Taken concurrently with SWK 462 and 464.

## URBAN STUDIES MINOR

Coordinated by: Richard I. Geruson, Ph.D., Economics Department

## REQUIREMENTS

Required:
Three courses from the following:

- SOC 257, 258
- HIS 329, 333
- ECN 35I, 404
- POL 240, 24I; EDC 330

Three courses from the following:

- ECN 203
- HIS 324,337
- $\operatorname{SOC} 306,308$


## WOMEN'S STUDIES MINOR

Directed by: Barbara C. Millard,
Ph.D., English Department
Designed as a minor for women and men students of any major who wish to examine the influence of gender as a cultural and historical variable and to explore the quality of women's lives. The list of courses available to those minoring in Women's Studies changes as new courses become available; students should check with the Director for the most up-to-date information on available courses.

## REQUIREMENTS

From the following list, students must select their six courses from at least 3 different departments:

- WST 270
- COM 314
- CRJ 370,* 387
- ECN 270*
- ENG I60, 302, 335, 435
- HIS 328, 329
- PHL 330,* 338
- PHY 121
- POL 311
- PSY 371
- REL 244, 31I
- SOC $260,271^{*}$
* Special Topics, as designated

Business Administration


The mission of the School of Business Administration is to offer educational programs which prepare students for a purposeful life by integrating human values with current business management skills.

Through its faculty, curricular environment, and linkages with the business community, the School of Business seeks to integrate its commitment to value-centered programs and to achieve an appropriate blend of contemporaneous business theory and practice.

In so doing, the School of Business strives to become a premier institution in the Delaware Valley, providing contemporary business education for local students in particular and for Middle Atlantic area students in general.

Teaching and learning are of paramount importance. We believe we should:

- know each student as an individual;
- challenge each student to work toward attaining his or her best performance level;
- expose students to value-centered concepts and issues throughout the curriculum;
- immerse students in a learning environment which blends current business theory and practice.

Continuous quality improvement processes ensure that the many offerings of the School of Business are of the highest quality. The program is regularly evaluated in terms of standards established by the American Assembly of Collegiate Schools of Business; standards and norms established by various professional bodies such as the American Institute of Certified Public Accountants, the American Management Association, and the American Marketing Association; and an ongoing dialogue and review with business executives and professionals.

The School of Business Administration prepares students to develop the skills and experience to move from the University into management/professional positions in business, government, and nonprofit organizations. The internship and cooperative education programs provide hands-on experience in business organizations; recent participants have included SmithKline Beecham, Cigna, Sun, Arthur Andersen, and Tasty Baking. Over 100 executives volunteer their time each year to come to classes to meet with students. Many of the business clubs set up field trips to area businesses so that students can see professional operations firsthand.

In addition, the Business Advisory Board, which is composed of senior executives from companies throughout the Delaware Valley, advises the Dean of Business on contemporary developments in business practice and how to help students prepare for professional careers.

In short, when you're a La Salle University business major, you have a number of competitive advantages. Your "real world" experiences and academic preparation put you on the right path toward success.

## THE CURRICULUM

The program leading to a Bachelor of Science degree in Business Administration consists of 120 credits (minimum 38 courses), of which at least 50 percent must be in arts and sciences. The liberal arts and science studies and business foundation courses tend to be concentrated in the first two years, and the professional studies in the last two years.

## THE LIBERAL ARTS CORE

The Liberal Arts Core Curriculum provides you with an opportunity to build a strong foundation for the future. It encourages you to work out a system of values rooted in the best thinking of the great minds of the past and present.

While the Core allows you some freedom of choice, it includes guidelines which should provide coherence in your college education. The Core Curriculum prepares you to adapt to the ever-changing world by exposing you to a well-thouglit-out plan aimed at encouraging four years of intellectual and personal growth. The Core Curriculum consists of three parts: Foundation, Core I, and Core II.

Foundation Courses ( 9 courses, to be completed by the end of the sophomore year)

These courses are most directly related to the liberal education approach that is basic to La Salle's aims and traditions. You will take foundation courses in writing, literature, history, computer science, philosophy, science, religion, and social science. The University may waive a writing course and/or a computer science course if your background so warrants.

Core I Courses (5 or 6 courses, to be completed by the end of the junior year)

These courses are an opportunity to build upon the foundations you have in place. You take three courses in Religion and Philosophy (two in one subject and one in the other). You also take a sequence of three courses in one of these:

- History
- Fine Arts (Art or Music)
- Foreign Languages (Classical languages, French, German, Hebrew, Italian, Japanese, Russian, Spanish)
- Literature

Each sequence has been planned by the individual department to provide growth in the knowledge and skills of that subject.

## Core II Courses (1 or 2 courses)

- Economics 201 and 1 course from a subject listed below. This course may not be in the subject you choose for your Core I sequence.
- Fine Arts (Art or Music)
- Foreign Language Literature
- History
- Literature
- Social Science (Economics, Psychology, Political Science, Sociology)
- Communication
- Education


## ADDITIONAL ARTS REQUIREMENTS

- Math 115 and 116 or equivalent
- Introduction to Psychology (PSY 150)
- Oral Communication
- Managerial Economics (ECN 302)


## BUSINESS CORE

The Business Core is intended to introduce you to the four functional areas in business-accounting, finance, management, and marketing-as well as to commonly used analytical concepts-economic and quantitative analysis and law. The following courses constitute the core:

Lower Division (taken freshman and sophomore years)

- Principles of Accounting (ACC 101, 102)
- Introductory Economics (ECN 150, 201)
- Business Statistics (QNT 213)
- Statistical Information Systems (QNT 215)
- Legal Environment of Business (LAW 202)
- Organizational Behavior (MGT 201)

Upper Division (taken junior and senior years)

- Fundamentals of Financial Management (FIN 300)
- Introduction to Financial Markets and Institutions (FIN 303)
- Production and Operations Management (IOM 300)
- Principles of Marketing (MKT 300)
- Business Policy (MGT 485)


## PROFESSIONAL STUDIES (4 or 8 courses)

These courses provide an intensive learning experience in one facet of business and serve as a basis for future career development.

Professional specializations are offered in:

- Accounting
- Finance
- Information and Operations Management
- Marketing
- Organizational Management

The professional option ordinarily consists of 4 courses in one functional area beyond those courses required in the business core. The accounting option, however, requires 8 courses. This is intended to help you be better prepared to pass the Certified Public Accounting (CPA) examinations or to cmbark on an accounting carcer in industry. The professional option may be chosen upon matriculation or prior to starting major conrses.

Professional minors are offered in:

- Accounting
- Business Administration
- Health Care Administration
- International Studies
- Risk Management and Insurance
- Other minors are offered by the School of Arts and Sciences.

Students who wish to do so have the option to pursue dual specializations or minors. In either case, permission of both Chairs must be obtained.

All students are required to take a writing emphasis course in their major discipline at the Junior/Senior level.

## FREE ELECTIVES

You may choose to concentrate free electives in a particular field or you may use these electives to diversify your background or broaden your interests. Foundation courses may not be taken as free electives without permission from the Dean.


## PROGRESS RECORD

## - FOUNDATION (9 courses)

1. Writing $\mathrm{I}^{1}$
ENG 107
ENG 108
2. Writing II $\qquad$
3. Literature $\qquad$
4. Religion $\qquad$
5. Philosophy $\qquad$
6. Social Science $\qquad$ ECN 150
7. History

HIS 150
8. Science $\qquad$
9. Computer Science ${ }^{2}$ $\qquad$
${ }^{1}$ May be waived by decision of the University before you begin course work; then additional elective is required.
${ }^{2}$ May be waived by challenge examination before you begin course work; then additional elective is required.

## - ARTS CORE (7 courses)

1. Economics 201
(Plus 6 of the following 7 courses):

CORE 1A Religion and Philosophy

1. Philosophy $\qquad$
2. Religion
3. Philosophy or Religion

CORE IB (sequence in any one of the following):
Fine Arts, History, Foreign Language, Literature
4.
5.
6. $\qquad$
CORE II
7. Social Science, Fine Arts, Foreign Language Literature, History, Literature, Communication, Education $\qquad$

- ADDITIONAL ARTS REQUIREMENTS (5 courses)

1. Math 115
2. Oral Communication
3. Math 116
4. Economics 302
5. Psychology 150

- BUSINESS CORE (11 courses) ${ }^{3}$

1. Accounting 101
2. Finance 300
3. Accounting 102
4. Quantitative Analysis 213
5. Finance 303
6. Quantitative Analysis 215
7. Information and Operations Management 300
8. Law 202
9. Marketing 300
10. Management 485
11. Management 201
${ }^{3} 300$ and 400 -level courses may not be taken until student has achieved junior standing.

- PROFESSIONAL STUDIES (4 or 8 courses) ${ }^{4}$

| 1. | 5. |
| :--- | :--- | :--- |
| 2. | 6. |
| 3. | 7. |
| 4. | 8. |

${ }^{4}$ The Accounting Option requires 8 courses in professional studies.

- ELECTIVES (4 for Finance, Management, and Marketing majors)

1. 
2. $\qquad$
3. 
4. 

## MODEL ROSTERS



[^1]
## COOPERATIVE EDUCATION AND INTERNSHIPS

The co-op and internship programs are designed to give the student a hands-on work experience related to his or her major. Participation provides an opportunity to link the theory and practice of the discipline. Students generally participate during their junior or senior years. Students earn 3 credits for internships and coops.

Internship: Involves a part-time work experience for one semester in the student's major and is not paid. The student ordinarily carries a full academic schedule along with the internship. One or two internships may be taken. Course numbering is 360 and 460 ; see course descriptions for further detail.

Co-op: Involves a full-time work experience of up to six months. It is a paid position ordinarily related to the student's major. A student taking a co-op may graduate in four years by following the model roster below.

## Freshman and Sophomore Years

Follow the same model roster as indicated on the previous page.

## Summer Sessions after Freshman, Sophomore, and Junior Years

Students should plan to take up to four courses as needed during the summers.


Finance, Management, and Marketing Majors

| Fall | Spring |
| :--- | :--- |
| 5 courses from | Co-op course * |
| Business and Arts |  |

Business and Arts
Core and elective courses

## $\overline{\text { Senior Year }}$

Follow same model roster as indicated on previous page.

[^2]
## Key:

(F)—Offered in Fall term;
(S)—Offered in Spring term; ( $F, S$ )-Course may be rostered in either Fall or Spring term. The year is indicated if the course is offered in alternate years. When a course number has been changed this year, the former number is given in parenthesis.
Courses listed in this section are subject to change through normal academic channels. New courses and changes in existing course work are initiated in the departments and approved by the curriculum committee consisting of faculty, student, and administrative representatives.
Lidentifies courses that have been designated as writing intensive.

## ACCOUNTING

## FACULTY

John F. Reardon, Ed.D. Chair Associate Professors: Hanratty, Kennedy, Markmann, Reardon,

## Stickel, Sweeney

Assistant Piofessors: Borkowski, Bradford, Brazina, Leauby, Massimini, Ugras, Welsh, Zook Lecturers: DeStephanis, Fitzgerald, Guerin
Joseph G. Markmann Accounting Alumni Endowed Chair. Scott E. Stickel, Ph.D.

## REQUIREMENTS

Required for Professional Option in
Accounting: 8 courses

- ACC 201, 202, 303, 304, 307, 380, 405 plus
- One of the following: ACC 406, 411 , or 418


## Required for Minor in Accounting:

6 courses

- ACC 101, 102, 201, 202, and any 2 accounting courses at the 300 or 400 -level except $350 / 450$

Junior standing is a prerequisite for 300 and 400 -level courses.

## COURSE DESCRIPTIONS

ACC 101 (F)

## PRINCIPLES OF

## ACCOUNTING I

3 credits
Education in this course focuses on the fundamental principles of recording business transactions, including a study of the presentation and interpretation of the financial data of a single proprietorship, partnership and corporation. Emphasis is placed on economic resources owned or controlled by a business entity.

ACC 102 (S)
PRINCIPLES OF
ACCOUNTING II
3 credits
The relationship between understanding accounting procedures and using accounting data effectively; the interrelationships between financial statements and the methods of accumulating data for these statements and how the particular accounting methods used influence business decisions. Problems include payroll analysis, alternative methods of obtaining capital, dividends, cash flow and the measurement and control of costs, including cost accounting systems, cost volume profit analysis, budgeting and standard costs. Prerequisite: ACC 101.

ACC 201 (301) (F)
ACCOUNTING THEORYI 3 credits
Theories and problems involved in proper recording of transactions and preparation of financial statements. Review of accounting cycle, discussion of financial statements, analysis of theory as applied to transactions affecting current assets, current liabilities, long-term investments, and their presentation on the balance sheet. Prerequisite: ACC 102.

ACC 202 (302) (S)
ACCOUNTING THEORYII 3 credits
Detailed presentation of theory as applied to plant and equipment, intangible assets, long-term debt, capital stock and surplus; correction of errors of prior periods; analysis of financial statements; statement of application of funds. Prerequisite:
ACC 201.
ACC 303 (F)
COST ACCOUNTING 3 credits
Basic principles applied to job cost and process cost systems. Topics include: purchasing and issuing of materials and maintenance of perpetual inventory records, control of labor, methods of distributing factory overhead expenses, evaluation of problems involved in shrinkage and idle time, forms used in job and process cost systems, and discussion of the place of cost accounting in modern enterprises. Prerequisite: ACC 102.

ACC 304 (S)
AUDITING
3 credits
A practical presentation of modern audit practices, emphasizing the principles and objectives of an audit. Analysis of the audit basis, the best standards, objective reporting, the adoption of improved accounting standards, business controls, professional ethics, and legal liability. Prerequisite: ACC 202 (can be taken concurrently with ACC 202).

ACC 307 (407) (F, S)
INCOME TAX
3 credits
Study of federal tax code as applied to individuals, partnerships, and corporations including exclusions, inclusions, deductions, gains and losses. Review of fiduciary and estate and gift tax. Prerequisite: ACC 102.

## ACC 310 (F)

## FINANCIAL STATEMENT

ANALYSIS
3 credits
Comparative analyses by percentages, ratios, trends, graphic reports, and projections applicable to the balance sheet and income statement. Structure and meaning of accounts and peripheral statements such as application of funds and breakeven analysis. Prerequisite: ACC 102.

ACC 350, 450 (F, S, Summer) COOPERATIVE EDUCATION 3 credits
Full-time paid employment in an area firm or government agency. Appropriate job-related learning assignments under faculty supervision. Consult with Department Chairperson.
Prerequisite: ACC 102.

ACC 380 ( $\mathrm{F}, \mathrm{S}$ ) ACCOUNTING SEMINAR 3 credits
Research in selected topics of accounting theory. Prerequisite: ACC 202 or taken concurrently.

ACC 405 (F)
ADVANCED ACCOUNTING
THEORY AND PROBLEMS I 3 credits
A study of home office and branch accounting, mergers, acquisitions and preparation of consolidated financial statements. Prerequisite: ACC 202.

ACC 406 (S)
ADVANCED ACCOUNTING THEORY AND PROBLEMS II 3 credits
A study of special topics in accounting theory including partnerships, foreign operations, estate and trust, insolvency in conncction with realization and liquidation, and fund accounting including governmental and hospital accounting. Prerequisites: ACC 202 and Senior standing.

ACC 411 (313) (S)

## ADVANCED COST ACCOUNTING

## 3 credits

Economic, industrial, and managerial aspects of cost accounting with emphasis on flexible budget as basis for cost control; analysis of variance and graphic charts. Study of estimated costs, standard costs, and distribution costs. Prerequisites: ACC 303 and Senior standing.

ACC 418 (S)
CORPORATE AND OTHER TAXATION
3 credits
Reviews federal revenue system; partnership; federal corporate income tax; federal, state, and federal gift taxes. State of
Pennsylvania corporation taxes, City of Philadelphia taxes.
Prerequisites: ACC 307 and Senior standing.

## BUSINESS ADMINISTRATION MINOR

## REQUIREMENTS

Required for Minor in Business Administration: 6 courses

- Economics 150, Accounting 10I, Law 202, Management 201, Finance 303, and Marketing 300.

This minor is not available to students in the School of Business Administration.

## FINANCE

## FACULTY

Les Barcnbaum, Plı.D., Chair
Professor: Barenbaum
Associate Professors: Buch, Kelly,
Rhoda, Schubert
Assistant Pofessors: Albert, Toync, Trinidad

Instructors: Ambrose, McNichol

## REQUIREMENTS

Required for Professional Option in Finance: 4 courses

- FIN 304, 306
- Two courses from among the following: FIN 313, 314, 401, 402, 403, 420, 470

Application may be made in the Spring semester of the Junior year to participate in the Finance Department Applied Research Project during the Senior year. See FIN 481.

Junior standing is a prerequisite for 300 and 400 -level courses.

## COURSE DESCRIPTIONS

FIN 300 (F, S)
FUNDAMENTALS OF FINANCIAL MANAGEMENT
3 credits
An introduction to the major concepts and techniques of financial management with an emphasis on time value of money, capital budgeting, financial statement analysis, financial forecasting, and short-term financial management.
Prerequisites: ACC 102, MTH 115, MTH I16, QNT 213.

## FIN 303 (F, S)

INTRODUCTION TO FINANCIAL MARKETS AND INSTITUTIONS 3 credits
An introduction to the basics of institutional finance. Financial instruments are generated and traded by participants in financial markets witl financial intermediaries facilitating the process. Concepts, terminology, and current practices in each of these three areas are examined, along with the impact they have on the economy. Prerequisites: ACC 101 and ECN 150.

## FIN 304 (F, S) <br> 边 <br> INTERMEDIATE CORPORATION FINANCE

3 credits
A continuation of FIN 300.
Application of analytical tools and concepts to the business decision process. Case studies, a computer based financial simulation game, electronic spread sheets, and outside readings are used to bridge the gap between theory and practice. Prerequisite: FIN 300.

## FIN 306 ( $\mathrm{F}, \mathrm{S}$ )

MONEY AND CAPITAL MARKETS 3 credits
Analysis of the flow of funds in U.S. financial markets; monetary policy; interest rate determination and the characteristics of money and capital markets and instruments.
Prerequisite: FIN 303.

## FIN 313 ( F )

## PENSION PLANNING

3 credits
An examination of private pension plans, including historical background, regulatory environment, benefits and costs.
Topics include: costs computation methods, benefits formulae, inflation impact, plan membership profile, accounting and tax considerations, and management of fund assets, including portfolio considerations. Profit sharing plans and individual retirement plans also covered. Same as RMI 313.
Prerequisite: FIN 300.

## FIN 314 (F)

## RISK MANAGEMENT

3 credits
Designed to acquaint the student with the nature of risk management and the role of the risk manager in business or governmental organizations. Emphasis on risk analysis and control functions: recognition, measurement and treatment. Historical and forecast financial statements are scrutinized for the purpose of risk identification. Same as RMI 314. Prerequisite: FIN 300.

FIN 350, 450 (F, S, Summer) COOPERATIVE EDUCATION 3 credits
Full-time paid employment in an area firm or government agency. Appropriate job-related learning assignments under faculty supervision. Consult Department Chairperson. Prerequisite: FIN 300 or 303 or permission of Chairperson.

FIN 360,460 ( $\mathrm{F}, \mathrm{S}$ )
INTERNSHIP IN FINANCE
3 credits
Practical experience in Financial/Insurance setting. Appropriate job-related learning assignments under faculty supervision. Consult Department Chairperson. Prerequisite: FIN 300 or 303 or permission of Chairperson.

## FIN 401 (F)

## INVESTMENT ANALISIS

3 credits
Analytical techniques are used to investigate market efficiency and portfolio selection. Analysis of the bond market and stock market. Prerequisites: FIN 300 and 303.

FIN 402 (S)
SPECULATIVE MARKETS AND PORTFOLIO ANALYSIS

## 3 credits

The study of strategies involving the analysis and management of capital market securities, futures, and options. Prerequisite: FIN 306 or 401.

FIN 403 (F, S)
INTERNATIONAL FINANCE

## 3 credits

The study of multinational business practice, direct forcign investment, and managerial challenges in operating abroad. Foreign exchange markets and exchange determination; international banking and balance of payments issues. Prerequisite: FIN 303.

## FIN 420 (S)

FINANCIAL MANAGEMENT OF THE INSURANCE FIRM
3 credits
A functional course emphasizing the interrelationships among underwriting, investment, regulation, and other aspects of insurance company and insurance agency operations. Spreadsheets are used to demonstrate effective financial management of the insurance firm. Same as RMI 420. Prerequisite: FIN 300.

FIN 470 (480) (S)

## SELECTED TOPICS IN FINANCE

 3 creditsSelected topics in finance studied in-depth under the direction of faculty. Prerequisite: Senior standing.

FIN 481, 482 (F, S)
APPLIED RESEARCH PROJECT
3-6 credits
Students work one-on-one with faculty members on a year-long applied research topic. A monograph of student papers is published each year. Three of the six credits earned count towards the Finance major. Consult Department Chairperson.

## HEALTH CARE ADMINISTRATION MINOR

## $\overline{\text { FACULTY }}$

Directed by: Anne Walsh, M.S.W., M.B.A. Accounting Department Assistant Piofessor: Walsh
Lecturer: Thompson-Brauman

## $\overline{\text { REQUIREMENTS }}$

Required for Financial
Management Option: 6 courses

- HCA 370, 37I, 46 I and ACC 303.
- Two courses from approved list.
(Financial Management Option is available only to Business majors due to course prerequisites.)

Required for Generalist Option: 6 courses

- HCA 370, 371, 459, 460
- Two courses from approved list.

Approved list: PHL 223, PSY 215, REL 323, SOC 309, RMI 3I I, ACC 101, LAW 300, QNT 213.

Junior standing is a prerequisite for 300 and 400 -level courses.

## COURSE DESCRIPTIONS

HCA 370 (F, S)

## INTRODUCTION TO HEALTH CARE ORGANIZATION AND MANAGEMENT

3 credits
Analyzes the organization and administration of the health care system in relation to regulatory, technological, and financial variables affecting their operation. Managerial tasks of planning, controlling, motivating, and organizing applied to the management of health care institutions.

## HCA 37 I (S)

LEGAL ASPECTS OF HEALTH CARE DELIVERY

## 3 credits

Provides a fundamental orientation to the field of health care law with specific emphasis upon the duties, authority, and personal liability of the administrator in relation to the governing board, staff, and patients. Legislation and current regulations affecting the administration and delivery of services in health care institutions examined in conjunction with the legal and cthical rights of patients.

HCA 459 ( F )
HEALTH CARE PLANNING AND POLICY ANALYSIS
3 credits
Comparative analysis of international health care policies with specific emphasis upon the socio-economic, political, demographic, and epidemiological variables which influence the policy making process in industrialized and developing nations. Planning methodologies using a strategic planning framework are also extensively applied in the analysis of institutional policy formulation. Prerequisite: HCA 370 (or taken concurrently).

HCA 460 (S)
INTERNSHIP IN HEALTH CARE ADMINISTRATION
3 credits
Systems analysis of the various organizational factors influencing institutional policy formulation and managerial decision-making. Role and relationship of the governing board, medical/professional/nonprofessional staff and administrator discussed in relation to their impact upon institutional policies.
Internship and seminar are integral components of this course.
Prerequisite: HCA 459.
HCA 461 (S)
INTERNSHIP IN HEALTH CARE FINANCIAL MANAGEMENT 3 credits
Theoretical principles of health care financial management applied in a supervised internship in a health care institution. Class and internship experience are integral components of this course. Prerequisite: ACC 303.

## INTERNATIONAL STUDIES MINOR

Directed by: Joshua Buch, Ph.D., Finance Department<br>Designated as a minor available to all students regardless of major.

## REQUIREMENTS

Required: 6 Courses Many of the courses listed below may also fulfill Core 1 or Core II requirements.
Any 3 courses from the following:

- Core IA.
- PHL 305, REL 240, 341, 344
- Core IB:
- All foreign language and foreign literature courses approved for Core I (See Foreign Languages and Literatures); ENG 312; HIS 202, 203, 302, 303
- Core Il:
- All foreign language and foreign literature courses approved for Core II.
- ECN 330, 331
- HIS 307, 308, 325, 328, 344, 346, 348, 370, 452, 458, 470
- POL 230, 231, 233, 330, 331, 332, 333, 334
- SOC 257, 258, 263
- Additional courses (can also satisfy the first group of the three course requirement):
- ECN 36I, 412
- ENG 312
- HIS 340, 345, 440
- REL 340

Any 3 courses from the following:

- ECN 330 or 331 or 381
- POL 231
- MGT 38I
- FIN 403
- MKT 403


## LAW

Pre-Law Advisors: David Culp, Gerard Downey

## FACULTY

Business-Law Program
Assistant Professors: Cogan, Culp
Lecturers: Gembala, Glancy, Halpin, Shuman, Siegel

## REQUIREMENTS

Law courses may be taken as electives. LAW 202 is required of all business administration students. While there is no pre-law major, certain of these courses may be recommended for pre-law students by the Coordinator.

Junior standing is a prerequisite for all 300 and 400 -level courses.

## COURSE DESCRIPTIONS

LAW 202 ( $\mathrm{F}, \mathrm{S}$ )
LEGAL ENVIRONMENT OF BUSINESS
3 credits
A study of the politico-legal framework within which business operates. The nature, formation, and application of law to business; the historical development and present constraints upon decision making; the interface of business and the whole of its legal settings. Legal procedure, judicial, legislative, and administrative law considered in perspective.

## LAW 300 ( $\mathrm{F}, \mathrm{S}$ )

APPROACHES TO THE LAW OF CONTRACTS
3 credits
The study of both the common law approach to contracts, which governs real estate transactions, service oriented contracts and all non-sale contracts, leases, licenses, etc., and the Uniform Commercial Code approach, which deals
exclusively with contracts for the sale of goods.

LAW 301 (S)
LAW OF AGENCY,
PARTNERSHIPS, AND
CORPORATIONS
3 credits
Common law and statutes relating to the creation, operation, and termination of agencies, partnerships, and corporations. Emphasis on the Common Law of Agency, the Uniform Partnership Act, and the Business Corporation Law of Pennsylvania.

LAW 401 (F)
LAW OF REAL ESTATE
3 credits
Common law and statutes of court process which the real estate salesperson and broker encounter daily, including the legal principles applicable to the listing contract, the agreement of sale, mortgages, deeds, leases, adverse possession, easements, licenses, proving and recording title. This course has been accepted by the Pennsylvania Real Estate Commission as fulfilling the course requirement for a salesperson's license.

LAW 402 (F I993)
LAW OF NEGOTIABLE
INSTRUMENTS
3 credits
Application of the common law of the Uniform Commercial Code to checks, promissory notes, and bills of exchange. The use of commercial paper in security transactions and in the creation of credit. The laws of principal and surety, and insurer and insured as related to the use of commercial paper.

## MANAGEMENT

## FACULTY

Madjid Tavana, M.B.A, Chair<br>Professons: Joglekar, Miller, Seltzer Associate Professons: Smither, Troxell, Van Buskirk<br>Assistant Piofessors: Bohl, Kruger, Lee, Meisel, Rappaport, Szabat, Tavana<br>Instructors: Gauss, Karl<br>Lecturers: Dutzman, Halpin, Mudrick, Sackheim

There are two majors in the Management Department: Information and Operations Management (IOM) and Organizational Management (MGT). The choice of major should depend on career objectives and personal interests. If there are questions about the majors, the student should consult with the Department Chair or a departmental advisor.

INFORMATION AND OPERATIONS MANAGEMENT

## REQUIREMENTS

Required for professional option in Information and Operations Management: 4 courses.

- IOM 303, 404, 413, 4 I4

Junior standing is a prerequisite for 300 and 400 -level courses.

## COURSE DESCRIPTIONS

[^3]
## Business Administration <br> Areas of Study

planning, product mix, plant layout, work methods, inventory theory. Quantitative techniques used include break-even model, decision trees, linear programming, exponential smoothing, line balancing, and the economic order quantity model. Use of prepackaged software.
Prerequisites: MTH 115 and 116, QNT 213 and 215.

1OM 303 (S) QUALITYASSURANCE MANAGEMENT

## 3 credits

This course will examine both statistical and managerial techniques used in Total Quality Management. Statistical techniques used emphasize graphic displays of data and traditional control charts. Management techniques stress quality cost analysis, employee motivation, and management participation in quality implementation. Prerequisite: 1OM 300

IOM 350, 450 (F, S) COOPERATIVE EDUCATION 3 credits
Full-time paid employment in an area firm or government agency. Appropriate job-related learning assignments under faculty supervision. Consult Department Chairperson.

1OM 360, 460 (F, S)
INTERNSHIP IN INFORMATION AND OPERATIONS
MANAGEMENT
3 credits
Practical experience in area company or organizational setting. Appropriate job-related learning assignments under faculty supervision. Consult Department Chairperson.

IOM 104 (F)
OPERATIONS PLANNING AND
CONTROL
3 credits
Extends the basic concepts of production/operations management by covering sonc of
the earlier topics in depth (e.g., linear programming with sensitivity analysis, inventory theory with MRP) and by introducing the student to selected new techniques such as queuing theory, simulation, aggregate planning, job-shop scheduling, dynamic programming, and flexible manufacturing systems. Applications to manufacturing as well as service industries are addressed. Prerequisite: IOM 300 and Senior standing.

## 10M 405 (S)

TOPICS IN OPERATIONS

## MANAGEMENT

3 credits
This course is intended to serve as the capstone course for IOM students with the Operations Management concentration. It attempts to build on and integrate the students' knowledge from all prerequisite courses in IOM as well as the Business Core. Case studies and research projects are used to focus on the applications of concepts, principles, and models to selected manufacturing and service operations. The course also aims at building managerial skills in the written and oral presentation of analytical work. Each time the course is offered, a thematic topic is used in selecting the readings and case materials. A recent thematic area was "Dynamics of Managing New Technology." Prerequisite: IOM 404.

1OM 413 (F)
DECISION SUPPORT AND EXPERT SUSTEMS
3 credits
This course is about the manager's responsibilities for problem solving and decision making in the Information Age. Topics include Methods of Decision Making and Problem Solving, Decision Support Modeling, Expert Systems Development Life Cycle, Knowledge Enginecring, Meta-Knowledge, Systems Validation and Verification. The students are required to apply Decision Support and Expert

Systems Software Packages in a hands-on environment. Prerequisite: IOM 300 and Senior standing.

IOM 414 (S) 0
SYSTEMS ANALYSIS AND DESIGN 3 credits
Complex systems and organizations are examined, with the goal of discovering their structure and information flow. Tools such as the Data Flow Diagram, Data
Dictionary, and System
Specifications are produced.
Systems Design topics such as User
Interfaces, Design Alternatives, Prototyping, Input, Output, and File Design are discussed in detail. Prerequisite: IOM 300 and Senior standing

1OM4I5 (S)

## SYSTEMS DEVELOPMENT AND IMPLEMENTATION

## 3 credits

Intended as a capstone course in Management Information Systems. A project course in which students develop and implement a complete Information System using the Systerns Development Life Cycle in the context of a real organization. The latest systems development technologies, such as Prototyping and Computer-Aided Software Engineering (CASE) are discussed and practiced. Prerequisites: IOM 414 and Senior standing

## ORGANIZATIONAL MANAGEMENT

## REQUIREMENTS

Required for Professional Option in Organizational Management: 4 courses.

- MGT 302 and MGT 480
- Choose two of the following: MGT 307, 352, 363, 364, 365, 366, 371 (Special Topics), 381, 404

Junior standing is a prerequisite for 300 and 400 -level courses.

## COURSE DESCRIPTIONS

MGT 201 (301) (F, S) ORGANIZATIONAL. BEHAVIOR 3 credits
Consideration of the key issues of human behavior at work. Topics include: leadership, motivation, communication, group dynamics, organizational structure and other topics relating to management of organizations. Current readings, cases, and experiential learning. Prerequisite: PSY I50.

MGT 302 ( $\mathrm{F}, \mathrm{S}$ )
HUMAN RESOURCE
MANAGEMENT
3 credits
Designed to train students to analyze existing human resource programs and to adapt and develop procedures and methods which will ensure effective personnel administration. Job analysis; policy determination and administration; selection, promotion and transfer; E.E.O.; health, safety and OSHA. Prerequisite: MGT 201.

## MGT 307 (S 1994)

## ORGANIZATIONAL THEORY

## 3 credits

Develops an understanding of the interaction of organizational structure and processes. Examines relationship of internal and external environments. Studies organizational design and utilizes
current theories of organizational behavior as practical tools in analyzing specific organizations. Prerequisite: MGT 201.

MGT 350, 450 ( $\mathrm{F}, \mathrm{S}$ ) COOPERATIVE EDUCATION 3 credits
Full-time paid employment in an area firm or government agency. Appropriate job-related learning assignments under faculty supervision. Prerequisite: MGT 201.

MGT 352 (S)
INTERPERSONAL COMMUNICATION
3 credits
An examination of the process of communication in personal and organizational settings. Focus on the individual's styles and patterns of communicating, verbal and nonverbal modes, self-image, listening, perception, and barriers to effective communication.
Emphasizes building communication skills through active participation in experiences and discussions in class. Limited enrollment. Course generally equivalent to PSY 250. Prerequisite: MGT 201.

MGT 360, 460 ( $\mathrm{F}, \mathrm{S}$ )
INTERNSHIP IN
ORGANIZATIONAL MANAGEMENT
3 credits
Practical experience in an organizational setting. Study and evaluation of an organization's functioning. Appropriate job-related learning assignments under faculty supervision. Consult Department Chairperson.
Prerequisite: MGT 201.
MGT 363 (F 1994) EMPLOYMENT LAW
3 credits
Designed to educate future managers as to the options available in dealing with the individual in the work place. Topics: labor law; arbitration; fair employment practices; and health and safety in the work place. Cases, paper and
legal research problems.
Prerequisite: MGT 201.
MGT 364 (S 1995)
COMPENSATION ANALYSIS

## 3 credits

Study of the compensation policies and practices. Emphasis on job evaluation, rate ranges, incentive plans, and benefit programs. Federal and state laws examined. Field work and legislative research report required. Prerequisite: MGT 201.

MGT 365 (F)
HUMAN RESOURCE STAFFING AND DEVELOPMENT
3 credits
The study of employee hiring procedures and the training of personnel in organizations. Examination of recruiting, selecting and interviewing, and orienting new employees. Emphasis on training and career development programs applied to specific employee groups. Prerequisite: MGT 201.

MGT 366 (F 1994)
DISPUTE RESOLUTION
3 credits
Dispute resolution and conflict management describe a set of theories, principles, and techniques which build upon skills of analysis and communication. Managers negotiate every day to resolve conflicts between individuals and groups both within and outside the organization. Readings, exercises, and cases are utilized to study the complex human activity that is dispute resolution. Prerequisite: MGT 20 I .

MGT 381 ( F )
INTERNATIONAL BUSINESS
3 credits
Study of the conduct of business in foreign countries from a managerial point of view. Topics pertaining to the multinational industrial and commercial activities of American enterprises presented and discussed. The United States' involvements and relations with
foreign organizations such as OPEC, OCED, and ECM analyzed. United Nations regulations, commitments, and protections examined. Prerequisite: MGT 201.

MGT 404 (S)
ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT 3 credits
The actual art and practice of managing a small enterprise. Concepts and methods for decision making and being competitive. Actual cases with live situations and outside speakers from all areas-business, government, and organized labor-impinging on the small entrepreneur today.
Prerequisite: Business Core.

MGT 480 ( $\mathrm{F}, \mathrm{S}$ )
SEMINAR IN MANAGEMENT
3 credits
Comprehensive course with emphasis on current, positive management concepts and practice. Class discussion and analysis of selected topics. Focuses on integration of management studies. Comprehensive reports and presentations required.
Prerequisites: MGT 201 and Senior standing.

MGT 485 (F, S)
BUSINESS POLICY
3 credits
Intended as a capstone course in business administration. Integration of backgrounds acquired from accounting, finance, production, personnel, and marketing, strategic planning and implementation; analysis and discussion of actual or simulated situations. Prerequisite: Senior standing.

## QUANTITATIVE ANALYSIS

The Management Department coordinates the courses in this area.

Junior standing is a prerequisite for 300 and 400 -level courses.

## COURSE DESCRIPTIONS

QNT 213 ( $\mathrm{F}, \mathrm{S}$ )
INTRODUCTION TO BUSINESS STATISTICS
3 credits
Basic statistical methods used in the analysis of business and economic decision problems. Emphasis on valid applicability of techniques, sound interpretation of statistical results, as well as successful execution of statistical methods. Topics include: descriptive statistics, both graphical and numerical; probability and probability distributions; sampling distributions; statistical estimation and hypothesis testing; and simple regression and correlation. Students will be introduced to a microcomputer statistical software package. Not to be taken if ECN 213 is taken. Prerequisites: MTH $115,116, \operatorname{CSC} 151$.

QNT $215(\mathrm{~F}, \mathrm{~S})$
STATISTICAL INFORMATION SYSTEMS
3 credits
Information systems and computer-based statistical analysis; the role of information systems within the organization and their use in application with statistical analysis. Information systems topics include: business information systems; software packages and operating systems; text processing and graphics; elcctronic spreadslicets; database management systems; and problem solving with computers. Statistics topics include: simple regression and correlation; multiple regression; time series analysis. Various statistical packages
introduced. Prerequisites: CSC 151, QNT 213.

QNT 370 (S)
SPECIAL TOPICS IN APPLICATION OF STATISTICS 3 credits
Selected topics in forecasting; regression of time series data, classical analysis of time series data such as the decomposition method, exponential smoothing, and Box-Jenkins methods.
Prerequisites: QNT 215 and 1OM 300.

## MARKETING

## $\overline{\text { FACULTY }}$

Sharon Javie, Ph.D., Chair
Associate Professor: Reifsteck Assistant Professors: Bean, Javic, Jones, Liebman, Talaga, Wong Lecturer: Willig

## REQUIREMENTS

Required for Professional Option in Marketing: 4 Courses.

- MKT 301, 401 and 402
- Choose one of the following: MKT 302, 304, 371 or 403.

Junior standing is a prerequisite for 300 and 400 -level courses.

## COURSE DESCRIPTIONS

## MKT 300 (F, S) PRINCIPLES OF MARKETING

 3 creditsAn overview of marketing concepts and principles applicable to business and other organizations. Factors influencing the marketing emironment and buyer behavior; market segmentation and targeting. Product devclopment, pricing, promotion and distribution to satisfy the needs of selected target markets.

## MKT 301 (F, S) <br> PERSONAL SELLING <br> 3 credits

Examines the importance and practice of individual selling in the economy. Focuses on types of buyers, buyer behavior, steps in the selling process, sales presentations, and ethics in selling. Prerequisite:
MKT 300.
MKT 302
ADVERTISING AND
PROMOTIONAL MANAGEMENT 3 credits
Focuses on the economic and social aspects of non-personal promotion, including the important methods and techniques of research which form the basis of any promotional campaign. Includes a practical treatment of sales promotion programs, advertising copy, layout and media; measurement of promotional effectiveness; and advertising departments and agencies. Prerequisite: MKT 300.

## MKT 303

SALES MANAGEMENT 3 credits
The activities of a sales manager in directing and controlling a sales force; recruiting, selecting, training, compensating, motivating, and supervising sales personnel; establishment of sales territories, quotas, and budgets. Prerequisite: MKT 300.

## MKT 304 <br> BUSINESS TO BUSINESS MARKETING

3 credits
A study of business activities involved in the marketing of products and services to organizations (i.e., commercial enterprises, non-profit institutions, government agencies, and resellers). Emphasis also is on organizational and interfunctional interaction, buyer behavior, global interdependence and competition, and negotiation. Prerequisite: MKT 300.

MKT 350, 450 ( $\mathrm{F}, \mathrm{S}$ )
COOPERATIVE EDUCATION 3 credits
Full-time paid employment in an area firm or government agency. Appropriate job-related learning assignments under faculty supervision. See Department Chair for further information.
Prerequisite: MKT 300.
MKT 360460 ( $\mathrm{F}, \mathrm{S}$ ) INTERNSHIP IN MARKETING 3 credits
A study of an organization's marketing program conducted while the student is serving part-time as a trainee. Carried out under faculty supervision. See Department Chair for further information. Prerequisites: MKT 300 and at least one upper level marketing course.
A student may elect to take a second marketing internship for 3 additional credits in subsequent semesters.

## MKT 371

## CONSUMER BEHAVIOR

## 3 credits

A study of the consumer with applications for marketing strategy development. Looks at the cultural, social, and psychological influences on consumers and the consumer decision process. Prerequisite:
MKT 300.

## MKT 372

RETAILING
3 credits
Application of marketing concepts and principles to the management of retail institutions. Major topics include choice of store location, merchandise planning and management, retail pricing and promotion, and the impact of a changing environment on retailing. Prerequisite: MKT 300.

## MKT 373

PRINCIPLES OF PURCHASING 3 credits
A study of purchasing principles applicable to industrial firms, wholesalers, retailers, and
government procurement agencies. Relationship between marketing and purchasing functions. Legal considerations of contracts and agency. The art of negotiation; cost/price analysis as it affects buyer and seller. Prerequisite: MKT 300.

## MKT 401 ( $\mathrm{F}, \mathrm{S}$ ) <br> MARKETING RESEARCH

3 credits
The use of scientific method in the solution of specific marketing problems and in the conduct of general market research studies: methods of marketing research, gathering data, tabulation and analysis, interpretation of results, and report presentation.
Prerequisites: QNT 213, 215, MKT 300, MTH 116.

## MKT 402 (S)

MARKETING MANAGEMENT 3 credits
As the capstone course for marketing majors, integrates all other marketing courses. Includes a study of actual business cases employing a managerial approach to marketing. Emphasizes decision making and strategy development in marketing under rapidly changing market conditions. Prerequisites: All other required marketing courses or permission of the instructor.

## MKT 403

## INTERNATIONAL MARKETING

## 3 credits

A managerial view of the marketing function from a global perspective.
Describes and explores the complexities, problems, and opportunities of world-wide marketing. Prerequisite: MKT 300.

## MKT 405

MARKETING CHANNELS
3 credits
The marketing approach to physical distribution focusing on transportation, warehousing, channels, physical distribution systems, geography, material handling and planning and their

## Business Administration

effect on successful marketing.
Prerequisite: MKT 300.

## RISK <br> MANAGEMENT AND INSURANCE MINOR

## FACULTY

Directed by: Kathleen S. McNichol, M.B.A., C.P.C.U., Finance

Department
Associate Professor: J. Kelly
Instructors: Ambrose, McNichol

## REQUIREMENTS

Six courses are required for the Minor in Risk Management and Insurance, and must be taken from the following two groups:

- RMI 301, 302, 311, 312, 313, 314, 420.
- ACC 101; FIN 300; LAW 202; QNT 213.
Business majors are required to take 4 RMI courses; Non-business majors are required to take at least 3 RMI courses. No student may take more than 4 RMI courses. Junior standing is a prerequisite for 300 and 400 -level courses.


## COURSE DESCRIPTIONS

RMI 301 (F)
FUNDAMENTALS OF RISK AND INSURANCE

## 3 credits

Introduction to the underlying principles, practices, and the legal aspects of insurance; survey of personal lines such as auto, homeowners, life, health; commercial lines coverages, including fire, marine, fidelity and corporate surety, workers' compensation, business interruption.

RMI 302 (S)
INTRODUCTION TO LIFE INSURANCE
3 credits
The problems of alternative techniques for insuring of human life values considered from the differing viewpoints of the company, the economy, and the consumer. Financial needs in the life cycle of the family; elements of business insurance, such as group life insurance; mortality; underwriting; rate determination and reserves are explored.

RMI 311 (S)

## HEALTH CARE INSURANCE

 3 creditsAn interdisciplinary approach to the techniques and problems of financing health care with emphasis on prepayment devices, including medical insurance benefit systems, Blue Cross-Blue Shield prepayment plans, independent prepayment plans, and medical expense benefits through social insurance and social welfare programs. Effects of financing methods on the availability, quality, and planning of health care explored.

RMI 312 (S)
COMMERCIAL PROPERTY AND LIABILITY CONTRACTS 3 credits
Detailed examination of the major commercial policies and forms. Included are business interruption and extra expense coverage, occan and inland marine, crime, liability, auto, and workers' compensation policies along with bonding.
Prerequisite: RM1 30 I.
RMI 313 (F)
PENSION PLANNING
3 credits
An examination of private pension plans, including historical background, regulatory entironment, benefits and costs. Topics include costs computation methorls, benefits formulac, inflation impact, plan membership profile, accounting and tax considerations, and management of fund assets including ponfolio considerations. Profit slauing
plans and individual retirement plans are also covered. Same as Finance 313. Prerequisites: RMI 301 or 302 and FIN 300, or permission of Program Coordinator.

RMI 314 (F)

## RISK MANACEMENT

## 3 credits

Designed to acquaint the student with the nature of risk management and the role of the risk manager in business or governmental organizations. Emphasis on risk analysis and control functions: recognition, measurement and treatment. Historical and forecast financial statements are scrutinized for the purpose of risk identification. Same as FIN 314. Prerequisites: RMI 30I and FIN 300, or permission of Program Coordinator.

## RMI 420 (S)

## FINANCIAL MANAGEMENT OF

 THE INSURANCE FIRM 3 creditsA functional course emphasizing the interrelationships among underwriting, investment, regulation, and other aspects of insurance company. Spreadsheets are used to demonstrate effective financial management of the insurance firm. Same as FIN 420. Prerequisites: RM1 301 or 302 and FIN 300, or permission of Program Coordinator.

## Nursing



La Salle's Bachelor of Science in Nursing program prepares its graduates to qualify for the state board nursing examination to become registered professional nurses and to practice as members of the nursing profession. The four-year, full-time, 120 -credit program leading to the B.S.N. provides the student with a strong foundation in the liberal arts and biological sciences in preparation for 10 nursing major courses, six of which include clinical practice components in a variety of health care settings. The goal of the B.S.N. program is to enable the graduate to provide professional nursing care which includes health promotion and maintenance, illness care, restoration, rehabilitation, and health counseling and education based on knowledge derived from nursing theory and research.

La Salle's B.S.N. program provides the opportunity to refine critical thinking skills, to strengthen one's self concept as a person, to develop as a member of the nursing profession, to set a course for self-directed learning and independent action, and to prepare for graduate study in nursing.

The program is designed for students entering from high school who have selected nursing as a career, transfer students, adult students who are seeking a second undergraduate degree or career change, and students who have completed liberal arts/science pre-nursing requirements.

## ACCREDITATION

The La Salle University B.S.N. program will seek initial accreditation from the National League for Nursing after the graduation of its first class in 1995.

## CLINICAL EXPERIENCES

La Salle's School of Nursing has established strong ties with a number of hospitals and other health care facilities in the Pliladelphia area. Clinical experiences associated with course work will be at institutions such as Albert Einstein Medical Center, Fox Cluase Cancer Center, Germantown Hospital and Medical Center, Medical College Hospitals, Moss Rehabilitation Center, and Philadelphia Geriatric Center. In addition, students will have the opportunity to practice at the La Salle University Neighborlsood Nursing Center, a nurse-managed public health and primary care facility.

Five of the licalth care institutions and the Neighborlsood Nursing Center are within walking distance of la Salle's campus.

## THE MENTOR PROGRAM

As early as the spring semester of the Freshman year, all nursing majors will be assigned a mentor who is a practicing registered nurse. The student will spend time with the mentor in the practice setting, observing and discussing the nature of professional nursing practice until completion of the program.

## ADMISSION TO THE NURSING MAJOR

Before beginning nursing major courses-which are concentrated in the junior and senior yearsthe student must have earned at least 60 credits in the liberal arts and sciences.

Nursing major courses consist of 50 credits. Students are also strongly advised to take NUR 470, an independent study elective offered in the preSenior summer that includes a preceptored nursing practice experience.

## MODEL ROSTER

FRESHMAN YEAR

| Fall | Spring |
| :---: | :---: |
| Writing I | Writing II |
| Literature | Philosophy |
| Chemisiry | Computer Science |
| Bio-Nutrition | Sociology |
| Psychology (Core II) | Psychology (Core II) |
| SOPHOMORE YEAR |  |
| Fall | Spring |
| Clinical Microbiology | History |
| Core Course (1B) | Core Course (IB) |
| Anatomy and Physiology I | Statistics |
| Religion | Anatomy and Physiology II |
| Core Course (1A) |  |
| JUNIOR YEAR |  |
| Fall | Spring |
| Nursing 305 | Nursing 309 |
| Nursing 307 | Nursing 311 |
| Nursing 308 | Nursing 312 |
| Corc Coursc (1B) | Core Course (1A) |

Summer (Pre-Senior): Nursing 470 (optional but strongly recommended elective); Nurse Externship or International Experience

## SENIOR YEAR

Fall
Nursing 405
Nursing 407
Nursing 410
Corc Course (1A)

## Spring

Nursing 409
Nursing 4 II
Nursing 4I4
Nursing Elcctive

## PROGRESS RECORD

## FOUNDATION (7-9 courses)

1. Writing $I^{1}$ $\qquad$ 6. Social Science $\qquad$ SOC 150
2. Writing $1 I$
 ENG 108
3. History HIS 150
4. Literature ${ }^{2}$ $\qquad$ LIT 150 or ENG 150
5. Science_CHM161 (4 credits)
6. Religion REL 151, 152, or 153
7. Computer Science ${ }^{3}$ CSC 151 or 152
8. Philosophy PHL 151 or 152
${ }_{2}^{1}$ May be waived by decision of the University before you begin course work.
${ }^{2}$ May be in English or in Foreign Language Literature in English translations.
${ }^{3}$ May be waived by challenge examination before you begin course work.

## CORE I (6 courses)

## 1A (3 courses) <br> Religion and Philosophy

1. REL $\qquad$
2. PHL
3. REL or PHL

1B (3 courses from any one of these disciplines)
Fine Arts History Foreign Language Literature
1.
2.
3.

CORE II
(2 courses from one discipline or from a combination of disciplines) ${ }^{4}$
Fine Arts Literature Foreign Languages ${ }^{5}$
Social Science History

1. $\quad$ PSY 205,220 , or 225
2. PSX 210
${ }_{5}^{4}$ Also approved to fulfill Core 11 requirement: COM 202, 204, and 254; EDC 201 and 203.
${ }^{5}$ Both courses must be in same foreign language.

## MAJOR COURSES

| 1. $\quad$ NUR 305 ( 5 credits) |
| :--- |
| 2. $\quad$ NUR 307 ( 5 credits) |
| 3. $\quad$ NUR 308 ( 3 credis) |
| 4. $\quad$ NUR $309(5$ credits) |
| 5. $\quad$ NUR 311 ( 5 credits) |
| 6. $\quad$ NUR 312 ( 2 credits) |
| 7. $\quad$ NUR 405 ( 5 credits) |
| 8. $\quad$ NUR 407 ( 4 credits) |


| 9. | NUR 409 (4 credits) |
| :---: | :---: |
| 10. | NUR 410 (2 credits) |
| 11. | NUR 411 ( 5 credits) |
| 12. | NUR 414 (3 credits) |
|  | NUR 470 (3 credits) |
|  | Nursing Elective (2 credits) |
| 15. |  |

8. NUR 407 ( 4 credits)

## ELECTIVES*

| 1. BIO 161 (4 credits) | 6. |
| :---: | :---: |
| 2. BIO 162 (4 credits) | 7. |
| 3. BIO 163 (4 credits) | 8. |
| 4. BIO 165 (3 credits) | 9. |
| 5. ECN 213 (3 credits) | 10. |

[^4]
## Nursing

Course Descriptions

## FACULTY

Gloria F. Donnelly, Ph.D., R.N., F.A.A.N., Dean

Professors: Donnelly, Wolf Associate Professors: Becker, Gerrity, McHugh
Assistant Professors: Beck, Davis
Giardino, Jones, Kinsey,
Lauterbach, Tigar
Clinical Instructor: Ruane

## COURSE DESCRIPTIONS

## NUR 305

HEALTH ASSESSMENT AND PROMOTION I
5 credits
The focus of this course is to develop a theoretical and clinical base necessary to assess healthy individuals across the lifespan. Emphasis is given to identifying the range of health states through health assessment, health promotion activities, and prevention of disease and interventions necessary to provide care to healch individuals within the framework of Healthy People 2000 objectives. Includes 2 hours of class, 6 hours of clinical, 3 hours of learning lab. Prerequisites: 60 credits in Arts and Sciences.

NUR 307
NURSING I: FOUNDATIONS OF PRACTICE
5 credits
This course explores the conceptual and practical foundations of nursing as a practice discipline. Theory, learning laboratory, and clinical experiences in a varicty of health care settings are provided. The course emplasizes direct care interventions that assist persons to improve health states. Includes 2 hours of class, 6 hours of clinical, 3 hours learning lab. Prerequisite: NUR 305.

## NUR 308

NURSING RESEARCH
3 credits
The research process and its relevance to nursing practice is explored. Students develop and present research proposals to investigate problems in client and nursing systems. Critique of research as a nurse consumer is emphasized. Co-requisite with NUR 305.

NUR 309
HEALTH ASSESSMENT AND PROMOTION II
5 credits
A continuation of NUR 305; refines assessment and communication skills; emphasizes assessment and health promotion activities and application of nursing process with developing families. Includes 3 credits of class, 6 hours of clinical. Prerequisite: Nursing 307.

## NUR 311

NURSING II: HEALTH
MAINTENANCE AND

## RESTORATION

(ADULT-ELDERLY)
5 credits
This course focuses on the impact of chronic illness on adult and elderly individuals and their families. Physiological and psychosocial alterations are explored. Maintenance of health through the illness experience is emphasized with patients in secondary and tertiary settings and at home. Includes 3 credits of class, 6 hours of clinical.
Prerequisite: NUR 309.

## NUR 312

## PIIARMACOLOGY

2 credits
This course explores plarmacodynamics, pharnacokinetics, drug actions and interactions, and environmental factors and safcty precautions during medication administration. Special considerations are given to the effects of drugs on different age groups and to nursing's responsibilities in drug therapy. Co-requisite: NUR 307.

NUR 405
NURSING III: HEALTH
MAINTENANCE AND
RESTORATION (CHILD AND ADOLESCENT)
5 credits
This course focuses in the impact of acute and chronic illness on children and adolescent individuals and their families. Physiological and psychosocial alterations are explored. Maintenance of health through the illness experience is emphasized with patients in secondary and tertiary settings and at home. Includes 3 credits of class, 6 hours of clinical. Prerequisite: NUR 311.

## NUR 407

NURSING IV: NURSING
INDIVIDUALS AND FAMILIES IN STRESS
4 credits
Theories and concepts of stress and coping are explored from physiological, cognitive-belavioral, cultural, psychosocial, and nursing perspectives. Within the framework of Healthy People 2000, clinical experiences focus on stress and coping by individuals, including nurses as practice professionals, groups and families dealing with problematic, health related situations such as mental disorder. Includes 2 credits of class, 6 hours of clinical.
Co-requisite: NUR 405.

## NUR 409

NURSING V: HEALTH
MAINTENANCE AND
RESTORATION (ACUTE ADULT) 4 credits
This course focuses on the impact of acute illness on adult and elderly individuals and their families. Physiological and psychosocial alterations are explored. Maintenance of health through the illness experience is emphasized with patients in secondary health care settings and at home. Includes 2 credits of class, 6 hours of clinical. Prerequisite: NUR 405.

## NUR 410

## NURSING ISSUES

## 2 credits

Analyzes and debates positions on nursing and health care issues and the processes by which issues develop. Issues are analyzed from a historical, social, political, economic, ethical, and futuristic perspective. Prerequisite: NUR 311.

## NUR 411

NURSING VI: PUBLIC HEALTH NURSING

## 5 credits

This course introduces the student to population-based health care needs and strengths. Emphasis is placed on health promotion, primary disease prevention and protection for particular at-risk and high-risk population groups.
Resources and health care strategies are identified.
Neighborhood and community cohesiveness as well as relevant political, social, and health care actions are examined. In a variety of community settings, students will explore and apply nursing strategies that support personal and communal well-being. Includes 3 credits of class, 6 hours of clinical. Prerequisite: NUR 407.

## NUR 414

NURSING MANAGEMENT AND LEADERSHIP

## 3 credits

Analyzes nursing leadership and management from theoretical and practical perspectives. Leadership and management roles for nurses are explored. Theories, principles, and strategies are analyzed and applied in simulated cases. Emphasis is given to the promotion of assertive behavior in the professional role. For the generic student, this course culminates in a clinical immersion experience with one month of intensive preceptored clinical practice. Co-requisite with NUR 409.

## Nursing Electives

## NUR 470

 INDEPENDENT STUDY3 credits
This course is offered in the pre-Senior summer and gives the student a preceptored nursing practice experience in the form of an externship or an international practicum experience.
Prerequisite: completion of Junior-year nursing courses.

## NUR 474

WOMEN'S HEALTH CONCERNS 3 credits
Explores contemporary women's health problems and concerns. Women's health issues are explored. Health risk identification, health promotion, health maintenance, and intervention alternatives are examined from a holistic perspective.

## NUR 478

ETHICAL DILEMMAS IN NURSING PRACTICE
3 credits
This course critically analyzes ethical delemmas faced by nurses. Ethical theory is applied to the analysis of ethical dilemmas and to the identification of situational, social, and professional constraints.

## Directory



## Administration

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## Index

Academic Affairs Administration, 122
Academic Censure, 33
Academic Discovery Program, 17
Academic Programs and Procedures, 27-34
Academic Progress, 33
Acceptance Deposit, 15
Accounting, 105
Accreditation, 2
Achievement Tests, 15
Activities, 6
Administration, 121-125
Admission Requirements and Procedures, 15-16
Advanced Placement, 16
Advanced Standing, 16
Air Force Reserve Officers' Training Corps, 31
Application Fee, 15
Application for Admission, 15
Application for Financial Aid, 24
Army ROTC, 31
Art, 60
Arts and Sciences, School of, 36-97
Curriculum, 39
Degree programs, 37
Asian Studies Minor, 42
Athletic Grants, 22
Athletics, 6
Attendance Policy, 31
Audit, 32
Biochemistry, 46
Biology, 42
Board of Trustees, 121
Business Administration, School of, 98-114
Curriculum, 99
Degree Program, 99
Minor, 106
Business Affairs Administration, 123
Calendar, 140
Campus Ministry, 8
Central and Eastern European Studies Minor, 28, 45
Change of Program, 27
Chemistry, 46
Chestnut Hill College, Courses at, 31
Christian Brothers' Grants, 22
Christian Brothers' Scholarships, 22
Classical Languages, 64-65
Classification of Students, 27
CLEP Examinations, 32
College Board Tests, 15
Communication, 47
Community Academic Opportunity Program, 22
Community Scrvice Grants, 23
Community Service Program, 8
Computer Science, 80
Continuing Education for Women, 17
Cooperative Education Program, 30, 104
Cooperative Program with Chestnut Lill College, 31
Core Curriculun, 39
Costs, 20
Counscling, 8

Course Descriptions,
Arts and Sciences, 42-97
Business Administration, 105-114
Nursing, 118-119
Course Selection, 17
Credit, Off-Campus Courses, 34
Credit, CLEP Examinations, 32
Criminal Justice, 94
Criminal Justice, Preparation for, 38
Cumulative Average, 33
Day Care, 19
Deferred Payment Plan, 21
Degree Programs, 37-38, 99, 116
Degree Requirements, 34
Dentistry, Preparation for, 37
Development Administration, 123
Dining Services, 18
Directory, 121-136
Dismissal, 33
Dispensary, 19
Diversity Scholarship, 23
Dual Majors, 27
Early Acceptance, 15
Economics, 50
Education, 52
Educational Opportunity Grants, 23
Elementary Education, 53
Employment, Student, 23
English, 56
Enrollment Services Administration, 125
Entrance Requirements, 15-16
Examinations, 31
Examinations, Make-Up, 32
Expenses, 20
Expenses, Housing, 20
Faculty, 126-136
Finance, 106
Financial Aid, 22-26
Fine Arts, $60-63$
Food Service, 18
Foundation Courses, 39, 100
Foreign Languages and Literatures, 64-69
Foreign Student Admissions, 16
Foreign Study, 29
Free Electives,
Arts and Sciences, 39
Business Administration, 101
French, 65
Geology, 69
German, 66
Cold Card Account, 18
Grades, 32
Creck, 64
Health Care Administration Minor, 107
Healhh Professions, Preparation for, 37
Health Scıvices, 19
History, 73
History of the University, 11
Honor List, Dcans', 33

Honors, 34
Honors Program, 6, 29
Housing, 18
Independent Study, Honors, 29
Information and Operations Management, 109
Insurance, Risk Management and, II4
International Studies Minor, 28, 108
Internships, 104
Italian, 66
Japan Center, 29
Japanese, 67
Jobs, 23
Justice and Society Studies Minor, 28, 77
Language Requirements for Admission, 15
Languages, 64-69
La Salle in Europe, 29
La Salle University Scholarships and Grants, 22
Late Registration, 27
Latin, 64
Law, 109
Law, Preparation for, 37
Library, 5, 19
Life Science Minor, 77
Loan Funds, 23-24
Major Requirements, Arts and Sciences, 39
Management, 109-1I2
Marketing, 112
Mathematical Sciences, 77-82
Medical Records, 16
Medicine, Preparation for, 37
Minors, 27, 40
Modern Languages, 65-69
Monthly Payment Plan, 21
Music, 61
National Merit Scholarships, 22
Naval ROTC, 31
Nurses' Cooperative Program, 30
Nursing, School of, 115-119
Course Descriptions, 118
Curriculum, 117
Degree Program, I 16
Objectives of the University, 13
Off-Campus Housing, 18
Officers of the Corporation, 121
Optometry, Preparation for, 37
Organizational Management, IIl
Parent Loans for Undergraduate Students, 24
Pass/Fail Option, 32
Payment, Method of, 21
Pell Grants, 23
Penalty Fees, 27
Perkins Loans, 23
PHEAA and Other State Grant Programs, 23
Philosophy, 82
Philosophy of the University, 13
Physics, 71
Placement, Advanced, 16
Placement Bureau, 9, 30

Podiatric Medicine, Preparation for, 37
Political Science, 84
Political Science/Public Administration, 87
Pre-Allied Health Program, 30
Pre-College Counseling Program, 8
Private Scholarships, 24
Probation, 34
Program of Studies, 27
Pro Rata Refunds, 26
Psychology, 87
Quantitative Analysis, 112
Refunds, 21, 25, 26
Registration, 27
Related Studies, Classics, 64
Related Studies, Slavic, 68
Religion, 89
Requirements, Entrance, 15
Reserve Officers' Training Program, 31
Resident Students, 10, 18
Risk Management and Insurance Minor, 114
Russian, 67
Scholarship Index, 33
Scholarships and Financial Aid, 22-26
School of Arts and Sciences, 36-97
School of Business Administration, 98-1I4
School of Nursing, 115-119
Secondary Education, 53
Social Work, 96
Social Work, Preparation for, 38
Sociology, 93
Spanish, 68
Spanish, Madrid, 29
Special Education, 53
Special Students, 27
Sports, 6
Stafford Student Loans, 24
Student Affairs Administration, 124
Student Community Service Program, 8
Student Reports, 33
Student Responsibilities, 32
Summer Sessions, 31
Supplemental Grants, 23
Suspension, 33
Teaching, Preparation for, 37
Thomas Jefferson University, Agreement with, 30
Transcripts, 34
Transfer of Credit, 16
Transfer Students, I6
Tuition, 20
University Scholarships and Grants, 22
Urban Studies and Community Services Center, 30
Urban Studies Minor, 28, 97
Veterans, 17
Veterinary Medicine, Preparation for, 37
Withdrawals, 34
Women's Studies Minor, 28, 97
Work-Study Program, 23
Writing Fellows Program, 29

## Academic Calendar 1993-94

## Fall Semester

Aug. 30-Sept. 1 On-campus registration
September 8
September 14
September 30
October 24
November 1-2
November 2
November 3
November 4

November 24-26
December 15
December 16
December 17-22
December 23
January 3

## Spring Semester

January 11-12
January 17
January 18
January 24
February 7
March 7-12
March 8
March 17

March 21

Mar. 31-Apr. 1
April 29

May $2-6$
May 9
May 15
May 16

On-campus registration Martin Luther King Jr. Holiday
Beginning of classes
Last day for change of roster
Last day for filing Pass/Fail Option
Mid-semester holidays
Mid-semester grades due
Last day for withdrawal from courses

Fall semester pre-registration begins
Easter holidays
Classes end for Spring semester
Final examinations
Graduating Seniors' grades due
Commencement
Spring semester grades due

| 1993 |  |  |  |  |  |  |  |
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|  | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|  | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|  | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|  | 29 | 30 | 31 |  |  |  |  |
| SEPTEMBER |  |  |  |  |  |  |  |
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|  | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|  | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|  | 26 | 27 | 28 | 29 | 30 |  |  |
| OCTOBER |  |  |  |  |  |  |  |
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|  | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
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| NOVEMBER |  |  |  |  |  |  |  |
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|  | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|  | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
|  | 28 | 29 | 30 |  |  |  |  |
| DECEMBER |  |  |  |  |  |  |  |
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|  | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
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| 1994 |  |  |  |  |  |  |  |
| JANUARY W |  |  |  |  |  |  |  |
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|  | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
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| FEBRUARY |  |  |  |  |  |  |  |
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| MARCH |  |  |  |  |  |  |  |
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| APRIL |  |  |  |  |  |  |  |
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| MAY |  |  |  |  |  |  |  |
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|  | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|  | 22 | 23 | 21 | 25 | 26 | 27 | 28 |
|  | 29 | 30 | 31 |  |  |  |  |


[^0]:    HIS 325 (F, S)
    IMPERIALISM IN THE MODERN
    WORLD
    3 credits
    Core II
    A study of the expansion of western nations into the world of Asia and Africa in the 19 th century, and the contraction of western influence in these areas in the 20th century.

[^1]:    ${ }^{1}$ Students who have ENG 107 waived will substitute a Sophomore Foundation course.

[^2]:    E Designates Evening course.

    + This course may be taken in the Summer prior to the Junior year.
    *These courses can be taken during other semesters, if necessary, to accommodate your schedule. Check with your Chairperson or the Dean's Office.

[^3]:    IOM 300 ( $\mathrm{F}, \mathrm{S}$ )
    PRODUCTION AND OPERATIONS MANAGEMENT
    3 credits
    Survey of basic concepts of production/operations management in manufacturing as well as service industries. Topics include: forecasting, capacity

[^4]:    *Because of State Board requirements, electives are controlled.

