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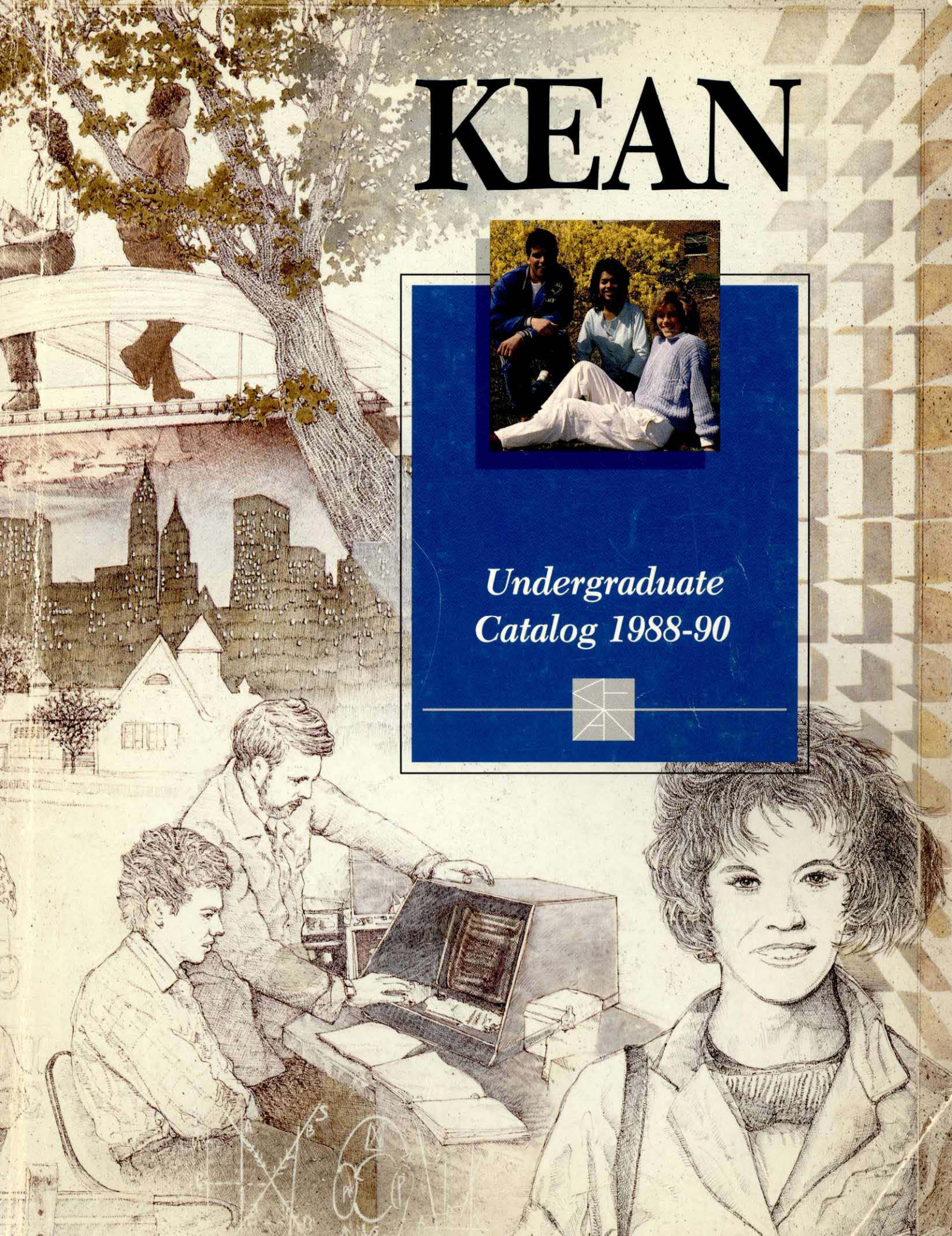
Kean College of New Jersey

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1988-1990**

 **KEAN COLLEGE
OF NEW JERSEY**
Union, New Jersey 07083

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Dr. Betty Barber,

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*Dr. Frank Esposito, Vice-President
for Academic Affairs, on leave of Absence.



Kean College of New Jersey is a major regional institution of higher learning serving students from the communities of New Jersey and its neighboring states.

The mission of the college is threefold:

- To provide quality instruction, built upon a firm liberal arts foundation, leading to employment, graduate or professional education and professional and personal development;
- To encourage scholarship and research and to exert creative leadership in the improvement of the learning process;
- To serve the community with the best academic resources and personnel.

Kean College was founded in 1855 in the city of Newark and for the next century was devoted to the development of educators. In 1958 the College moved to Union Township, occupying 120 acres of the historic Kean estate. Since that time, the institution's character, size and scope have been dramatically transformed.

Twelve thousand men and women now attend Kean College.

They are instructed by a distinguished faculty in the arts, humanities, sciences, applied disciplines and teacher education. This diversity comes from the capacity of the College to promote traditional areas of study while innovating and expanding those programs which address emerging societal needs, for instance, in the health professions, administrative sciences, human and social services.

There are forty-eight academic degree programs on the graduate and undergraduate level which students may pursue on either a full-time or part-time basis.

Kean College is committed to affirmative action in its admissions and employment practices. Furthermore, the College encourages participation of the disabled and provides support systems to facilitate their access to live and work within the institution.

Kean College of New Jersey invites prospective students and members of the academic community, business and industry to visit the campus and to inquire further into the institution's curriculum and services. The Admissions Office conducts tours at 10 a.m. Fridays during the academic year.

Kean College of New Jersey is accredited by the Middle States Association of Colleges and Schools. All major programs in professional education are approved by the National Council for Accreditation of Teacher Education and by the National Association of State Directors of Teacher Education and Certification. The College is licensed by the New Jersey State Department of Higher Education.

Certain undergraduate and graduate programs are individually accredited by national professional organizations. Where appropriate, such information is included in the program's description.

The college is located in Union and Hillside townships. The campus is quiet and spacious, spread over 148 acres of woods and lawns, bordering a Union county park and the Elizabeth River. Traffic is restricted to the perimeter of the campus. Only walkways and footbridges traverse the broad interior mall. A total environment has been created in which both esthetic and functional concepts are carefully integrated.

Access to the college is excellent with its proximity to major networks of transportation. This, in turn, makes the continuous cultural and intellectual interchange between the cities and the college possible. On-campus parking is provided for visitors, faculty and students.

Liberty Hall was the home of New Jersey's first governor, William Livingston. For 200 years, Liberty Hall has remained the residence of his descendants including the present Kean family, from whom the College acquired its land in 1954.

James Townley House—c. 1790, listed in both the New Jersey and National Register of Historic Places. An example of a late 18th, early 19th century farmhouse, it is particularly significant as one of the few extant period buildings reflective of the area's early rural character in what is now a predominantly urban environment. The Squires First Aid Squad (volunteer ambulance squad serving both West and East campuses) is located in Townley House.

The Kean Library—One of the original Kean estate buildings and a faithful replica of Norman architecture, panelled with oak from Nottinghamshire, the traditional retreat of Robin Hood. Built by Senator Hamilton Fish Kean, it housed the Senator's extensive private library and became a meeting place for politicians and statesmen. The Nursing department is housed here.

Townsend Hall—Executive offices, administrative faculty offices, classrooms. Named for M. Ernest Townsend, President of the College, 1929-1939. The original building is extended by the Industrial Technology Wing and Bruce Hall, named for Guy V. Bruce, professor emeritus. These areas contain classrooms, shops and science laboratories.

College Center—Little Theatre, snack bar, lounges, student activities office and meeting rooms.

Student Activities Building—The Jane Plenty Book Store (Barnes & Noble), Health Services, Counseling Center, lounges, offices and bank.

D'Angola Gymnasium—Gymnasiums; swimming pool; dance studio, named in memory of Joseph A. D'Angola, head of the Health and Physical Education Department and Dean of Men. 1935-1956, and for Anita B. D'Angola, head of Women's Physical Education, 1916-1956.

Campus School—Cluster of five buildings of classrooms and offices, housing the Department of Special Education, Kathryn Albert Gasorek Child Study Institute and Computer Center.

Nancy Thompson Library—700 seating stations, from conference rooms to individual and research study carrels; curriculum materials room; extensive book collections, periodicals, microfilm. Named for Nancy Thompson, chief librarian from 1914-1957.

Wilkins Theatre for the Performing Arts—1000-seat semicircular auditorium, teaching studios, reception hall. Named for Eugene G. Wilkins, President of the College from 1950-1969.

Willis Hall—Classrooms, faculty offices. Named for William Spader Willis, chief administrator from 1899-1928.

Downs Hall—Student and faculty dining rooms, meeting rooms and lounges. Named for Martha Downs, chairperson of the Mathematics Department.

Dougall Hall—Campus police facilities, recreation rooms. Named for John B. Dougall, President of the College from 1944-1950.

Vaughn-Eames Hall—Workshop and exhibit space for the fine and theatre arts, studios and classrooms. Named for Lenore Vaughn-Eames, alumna and member of the faculty. James Howe Gallery—housing current faculty and student art exhibits.

Science Building—Classrooms and research laboratories, faculty offices.

Hutchinson Hall—Instructional Resource Center, lecture hall, classrooms, faculty offices. Named for John C. Hutchinson, chairperson of the Department of Sociology.

Administration Building—Offices of business and academic services.

Whiteman Hall—Freshman Dormitory. Named for Harriet E. Whiteman, dean emeritus.

College Apartments—Four mid-rise buildings with apartment accommodations for 1,000 men and women. Named in honor of Mary B. Burch, member of the Board of Trustees; Mary B. Bartlett, member of the faculty; and Laura E. Rogers, alumna and member of faculty; and in memory of Ralph P. Sozio, student at the college.

East Campus Facility—Gymnasiums; swimming pool; exercise room; saunas; administrative offices; meeting rooms; Career Services Center; Center for Continuing Professional Education; Curriculum Library; tennis courts; theatre; radio station.

Alumni House—East Campus—offices and meeting rooms.

Student offices of 40 academic and social organizations are available at the College.

The Officers of the College are shown on the chart on page 5. A listing of academic departments can be found on page 181. These departments are divided among four schools, and the statements of the degree requirements found in a subsequent section of this catalog are grouped by school.

HOUSING

COLLEGE APARTMENTS

Kean College's midrise apartment complex features 244 two bedroom apartments, each with private bath and modern science kitchen facilities. Each apartment is attractively furnished, completely carpeted and centrally air conditioned. Separate television hookups and telephone services are available. Laundry facilities are also included on each floor. The apartment complex provides accommodations for approximately 1,000 men and women. Several two-bedroom units on the first floor are available specifically for handicapped students.

TRADITIONAL RESIDENCE HALLS

A residential experience designed for, and limited to freshmen. Most freshmen are assigned to traditional style housing although some spaces are available to freshmen in the apartments. Every room is attractively furnished and each student has a bed, dresser, closet, desk with bookshelves, desk lamp, lounge and desk chair. Connecting each room is a bathroom facility, laundry facilities, lounges and a study are available on every floor.

No cooking is allowed in the traditional residence halls. Residents are required to purchase a full meal plan.

The residents are represented by a government association comprised of all residents. Elected officers in consultation with the Housing staff are concerned with all areas of student living.

Campus facilities are open for extended use by the resident students including Library, Health Services, Game Room, Gymnasiums, Pub and Snack Bar. Also, a full calendar of social and cultural events, theater, performing arts, movies and off-campus activities is planned each year. Campus Van Shopping Services is provided free of charge for all resident students. This service allows resident students access to the surrounding shopping centers. Students are advised to contact the Housing Office for housing costs and other information, Whiteman Hall, 527-2114.

OFF-CAMPUS HOUSING

Any full-time student may register for off-campus housing with the Housing Office which maintains a listing service and will guide students in locating housing facilities in the community.

LIBRARY SERVICES

The Nancy Thompson Library is a comprehensive learning center holding more than 265,000 volumes including bound periodicals and 1,200 periodical subscriptions. Several special collections include rare books and other printed materials: the New Jersey collection; the papers of Congresswoman Florence P. Dwyer (M.C. 1956-72); and the institutional archives, containing catalogued documents relating to the 133-year history of the College. The library has been designated by Congress as a depository for selected United States Government documents; it also serves as a regional depository for selected New Jersey State publications.

Rapid bibliographic retrieval capability is available through on-line service from several computerized national data bases. Kean College participates in an interlibrary loan system, through which books and other materials not available in our Library may be borrowed.

The holdings of all state colleges are available to registered Kean students through special borrowing privileges.

All new students should come to the Circulation/Reserve Desk located on the first floor of the library to obtain a library card. Please bring proof of registration.

The director of the library and members of the Library staff cordially invite all students to secure a library card as soon as possible. Materials that describe the various collections and the range of services offered by the Library will be provided at the Circulation/Reserve Desk, and Information Desk. Staff members will be available to help freshman begin to make the Nancy Thompson Library a valuable learning resource and benefit from the services provided. The East Campus Library is open for services. Call 527-3132 for hours.

INSTRUCTIONAL RESOURCE CENTER

The Instructional Resource Center (IRC) provides a variety of non-print materials, electronic and conventional audio-visual equipment, and comprehensive media services, all of which support the academic programs of the College. The non-print instructional materials collection, which includes films, filmstrips, slides, audiotapes, media kits, videotapes, and records, numbers approximately 6,000 titles. All available materials have been catalogued and appear in a card file on the main floor of the Center. All titles are interfiled in the catalog card file of the College Library as well. These non-print materials may be utilized within the IRC carrel and preview area, which has been equipped for listening and viewing activities. The IRC is located on the second floor of Hutchinson Hall, Room J-230.

THE FRESHMAN CENTER

The Freshman Center, located on the first floor of the Nancy Thompson Library, provides academic, social, and personal guidance to new students. Faculty advisors and counselors representing offices such as Career Planning, Financial Aid, Counseling, Exceptional Educational Opportunity, and Academic Advisement, together with peer counselors and tutors, help students solve problems, improve their academic performance, and locate the service or activity they need.

Other orientation and special activities offered by the Freshman Center include the Freshman Seminar, (a course all Freshman are required to take), Peer Liaisons Assisting New Students (P.L.A.N.S.), New Student Orientation, Family Day, Freshman Convocation, special workshops, and special freshman organizations such as the New Student Committee and the Commuter Club.

New students and their families are invited to drop by the Freshman Center Monday through Thursday, 10 am to 5 pm, Friday 10 am to 2 pm, or evenings by appointment. Call 201-527-3114 for further information.

TUTORING ASSISTANCE

Information on tutoring assistance is available at the Transfer Student Center.

EXCEPTIONAL EDUCATIONAL OPPORTUNITIES PROGRAM

Students whose potential for success in college cannot be identified by conventional criteria may apply for admission to Kean through the Exceptional Educational Opportunities (EEO) Program. Intensive support services are provided with the goal of academic and personal adjustment to the college experience.

As an introduction and orientation to the College, EEO students attend a special summer session immediately prior to the fall semester of the freshman year. The summer session is also designed to strengthen writing skills, reading and study skills, science concepts and mathematical concepts based on individual assessment of academic needs.

Supportive services in tutoring, counseling, academic advisement and financial aid begin with the summer program and continue as EEO students progress through their regular course of studies.

Students admitted to the EEO Program may apply for the Educational Opportunity Fund (EOF) grant if financially eligible.

SEMESTER ABROAD

Kean College offers overseas studies programs to eligible matriculated students. These College sponsored programs are instructed by English-speaking faculty members of the host institution, unless foreign language is one of the objectives. The study abroad program is the equivalent of a semester's work. Upon successful completion of the program, students are awarded credits which may be applied toward graduation. Since participants are Kean College students, they are entitled to all forms of financial assistance.

Applications and further information on College semester abroad programs are available from the Advisement Center, 1st floor, Administration Building. (201) 527-2030.

SUMMER SESSION

Each summer the College offers a comprehensive schedule of studies on both the undergraduate and graduate levels, including regular and non-traditional courses, workshops and institutes, and a variety of international study tours. All of the College's regular administrative support services and facilities are available during the summer term of study. A separate bulletin is published and is available on request from the Office of Summer Session. Two sessions are offered. One in late May, early June and another from the last week in June to the first week in August.

EXTERNAL EDUCATION

External Education courses are designed for mature, fully-matriculated, upper-division undergraduate students whose family and/or work responsibilities make it difficult for them to attend regular classes. External courses are adapted for individualized study and employ a variety of teaching-learning strategies. Students enrolled in these courses are responsible for adherence to individual course requirements and for completion of course assignments outside a traditional setting.

Upon approval, a student may take a maximum of two external courses per semester. Full-time undergraduates, under exceptional circumstances, may petition to enroll in one external course as part of an approved academic workload.

TRANSFER STUDENT CENTER

Transferring is sometimes a difficult process, and as with any new situation, questions are likely to arise. Because we want to assist you in making your transition to Kean a successful one, we have established a Transfer Student Center for you. Our goal is to provide you with a one-stop information center where we can assist you with your concerns and help to reduce "transfer shock." The Center, located in the heart of the campus in Hutchinson Hall, J-106, is staffed by advisors and graduate assistants from the Advisement Center. The Transfer Student Center can help you with the questions you may have about the College in general, specific college services, and academic policies and procedures.

TRANSFER NEWSLETTER

A newsletter is prepared to help familiarize transfer students with Kean College and keep them informed of important dates, activities and procedures.

TRANSFER ORIENTATION

New transfer students will be invited to a Transfer Orientation Program at the time of registration in conjunction with registration.

TRANSFER ARTICULATION AGREEMENTS

Kean College of New Jersey has signed a number of Transfer Articulation Agreements, with public community colleges, that form a framework for the process of transferring credit to Kean College of New Jersey.

CAREER SERVICES CENTER

Career Services Center provides a confidential career counseling and placement service for undergraduates, seniors and alumni. Seniors are assisted in locating suitable positions in teaching, industry and government through off-campus interviews and direct referrals. In addition, the office assists students in the techniques of securing a job, the proper conduct of interviews, the writing of applications, the preparation of qualification records, effective job hunting strategies and career awareness seminars.

The center maintains a comprehensive folder of personal data and references which, with the permission of the student or alumnus, is sent to all interested employers and is located at the East Campus.

DAY CARE CENTER

The Department of Early Childhood Education maintains and supervises a center for the care and education of children, 2-5 years of age, while their parent(s) attend classes. Children enrolled in the center attend on a regular schedule. The center is open Monday through Friday, 7:45 a.m. to 4:30 p.m.

EVENING CARE

Evening care is offered from 4:30 p.m. to 7:45 p.m. for children 3-12 years of age. Supervision, creative recreation and homework help are provided Monday through Thursday.

Students majoring in Early Childhood Education may take their junior field practicum in the center. In addition, graduate assistants who are certified Early Childhood Education teachers teach there. The Financial Aid Office places a number of student aides in the center. Various departments of the College use the Center to observe young children's growth, development and learning. Further information may be obtained by calling the director, 527-2075. The Center is located at Campus School North, Room 110.

INSTITUTE OF CHILD STUDY

The Institute of Child Study is a clinical complex that encompasses several clinics and provides training facilities for various academic programs of the College. The Institute also provides services to the community at minimal costs in the areas of learning problems, reading disabilities, speech and hearing impairments, psychological and medical evaluations and comprehensive evaluations of the child study team type. The Institute also sponsors parenting groups, interdisciplinary workshops and mentally retarded adult groups, and has been the recipient of various state and federal grants.

The Speech and Hearing Clinic; Stuttering, Tongue Thrust and Cleft Palate Clinics; Learning Clinic; Psychological Clinic; and Reading Clinic are part of the Institute. Academic undergraduate and graduate programs enriched by the various clinics include speech correction, audiology, learning disabilities, reading, school psychology, student personnel/counseling, occupational therapy, nursing and social work.

AFFIRMATIVE ACTION

As an affirmative action/equal employment opportunity institution, it is the policy of the College that in all matters concerning the recruitment, selection, and admission of students, and in all matters relating to employment with, or employment sponsored by, the College, no person shall be discriminated against for reason of race, creed, sex, national origin, religion, political affiliation or handicapping conditions. Inquiries about compliance in these areas may be directed to the College's Affirmative Action Officer, (201) 527-2244.

This policy is in compliance with federal regulations issued under Title VI, Title VII, Civil Rights Act of 1964; Executive Order 11246, as Amended; Title IX, Education Amendments of 1972; Section 504, Rehabilitation Act of 1973, as Amended; and the Veterans Assistance Act of 1972, as Amended.

POST BACCALAUREATE MAJOR

The Post Baccalaureate Major Program (PBM) is designed to permit individuals who already hold the bachelor's degree, from Kean College or another institution of higher education, to earn credits equivalent to a major in a second discipline. Upon meeting all PBM requirements, which vary from discipline to discipline, the student is granted a certificate indicating successful completion of the program.

Further information on the PBM program is available from the College Admissions Office. Filing date for all applications is June 1.

CERTIFICATION PROGRAM

The Certification Program is designed to permit individuals who already hold the bachelor's degree to secure either an initial teaching certificate or additional teaching certificates. The following certificates are offered: nursery school, elementary, art, English, reading, Spanish, health and physical education, handicapped, mathematics, music, biological sciences, physical science, earth science, social studies, deaf or hard of hearing, industrial education, bilingual/bicultural education, teaching English as a second language and speech correction.

The Certification Program also offers programs for students with high school diplomas or equivalencies for group nursery school teacher qualification and for industrial studies certification on the basis of work experience.

Further information is available from the Teaching Performance and Certification Center in Willis Hall.

CONTINUING EDUCATION

Based on the belief that learning is a life-long process, Kean College offers non-credit courses, lectures, workshops and seminars to an enlightened public for personal and intellectual growth, career development and job enhancement.

ADULT ADVISORY SERVICES

This office provides career and educational counseling and resource information about employment and education. Workshops and conferences are offered in response to these and other adult needs. The Office of Adult Advisory Services administers EPIC (Entry Program into College), a program for adults (25 years of age and older) who wish to enter Kean College. The office offers guidance and services geared to the specific needs of adults, including the Assessment of Life Experience.

CENTER FOR CONTINUING PROFESSIONAL EDUCATION

The Center develops programs at the request of professional organizations, training personnel and human service directors and individuals, and are carried out through on-campus non-credit courses, workshops and conferences. They are designed to provide professional development which may lead to certificates or Continuing Education units (CEU's).

CENTER FOR CORPORATE EDUCATION

The Center helps business and industry meet their needs in an environment of rapidly changing human relations and technology. It coordinates on-site and on-campus courses designed to meet the needs of companies of all sizes. These courses may range from a few selected offerings to a complete degree program. Instructors include qualified people now working in business and industry as well as members of the Kean College faculty.

OFFICE OF COMMUNITY SERVICES

This office acts as liaison between the College and the community and coordinates the use of college facilities and resources by non-profit community groups. This office also works with groups in planning programs that prove beneficial to the community and to the College.

GRADUATE STUDIES

The Office of Graduate Studies offers programs and courses of advanced level and specialization which lead to the degree of Master of Arts, Master of Science, Master of Public Administration, Professional Diploma, particular types of certification or personal enrichment.

A separate catalog, published for Graduate Studies and available on request, contains all information on graduate admissions and fees and describes in detail the program and options in the following areas:
 M.A., Audiology and Communication Sciences
 M.A., Behavioral Sciences
 M.A., Counselor Education
 M.A., Early Childhood Education
 M.A., Fine Arts Education
 M.A., Instruction and Curriculum
 M.A., Liberal Studies
 M.S., Management Systems Analysis
 M.A., Mathematics Education
 M.P.A., Public Administration
 M.A., Reading Specialization
 M.A., Special Education
 M.A., Speech Pathology

Students who apply for admission to graduate study at Kean College are also eligible to apply for a graduate assistantship which provides a stipend for a 20-hour work week and a waiver of tuition and all fees for 18 to 24 credits for an academic year.

COOPERATIVE EDUCATION

Cooperative Education is a program which combines academic study with realistic, hands-on, career-related work experience. Students earn academic credits while on approved employment experience directly related to their major. Students are supervised by employers and advised by faculty. The job may be either full or part-time, and credits earned vary with the work experience. This opportunity is available only to undergraduate juniors and/or seniors whose academic departments sponsor a particular co-op course. At Kean College the titles of the co-op experience vary; they may be designated as internships, practicums, apprenticeships, field experiences, field studies and Co-op Education.

The Cooperative Education Office coordinates the initial interaction between, and offers administrative assistance to, academic departments, students, and employers. The Cooperative Education Office maintains a listing of positions available in companies, corporations, non-profit and governmental organizations, which have received departmental approval as appropriate job-study experiences. This office assists in program development, counseling students, and serves as a resource center for potential employment opportunities.



R.O.T.C.

U.S. ARMY ROTC

Full-Time undergraduate students at Kean College may register for U.S. Army ROTC at Seton Hall University in South Orange. Successful completion of this option leads to a commission as a Second Lieutenant in the United States Army. Details are available in the Advisement Center.

U.S. AIR FORCE ROTC

Through an agreement among Kean College of New Jersey, the United States Air Force, and New Jersey Institute of Technology in Newark, full-time undergraduate students may pursue an Aerospace Studies Option (U.S. Air Force ROTC). Details are available in the Advisement Center.

AEROSPACE STUDIES COURSE DESCRIPTIONS

AS-111 (Fall Semester) United States Military Forces in the Contemporary World I

This introductory course explores the doctrine, mission, and organization of the United States Air Force. It examines the mission and weaponry of the U.S. strategic offensive and defensive forces and the function and employment of nuclear weapons. One hour of class and one hour of Leadership Laboratory per week. 1 credit.

AS-112 (Spring Semester) United States Military Forces in the Contemporary World II

This course is a study of U.S. general purpose forces and aerospace support forces. It explores the mission, resources, and operation of various Air Force commands and their role in warfare. The support functions of research, logistics, and education are also introduced. One hour of class and one hour of Leadership Laboratory per week. 1 credit.

AS-221 (Fall Semester) Development and Growth of Air Power I

This course examines the development of air power over the past 60 years. It traces the development of various concepts of employment of air power and focuses on factors which have prompted research and technological change. One hour of class and one hour of Leadership Laboratory per week. 1 credit.

AS-222 (Spring Semester) Development and Growth of Air Power II

This course stresses the variety of events and elements in the history of air power especially where these provide significant examples of the impact of air power on strategic thought. One hour of class and one hour of Leadership Laboratory per week. 1 credit.

AS-333 (Fall Semester) Leadership and Management for the Professional Officer I

Emphasis on the concepts and skills required by the successful manager and leader. Curriculum includes individual motivational and behavioral processes, leadership, communications, and group dynamics, providing the foundation for developing the junior officer's professional skills. Course material stresses decision-making, and the use of analytic aids in planning, organizing, and controlling in a changing environment. Three hours of class and one hour of Leadership Laboratory per week. 3 credits.

AS-334 (Spring Semester)

Prerequisite: AS-333 or approval of the Professor of Aerospace Studies. A continuation of AS-333. Organizational and personal ethics, management of change, organizational power, politics, and managerial strategy are discussed within the context of the military. Actual Air Force case studies are used throughout the course. Three hours of class and one hour of Leadership Laboratory per week. 3 credits.

AS-443 (Fall Semester)

Prerequisite: AS-334 or approval of the Professor of Aerospace Studies. Focusing on the American Armed Forces as an integral element of American society, this course examines a broad range of topics related to American civil and military relations and the environmental context in which U.S. defense policy is formulated. Specific topics include the role of the professional soldier in a democratic society; socialization processes within the American military forces; and the requisites for maintaining adequate national security forces. A special emphasis will be placed on the communicative skills in the context of the course material. Three hours of class and one hour of Leadership Laboratory per week. 3 credits.

AS-444 (Spring Semester)

Prerequisite: AS-443 or approval of the Professor of Aerospace Studies. Focusing on the Armed Services as an integral part of world society, this course examines the broader range of American civil-military relations and the environmental context formulating defense policy. Special themes emphasized are: political, economic, and social constraints upon the national defense structure; impact of technological and international developments upon strategic preparations and the policy-making process; and a futuristic look into the world diplomatic-military scene. Special topics are the laws of war and American military law highlighted by a study of military justice and its effect on the citizenship. Three hours of class and one hour of Leadership Laboratory per week. 3 credits.



The program of student activities and services is planned to provide the means for personal development and a natural blend of living and learning at Kean. Students may draw on the many resources of the campus and pursue, quite individually, that which may enlarge their world. Inquiry, dialogue and diversity are encouraged. Opportunities are extensive for participation in clubs and publications, athletic, social and cultural activities, student government and college governance.

Faculty, administrators and students work together on many aspects of college life. They operate under a bill of rights and responsibilities, mutually conceived and accepted. Supportive student services under the auspices of the Office of the Vice-President for Student Services are available for personal counseling and guidance, housing, health care, financial aid, athletics, recreation, student activities and special student services. The Student Handbook, published yearly, provides a guide to all activities, services and personnel that contribute to the special quality of student life at Kean.

THE STUDENT CENTERS

The complex of student activities facilities, the College Center and the neighboring Student Activities Building, compose the hub of college life and provide the informal and friendly atmosphere in which students and faculty can mingle, relax and conduct business. The attraction may be coffee, refreshments in the Kean College Pub, a light lunch, a special scheduled program or an organization meeting.

The College Center provides a lounge, the Kean College Pub, the professional student activities offices, the offices of Student Organization and student publications, the Little Theatre, the College Cafeteria, the Snack Bar, the Information Center, the Communication Help Center and the candy store.

The Student Activities Building houses the Book Store, Health Services, the Office of Special Student Services, the Campus Bank, the Counseling Center, the Browsing Room, and the Payroll, Personnel Office.

Downs Hall provides cafeteria/dining facilities and meeting rooms to handle activities ranging from a small group gathering to a major conference experience.

STUDENT SERVICES

The Division of Student Services includes the offices of: Health Services; Counseling; Special Student Services; Financial Aid; Intramural and Recreational Sports; Athletics; Housing; and Student Activities. Programs of special interest include: the Freshman Assistance Program wherein a cadre of trained upperclass students serve as "buddies" or pals to entering students; the annual Campus Awareness Festival coordinated by the Office

of Student Activities (designed to introduce students to one another and to a wide range of social and cultural organizations); and the individualized needs assessments provided by the Office of Special Student Services for entering students with physical disabilities.

The Vice President for Student Services, Patrick Ippolito, the Dean, Janice M. Murray and Associate Dean of Students, Jose A. Quiles, invite you to learn about these services and to participate in those activities that interest you. They are located in T-122, Ext. 2190.

HEALTH SERVICES

The College Health Service, located in the Student Activities Building provides first aid and emergency treatment; short-term medical treatment; health information and referral; allergy immunizations for resident students; medical counseling for a variety of health problems, leaves of absence for medical reasons.

There is no cost to students for service given by College medical personnel. Students are required to pay for all expenses for laboratory testing in the Health Services plus written prescriptions given by college or outside physicians, treatment administered by private physicians, local hospitals and other health agencies. Health insurance is compulsory for all resident students and is highly recommended to all commuting students as well. A college group health plan may be elected at a nominal fee prior to each semester. See "Student Health Insurance" in the Fees and Expense section of this catalog.

Students requiring special services due to temporary or permanent physical handicaps may apply to Health Services for elevator keys and special parking permits. Ramps are situated at the entrance to all buildings to accommodate students confined to wheelchairs. In addition, students are encouraged to register with the Office of Special Services located in the same building.

SPECIAL STUDENT SERVICES

Special Student Services coordinates a variety of educational services for international and disabled students at Kean College. Students with permanent or temporary disabilities can be helped by supportive educational resources available through the Office of Special Student Services. International and disabled students are encouraged to make an appointment with the Director for individual needs assessment at Student Activities Building, Room SA-114, Monday-Friday, 9:00 a.m.-5:00 p.m., 527-2015.

*EAST CAMPUS

The East Campus is a student life facility purchased in 1981 following its endorsement by the Kean College student body. Each student at Kean pays a per credit dedicated student fee, which is applied to the purchase and operation costs of the East Campus.

Located approximately one quarter mile from the main campus and encompassing 28.5 acres of land, the East Campus contains 12 tennis courts, a one quarter mile track, five playing fields, two gymnasiums, a swimming pool, saunas, an exercise room, a 400 seat theatre, a library, a radio station, a number of classrooms, meeting rooms, the Alumni House, as well as student group college programs and administrative offices.

*For further information concerning the East Campus please call—527-3017.

COUNSELING CENTER

The Counseling Services provide assistance without charge, regarding personal problems of an academic, vocational, or emotional nature for all students, faculty and staff at Kean College of New Jersey. Consultation with a professional counselor is voluntary and all counseling interviews are treated in a confidential manner. Initial appointments are arranged promptly in the counseling office and may be extended to include several regular individual interviews. Vocational interest and psychological testing are provided. Emergency and referral services are also available.

The counseling staff attempts to assist the student in improving interpersonal and social relationships, to set and achieve appropriate vocational goals and to increase personal satisfaction and self-worth. Group counseling is also available.

The Counseling Center is located in the Student Activities Building, Room S.A. 126. It is open from September through August, 10:00 a.m. until 5:00 p.m. Appointments may be made in advance.

ATHLETICS

Kean College sponsors 15 varsity sports in intercollegiate competition. It retains Division III membership in the National Collegiate Athletic Association, Eastern College Athletic Conference, and New Jersey Athletic Conference.

Men at Kean compete in football, soccer, basketball, wrestling, ice hockey, lacrosse, baseball, and tennis. Women compete in field hockey, softball, tennis, swimming, basketball, volleyball and soccer.

Further information concerning athletics at Kean and opportunities to participate may be obtained from the Director of Athletics, Intramurals and Recreation.

RECREATIONAL SPORTS

The Department of Athletics and Recreational Sports offers a comprehensive sports program including: (1) intramural sports, (2) sports clubs, (3) informal recreation, (4) extramurals, (5) instructional clubs. All students are eligible and encouraged to participate in any of the offered activities.

The intramural Sports program includes individual, dual and team competition in a variety of events. All sports clubs are of either an instructional or competitive nature. Unless otherwise specified, sports clubs are co-ed and open to the entire college community. In general, there is no fee for instruction or use of equipment. In some instances club members may be required to pay a special testing fee if a course results in a particular certification.

The recreational facilities available to students include: (1) gymnasias, (2) exercise rooms, (3) tennis courts and (4) swimming pools. The hours for recreational use of these facilities are established on a semester basis. Copies of the informal recreation hours can be picked up at the Department of Athletics-Recreational Sports, Office on the East Campus. Additionally, a complete schedule of all intramural sports and sports clubs is published each semester, and can be picked up in the Department's office.

All program activities are publicized in the Independent and via notices periodically circulated through the campus.

THE COUNCIL FOR PART-TIME STUDENTS

The Council for Part-Time Students is a representative student body organized to promote the interests and concerns of all part-time students and to strengthen their identity with the College and with each other. Some Council for Part-Time Students' activities include funding approximately 27 student groups, Cultural Arts Program Board, Committee of the Faculty Senate. CPTS also funds six part-time student scholarships. The office is located in CC-113. 527-2228. 12:00-8:00 Mon.-Thurs.

RECREATION

Recreation is programmed year-round for the entire Kean community. It covers many interest areas, fulfilling needs for vigorous exercise and competition, for light activity and relaxation.

The numerous tennis courts, the swimming pools, the basketball courts and gymnasiums are open at special hours for students, faculty and staff. Different clubs, intramural sports and game room activities go on all over the campus much of the time. Particular emphasis is placed on making extended recreation available to the student residents of the College Apartments.

The Office of Campus Recreation coordinates the programming and use of all facilities connected with recreation and may be contacted for further information.

ORGANIZATIONS

New groups have formed over the years as students have sought companions in the pursuit of special interests. There are clubs which cater to politics, religion, the human concern, sports, social events, recreation, and the cultural arts.

There are both locally and nationally affiliated fraternities and sororities which serve a social function, engage in charitable work and are concerned with scholarship, character building and service to the College. In addition, there is a national service group for college and university men and women whose cardinal principles are leadership, friendship and service. There is also a statewide association of veterans in New Jersey colleges which exists to familiarize veterans with scholastic life and to discuss current and pending legislation affecting veterans. Policies and procedures regarding club information and recognition can be obtained from the Office of Student Activities.

STUDENT ORGANIZATION

Every full-time undergraduate student is a member of Student Organization. Elected representatives from each class and officers elected by the student body as a whole compose the Student Council which governs the organization, meets regularly and takes action on issues of student concern. Student Org. sponsors a number of projects including a leadership development program and over thirty-five funded groups and college services.

The College Center Board is a standing committee of Student Organization, initiating cultural, recreational and social programs and related activities. This is a cooperative venture. It is shared by the professional student activities staff which is prepared to advise and assist and which endeavors, wherever possible, to enable innovations to take place. The office is located in the College Center 128, Mon.-Fri., 8:30 a.m.-5:00 p.m., 527-2346.

STUDENT ACTIVITIES

The Office of Student Activities, located in the College Center room 143, serves as the developer, coordinator, and clearing house for cultural, social, and educational programs of the College.

The office has direct responsibility for the development of student clubs. Interested groups may apply for college recognition and subsequently receive a variety of campus privileges. Policies and procedures regarding both the formation of a club and its rights and responsibilities are defined in official documents and memoranda distributed by the office.

CULTURAL PROGRAMS

Diverse, exciting cultural programs are offered throughout the year at Kean. Numerous concerts, lectures, plays, films and dance programs are scheduled to enhance the educational experience.

These events are sponsored by various programming committees comprising students, staff and faculty. The Cultural Arts Program Board is responsible for scheduling major national and international dance and drama events such as Princeton Ballet and New Jersey Ballet Company, National Theatre of the Deaf and The Pirates of Penzance. Bus trips to museums, Broadway plays and Lincoln Center are scheduled throughout the year.

A diverse classical and lecture series is also offered. Distinguished guests who have been part of the Townsend Lecture Series are Alex Haley, Kurt Vonnegut, Jr. and Maya Angelou. Classical artists who have appeared are Panocha String Quartet, The Arden Trio and Nadja Salerno, violinist.

Pop concerts are brought to Kean by the student coordinated College Center Board. Among the featured performers who have graced Kean's stage are Cyndi Lauper, Miles Davis, Count Basie, The Hooters, Marshall Tucker and The Alarm.

Kean Dance Theatre and the Department of Communications and Theatre sponsor student productions each semester.

STUDENT PUBLICATIONS

There are a number of student publications running the gamut of form and opinion.

INDEPENDENT

A weekly newspaper, *Independent* reports news items on campus, local, state and national levels and is a platform for student opinion. CC115/119

TIMES

A newsletter that serves as the voice of part-time students. CC113

GRUB STREET WRITER

A yearly literary review that brings together the creative prose, poetry and art work of Kean students. W-402A

MEMORABILIA

The yearbook *Memorabilia*

Admissions

Applicants are admitted to Kean College of New Jersey on the basis of academic and personal qualifications. The recruitment and admissions procedures are designed to enroll the best qualified students for the College. Each applicant is considered carefully in the light of his/her secondary school record, both academic and personal, performance on a scholastic aptitude test and the College's estimate of potential as a student. Special opportunities for admissions are made possible through the Exceptional Educational Opportunities Program, designed for students with limited academic preparation.

Freshmen are generally enrolled for the fall semester; however, spring admission is also possible. *The College expects that all students offered admission will register for study to begin the fall or spring semester immediately following acceptance.*

Application deadlines for freshmen are November 15 for Spring Semester and July 15 for the Fall Semester.

1. Complete the application and send it to the Admissions Office, Kean College of New Jersey, with the \$10 non-refundable processing fee or fee waiver request as soon as possible. Do not send cash. (Applications without the fee or fee waiver request will not be processed.)

2. Submit your SAT or ACT scores (our College Board Code number is 2517).

3. Submit an official copy of your high school transcript.

4. Your high school transcript must show at least 16 completed college preparatory subjects:

English	4
Social Studies	2
Science (Laboratory)	2
Mathematics	3
Electives in English, Social Studies, Science, Math or Foreign Language	5

Students who do not meet these requirements may receive consideration under one of our special admissions programs.

5. POST-BACCALAUREATE (PBM) AND TEACHER CERTIFICATION STUDENTS are required to submit official transcripts from all colleges previously attended.

6. Students 25 years of age or older, with little or no college background and no SAT's, will be considered through the EPIC Program (Entry Program Into College) as part-time students. Please contact the Office of Adult Advisory Services for information (201-527-2210).

7. Students should plan to visit the College as soon as possible for a tour of the campus given on Fridays, at 10 a.m., October through May, except for holidays. Call the Admissions Office for details (201-527-2195).

ADMISSIONS, FEES, FINANCIAL AID

SPECIAL ADMISSIONS PROGRAMS

(EEO) EXCEPTIONAL EDUCATIONAL OPPORTUNITIES PROGRAM

Students eligible to participate in the EEO Program are those who (1) Are not admissible to the College under the regular admissions standards; (2) Hold standardized test scores (such as the S.A.T.) which are below the institutional norms; or (3) Bear an educational background which indicates the need for improvement of basic academic skills.

(SPN) SPANISH SPEAKING PROGRAM/PROGRAMA HISPANO

Programa bilingue diseñado específicamente para alumnos hispanos que tengan deficiencia en el idioma ingles.

TRANSFER

Applicants for transfer may seek admission to the fall or spring semester. A cumulative average of no less than 2.0 (C) along with 15 completed semester hours of transferable credit is required for consideration. Students who have earned fewer than 15 credits must submit a high school transcript and SAT scores.

Admission is based on the quality of the candidate's previous college work and the availability of space. The approval of the department in which the student will major may also be required.

Students may be accepted to the College by the Admissions Office and are subsequently required to obtain departmental approval for a specific major or program.

Application deadlines for transfer students are November 15 for Spring Semester and July 15 for the Fall Semester.

Every attempt is made to evaluate the student's transcript(s) for transfer credit at the time of acceptance.

See Academic Standards and Procedures, Page 19.

EPIC PROGRAM

(Entry Program into College)

This is a special program designed to facilitate the entry or re-entry into higher education of mature students who have been separated from formal schooling for a number of years. In addition to regular support services, special advisement and counseling is provided by the Adult Advisory Center.

Information about admissions for adults is available in the Office of Adult Advisory Services.

FOREIGN STUDENTS

Students who are not citizens or permanent residents of the United States and who do not reside in this country may apply for admission to Kean College. All foreign students applying as freshmen are requested to submit results of the Scholastic Aptitude Test of the College Entrance Examination Board, a statement of complete financial support and certified translated copies of all academic credentials. The Test of English as a Foreign Language (T.O.E.F.L.) of the College Entrance Examination Board is required of those for whom English is not their native language.

Application for admission as a foreign student must be filed in the Admissions Office not later than April 1.

Foreign students (F-1) will be considered for Fall (September) admission only.

ADMISSION OF VETERANS

Veterans will be permitted to file applications after the deadline, provided the date of discharge occurred no earlier than two months prior to the date of application. Ex-servicemen will be expected to meet all other admissions criteria. Applicants must be received by the Admissions Office within 30 days before the beginning of the semester for which the candidate wishes to enroll.

Fees

Tuition, fees and expenses are established by the Board of Trustees and are subject to change by the Board. Payment is made according to the following schedule with checks drawn to Kean College of New Jersey.

TUITION

Tuition rates are published several times during the year in the registration bulletins. Please consult the bulletin appropriate to each academic semester for all information.

New Jersey Resident—	
Per semester hour	\$43.50
Non-Resident—Per semester hour	\$63.50

FEES (all fees subject to change)

Admissions	\$10.00
Required of each applicant. non-refundable.	

Acceptance Deposit (non-refundable)	\$50.00
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Required of full-time students accepted for admission who desire to reserve their place at the College. This deposit will serve as a credit toward tuition charges.

General Service Fee	\$3.00
Per semester hour	

Student Activity: Full-time Student	\$2.75
Per semester hour	

Student Activity: Part-time Student	\$1.25
Per semester hour	

Student Activity: Summer Session	\$2.25
Per semester hour	

Athletic Fee	\$2.00
Per semester hour. Charged to full-time students only.	

Student Life Facility Fee	\$4.00
Per semester hour	

Late Registration (non-refundable)	\$15.00
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A charge placed on students who register on the date published as late registration and thereafter.

Late Payment	\$25.00
A charge for payments made after the due date as established by the Business Office.	

Student Teaching	\$60.00
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Charged in addition to tuition. The fee is non-refundable and is assessed when student teaching assignments are made.

Teaching Certificate	\$30.00
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Required of all candidates in each area of certification. It is due with remittance of Student Teaching fee.

Campus Parking

Full-time Student	\$10.00
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Covers the academic year. All student vehicles are to be registered with the Parking Office.

Campus Parking: Part-time Student	\$4.00
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Covers both fall and spring semesters.

Campus Parking: Summer Session	\$4.00
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College Apartments

The College Board of Trustees establishes fees for the college apartments on a yearly basis. Contracts are based on nine month or twelve month occupancy and on two person and four person capacity. Please contact the Housing Office for specific information.

Student Health Insurance	\$70.00
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This is a current annual premium, included in the fall semester billing. The College's group insurance plan for medical reimbursement affords protection on a yearly basis from September 1 to August 31. Compensable items include hospital care, surgery and limited physicians' fees. Students may obtain insurance beginning with the spring semester on a pro-rated basis through the insurance company directly. Claims for benefits are handled through the College's Health Office.

Transcripts	\$1.00 each
Obtained through the Office of the Registrar.	

Books

Each student buys his/her own books, which may be secured from the College Book Store. Books and materials for the first year may cost about \$300, except for industrial education majors who purchase certain items which will be used throughout the four years for an additional cost of about \$300.

Refunds

Students who withdraw from the College or who are granted a leave of absence may be granted a refund of tuition and certain other fees on the following basis:

Withdrawal by end of add-drop period or two weeks into the semester, whichever is less	100%
Withdrawal within first third of semester	50%
No refund thereafter	

Financial Aid

COLLEGE-ADMINISTERED FINANCIAL AID

Kean College endeavors to make assistance available to a student in accordance with his/her financial need. Such need is determined on an individual basis and is measured as the difference between college costs and the resources of students and their parents. The Financial Aid Form is normally required as part of the application. Suggested application date is April 1st, although applications submitted after that date will be accepted and processed based on the availability of funds.

Students may secure applications and further information on all aid programs through the Financial Aid Office.

NATIONAL DIRECT STUDENT LOAN PERKINS PROGRAM

Loans from the NDSL program are granted in amounts from \$100 to a maximum of \$2,500 for two years. Applicants must demonstrate financial need, and must be registered on at least a half-time (6 credits) basis in a program leading to a degree or certificate. Repayment of the loan on a quarterly basis begins nine months after graduation or withdrawal from college. Simple annual interest of 5 percent is charged after the six months' grace period. A minimum payment of \$30 per month is required, over a repayment period that may extend to a maximum of ten years. Upon proper application, payments may be deferred while a borrower is in graduate school, military service, Peace Corps and VISTA. A portion of the loan may be cancelled while a borrower serves in a combat zone, teaches the handicapped, or teaches the disadvantaged in certain Title I or Headstart schools.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS

Yearly grants from \$200 to \$2,000 are awarded to students who are registered on at least a half-time basis in a program leading to an undergraduate degree.

EDUCATIONAL OPPORTUNITY FUND

Yearly grants from state funds of \$250 to \$1,000 are awarded to students enrolled on a full-time basis in Kean College of New Jersey's Exceptional Educational Opportunity Program and to transfers who have had an EOF award from another college. Recipients must have been New Jersey residents for at least one year and must demonstrate exceptional financial need.

MEMORIAL LOAN FUND

Emergency loans to meet short-term needs for college expenses are available to full-time undergraduate students. Loans are repayable within the semester.

STUDENT EMPLOYMENT

The College Work-Study Program, maintained with federal funds, provides part-time and summer jobs both on campus and in off-campus agencies for matriculated students with demonstrated need who are registered on at least a half-time basis.

Within the limitations of individual financial need and employment funding, students may work an average of 20 hours per week while classes are in session or up to 40 hours during vacations and holidays.

Anyone desiring placement in the summer should complete an application before May 1. Freshmen admitted for September are eligible to work in the summer preceding their attendance.

To assist students in finding part-time work outside the College the Financial Aid Office maintains a bulletin board on which are posted jobs reported by off-campus employers. Students apply directly for openings of interest to them.

HONOR SCHOLARSHIPS

There are a number of undergraduate honor scholarships which the College awards each spring for use the following year. Financial need as well as other criteria is a factor in the awards. Applications, including a copy of the parents' tax return for the last taxable year, must be submitted to the Financial Aid Office no later than April 1. Upon recommendation of the Scholarship Committee, the following scholarships are awarded.

Alumni Scholarship—Two scholarships of \$250 each are given to members of the junior class and one scholarship of \$500 is given to a member of the freshman class by the Alumni Association. The recipients are chosen primarily on the basis of academic excellence.

Catherine A. Blewitt Memorial Scholarship—A scholarship of \$200 from the Newark Association of Directors and Supervisors is awarded to a junior in elementary or early childhood education, with preference given a Newark resident or a graduate of any Newark school. Criteria are rank in the upper third of the class, leadership and service.

Guy V. Bruce Scholarship—A scholarship is awarded to a student who has manifested dedication to the restoration and preservation of the environment.

Edward Paul Cares Memorial Scholarship—A \$100 scholarship given to a voice major whose speciality is classical music.

John Edward Haffly Scholarship—A scholarship of \$250 is awarded to a senior majoring in Special Education-Mental Retardation on the basis of scholarship and community leadership.

Evening Student Council Scholarships

Scholarships are awarded to part-time students who have completed at least 30 hours at Kean College and who receive no other grant or scholarship aid.

Kean College of New Jersey Staff Association Scholarship—A scholarship of \$300 is awarded on the basis of scholarship and promise and may be awarded to a highly qualified student for two or three consecutive years.

Lambda Alpha Sigma Scholarship—Two \$200 scholarships awarded on the basis of academic excellence to a sophomore or junior.

Helen Longacre Memorial Scholarship

Two scholarships of \$250 each, one designated for an evening student, are awarded to Elementary Education majors chosen on the basis of good scholarship.

New Jersey Bell Telephone Company Scholarship—Two scholarships of \$750 each are awarded to members of the freshman, sophomore or junior class. Recipients selected on the basis of good scholarship.

Dr. John O'Meara Memorial Scholarship—A \$500 scholarship is awarded to a member of the junior class who demonstrates humanitarian qualities in his or her accomplishments.

Presidential Trust Fund Scholarship—Two scholarships of \$400 each are awarded to outstanding freshman, sophomore or junior students.

Steven J. Weiss Memorial Scholarship—A scholarship of \$400 is awarded to an outstanding freshman, sophomore or junior student.

INDUSTRIAL STUDIES SCHOLARSHIPS

Careers in Graphics Arts Scholarships—Five \$1,000 scholarships, available for women and minorities, are designed to stimulate greater interest in the career avenues available in the graphic arts industry and to reward student excellence.

Mechanical Contracting Scholarships—Scholarships of \$250 are based on financial need and are available through the Mechanical Contracting Association of New Jersey. Additional scholarships are awarded by the American Society for Heating, Refrigeration and Air Conditioning Engineers and the Merit Shop Foundation, Ltd.

Manufacturing Scholarship—A \$500 scholarship, based on academic excellence, is available through the New Jersey Section of the American Welding Society. Membership in the student section of the AWS is assumed.

Industrial Studies Scholarship—A \$500 scholarship, based on financial need, is available annually through an anonymous donor. Geographic location is one of the criteria for the award.

OUTSIDE AID

PELL GRANT PROGRAM

The Pell Grant is a federally funded program intended to provide a base to which other types of financial aid may be added according to need. The amount of individual grants depends upon federal appropriation levels as well as student and family resources. All students in a program leading to an undergraduate degree and registered on at least a half-time basis are eligible to apply. All applicants for federal and state aid programs are expected to first apply for Pell Grants. Application forms are distributed nationally through high schools and colleges. Application for a Pell Grant may be made by completing the appropriate section of a Financial Aid Form.

NEW JERSEY STATE PROGRAMS

The Department of Higher Education administers several aid programs for New Jersey residents who are enrolled full-time in undergraduate programs including: Tuition Aid Grants, Educational Opportunity Fund Grants and Garden State Scholarships. Application for all New Jersey Programs is made by completing the New Jersey Financial Aid Form.

GUARANTEED STUDENT LOANS

Students apply directly to lending institutions for applications for loans up to \$2,500 yearly for full-time and to \$1,250 for half-time attendance. Repayment of loan at 8% interest is deferred until 6 months after graduation or withdrawal from at least half-time enrollment in an eligible institution.

Lists of participating banks are available from the aid office or from the N.J. Higher Education Assistance Authority, CN 540, Trenton, N.J. 08625. Out-of-state students may inquire from the loan authorities in their states.

PLUS LOANS

Independent graduate and undergraduate students and parents of undergraduate dependent students apply directly to lending institutions for applications for loans up to \$3,000 yearly for full-time attendance and up to \$1,500 yearly for half-time attendance. Repayment of loans at 12% interest begins within 60 days of disbursement. Lists of participating banks are available from the aid office or from the New Jersey Higher Education Assistance Authority, CN 540, Trenton, New Jersey 08625. Out of state students may inquire from the loan authorities in their states.

Only college-administered programs and the larger state programs have been described here. Applicants should investigate outside aid through high school guidance offices and agencies such as the Veterans' Administration, Rehabilitation Commission and Social Security Administration.



Within this catalog are the academic programs, standards and procedures which apply to students matriculating at Kean College of New Jersey in the academic year for which it is published. The College will provide the student with the programs stated herein. However, the provisions of this publication are not to be regarded as an irrevocable contract between the student and Kean College of New Jersey. Degree and related academic requirements are subject to change. When such alteration takes place, it is not made retroactive unless it benefits the student and can be accommodated within the span of time normally needed for completion of degree requirements.

COURSE OF STUDY

The course of study at Kean College is designed to bring to students the essential values of liberal education—a breadth of understanding, a depth of knowledge in chosen fields of learning and a large measure of freedom in determining what they will study and the direction of their education.

General education, the breadth component of the curriculum, provides students with experiences in major areas of learning which will acquaint them with diversity of thought, provide them with disciplined ways of knowing, and suggest the interdisciplinary and complex nature of the real world.

The component of depth, represented by the concentration or specialization requirement, enables students to acquire mastery in a subject discipline. This component is acquired through a number of professional and applied disciplines.

Generally speaking, one-third of an academic program is intended to provide opportunity to elect study in courses that promise to add to educational development.

BACCALAUREATE DEGREE REQUIREMENTS

The baccalaureate degree is conferred by the authority of the Kean College of New Jersey Board of Trustees.

To qualify, a student must be fully matriculated in a major program of Kean College, must complete that program as described, and must earn a minimum of 124 semester hours of credit. A minimum of 32 degree credits, including one-half of the major requirements, must be earned at Kean.

No course can fulfill both a major and a general education requirement.

Except in the case of certain specifically approved academic programs, no more than 40 semester hours in a major field will count toward the total credits for graduation.

Fifty percent of free elective credits must be 3000-4000 level courses.

Degree requirements must be completed within 10 years from the date of matriculation. Extension of time may be considered upon written request by the student to the appropriate school dean.

A 2.0 cumulative grade point average is required for graduation. For students in teacher preparation majors, a 2.5 cumulative grade point average is required for certification.

Candidates for New Jersey teacher certification (except Special Education) must pass the National Teacher Examination (NTE) in the appropriate field.

SELECTION OF AN ACADEMIC PROGRAM

Students must select and be admitted to a first major program no later than the spring of the sophomore year. Should the student desire to pursue a second major, the choice must be made early, for fulfilling the requirements for two majors will necessitate careful planning of the entire curriculum.

Many professional programs have extensive requirements and prerequisite course work and should be selected as early as possible.

DECLARATION OF MAJOR(S)

Admission to the College does not guarantee admission to a particular major. Therefore, a student must formally apply and be accepted into a first major (major of record) through the academic department which offers the major. This procedure applies to a second major as well.

USE OF FREE ELECTIVES

After the student has arranged to fulfill general education and first major requirements, the remainder of the program may then be completed with free electives. Electives may be used to develop a second major, a minor or collateral program or to acquire certification. Two restrictions, however, apply to the use of free electives: (1) at least 50% of free electives must be in coursework on the 3000-4000 level; and (2) except in the case of certain specifically approved academic programs, no more than 40 semester hours in a major field will count toward the total credits for graduation. (For example, if a major requirement constitutes 30 s.h., then a maximum of 10 additional credits may be taken in the major field as free electives.)

CHANGE OF ACADEMIC PROGRAM

In order to change from one major to another, the student must apply for acceptance to the new major through the department which offers it. Whenever a major is changed, the student is responsible for completing all requirements of the new program, including specified cognate courses.

ACADEMIC ADVISEMENT

The philosophy of the College places advisement responsibility on the total professional staff. Academic advisors in the Advisement Center provide initial information by relating student career goals to programs at the College and explaining the academic format of such programs. Students who have selected a major are generally advised by the major department. Students pick up their advance registration permits in their respective departments.

Undecided or undeclared undergraduates, incoming transfer students, and most freshmen are advised in the Advisement Center on the first floor of the Administration Building. This office also assists students in declaring a major, changing majors, evaluating credits earned in the military and in responding to all questions relative to general education and electives.

CLASSIFICATION OF STUDENTS

Students attend the College either on a full-time or part-time basis. Status is defined as follows:

Matriculated—those who have been accepted for admission and are enrolled in a program leading to a degree. Matriculated student status is available on both a full-time and part-time basis. Only matriculated students can earn a degree from Kean College.

Pre-Matriculated—those who are following a prescribed program leading to matriculation. Pre-matriculated student status is available only on a part-time basis and for a maximum enrollment of 30 attempted credits.

Non-Matriculated—those who have not applied for admission and are attending on an informal (less than matriculated or pre-matriculated) basis. Individuals in this category may register for a maximum of 2 courses and are encouraged to apply for admission as soon as possible, as non-matriculated students cannot earn a degree from Kean College.

CLASS STANDING

Student standing is determined by the cumulative number of credits earned and is set at the following levels:

Freshman—maximum of 28.5 earned credits
Sophomore—minimum of 29 to maximum of 55.5 earned credits
Junior—minimum of 56 to maximum of 89.5 earned credits

Senior—minimum of 90 earned credits

COURSE LOAD

Course load limitations apply to work taken at both Kean College and at other institutions of higher education.

FALL AND SPRING SEMESTERS

Full-time students—The normal workload is 16 credits per semester with a minimum of 12 credits and maximum of 18 credits, except as noted below for students taking developmental courses.

Students in developmental courses—Students required to take developmental courses may take no more than 16 credits per semester, including developmental courses, until the required developmental coursework is completed successfully.

Part-time students—Maximum workload of 11 credits per semester.

SUMMER SESSION

Unless prior approval has been given by the Advisement Center, no more than two courses may be taken in the summer session. No more than one course may be taken in the pre-session. See page 19 (9).

TRANSFER CREDIT

Kean College of New Jersey grants transfer credit for courses successfully completed with a grade of "C" or better at accredited colleges and universities. Should a Kean College student wish to take a course at another institution, advance written approval of the Advisement Center is required. Transfer courses are not calculated in the Kean College grade-point average.

Graduates of programs formally approved by the State Board of Higher Education for transfer from New Jersey public community colleges or from Thomas A. Edison College are guaranteed admission to Kean College on a space-available basis. Those who have earned the associate of arts degree or associate degree in other articulated programs may be admitted as juniors provided that all transfer admission requirements of the College have been met. Associate of Arts Degree recipients must take two core courses in general education at Kean College, at least one of which shall be at the 2000 level. Associate of Science degree recipients must complete the general education program at Kean College. However, individual program requirements may make additional coursework necessary. At Kean, these students will be expected to complete remaining cognate and major course requirements, to follow all major-related policies such as those stipulating a minimum level of achievement in coursework and development of areas of secondary concentration, and to fill out the remainder of their programs with free electives at the upper division level (i.e. courses listed with 3000 or 4000 numbers).

In accordance with State Board of Higher Education policy, transfer applications from students who have not graduated from approved or articulated transfer programs or who have completed terminal programs in New Jersey public community colleges or Edison College are evaluated on the basis of specific coursework taken and its applicability for regular transfer credit.

TEACHER EDUCATION CREDITS

Regulations for teacher education and certification limit to six semester hours the amount of professional education coursework which can be transferred from the two-year college level.

ADVANCED PLACEMENT

Kean College of New Jersey grants credit and appropriate advanced standing to students who have successfully completed Advanced Placement courses in high school and who have passed the Advanced Placement examination of the College Entrance Examination Board with a grade of three or higher. Six semester hours of degree credit is granted, with the exception of the Advanced Placement course "Latin 4," for which three semester hours is granted.

Advanced Placement credit is recognized as fulfilling general education requirements where applicable and is treated as ungraded transfer credit. If the Advanced Placement course can be equated with particular courses offered in the College, degree credit equivalent to two semesters' work in those courses is granted.

COLLEGE LEVEL EXAMINATION PROGRAM

The College Level Examination Program (CLEP) is designed to test and recognize knowledge gained by individuals in non-traditional ways. Two kinds of examinations are offered. General examinations measure achievement in four basic areas of the liberal arts (humanities, mathematics, natural sciences, and social sciences-history). Subject examinations measure achievement in specific college-level courses.

Kean College awards up to 24 credits for the general examinations when a score in the 25th percentile or better is earned. Up to 16 credits are granted for the subject examinations with scores in the 50th percentile.

Interested Kean College students should first apply to the Advisement Center for further information on the CLEP program. As an Open Test Center, Kean College offers CLEP examinations on the third Saturday of each month.

Applications must be received by the Special Programs Office one month prior to the selected test date.

ASSESSMENT OF EXPERIENTIAL LEARNING

Kean College recognizes that an individual can gain knowledge outside the usual structure of regular classroom meetings. Credit can be awarded for prior learning experiences if the individual can demonstrate a level of understanding equivalent to that resulting from traditional coursework and can otherwise meet the degree requirements of the College.

A matriculated student may apply for evaluation of prior learning from life experience at any point while earning the first 32 credits in residence at Kean College or within one semester of declaring a major. No credits granted for experiential learning may be included in the minimum of 32 s.h., including one-half of the major requirements, that must be earned at Kean in order to qualify for the baccalaureate degree. *Only one evaluation of prior learning will be made for the student, with all experiences being assessed at that time.*

In order to earn degree credit, experiential learning must be evaluated as corresponding to the major objectives of coursework offered by Kean College. Each academic department retains the right to determine whether or not experiential learning is appropriate to its discipline.

All experiential learning is evaluated on the basis of "credit granted" or "credit not granted." Only "credit granted" will be recorded on the student's transcript; credit attempted but not earned will not be recorded.

Students wishing to apply for assessment of experiential learning should contact the Office of Adult Advisory Services for further information.

FRESHMAN TESTING

Following admission, but prior to registration, all entering matriculated and pre-matriculated freshmen, regardless of full-time or part-time status, are required by State Board of Higher Education policy to take the New Jersey College Basic Skills Placement Test, a series of examinations in reading, writing and mathematics. Students transferring to Kean College as freshmen also are required to take the test unless they already have done so. Basic skills testing is given at Kean College. There is no fee charged to the student.

PROGRAMMING DESIGNED TO FACILITATE ACCESS TO HIGHER EDUCATION

A significant number of students entering colleges across the nation require additional preparation in the basic skills areas of reading, writing, and mathematics. Many others are students whose native language is not English.

Kean College is committed to providing the support that is necessary to give all its students the opportunity to participate fully in the range of academic programs available at the College.

A number of programs therefore have been designed specifically to enable entering students to improve their basic skills or their fluency in English and to increase the likelihood of success in college-level coursework.

The largest of these programs is the Developmental Studies Program and the policies governing that program are described in more detail on the pages that follow.

For students whose native language is not English, our English as a Second Language (ESL) will provide intensive instruction in English while affording an opportunity to complete at the same time college-level coursework in subject areas.

A unique program, The Spanish Speaking Program, has been designed to enable students whose native language is Spanish to take general education courses in Spanish while completing their ESL sequence. Information about the ESL and Spanish Speaking programs is provided in the following sections of this catalog.

THE DEVELOPMENTAL STUDIES PROGRAM

Under the terms of the Developmental Studies policy, students whose scores on the New Jersey Basic Skills Test indicate a need for instruction in one or more of the basic skills areas (reading, writing, or mathematics) must register for the appropriate course(s) and must complete all required coursework as soon as possible. Each freshman receives a Letter of Advisement at registration on which is indicated his or her development studies requirements. This Letter of Advisement contains a complete statement of the Developmental Studies policy; the policy is summarized below.

Developmental studies courses are not offered for graduation credit. The courses are counted as the equivalent of three credits, however, in the determination of a student's total course load for a semester. While students are completing developmental coursework, they will not be permitted to enroll for more than 16 credits in a semester (including developmental courses).

Full-time students needing basic skills instruction must enroll in their first semester in required courses in developmental studies in each area of need. Individual plans for completion of developmental studies coursework will be prepared for those students who need developmental coursework in three areas (permitting courses in reading and writing to be completed prior to enrollment in developmental mathematics) and for part-time students who are unable to enroll in all required developmental courses in their first semester.

The developmental courses that a student is required to take during his or her first semester at the College must be completed by the end of the student's first complete academic year or the student is subject to dismissal. All requirements in developmental studies must be completed by the end of the sophomore year.

Please be sure that you understand how the policy applies to your case. The Director of the Developmental Studies Program, (or a member of the staff) is available in Willis Hall-402A (527-2334) to provide assistance.

ENGLISH AS A SECOND LANGUAGE PROGRAM

The English as a Second Language (ESL) program at Kean College is designed to help students whose first language is not English to achieve a degree of competency in English that will enable them to successfully complete a baccalaureate program at the College.

Students are given a placement test upon admission to the College and are placed into one of four levels of core courses. Additional skills courses also may be required at any level. Courses in the ESL program are designated either with an ESL designation or an ENG designation. Courses with an ESL designation are not offered for graduation credit but carry institutional credit for purposes of determining total semester course load.

The three courses with an ENG designation (the core courses—ENG 1300 and ENG 1400 as well as the skills course—ENG 1403) earn credit toward the degree. Completion of ENG 1300 with a grade of P and ENG 1400 with a grade of C or better fulfills the general education equivalent of ENG 1020—Composition. The course ENG 1403 is the equivalent of the core course GE 2020 for ESL students.

Students in the ESL program receive a Letter of Advisement at registration which specifies their requirements both in the ESL program and in developmental mathematics. Any required course must be completed within two semesters, or the student is subject to dismissal. A complete statement of the ESL policy is contained on the Letter of Advisement. Students in the ESL program who have questions may see the coordinator in Willis 402A (527-3019).

SPANISH SPEAKING PROGRAM

The commitment of Kean College to students who are native Spanish speakers is reflected in the innovative Spanish speaking program. Each semester a representative group of general education courses is offered in Spanish. Designed to be taken during the freshman and sophomore years, these courses enable Spanish-speaking students to earn credit toward the baccalaureate degree while simultaneously completing the English as a Second Language program. Students interested in information about the Spanish Speaking Program should seek help from its Director, in Hutchinson Hall, J309, or call 527-2185.

INDEPENDENT STUDY

For the student who has demonstrated a high level of competence as determined by qualifying departmental standards, independent study provides an educational experience that cannot otherwise be accomplished through the regular course offerings of the College. No activity that can be carried out either in partial or complete fulfillment of the requirements of an existing course may be approved for investigation through independent study.

An independent study project is designed and carried out by a student under the direct supervision of a faculty member. This project may consist of, but is not limited to, a research project, analytical writing, creative writing, intensive or extensive reading, a studio or a laboratory project.

The eligible candidate for independent study should first identify an appropriate topic and faculty sponsor and then submit a proposal in accordance with guidelines established by the major department or program. Independent study courses are found in the academic department offerings.

GRADING AND ACADEMIC STANDING

The academic standing of a student in every subject is reported at the end of each semester by a letter grade.

Credit is granted for the following:

- A—Excellent
- B—Good
- C—Fair
- D—Poor
- P—Pass (Pass/Fail basis) *except for developmental courses*
- S—Satisfactory (Pass/Fail basis)

No credit is granted for the following:

- F—Fail
- U—Fail (Pass/Fail basis)
- AF—Fail (administratively assigned)
- IN—Incomplete Work
- W—Withdrawn (first third of semester)
- WD—Withdrawn
- AU—Audit
- R()—Repeated grade
- NR—Grade not reported at time of collection
- RP—Program Reported (developmental courses only)
- LV—Leave of absence

Student teaching is graded as "S" or "U". Credits for student teaching are not used in computing the cumulative grade-point average.

REPEATING COURSES

If a student receives a grade of "B," "C," "D," "F," or "AF," in a course and repeats that course and receives a higher grade, the lower grade will be designated with an "R" and not included in the determination of the G.P.A. The higher grade will be included in the G.P.A. This policy will permit the exclusion of up to twelve credits or four courses whichever is greater. The student must initiate the request to have the lower grade excluded from the G.P.A. A course may not be repeated for a higher grade after graduation. A course may be repeated once using this process.

This policy will not be retroactive to courses repeated prior to the implementation of this policy. Only courses completed during the Fall 1987 semester and onward may be repeated under this policy. The impact of this policy on academic quality and effectiveness will be reviewed by the Deans and the Academic Standards Committee in 1990. The Registrar will review administrative procedures at the same time.

GRADE-POINT AVERAGE

Comprehensive evaluation of the student's academic standing is indicated by grade-point average. The grade-point average is determined by dividing the total grade-points earned by the total number of semester hours attempted. The numerical equivalents for

determining grade-point average follow: A-4; B-3; C-2; D-1; F-0. The cumulative average is determined only on courses taken at Kean College of New Jersey.

Omissions or errors in grade compilation should be reported to the Office of the Registrar at once. Questions regarding letter grades assigned by an instructor should be discussed directly with the instructor as soon as possible and no later than the last day of the eighth week of the subsequent major (fall or spring) semester.

PASS/FAIL

A matriculated student in good academic standing who has earned at least 30 semester hours of credit may, at any time before graduation, select a maximum of six courses from free electives to be taken on the Pass/Fail option. The Pass/Fail option is available only for free elective coursework. Courses needed to satisfy General Education requirements, cognate requirements or major program requirements must be completed according to the regular system of earned grades. Successful completion of mid-year or pre-session coursework graded by Pass/Fail is counted toward the maximum of six courses allowed on the Pass/Fail option.

Coursework taken on the Pass/Fail option is graded as either "P", which represents achievement at the level of "C" or better, or "U", which indicates failure. The cumulative grade-point average is not affected by work completed on a Pass/Fail basis, nor are these credits considered when calculating academic honors.

The Pass/Fail option must be declared at the Registrar's Office and may be done through the first three weeks of classes during the fall and spring semesters and through the first week of classes during the summer session. During this period students also may change into the Pass/Fail option from a course initially enrolled in for credit or out of the Pass/Fail option and re-register for earned credit.

COURSE AUDIT

A student who wishes to engage informally in regular College offerings may, with the permission of the instructor, audit one course per semester or term of study. Formal course requirements are not held for the auditing student, who is thereby better able to deepen knowledge in areas of thought within his or her major course of study or to broaden familiarity with disciplines beyond the major course of study. Regular tuition rates are charged for course audit.

All lecture courses may be audited; laboratory and studio courses also may be audited. Auditing status permits the students to attend class. Otherwise, the auditor does not write examinations or fulfill course requirements that regularly registered students must satisfy in order to earn academic credit.

The title of the audited course is printed on the student's transcript, along with the grade symbol "AU". No academic credit is earned for audited courses.

Students who wish to audit a course must first register for the course during the regularly scheduled registration period and then declare the audit option within the first three weeks of the regular fall or spring semester or within the first week of summer session. The audit option is declared by obtaining the audit registration form at the Registrar's Office, securing the instructor's approval, and returning the form to the Registrar during the time periods stated above. During this initial period of each semester or session, students may also change into the audit option from a course first enrolled in for credit or out of the audit option and re-register for earned credit.

INCOMPLETE

A grade of incomplete (IN) may be reported for a student who has completed course requirements throughout the semester and then because of illness or other unusual and substantiated cause has been unable to take the final examination or to complete a limited amount of assigned work due near the end of the semester. Unsubstantiated absences from class may not be used to justify an incomplete grade.

Class attendance in the subsequent semester may not be required by the instructor as a condition for removal of the IN. If a substantial amount of work has been missed for medical or other valid reasons, the student should petition the School Dean to be withdrawn from all courses.

It is the responsibility of the student to initiate a request for a grade of incomplete by filling out the form "Conditions for an Incomplete Grade and Its Removal." The instructor of the course must receive this request prior to the submission of grades at the end of the semester. If no such request is received or if the instructor judges the request unacceptable, an appropriate grade shall be submitted based upon the student's attainment of the stated goals of the course.

It is the student's responsibility to make up the examination or other work prescribed in a contract written by the instructor as part of the form "Conditions for an Incomplete Grade and Its Removal." This contract will also indicate the final grade to be assigned if the student's unfinished work is not completed by a specific date. The prescribed time period will be no later than the last day of the eleventh week of the regular fall or spring semester immediately following the receipt of the incomplete grade. An earlier deadline may be agreed upon by the instructor and the student and in most cases it is expected that a shorter period of time will be specified in the contract for the removal of the IN.

When the student has made up the assignment(s) or taken the examination on time, the instructor forwards a change of grade form for action by the department chairperson and the School Dean. The School Dean then transmits the form to the Registrar for processing of the grade change. If the student has not completed the work according to schedule, the instructor reports as the final grade for the semester the grade recorded in the contract worked out with the student.

GRADE GRIEVANCES

If a student believes that he or she has not been graded fairly in a course, it is the student's right to bring forward a grade grievance, and a formal process exists for the resolution of such problems. The overall guidelines from the grade grievance process are uniform from department to department, with each department free to develop specific procedures within these guidelines. *Requests for reconsideration of a grade must be brought forward to the faculty member as soon as possible after the conclusion of the course and no later than the end of the eighth week of the next major semester.* The steps in the process are outlined below; it is understood that if a satisfactory resolution is reached at any level, the process ends. If at a given step either party is dissatisfied with the proposed resolution, the dissatisfied party may request reconsideration at the next level. Decisions by the School Dean are final.

1. The student meets with the faculty member to request information about the basis for the faculty member's decision that is at issue. If after receiving an explanation from the faculty member, the students remains dissatisfied, he or she requests reconsideration of the grade by the faculty member.

2. The student meets with the chairperson of the department to discuss the situation. The chairperson may choose to intervene and attempt to seek a resolution or he or she may refer the matter to the departmental grievance committee and convene the committee in accordance with departmental policies.

3. The departmental grievance committee, composed of faculty and at least one student hears the grievance. The committee determines (in accordance with the prevailing practices in the department and the specifics of the particular grievance) a procedure to follow. Both the student and faculty member might be asked to submit materials in writing, or both might be extended an invitation or required to appear in person before the committee. The committee may choose to schedule these meetings so that the parties appear separately or together. Additional information may be requested by the committee as needed.

4. The grievance committee makes a determination and notifies the student and faculty member of its decision.

5. If the recommendation of the committee is not satisfactory to one or both of the parties involved or if implementation of the recommendation requires the involvement of the dean, the situation is brought to the dean for resolution; all relevant materials are forwarded to the dean's office.

STANDARDS FOR WRITTEN WORK

Students should become familiar with the College's general standards for written work. Copies of these standards are on file and available in all academic department offices and are to be followed in the preparation of all written work. Individual instructors may amplify the general standards to fit the special needs of their courses. Students are advised to check with their instructors at the beginning of the semester to determine whether general college standards are to be supplemented with individual course standards.

COMMUNICATION OF COURSE REQUIREMENTS TO STUDENTS (CLASS SYLLABUS)

Instructors are expected to communicate to students in writing at the start of the semester essential information about the conduct of the course. The syllabus should include information about course prerequisites (if any), textbooks, objectives, and course content. All course requirements should be specified in the syllabus, including the dates of examinations, deadlines for submission of papers, and the basis for the determination of the final grade.

The course syllabus is a contract between the faculty member and the student. Changes in course requirements made after the start of the semester should also be communicated in writing to students. Students, in turn, are responsible for meeting the requirements of the course as delineated in the syllabus and for requesting clarification from the instructor on items not made clear in the syllabus. Students who experience difficulty in meeting course requirements should discuss their situation with their instructor and seek help.

LEAVE OF ABSENCE

Students who find it necessary to leave the College temporarily either for medical reasons or for matters of personal priority may do so by requesting a leave of absence. Medical leaves are processed by the Office of Health Services; personal leaves are processed by the Counseling Center.

Students who wish to request a leave of absence after a semester has begun must do so no later than one week past mid-semester. In such cases, students are not eligible for resumption of study in the following semester unless special authorization is arranged with the Office of the Dean of Students. The ordinary length of a leave of absence is one full semester. In unusual circumstances the Dean may approve a renewal of the leave. In this case, payment of a continuing registration fee is required prior to the opening of the semester.

Official withdrawn students are not eligible for readmission for the subsequent semester unless special authorization is arranged with the Office of the Vice President for Student Affairs prior to withdrawal. Once withdrawal is completed, all applications for readmission including those approved for early re-entry must be filed in the Advisement Center.

READMISSION

Students who have interrupted their program of study for a period of a year or longer must apply for readmission through the Advisement Center.

Readmission to the College does not imply or constitute readmission to a specific academic program offered by the College. A student upon readmission is subject to current college curriculum requirements. Students who have been academically dismissed or discontinued should refer to the policy on reinstatement.

PROBATION AND DISMISSAL

POLICY FOR REGULAR COURSEWORK

Matriculated students earning a cumulative grade-point average of less than 2.00 are subject to academic probation. A cumulative average which would place a student on academic probation for the third time makes the student subject to dismissal from the College.

All students earning a cumulative grade-point average of less than 1.6 for the first 30 semester hours or less attempted, or less than 1.8 when more than 30 hours have been attempted, are subject to dismissal. Transfer students must satisfy the required minimum standards of academic achievement according to their level of entry into Kean College.

POLICY FOR DEVELOPMENTAL COURSEWORK

Students whose basic skills test scores result in a requirement to complete developmental courses are subject to academic probation if that requirement is not fulfilled during their initial semester at Kean College. Students who do not successfully complete within one year developmental coursework required on entry are subject to dismissal.

NOTIFICATION

College regulations on academic probation and dismissal are printed on the reverse side of semester grade reports. Notification of probationary status is sent to each student whose grade-point average is below the standard required for good academic standing.

Decisions on academic dismissal are made at the end of each academic year. Students dismissed from the College are notified by a letter from the appropriate School Dean.

NON-ACADEMIC DISMISSAL

When the actions of a student are judged by competent authority, using established procedure, to be detrimental to the interests of the College community, that person may be required to withdraw.

REINSTATEMENT AFTER ACADEMIC DISMISSAL OR DISCONTINUATION

Students who have been dismissed or discontinued for academic reasons may appeal for reinstatement to the College. All appeals for reinstatement should be submitted to the director of the Advisement Center, who serves as the designee of the School Dean in matters of academic appeal. After receipt of a recommendation from the director of the Advisement Center, the school dean will make a final decision on appeals for reinstatement. This decision will take one of three forms:

reinstatement to good academic standing, reinstatement to probationary status or denial of appeal.

Appeals from students dismissed for academic reasons at the end of the regular college year are considered by the Committee for Academic Appeal. This committee is made up of representatives from the student body, the faculty and the administration of the College; its chairperson, the Director of the Advisement Center forwards all Committee recommendations to the appropriate School Dean.

Students who have been dismissed or discontinued may not take courses at Kean College under any circumstances unless they have been officially reinstated by a School Dean.

Reinstatement to the College does not imply or constitute reinstatement to a particular academic program within the College (unless there is a specific provision to that effect in the reinstatement letter from the School Dean). A student upon reinstatement will be subject to current College curriculum requirements.

APPLICATION FOR DEGREE

A student who has earned 90 credits and plans to complete degree requirements during the following academic year must request a degree application from the Office of the Registrar. A degree application and a complete academic transcript will be forwarded to each student who makes a request. Request forms for degree applications are included in the fall and spring semester course bulletins published and distributed prior to registration.

The application for degree must be received by the Registrar's Office no later than October 1 if the student intends to complete graduation requirements by the end of the spring semester or the summer term and no later than June 1 if the student intends to complete degree requirements by the end of the fall semester.

Students are advised to allow sufficient time between requesting an application for degree and filing the completed application by the above dates.

AWARDING OF DEGREES

Formal commencement exercises are held each year at the close of the spring semester. Diplomas also are available in January and August for students who complete their degree requirements during the fall semester or the summer session. January and August candidates may participate in the formal spring commencement exercises.

TRANSCRIPT REQUESTS

Transcripts of academic records are obtained through the Office of the Registrar/Records. \$1.00 is charged for each transcript. All transcript requests must be made in writing or by completion of forms provided in the Records Office. Official transcripts are mailed directly from the College; only unofficial transcripts will be issued directly to the student.

ACCESS TO EDUCATION RECORDS

A student may review the contents of his/her education folder by filing a request with the Records Office. The College subscribes to all provisions of the Family Educational Rights and Privacy Act of 1974 (Buckley Amendment). A guide to related college regulations and procedures is available through the Office of the Registrar.

ATTENDANCE POLICY

Attendance is *required* for freshmen and expected of all other students. Attendance is mandatory for *all* students in laboratories, studio, and certain other specified courses such as developmental studies courses, laboratory and studio courses, 1000-level English classes, and 1000 and 2000-level foreign language courses.

Under the terms of the attendance policy, attendance per se may not be a basis for grading upper classmen, but class participation may be a component of the final grade if it is so stated in the syllabus. It is the opinion of the instructor to accept or not accept late work (or to give opportunities for making up work missed because of absence).

Observance of a religious holiday is to be considered an excused absence from class. In the event that a student missed a scheduled examination or other pre-arranged assignment because of observance of a religious holiday, the student and instructor shall agree upon an alternate date for completion of the assignment at a mutually convenient time.

REGISTRATION

Priority in advance registration is given according to the number of credits earned toward the degree. Students who fail to avail themselves of advance registration privileges lose priority and are registered on a space available basis during in-person registration immediately prior to the beginning of each semester. Incoming freshmen and transfer students are advised on registration with materials that accompany acceptance by the College.

COURSE NUMBERING SYSTEM

Courses carrying 1000 and 2000 numbers are lower division offerings, usually appropriate for the freshman and sophomore years of undergraduate study. Courses numbered at the 3000 and 4000 levels are upper division offerings, usually appropriate for the junior and senior years of undergraduate study.

In general, the following course numbering system is applied:

0000—developmental level, providing remediation of basic skills deficiencies, no degree credit granted.

1000—Introductory level, broad-based in nature, prerequisites usually not necessary.

2000—Intermediate level, the second course in a discipline, one prerequisite sometimes necessary.

3000-4000—advanced levels, providing greater depth in a more defined area of scholarship, one or more prerequisites generally necessary.

5000—graduate level.

SENIOR/GRADUATE HONORS PROGRAM

Matriculated seniors who stand academically in the upper quarter of their class may, with the approval of the appropriate school dean, enroll in one graduate course each semester of the senior year. Tuition is charged at the regular undergraduate rate. Credit earned will count either towards completion of baccalaureate degree requirements or, with prior permission of the Office of Graduate Studies, may be applied toward a master's degree in one of the graduate programs offered by Kean College.

ACADEMIC HONORS

DEAN'S LIST

Superior academic achievement is recognized by nomination to the Dean's List. Appointment to the Dean's List is available to both full-time and part-time students, according to the criteria given below.

Full-time students—The Dean's List is announced twice a year for full-time students, at the end of each fall and spring semester. To qualify, the student must be matriculated and must have earned a semester grade-point average of 3.45 or better for at least 12 credit hours (not including courses taken on the pass/fail option). All courses completed in the semester must have been passed for earned credit.

Part-time students—The Dean's list is announced once a year for part-time students, at the end of each spring semester. To qualify, the student must be matriculated and must have earned a grade-point average of 3.45 or better for the regular academic year (combination of fall and spring semesters only) for at least 12 credit hours (not including courses taken on the pass/fail option). All courses completed in the regular academic year must have been passed for earned credit.

Each student awarded Dean's List honors receives a personal letter of congratulations; this academic achievement also is noted on the student's semester grade report.

GRADUATION WITH HONORS

Students graduating with a cumulative grade-point average of 3.45 or better, who have completed a minimum of 45 semester hours at Kean (excluding credits earned on a Pass/Fail basis) by the end of the first semester of their senior year are recognized as honor students, with the following designations:

Average of 3.45-3.64 Cum laude

Average of 3.65-3.84 Magna cum laude

Average of 3.85-4.00 Summa cum laude

Honors achieved by the end of the second semester of the senior year will be included in all permanent records and, at the student's option, on the diploma as well.

HONOR SOCIETIES

Academic achievement may also be recognized by election during the junior or senior year to one of the honor societies established at Kean. The qualified candidate will receive notification of eligibility and an invitation to membership directly from the local chapter of the sponsoring honor society.

Alpha Sigma Lambda is a national collegiate honor society in all academic fields open to qualified part-time and evening students. The society is dedicated to the early recognition of scholarly ability and leadership qualities. (Chapter established in 1967)

Kappa Delta Pi is a national collegiate honor society in education open to qualified members of the junior and senior classes and to a limited number of graduate students. Its purpose is to recognize sound scholarship, worthy educational ideals, commendable personal qualities and outstanding contributions to education. (Chapter established in 1938)

Lambda Alpha Sigma is a College honor society in the arts and sciences curricula open to qualified memberships of the junior and senior classes. Its purpose is to recognize and promote outstanding scholarship. (Chapter established in 1970)

Phi Kappa Phi is a national collegiate honor society in all academic fields open to qualified members of the senior class, and, to a limited extent, members of the junior class and graduate students. Its purpose is to emphasize scholarship and to stimulate achievement by the prize of membership. (Chapter established in 1977)

COLLEGE HONOR SOCIETIES

Alpha Delta Mu—Social Work
Alpha Kappa Delta—Sociology
Alpha Kappa Psi—Management Science
Beta Beta Beta—Biological Sciences
Epsilon Epsilon Omega—Exceptional Educational Opportunities Program
Epsilon Pi Tau—Technology
Omicron Delta Epsilon—Economics
Phi Alpha Theta—History
Phi Epsilon Kappa—Physical Education
Phi Mu Alpha—Music (men)
Pi Sigma Alpha—Political Science
Pi Mu Epsilon—Mathematics
Psi Chi—Psychology
Sigma Alpha Iota—Music (women)
Sigma Tau Delta—English
Sigma Xi (club)—Sciences and Mathematics

TEACHER EDUCATION PROGRAMS

A New Jersey teaching certificate may be earned with any liberal arts program at Kean College. Teaching certificates are offered in the following fields:

Biological Science; Physical Science (Chemistry/Physics); English; Foreign Language—Spanish; Mathematics; Social Studies (Economics, History, Political Science, Sociology); Earth Science; Bilingual/Bicultural Education; English as a Second Language; Reading; Art; Elementary Education/Nursery School (Early Childhood); Physical Education; Health and Physical Education; Industrial Arts (Technology); Music; Teacher of the Handicapped; Speech Corrections; Deaf or Hard of Hearing (Special Education and Individualized Services).

ADMISSION

Students must be formally admitted to teacher education programs. Since criteria for admission to specific programs vary, students are urged to contact the academic department offering the program for specific information. General criteria for admission are as follows:

A cumulative grade average of 2.5 or better. Demonstrated competency in oral English communication (minimum grade of "C" in Comm 1400 or its equivalent or formal exemption).

Demonstrated competency in written English as evidenced by a minimum grade of "C" in Eng 1020.

Demonstrated competency in mathematics as evidenced by a minimum grade of "C" in at least one college-level math course.

Satisfactory completion of an appropriate sophomore field experience.

Although students will not be formally admitted to teacher education programs until the satisfactory completion of the sophomore field experience, the programs are offered in a sequence which is best completed by starting in the freshman year.

Satisfactory scores on the New Jersey Basic Skills Test or satisfactory completion of required developmental courses in writing, reading and mathematics at Kean College is required.

SPEECH COMPETENCY

All Education majors must pass a speech and language screening in order to be accepted into the program.

RETENTION

Students will be evaluated at the end of the junior year prior to being confirmed as candidates for the instructional certificate. Students must maintain a grade point average of 2.5 or better and must show evidence of an acceptable level of teaching proficiency.

At the end of the senior year student's knowledge of behavioral and social foundations of teaching and learning and knowledge of the academic subject area will be assessed by comprehensive examination.

These admission and retention standards as well as the teacher education programs shown in this catalog are binding on freshmen who began on or after September 1, 1985, and on transfer students who will begin on or after September 1, 1987.

STATE TEACHING CERTIFICATES

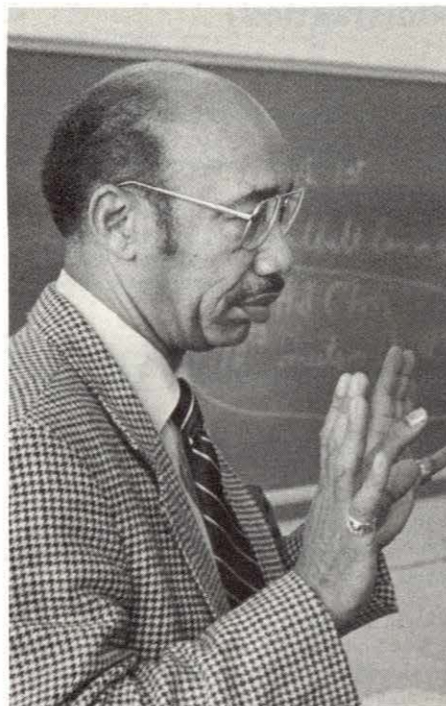
Teaching certificates are granted by the State of New Jersey to students who have completed approved programs. These programs are available on the baccalaureate and post-baccalaureate level.

Students must complete all the program requirements including general education, academic sequence, behavioral and social sciences, the professional sequence and *must maintain a grade point average of 2.5 or better* in order to receive certification.

FIELD EXPERIENCE AND STUDENT TEACHING

Students in teacher education programs are required to complete all field experiences and student teaching. All student teaching and field experiences are coordinated through the Teaching Performance Center. The center functions as a micro-teaching facility and as a liaison between the College and public schools in placing students in classrooms for professional field experiences. Registration with the Teaching Performance Center for those experiences takes place in November of the year before the experience. See program descriptions for the specific course requirements.

The State requires all student interns who enter a public school to obtain a tuberculosis test and receive favorable results.



STRUCTURE OF BACCALAUREATE DEGREE PROGRAMS

Kean College offers undergraduate programs in the liberal arts and sciences, in education, and in a growing number of professional areas. Although the various majors differ in their specific requirements, degree programs at the College share a common structure, the four basic components of which are described in the sections that follow.

FRESHMAN SEMINAR

All students entering the college as freshmen are required to complete a Freshman Seminar designed to orient them to the college and to help them develop skills necessary for college survival. Although the class meets formally for only one semester, the teacher serves as academic advisor and mentor for the students in that class throughout the first year. The description of the course is provided below: ID 1001 — Freshman Seminar (1) Development of the student's confidence and skills in using academic, social, and career development knowledge and techniques for success. Graded on a Pass-Fail basis. (Freshman Seminar is administered by the freshman Center, First Floor, Nancy Thompson Library, 201-527-3114).

GENERAL EDUCATION

Students who have entered the College as freshman since September 1985 are subject to the following General Education requirements: Under these requirements students must accumulate a total of 51-52 general education credits in order to qualify for graduation. This required total is divided into two parts: core requirements (18 credits) and breadth requirements (33-34 credits). Students entering teacher preparation programs must accumulate a minimum of 57 general education credits. This total includes the core requirements (a minimum of 39 credits).

The core consists of six required courses which are designed to increase general knowledge and to strengthen intellectual skills. These courses provide a basic understanding of the traditions, events, and issues that have shaped our contemporary global civilization. In addition, these courses provide an opportunity to strengthen skills in communication, critical thinking, and quantitative reasoning. Descriptions of these six core courses are provided below.

ENG 1020—Composition (3)

Production to expository writing; emphasis on logic, rhetoric and critical thinking. Prerequisite: Satisfactory performance on writing sections of the NJCBSPT or successful completion of development writing requirements.

Attendance is required.

GE 1100—Emergence of the Modern World (3)

Origins of the major political, economic, and social systems of the 20th century; emphasis on the great transformations of the past two centuries; major global issues and crises in the late 20th century.

Prerequisite: Completion of all developmental reading and writing requirements.

Attendance is required.

GE 1200—Intellectual and Cultural Traditions of Western Civilization, 1450—To The Present (3)

An introduction to major philosophic attitudes and artistic sensibilities of Western peoples beginning with the Renaissance.

Prerequisite: Completion of all developmental reading and writing requirements.

Attendance is required.

GE 2020—Inquiry and Research

Analysis of published research; carrying out of a research project; emphasis on communication skills.

Prerequisite: Eng 1020 (Composition)

Attendance is required.

ENG 2203—Landmarks of World Literature

Representative readings in the literature of the world's cultures from earliest times to the present, with emphasis on selected themes and genres.

Prerequisite: Eng 1020 (Composition)

Attendance is required.

GE 2400—Science and Technology in the Modern World (3)

The interrelatedness of science, technology and society investigated through critical analyses of selected, modern topics using the methods of science and technology.

Attendance is required.

Prerequisites: Successful completion of all developmental mathematics requirements.

One college-level mathematics and one laboratory science course (which may be used to satisfy General Education breadth requirements.)

Core requirements should be satisfied by the end of the sophomore year. Three of the core courses are 1000 level courses which are to be taken during the freshman year and three are 2000 level courses which are to be taken during the sophomore year. Completion of all developmental reading and writing requirements is a prerequisite for enrollment in the 1000 level core courses.

Students enrolled in General Education core courses are required to attend two cultural events per course. These events will be scheduled outside of class time and will be assigned by individual instructors. Students will also be required to participate in General Education program assessment activities.

The breadth requirements consist of specific introductory and intermediate-level courses chosen by the student from several different subject areas in the arts and sciences. Students should begin fulfilling these requirements during the freshman year. These courses further expand and develop the general knowledge and intellectual skills imparted by the core courses.

Satisfaction of the general education requirements at an acceptable level of performance will provide the student with a broad liberal education and with a solid foundation for advanced course work in the chosen major program.

Credit hours required for each cluster of courses under the breadth requirements are minimums. When the minimums are exceeded, the balance will be considered elective credit, in selecting courses to fulfill these requirements, students should read the course descriptions carefully to see whether listed prerequisites, if any, have been met.

Although the General Education requirements are similar for all major programs at Kean College, there are variations in the specific courses that are required within General Education. For that reason, the requirements for a baccalaureate degree for each major program are shown in their entirety in this catalog.

COGNATE REQUIREMENTS

A major program may include up to 12 credits of required coursework in areas outside (but related to) the major. Not all programs include cognate requirements; for those that do, the courses are generally introductory-level courses in areas supporting the major.

WRITING—EMPHASIS REQUIREMENT

All students are required to complete two upper-division (3000-4000 level) "Writing-Emphasis" courses. These courses are normally taken during the junior and senior years. One "W-E" course should be within the major program, the other should be an elective course outside the major program. If completion of the student's major program requirements places such a limit on elective credits that taking one "W-E" course outside the major is not possible, then both "W-E" courses may be taken within the major. Consult your major program advisor for specific information.

Effective date: Freshman, Fall 1987

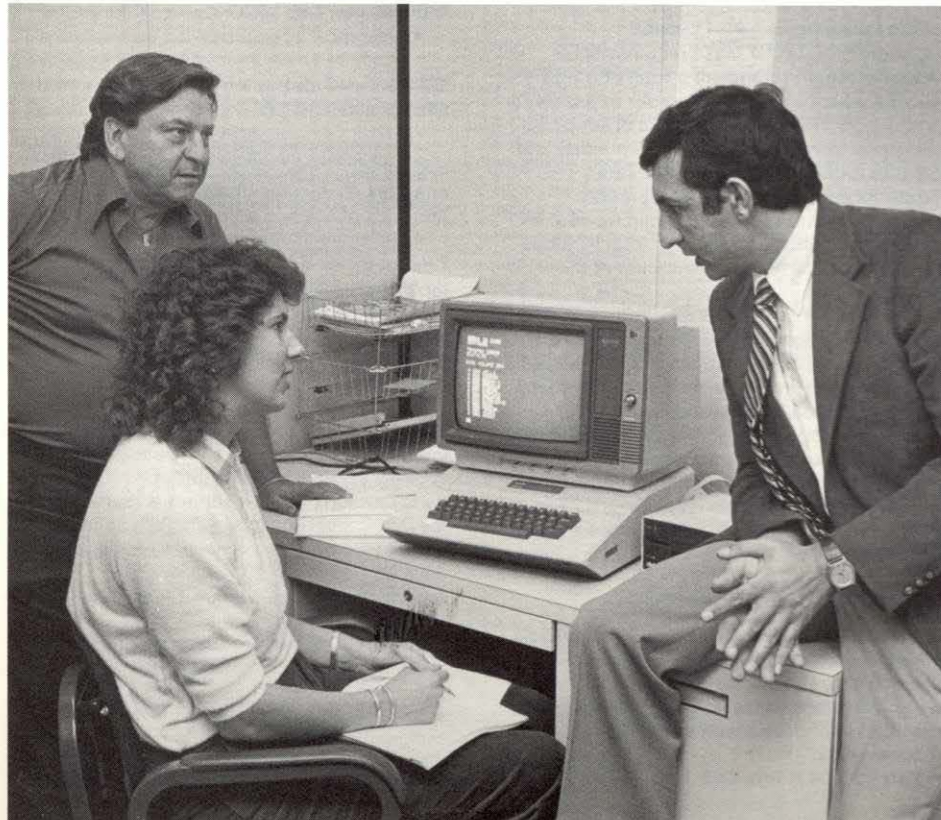
MAJOR REQUIREMENTS

Major programs at Kean College are offered in the arts and sciences and in a variety of professional areas, including education, healthcare, and the administrative sciences. These programs are designed to prepare students for advanced study in a particular area or for an entry-level position in a profession or career. Major programs in the liberal arts and sciences normally require between 30 to 40 credits of coursework to meet major requirements. Programs in education and professional areas (where accrediting bodies mandate specific general requirements) may require more than 40 credits in the major.

The typical major program includes a core of required courses structured to provide for the student a foundation in the fundamental concepts, methodology, and subject matter of the discipline. The framework of most major programs also affords the student the opportunity to build up this foundation through the selection of a set of departmental elective courses. Major electives may be chosen to provide increased breadth across the discipline or to form a concentration in one particular sub-area.

FREE ELECTIVES

After general education and major requirements are met, the remainder of the program consists of coursework which the student may complete in areas of his or her own choosing. Free elective coursework is generally taken during the junior and senior years. At least half of the free electives credits must be at the upper levels (3000-4000).



SCHOOL OF BUSINESS, GOVERNMENT AND TECHNOLOGY

Academic Degrees, Programs

- B.S. in Accounting
- B.A. in Economics
- B.A. in Economics, *Teacher Certification Option*
- B.S. in Management Science
- B.S. in Management Science, *Accounting Option*
- B.S. in Management Science, *Finance Option*
- B.S. in Management Science, *Marketing Option*
- B.S. in Management Science, *Quantitative Methods Option*
- B.S. in Management Science, *International Business Option*
- B.A. in Political Science
- B.A. in Political Science, *Criminal Justice Option*
- B.A. in Political Science, *Teacher Certification Option*
- B.A. in Public Administration
- B.A. in Public Administration, *Criminal Justice Option*
- B.S. in Technology Education
- B.S. in Technology, *Design Option*
- B.S. in Technology, *Graphic Arts Option*
- B.S. in Technology, *Electronics Option*
- B.S. in Technology, *Computer Integrated Design and Manufacturing Option*
- B.S. in Technology, *Electrical Contracting Option*
- B.S. in Technology, *Mechanical Contracting Option*

Departments, Faculty

GEOGRAPHY & MANAGEMENT SCIENCE

Faculty: Battista, Bornstein, Capone, Carlsen, Casson, Chopra, Cogan, Condon, Elakman, Eldridge, Engelberg, Fenster, Finch, Fulop (Chairperson), Helliwell, Hiraoka, Kelland, Kempey, Kim, Lampert, Parker, Rosenberg, Saffer, Schader, Schumacher, Wachtel, Wailoo, Yamoah

POLITICAL SCIENCE

Faculty: Barada, Boateng, Chang, Daly (Chairperson), Farahi, Hunt, Israel, Kahn, Kelly, Laudicina, Lederman, Ross, Rubin, Sanchez, N. Weiss

TECHNOLOGY

Faculty: Adhikari, Cherukara, Cokewood (Chairperson), Cone, Jahn, Lokuta, Peterson, Riegle, Sarapin, Sharabi, Sladicka, Thatcher

Coordinator: Dr. Eric Carlsen
W403 Ext. 2238

Accounting is the study of how an organization's financial transactions are recorded, controlled, and reported. It seeks to analyze the earnings performance and financial position of entities in both the business and the not-for-profit sectors of the economy. If you are interested in the financial aspects of business, you may wish to consider a major in accounting. Our program will prepare you for the CPA examination and entry-level positions in accounting.

ADMISSIONS REQUIREMENTS:

Conditions for acceptance into B.S. in Accounting Program are as follows: 1) a G.P.A. of 2.5; 2) average G.P.A. of 3.0 in the following 6 courses: Economics 1020 and 1021, Computer Science 1031 and 1032, Principles of Accounting 2200 and 2210. (Minimum of "B" in each of Accounting 2200 and 2210).

B.S. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 54-55

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
Foreign Languages
Music
Philosophy or Religion

Social and Behavioral Sciences 12
ECO 1020-1021 Principles of Economics I and II 6

Two courses from two areas:
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4
Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3
CpS 1031 Computer Arithmetic Algorithms

Health and Physical Education 2-3
Health Education
Physical Education

#A Science course may be substituted for this Core Course
**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

COGNATE COURSES 3

CpS 1032 Principles and Procedures of Electronic Data Processing 3

MAJOR REQUIREMENTS 57

REQUIRED COURSES 45

MgS2110 Quantitative Methods in Management Science 3
MgS2120 Business Statistics 3
Acc 2200 Principles of Accounting I 3
Acc 2210 Principles of Accounting II 3
MgS3310 Management of Corporate Finance I 3
MgS3051 Business Law I 3
MgS3052 Business Law II 3
Acc 3210 Intermediate Accounting I 3
Acc 3220 Intermediate Accounting II 3
Acc 3230 Federal Income Taxes 3
Acc 3240 Cost Accounting 3
Acc 4210 Advanced Accounting I 3
Acc 4230 Auditing I 3
Eco 3300 Money and Banking or Eco 3311 Management of Corporate Finance II 3
Eng 3090 Business, Professional and Technical Writing 3

MAJOR ELECTIVES 12

Selected with departmental advisement

FREE ELECTIVES 12-13

TOTAL 124

Accounting Courses

Acc 2200 Principles of Accounting I (3)

An introduction to accounting concepts and principles involved in financial reports of proprietorships, partnerships and corporations including the techniques of debit and credit trial balances, adjustments and statements. Maximum of 30 students per section.

Acc 2210 Principles of Accounting II (3)

Use of accounting data as an aid in formulating managerial decisions analysis and interpretation of financial statements; the nature, source and flow of funds and the preparation of fund statements; the safeguarding of assets and the checking of the accuracy and reliability of accounting data through the use of internal control systems; special problems in connection with the accounting for cash, payroll and sales tax, investments, fixed assets and liabilities; and the study of cost accounting. Prerequisite: Acc 2200.

Acc 3210 Intermediate Accounting I (3)

Study of financial statements for internal management purposes and as a reporting function; theory of classification and evaluation of accounts. Alternative concepts as advanced by professional societies. Prerequisite: Acc 2210. Carlsen, Cogan, Wailoo

Acc 3220 Intermediate Accounting II (3)

Continuation of Acc 3210 which is prerequisite. Carlsen, Cogan, Wailoo

Acc 3230 Federal Income Taxes I (3)

Understanding and solution in tax problems. Practice provided in preparation of returns for individual taxpayers, partnerships, corporations, and in the use of the Tax Guide. Prerequisite: Acc 2210. Bornstein, Schader

Acc 3231 Federal Income Taxes II (3)

Continuation of Acc 3230 which is a prerequisite. Bornstein, Schader

Acc 3240 Cost Accounting (3)

Study of management accounting systems and the controllership function as performed by the typical corporate controller in his role as a key member of the management group of a private enterprise business corporation. Prerequisite: Acc 3210. Carlsen, Cogan

Acc 3261 Computer Augmented Accounting (3)

Methods of adapting accounting functions to computers. Preparation of payrolls, controlling inventories, recording receivables and payables, and auditing of selected financial transactions. Prerequisites: Acc 2210 and CpS 1031. Engelberg

Acc 3280 Government and Fund Accounting (3)

Fund Accounting preparation and analysis of financial statements for government, schools, hospitals and other not-for-profit organizations. Prerequisite: Acc 2200. Lampert

Acc 4210 Advanced Accounting (3)

Practical application of such topics as partnerships, joint ventures, consignments, installment sales, insurance, business in financial difficulty, actuarial accounting, estates and trusts, agency and branch accounting, consolidations, foreign exchange, and accounting for funds. Prerequisite: Acc 3220. Bornstein, Schader

Acc 4220 Practical Accounting Procedures (3)

Prepares the student to function effectively within an accounting environment, using the actual forms, accounting practices and procedures. Prerequisite: Acc 3210. Bornstein

Acc 4225 Accounting Theory (3)

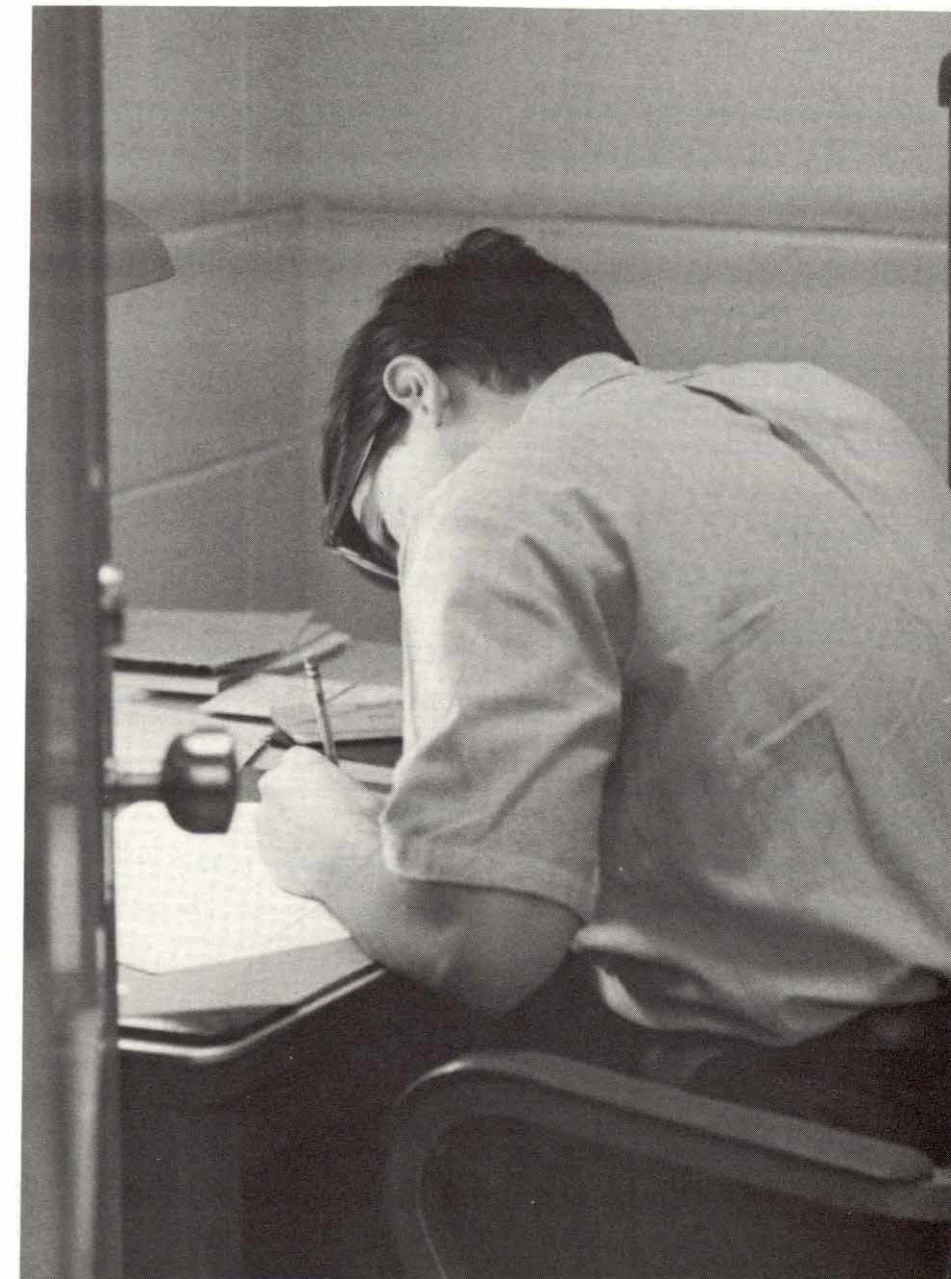
The postulates, principles, rules and procedures underlying the broad area of financial reporting. Study and critical analysis of current accounting and reporting problems. Examination of the Accounting Research Studies and Opinions of the Accounting Principles Board and the Financial Accounting Standards Board. Prerequisite: Acc 3220. Schader

Acc 4230 Auditing I (3)

Professional ethics and the rules of professional conduct as recommended by the American Institute of Certified Public Accountants and other professional societies; the relation of internal control to the independent audit; the preparation of audit programs and discussions concerning accountants' reports and generally accepted auditing standards. This course is specifically designed for students interested in a career in Public Accounting and should be distinguished from Internal Auditing. Prerequisite: Acc 3220. Carlsen, Schader

Acc 4240 Auditing II (3)

Preparation of a set of working papers which includes a complete company audit stressing accepted accounting principles and auditing standards. Audit programs and special reports for various industries are reviewed and analyzed. This course is specifically designed for students interested in a career in Public Accounting. Prerequisite: Acc 4230. Carlsen



Acc 4250 Comprehensive Public Accountancy Problems (3)

Study of problems given in American Institute of Certified Public Accountants (CPA) examination as follows: demonstration and development of analytical techniques; employment of accounting principles, problems on job cost, process cost, and standard cost; goodwill computation; consolidations; fund accounting; inventories; statement of affairs; statement of realization and liquidation; partnership and corporation problems. Prerequisites: Acc 3240, 4230. Carlsen, Schader

ACC 4270 International Accounting (3)

Introduction to the principles of and issues surrounding international accounting. Differences between national accounting practices, methods of international currency translations and other techniques for comparing accounting data from different countries will be emphasized. Prerequisites: Acc 2200, MgS 3310 Carlsen

Coordinator: Dr. Carol Condon
W403 Ext. 2238

The major in Economics is designed to develop an understanding of the economic aspects of human behavior by providing an analysis of the basic structure, processes and problems of the economy and systematic training in the analytical tools used in their study. Courses in economics prepare the student for graduate work in economics, statistics, business administration and law, as well as corporate and public sector employment.

Those students who plan to do graduate work in economics should take courses in quantitative methods and additional courses in mathematics. All students are urged to seek departmental advisement.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12
ECO 1020-1021 Principles of Economics I and II 6

Two courses from two areas:
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4
Astronomy Meteorology
Biology Oceanography
Chemistry Physics
Geology

Mathematical Sciences 3
Computer Science
Mathematics

Health and Physical Education 2-3
Health Education
Physical Education

#A Science course may be substituted for this Core Course
**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

MAJOR REQUIREMENTS 30

Required Courses 12
MgS2120 Business Statistics 3
Eco 3020 Intermediate Macroeconomics 3
Eco 3321 Intermediate Microeconomics 3
Eco 3300 Money and Banking 3

Major Electives 18

Selected with departmental offerings, at least 12 at 3000-4000 level

FREE ELECTIVES 41-42

TOTAL 124

Minor

From departmental offerings, at least 12 semester hours beyond Eco 1020-1021 of which at least 6 hours must be at the 3000-4000 level.

Option: Teacher Certification

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 68

CORE REQUIREMENTS 18
Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 50

*English/Humanities (from at least 3 disciplines) 9
Comm 1400 Speech 3
*Social/Behavioral Sciences (from at least 3 disciplines) 9
Psy 1000 General Psychology 3
His 2303 United States History to 1877 3
Soc 1000 Social Life and Society or
Ant 1800 Cultural Anthropology 3

*Physical/Biological Sciences 4
*Mathematical Sciences (not including computer science) 3
*Health and Physical Education 4
ID 1225 Issues/Values in Contemporary Health 3
P.Ed. 1

*Additional Cognates 24
GE 3210 Economic Geography 3
One of the following: 3

PS 2110 American State and Local Political Systems or
PS 3150 American Constitution Law I or

PS 3151 American Constitution Law II or

PS 3160 Ethnic Politics in United States or

PS 3170 New Jersey Government and Politics or

PS 3310 Comp. Non-Western Government

His 2304 United States History, 1877 to Present 3

His 3326 History of New Jersey 3

His 2381 History of Latin America to 1825 or

His 2382 History of Latin America, 1825 to Present or

His 2500 Survey of African Prehistory and History or

His 2510 Political History of Africa in 20th Century or

His 3425 Southeast Asia in 20th Century

Psy 2110 Psychology of Adolescent 3
Eco 1020 Principles of Economics I 3
Eco 1021 Principles of Economics II 3

MAJOR REQUIREMENTS 30

MgS2120 Business Statistics 3
Eco 3020 Intermediate Macroeconomics 3
Eco 3021 Intermediate Microeconomics 3
Eco 3300 Money and Banking 3

Major Electives 18

Selected with departmental advisement. At least 4 courses at 3000-4000 level.

PROFESSIONAL EDUCATION 30

FIELD EXPERIENCE 15

ICA 2801 Introductory Field Experience K-12 3
ICA 3803 Junior Field Experience K-12 2
ICA 4802 Professional Internship: Secondary Education 10

EDUCATION CORE 9

ED 3401 Language Arts/Reading K-12 3
ED 3000 Curriculum, Evaluation and Learner 3
ED 4000 Teacher and Classroom 3

SPECIALTY 3

ICA 3xxx Social Studies K-12 3

EDUCATION ELECTIVE 3

ICA 4xxx Computers and A-V Aids or
ICA 4xxx Bilingual/ESL: Curriculum and Instruction or
ICA 4xxx Humanistic and Humane Education 3

TOTAL 129

Economics Courses

THEORY, HISTORY, SYSTEMS, ENVIRONMENT

Eco 1020 Principles of Economics I (3)
The American Economy; aggregate economics with emphasis on the relationships of income, consumption, savings and investment; money and banking, economic growth and the role of government. (The 1020-1021 sequence may be taken in either order.)

Eco 1021 Principles of Economics II (3)
The allocation of resources and distribution of income through the price systems with emphasis on the American economic system. (The 1020-1021 sequence may be taken in either order.)

Eco 2030 History of Economic Thought (3)
The development of economic thought with special emphasis on Aristotle, Mercantilism, Physiocrats, Hume, the Classical School, Marx and the Neo-Classical School.

Eco 2040 American Economic Development (3)
Development of the American economy from colonial times to the present, including the development of agriculture and industry, the impact of technology and the evolution of the banking system.

Eco 2041 European Economic Development (3)
Economic development of Europe from ancient times to the present with emphasis on medieval era, Reformation, Industrial Revolution and conditions in the 20th century.

Eco 3020 Intermediate Macroeconomics (3)

An analysis of economic aggregates. Interrelationship between money supply, interest rates, output and employment. Classical, Keynesian, post-Keynesian theories. Prerequisites: Eco 1020-1021 or consent of instructor.
Kempey, Condon

Eco 3021 Intermediate Microeconomics (3)

Theory of value and distribution. Prices, output and factor proportion problems of firms operating under conditions of competition, monopolistic competition, oligopoly and monopoly. Prerequisites: Eco 1020-1021 or consent of instructor.
Kempey

Eco 3050 Comparative Economic Systems (3)

Principles and practices of Capitalism, Socialism and Communism with special emphasis on the economics of the U.S.A. and U.S.S.R.
Schumacher

Eco 3051 The Capitalist System (3)
An analysis of the functioning of the capitalist system with respect to social problems. Conservative and liberal views sympathetic to the market system are contrasted with radical views that are unsympathetic to capitalism. Prerequisites: Eco 1020 and 1021.

Eco 4050 Seminar in Comparative Economic Systems (3)

A study of contemporary alternative modes of economic organization and the rationale for these modes. Special attention is devoted to the U.S., Britain, Scandinavia, Yugoslavia, U.S.S.R., and China. Prerequisites: Eco 1020 and 1021.

DEVELOPMENT, PLANNING, FLUCTUATIONS

Eco 2100 Economic Development (3)
A brief survey of development theories. Problems and factors of economic development. Case studies of underdeveloped countries.
Finch

Eco 4100 Business Cycle Theory (3)
Historical and theoretical analysis of business cycle theory. Measures to control cyclical fluctuations and methods of investment forecasting. Prerequisites: Eco 1020-1021 or permission of instructor.
Condon

QUANTITATIVE METHODS

Eco 3200 Introduction to Quantitative Methods in Economics (3)
Mathematical statement of equilibrium, maximization and minimization of economic models. Introduction to dynamic techniques and linear production models. Review of necessary mathematics.

Prerequisites: Eco 1020 and 1021 or permission of instructor.
Fulop

Eco 4200 Introduction to Econometrics (3)

The testing and construction of economic models using mathematical and statistical models. Application in macroeconomics. Prerequisites: Eco 1020, 1021 and MgS 2120.

MONETARY AND FISCAL THEORY AND INSTITUTIONS

Eco 3300 Money and Banking (3)

The nature and function of money, operations of banks, the Federal Reserve System and the Treasury. Income and monetary theory and its applications to achieve stability, employment and growth. Prerequisites: Eco 1020-1021 or consent of instructor.

Finch, Kempey

Eco 3320 Public Finance (3)

Principles of taxation, budgeting, public expenditure, debt management and fiscal policy with special reference to Federal, State and local governments. Prerequisites: Eco 1020-1021 or consent of instructor.

Condon

Eco 4300 Monetary and Fiscal Policy (3)

An examination of different hypotheses dealing with the mechanisms through which variations in the national budget and the money supply are said to affect such problems as unemployment, inflation, economic growth and the balance on international payments. Prerequisite: Eco 3020.

Eco 4310 Monetary Economics (3)

A theoretical analysis of topics in monetary theory and policy; demand and supply of money; monetary influences on prices and interest rates; monetary channels; instruments and targets; lags in the effect of monetary policy.

Prerequisites: Eco 1020, 1021, 3020. Recommended: Eco 3300, 3200, 4200.

INTERNATIONAL

Eco 3400 International Economics (3)

Principles of international trade, international finance and exchange. Introduction to the major international organizations. Prerequisites: Eco 1020-1021 or permission of instructor.

Kim

Eco 4420 Advanced International Economics (3)

A theoretical analysis of advanced topics in international trade. An investigation into the causes of international specialization, balance of payments, trade policy and the relation of international trade to growth and development. Prerequisites: Eco 3100 and 3110.

Kim

Eco 4430 Advanced International Monetary Economics (3)

Analysis of the balance of payments accounts and adjustment policies. Determination of

exchange rates, foreign exchange markets and the appropriate use of monetary and fiscal policy for a fixed versus a flexible exchange rate system.

Prerequisites: Eco 3020 and 3021.

Eco 4440 Seminar in International Economics: Advanced Theory and Policy (3)

Recent literature covering topics in advanced international economic theory and policy. Application of received theory to problems in international trade and finance including international monetary arrangements, the growth of world trade, customs unions, the distribution of income, and economic growth and development.

Prerequisite: Eco 3400.

INDUSTRIAL ORGANIZATION; INDUSTRY STUDIES

Eco 3600 Government and Business (3)

The development of public policies towards business. The principles, purposes and effectiveness of anti-trust laws and other government regulations of business.

Prerequisites: Eco 1020-1021 or consent of instructor.

Finch, Lampert

Eco 3610 Industrial Organization and Public Policy (3)

An analysis of American market structure with a consideration of the conduct and performance of industries under different modes of competition. An analysis of different public policy measures for improving industrial performance from a social viewpoint.

Prerequisites: Eco 1020 and 1021.

Lampert

Eco 3630 The Economics of Transportation (3)

The operation of domestic transport modes, comparing the actual allocation of transportation resources with an ideal allocation dictated by free market criteria. The economic effects of regulation, subsidization and intermodal competition. Evaluation of proposals for integrated operation of the national transportation network.

Prerequisites: Eco 1020-1021 or permission of instructor.

MANPOWER, LABOR, POPULATION

Eco 3800 Labor Economics I (3)

Economic analysis applied to the labor market and the wage structure; wage theories and policies; collective bargaining and unionism; labor problems.

Prerequisites: Eco 1020 and 1021.

Kim

Eco 3801 Labor Economics II

The economic behavior of employment and earnings; wages and inflation; social security and welfare program; public policy; manpower and human capital formation.

Prerequisites: Eco 1020, 1021 and/or 3800.

Kim

Eco 3840 Population Economics (3)

The economic determinants of population

growth. Various economic theories of fertility behavior. The effects of rapid population growth on the economy, especially of population growth on savings, natural resources and the environment.

Prerequisites: Eco 1020 and 1021 or permission of instructor.

Fulop

WELFARE, HEALTH, CONSUMER, URBAN, REGIONAL

Eco 2900 The Economics of Poverty (3)

The impact of industrialization and urbanization on society and the change in the attitude towards poverty. Theoretical aspects of the nature of poverty and the reasons for its existence in the U.S. The development of federal anti-poverty policies and programs.

Eco 2910 Health Economics (3)

Use of tools of economic theory in the study of special problems of health resources, markets, manpower shortages, insurance programs, Medicare and Medicaid.

Prerequisite: Eco 1021.

Eco 2920 Consumer Economics (3)

The general framework within which consumer choices are exercised; the tools of personal economic choice applied to consumption and investment decisions.

Prerequisite: Eco 1021.

Eco 2930 Urban Economics (3)

An investigation of economic influence on the organization and form of urban areas. Problems and public policy issues in urban transportation, public finance, housing and poverty analyzed in relation to the evolving economic structure of metropolitan areas.

Prerequisites: Eco 1020 and 1021.

Eco 4930 Regional and Urban Economic Theory (3)

A theoretical treatment of the factors that determine the economic base, growth, and development of economic regions with special emphasis on metropolitan regions.

Prerequisites: Eco 1020 and 1021.

Geography Courses

Geo 1010 The Earth, the Environment of Man (3)

An introduction to the physical basis of the human habitat; landforms, climate, water, soils, and vegetation; regional patterns and relationships; and the representation of geographic phenomena on maps, charts and graphs with field work. *Credit for graduation will not be granted for both Geo 1010 and Geo 1200.*

Geo 2010 The Geography of Man (3)

An introduction to human occupancy of the earth's varied regions: population distributions, livelihoods, and physical settings.

Prerequisite: Three hours in geography or permission of instructor.

Kelland

Geo 2020 Conservation of Natural Resources (3)

A study of relationships among natural resources, technological development, population growth and levels of living as a means of exploring and evaluating the foundations of environmental management and conservation.

Prerequisite: Three hours of geography or a science or permission of instructor.

Geo 2300 Climatology (3)

Global distribution of the principal climatic elements with emphasis on physical causes of climate. Theories regarding climatic change. (same as Met 2300.)

Prerequisite: Met 1300 or permission of the instructor.

Geo 2301 Climatology Lab (1)

Techniques in handling climatological data. (same as Met 2301).

Corequisite: Geo 2300 or permission of the instructor.

Geo 3110 Practical Geographic Skills (3)

The practical skills and techniques of the geographer, such as those developed for studies in the field and the library, and for graphic, cartographic, written and oral presentation of geographic information.

Prerequisite: Six hours in geography or permission of instructor.

Kelland

Geo 3210 Economic Geography (3)

Man's economic activities in relation to environmental factors; climate, resources and cultural influences.

Prerequisite: Six hours in geography or permission of instructor.

Kelland

Geo 3410 Urban Geography (3)

An examination of urban settlements with special emphasis on the practical application of modern geographic theories to the contemporary urban situation.

Prerequisite: Six hours in geography or permission of instructor.

Kelland

Geo 3420 The Resource Base and the Urban Pattern (3)

An investigation of the problems posed by the multiplicity of users for the limited natural resources of urban areas.

Prerequisite: Six hours in geography or permission of instructor.

Kelland

Geo 3920 Geography of Latin America (3)

The physical geography and human adaptation in Middle South America.

Prerequisite: Six hours in geography or permission of instructor.

Kelland

Geo 3950 The Geography of New Jersey (3)

The various geographic aspects of the State of New Jersey: physical environment, cultural diversity, resource base, and economic pattern. Special emphasis placed on the high degree of urbanization which characterizes New Jersey. Field observations included.

Kelland

Coordinator: Dr. Herbert Parker
W403 Ext. 2238

The baccalaureate program in Management Science is an integral part of a growing array of professional programs in the administrative sciences at Kean College. One of the first professional programs developed, the major is now the largest program at the College. The program leads to the degree of Bachelor of Science. Built on a foundation in the liberal arts and sciences, it combines quantitative techniques and computer applications with recent advances in the behavioral sciences to prepare graduates for managerial decision making.

The curriculum is designed to develop the student's capacity for professional growth and to prepare him or her for entry level managerial positions in areas of finance, accounting, marketing, general management and personnel, and operations research, as well as for further study at the graduate level.

B.S. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
†Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12
ECO 1020-1021 Principles of Economics I and II 6
Two courses from two areas: 6

History
Political Science
Psychology
Sociology and Anthropology

Biological and Physical Sciences 4
Astronomy Meteorology
Biology Oceanography
Chemistry Physics
Geology

Mathematical Sciences 3
CpS 1031 Computer Arithmetic Algorithms

Health and Physical Education 2-3
Health Education
Physical Education

A Science course may be substituted for this Core Course
**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

COGNATE COURSES 3

CpS 1032 Principles and Procedures of Electronic Data Processing 3

MAJOR REQUIREMENTS 30

REQUIRED COURSES 12

MgS2110 Quantitative Methods in Management Science 3
MgS2120 Business Statistics 3
Acc 2200 Principles of Accounting I 3
MgS3310 Management of Corporate Finance I 3

MAJOR ELECTIVES 18

Selected with departmental advisement

Accounting
Acc 2210 Principles of Accounting II 3
Acc 3210 Intermediate Accounting I 3
Acc 3220 Intermediate Accounting II 3
Acc 3230 Federal Income Taxes 3
Acc 3240 Cost Accounting 3
Acc 4230 Auditing I 3

Finance
MgS3311 Management of Corporate Finance II 3
Five of the following: 15
Eco 3300 Money and Banking 3
MgS3300 Personal Finance 3
MgS3320 Preparation and Analysis of Financial Statements 3
MgS3350 International Business Finance 3
MgS4300 Investments 3
MgS4310 Money and Capital Markets 3

MAJOR ELECTIVE WITH ADVISEMENT (3)

Management
MgS2030 Business Organization and Management 3
MgS4050 The Strategic Management Process 3
Four of the following: 12
MgS3013 Small Business Management 3
MgS3030 Personnel Management 3
MgS3035 Management of Multinational Corporations 3
MgS3040 Management Information Systems 3

MgS3050 Management Strategies 3
MgS4010 Production Management 3

MAJOR ELECTIVE WITH ADVISEMENT (3)

Marketing
MgS3410 Basic Marketing 3
Five of the following: 15
MgS3420 The Retail Marketing Process 3
MgS3425 Retail Buying and Merchandise Management 3
MgS3430 Essentials of Advertising 3
MgS3431 Advertising Campaigns 3
MgS3435 Sales Management 3
MgS3440 Fashion Merchandising 3
MgS3450 Industrial Marketing 3
MgS3451 Consumer Marketing 3
MgS3460 Marketing Management 3
MgS3470 International Marketing Research 3
MgS4420 Transportation and Physical Distribution 3

MAJOR ELECTIVE WITH ADVISEMENT (3)

Quantitative Methods and Operations Research
MgS3120 Advanced Statistical Methods in Management Science 3
MgS3130 Forecasting Techniques in Business and Economics 3
MgS4010 Production Management 3
MgS4100 Operations Research 3
Eco 4200 Introduction to Econometrics 3
One additional course selected with departmental advisement 3

International Business
MgS2030 Business Organization and Management 3
MgS3025 International Business and Trade 3

Four of the following:
MgS4060 International Business Law 3
Acc 4270 International Accounting 3
MgS3035 International Management 3
MgS3350 International Business Finance 3
MgS3470 International Marketing 3
Eco 3400 International Economics 3
Eco 4420 Advanced International Economics 3

General Management Science
Six courses selected from the above concentrations, with departmental advisement

FREE ELECTIVES 38-39

(50% @ 3000/4000 level)

TOTAL 124

Minor**REQUIREMENTS 18**

Required Courses 12

MgS 2110	Quantitative Methods in Management Science or approved substitute	3
MgS 2120	Business Statistics	3
Acc 2200	Principles of Accounting I	3
MgS 3310	Management of Corporate Finance I	3

Electives 6

two management science courses or one management science and one 3000-4000 level economics course

Management Science Courses**GENERAL BUSINESS, LAW, REAL ESTATE****MgS 1030 Fundamentals of Business Analysis (3)**

Fundamental economic and business analysis of the domestic market; role of monetary policy; examination of marketing and financial functions and institutions; opportunities in international business. Not open to juniors or seniors in Management Science.

MgS 2031 Health Care Organization and Management (3)

Introduction to management functions as applied to the health care industry with emphasis on the hospital organization. Explores various organizational concepts within the context of relevant health care problems and issues. (Credit not given for both MgS 2030 and 2031).

Chute

MgS 3070 Real Estate Transactions (3)

The principles, practices and laws concerning real estate.

Battista

MgS 3051 Business Law I (3)

The basic legal principles that apply to the areas of law and society, contracts, agency and employment, partnerships, corporations. Consideration of the relevant statutes and adjudicated cases which give the student a grasp of the legal risks and results incident to common business relationships and transactions.

Capone, Eldridge

MgS 3052 Business Law II (3)

The basic legal principles that apply to the areas of personal property, sales, security devices, commercial paper, estates and bankruptcy.

Prerequisite: MgS 3051.

Capone, Eldridge

MANAGEMENT**MgS 2030 Business Organization and Management (3)**

Surveys the various forms of business organization and the methods and principles used in production, marketing, credit and competition. Examines the responsibilities of management in the organization of business.

Battista, Parker

MgS 3013 Small Business Management (3)

Formulation of small business strategies involved in evaluating current and future management decisions. Integration of principles of management, economics, marketing, finance and production in the study of small business structures.

Prerequisite: MgS 2030 or permission of instructor.

MgS 3025 International Business and Trade (3)

A survey of the essentials of International Business and the global forces that affect it. The course is designed to introduce students to the study of international environments and international business operation in the "global marketplace." Emphasis will be placed on the international activities of exporting, importing, licensing, foreign exchange, foreign investment, and foreign trade and their interacting relationships with the world economic, social and political environments.

Prerequisite: MgS 2030

Helliwell

MgS 3030 Personnel Management (3)

Personnel recruitment, development, utilization and accommodation within the organization studied within the analytical framework of the behavioral sciences. Effective personnel policies and procedures emphasized with respect to the goals of the organization and the objectives of the organization's members.

Parker, Chopra

MgS 3035 International Management (3)

Management practices of multinational corporations; economic, social-cultural, legal, political and technological constraints faced by managers in multinational companies.

Prerequisites: MgS 2030 and 3030.

MgS 3040 Management Information Systems (3)

Computer-based information systems for business organizations: management and decision-making; organization and information systems; technology of computer-based systems; systems analysis, design and implementation. Emphasis on managerial issues.

Prerequisites: CpS 1031, Acc 2200 and MgS 2030.

Fenster, Rosenberg

MgS 4010 Production Management (3)

Analysis of production operations in manufacturing and service operations. Production planning, systems and control introduced and related to such recent methodological developments as inventory forecasting, PERT/CPM, operations scheduling and queueing theory.

Prerequisites: MgS 2110 and 2120.

Hiraoka

MgS 4020 Industrial Plant Design and Economics (3)

Principles of plant and equipment design; economics in the process industries; cost estimation of material and labor; energy and pollution control considerations.

Prerequisite: MgS 4010.

MgS 4050 The Strategic Management Process (3)

Parameters of the strategic management process: how organizations analyze and diagnose threats and opportunities in the environment, determine their strategic advantages, consider and choose among alternative strategies, and implement and evaluate chosen strategies.

Prerequisites: MgS 2030 and senior status or permission of instructor.

Parker

MgS 4060 International Business Law (3)

An introduction to the law pertaining to international business transactions and economic relations. The course will emphasize United States Government and international regulation of transnational business transactions.

Prerequisite: MgS 3051

QUANTITATIVE METHODS**MgS 2110 Quantitative Methods in Management Science (3)**

Application of quantitative methods to business and management problems. Includes functions, matrix and linear algebra, mathematics of finance, differential calculus. Students completing this course will not receive credit for Eco 3200.

Prerequisite: Two years of high school algebra or equivalent.

Engelberg, Hiraoka, Rosenberg

MgS 2120 Business Statistics (3)

The methods used for the collection, presentation and analysis of business data, including sampling, the estimation of population parameters, index numbers, probability theory, the normal distribution, confidence intervals, testing of hypothesis, regression and correlation.

Prerequisite: Two years of high school algebra or equivalent.

Engelberg, Fulop

MgS 3120 Advanced Statistical Methods in Management Science (3)

Bayesian decision theory and its relationship to classical statistical inference, analysis of variance, nonparametric statistics, maximum likelihood estimation, sampling designs including Monte Carlo sampling and quality controls. Applications to problems in business and economics.

Prerequisite: MgS 2120 or permission of instructor.

Fulop

MgS 3130 Forecasting Techniques in Business and Economics (3)

Methods of identifying, determining and analyzing economic and business trends in order to forecast future behaviors. Topics include time-series analysis, cross-sectional analysis and applications of regression methods.

Prerequisite: MgS 2110 and 2120 or permission of instructor.

Fulop

MgS 4100 Operations Research (3)

Quantitative modeling for decision-making and operations research. Linear programming techniques; decision-theory and theory of games.

Prerequisite: MgS 2110 or 2120.

Hiraoka

MgS 4110 Case Analysis Using Quantitative and Statistical Methods (2)

Comprehensive case analysis and solution requiring principles of operations research and advanced statistics, numerical approximations; simulation techniques.

Prerequisites: MgS 3120 and 4100.

FINANCE**MgS 3300 Personal Finance (3)**

Evaluation and structure of a lifetime personal finance program. Financial strategies, alternatives and problems for small investor. Insurance, real estate, estate planning, portfolio investments.

Prerequisite: Acc 2200.

Casson

MgS 3310 Management of Corporate Finance I (3)

Principles and procedures of finance and their applications to typical management decisions. Financial analysis and planning with emphasis on the procurement and allocation of funds and the concept of the risk-return trade-off.

Prerequisite: Acc 2200.

Saffer, Yamoah

MgS 3311 Management of Corporate Finance II (3)

Further application of financial principles with emphasis on long-term management decisions. Maximizing the value of the firm under conditions of risk and uncertainty, through optimal budgeting of capital and use at least-cost funds.

Prerequisite: MgS 3310.

Saffer, Yamoah

MgS 3320 Preparation and Analysis of Financial Statements (3)

A study of the techniques applied in preparing, analyzing and interpreting the financial statements of industrial and commercial business enterprises. Published statements of business concerns will be discussed and analyzed. Course is designed for both accounting and non-accounting majors.

Prerequisites: Acc 2210 and MgS 3310.

Wailoo

MgS 3350 International Business Finance (3)

Examines the circumstances under which a business firm operates and finances its activities in a multinational environment. Management, finance and investment problems peculiar to foreign operations. The political environment; investment and incentives for foreign expansion; the financial activities of the multinational corporation and the continuing evolution of this form of organization.

Prerequisite: MgS 3310 or Eco 3400.

Yamoah

MgS 4300 Investments (3)

The basic principles of investments suitable for the individual and for business organizations. A study of the security market, the market influences on security prices, exchange regulation and the development of investment programs.

Prerequisite: MgS 3310.

Casson

MgS 4310 Capital and Money Markets (3)

Relationship of financial markets to private and public sectors; workings of the stock market, the corporate bond market, the money market, the government securities market and the international money market.

Prerequisites: Eco 1020, 1021, MgS 3310.

Casson

MARKETING**MgS 3410 Basic Marketing (3)**

An extensive overview of the field of marketing in one semester. Covers the fundamental concepts of contemporary marketing, its function in the economy, and its relation to today's social concerns. Specific topics include consumer behavior, industrial marketing, product development, channels of distribution, advertising and promotion, and pricing.

MgS 3420 The Retail Marketing Process (3)

A channels-of-distribution approach to the retailing function, focusing on the economic and social forces which affect the retail sector, the changing character of retail competition, relations between manufacturers and retailers, and responses to the emerging forces of consumerism. The procedures and problems of retail management, trading area evaluation, store organization and staffing, promotional policies, and measures of retail productivity. Emphasis on the role of the smaller entrepreneur, as well as the large retail organization. Case studies, field projects.

MgS 3425 Retail Buying and Merchandise Management (3)

Analysis of consumer demand and the problems of effectively anticipating and responding to it. Buying policies relating to the selection and development of merchandise resources, pricing and repricing policies; the effect of markup, markdown, stockturn and inventory valuation on profit; elements of fashion merchandising. Case studies, field projects.

Prerequisite: MgS 3420.

MgS 3430 Essentials of Advertising (3)

Survey of the entire field of advertising and its place in the total marketing program. Covers advertising objectives, research methods, management of advertising campaigns, advertising copy and production. Focus on the functional interrelationships of advertisers, agencies, and media.

Prerequisite: MgS 3410.

Helliwell

MgS 3431 Advertising Campaigns (3)

Analyzes current advertising campaigns in terms of research, creative and media strategies used to achieve promotion and marketing mix goals. Students prepare goal-oriented advertising campaigns.

Prerequisite: MgS 3430.

MgS 3435 Sales Management (3)

Sales management from various perspectives: the selling "environment" and the societal, economic, ethical, legal and governmental elements comprising this environment; general management functions, including planning, organizing, motivating and controlling; functions peculiar to sales management, including sales forecasting and selecting, training, motivating and compensating of sales people; relationships between the sales department and other internal and external departments and public.

Prerequisite: MgS 3410.

Battista, Helliwell

MgS 3440 Fashion Merchandising (3)

A study of fashion as a force in contemporary life and as a major determinant in the marketing of diverse categories of products. Theory of the fashion cycle, evolutionary development of fashions, analysis of demand for fashion goods, structure and operation of the fashion industries both at manufacturing and retail levels. Techniques and problems of fashion buying, display and promotion.

Prerequisite: MgS 3410.

MgS 3450 Industrial Marketing (3)

Marketing of products and services to industry from functional and management perspectives. Emphasizes new product introduction, legal and social constraints and salesmanship currently used in industry.

Prerequisite: A basic introductory marketing course: MgS 3410.

Wachtell

MgS 3451 Consumer Marketing (3)

Marketing of products and services to the consumer, from functional and management perspectives. Emphasizes new consumer product introductions, environmental and social constraints, and personal factors influencing consumer choices.
Prerequisite: MgS 3410.

Allen

Mgs 3455 Services Marketing (3)

Conceptual foundations of services marketing in consumer sector of banking, brokerage, insurance, health, technology, and professional service areas of the economy. Application of fundamental marketing processes to the service firm, in the profit and not-for-profit sector. An examination of differences between service marketing and product marketing.
Prerequisite: MgS 3410.

MgS 3460 Marketing Management (3)

Management of marketing function as it relates to total corporate activity; application of marketing principles in solving problems through case studies, field projects and computer simulation.
Prerequisite: MgS 3410 or equivalent.

Eldridge, Wachtel

MgS 3470 International Marketing (3)

Introduction of the multinational enterprise as a participant in world markets, incorporating the marketing concept into a global framework. The course focuses on the environmental and cultural forces affecting marketing program, strategies, and techniques both into and from foreign countries.
Prerequisite: MgS 3410.

Helliwell

MgS 4090 Career Management (3)

An investigation, employing multi-disciplinary perspectives, of career management as a systematic process and as a series of techniques. Topics will include: labor market dynamics and trends; career options, stages, paths and strategies; planning, pursuing, advancing and changing careers; organizational hiring, promotion and termination practices; employment search procedures and skills. Case studies and student experiences will be employed to examine the application of career management techniques and strategies.
Prerequisite: Junior or Senior status

Casson

MgS 4410 Introduction to Marketing Research (3)

An introduction to the basic tools of marketing research. The application of behavioral science and quantitative methods to solving marketing problems. Hypothesis testing, questionnaire construction, sampling and data analysis. Techniques include statistical inference tests, decision theory, Chi-square, and regression and correlation.
Prerequisites: MgS 2120 and 3410.

Wachtel

MgS 4420 Transportation and Physical Distribution (3)

Management and organization of physical distribution and transportation systems; optimum planning and processing methods; effect of institutions and regulations.

COOPERATIVE EDUCATION

MgS 4801-4806 Cooperative Education/Internship (1-6)

Selected majors test theories learned in the classroom with on-the-job experience in a career-related area. Assignments and placements are arranged by the department. Seminars, student reports and term papers required. Credits earned count as free electives but no more than a total of 40 credits in Management Science, including Coop/Ed/Internship courses can be used toward the 124 credit requirement for graduation.

Prerequisites: Permission of the department, junior or senior status and G.P.A. of 3.0 in Management Science.

INTERDISCIPLINARY COURSE

The following is found under *Interdisciplinary Courses*. (See Index.)

MARKETING/COMMUNICATIONS

ID 4500 Seminar in American Business Issues (3)

Exposition and critical analysis of controversial issues currently facing the American business system. Opposing viewpoints on topics such as inflation, profits, business ethics, government regulation, and energy policy examined. Advocacy lectures by guest speakers.
Prerequisites: 3.0 G.P.A., at least junior standing; 12 credits among economics, management science, political science and/or public administration and permission of instructor.

Casson

ID 4545 Marketing Communications Workshop (3)

An interdisciplinary course involving marketing (management science), media studies (English) and visual communications (fine arts). Groups from the three disciplines work as a team to plan and evaluate a unified marketing communications program for an institution. May be repeated once for credit.
Prerequisite: Permission of instructor.

Chairperson: Dr. James Daly
J105A Ext. 2066

Political Science concerns itself with the study of governments and governing procedures; what they are, how they change and what one thinks they should be—this includes international organizations, national states and sub-units of nations. While political science is concerned with understanding legislative, executive and judicial bodies that are formally part of government, it is also concerned with the political activities and influence of many other related groupings. It considers, for example, political parties, voting behavior and interest groups, as well as relevant activities of other organizations and individuals. The entire process by which public policy is formulated and executed ("who gets what, when, where and how") constitutes the field of political science.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020	Composition	3
GE 1100	Emergence of the Modern World	3
GE 1200	Intellectual and Cultural Traditions	3
GE 2020	Inquiry and Research	3
Eng 2203	Landmarks of World Literature	3
GE 2400	Science and Technology in the Modern World #	3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12
Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology
(Two courses in U.S. History recommended)

Biological and Physical Sciences 4
Astronomy Meteorology
Biology Oceanography
Chemistry Physics
Geology

Mathematical Sciences 3
Computer Science
Mathematics

Health and Physical Education 2-3
Health Education
Physical Education

#A Science course may be substituted for this Core Course
**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

COGNATE COURSES 3

One course in Public Administration

MAJOR REQUIREMENTS 30

REQUIRED COURSES 12

PS 1010	Introduction to Politics I: Elements of Politics	3
PS 1020	Introduction to Politics II: Political Institutions	3
PS 2100	American Government and Politics	3
	One course from political theory area	3

MAJOR ELECTIVES 18

Six political science courses, five of which must be at 3000-4000 level; may include PA 1000 and PA 3110. No additional public administration courses may be selected without prior departmental approval.

FREE ELECTIVES 38-39

TOTAL 124

B.A. Degree

Option: Criminal Justice

Coordinator: Dr. Jose Sanchez
J105D Ext. 2507

The Criminal Justice option is housed within the Department of Political Science, where criminal justice students can major in either Political Science or Public Administration. The curriculum is flexible and interdisciplinary which provides great advantages in career choices. The option provides students with a background in both the substantive and procedural aspects of criminal law, criminology, and the criminal justice system. Many courses include observations of court proceedings and police functions as well as visits to correctional institutions and programs. A broad background in the social sciences is integrated with specialized criminal justice courses.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020	Composition	3
GE 1100	Emergence of the Modern World	3
GE 1200	Intellectual and Cultural Traditions	3
GE 2020	Inquiry and Research	3
Eng 2203	Landmarks of World Literature	3
GE 2400	Science and Technology in the Modern World #	3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12
PS 1010 Introduction to Politics I: Elements of Politics 3
PS 1020 Introduction to Politics II: Political Institutions 3
Psy 1000 General Psychology 3
Soc 1000 Social Life and Society 3

Biological and Physical Sciences 4
Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3
Computer Science
Mathematics

Health and Physical Education 2-3
Health Education
Physical Education

#A Science course may be substituted for this Core Course
**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

COGNATE COURSES 12

PA 1000	Introduction to Public Administration	3
	One course from each of the following three groups	9
PS 2110	American State and Local Political Systems	
PA 3030	Administration of Public Finance	
CpS 1931	Computer Arithmetic Algorithms	
Acc 2200	Principles of Accounting I	
MgS 2120	Business Statistics	
PS 3550	Scope and Methods of Political Sciences	
Phi 3307	Philosophy of Law	
Phi 3309	Theories of Punishment	
Soc 2710	Crime and Delinquency	

MAJOR REQUIREMENTS 30

REQUIRED COURSES 6

PS 2100 American Government and Politics	3
PS 2600 Criminal Justice in America	3

MAJOR ELECTIVES 24

Four courses selected with advisement from the following: 12

PS 3630 Police Role in the Community	
PS 3650 Juvenile Justice	
PS 3680 Constitutional Law: Criminal Procedure	
PS 3685 Substantive Criminal Law	
PS 3690 Role of Prosecutor	
PS 4600 Honors Seminar in Criminal Justice	
PS 4610 Issues in Criminal Justice	
PS 4650 Community Based Corrections	
PA 3600 Police Organization and Administration	
PA 3610 Correctional Systems	
PA 3620 Probation and Parole	
PA 3640 Comparative Criminal Justice Systems	

PA 3660 White Collar Crime
Four courses in political science selected with advisement from areas other than criminal justice 12

FREE ELECTIVES 29-30

TOTAL 124

Minor

REQUIREMENTS 21

Required Courses 9

PS 1010 Introduction to Politics I: Elements of Politics	3
PS 1020 Introduction to Politics II: Political Institutions	3
PS 2100 American Government and Politics	3

Electives 12

Four courses in political science, three of which must be at the 3000-4000 level, selected with achievement. May include one course in public administration, with prior approval of department chairperson.

**B.A. Degree
Option: Teacher
Certification**

ID 1001 Freshman Seminar	1
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GENERAL EDUCATION 68

CORE REQUIREMENTS 18

Eng 1020 Composition	3
GE 1100 Emergence of the Modern World	3
GE 1200 Intellectual and Cultural Traditions	3
GE 2020 Inquiry and Research	3
Eng 2203 Landmarks of World Literature	3
GE 2400 Science and Technology in the Modern World #	3

BREADTH REQUIREMENTS 50

*English/Humanities (from at least 3 disciplines) 9
Comm 1400 Speech 3

*Social/Behavioral Sciences (from at least 3 disciplines) 9
Psy 1000 General Psychiatry 3
His 2303 United States History to 1877 3
Soc 1000 Social Life and Society or
Ant 1800 Cultural Anthropology 3

*Physical/Biological Sciences 4
*Mathematical Sciences (not including computer science) 3

*Health and Physical Education 4
ID 1225 Issues/Values in Contemporary Health 3
P.Ed. 1

*ADDITIONAL COGNATES 21

One of the following: 3
GE 1010 Earth, Environment of Man or
GE 3950 Geography of New Jersey

One of the following: 3
Eco 2030 History of Economic Thought or

Eco 2040 American Economic Development or
Eco 2041 European Economic Development or

Eco 3050 Comp. Economic Systems
His 2304 United States History, 1877 to Present 3

His 3326 History of New Jersey 3
One of the following: 3
His 2381 History of Latin America to 1825 or

His 2382 History of Latin America, 1825 to Present or

His 2500 Survey of African Prehistory and History or

His 2510 Political History of Africa in 20th Century or

His 3425 Southeast Asia in 20th Century	
Psy 2110 Psychology of Adolescent	3

ELECTIVES from * areas 3

MAJOR REQUIREMENTS 30

PS 1010 Introduction to Politics I	3
PS 1020 Introduction to Politics II	3
PS 2100 American Government and Politics	3
One course in political theory	3

MAJOR ELECTIVES 18

Six political science courses, including 5 on the 3000-4000 level. No more than two public administration courses including either PA 1000 or PA 3110 may be taken without prior departmental approval.

PROFESSIONAL EDUCATION 30

FIELD EXPERIENCE 15	
ICA 2801 Introductory Field Experience K-12	3
ICA 3803 Junior Field Experience K-12	2
ICA 4802 Professional Internship: Secondary Education	10

EDUCATION CORE 9

ED 3401 Language Arts/Reading K-12	3
ED 3000 Curriculum, Evaluation and Learner	3
ED 4000 Teacher and Classroom	3

SPECIALTY 3
ICA 3xxx Social Studies K-12 3

EDUCATION ELECTIVE 3

ICA 4xxx Computers and A-V Aids or	
ICA 4xxx Bilingual/ESL: Curriculum and Instruction or	
ICA 4xxx Humanistic and Humane Education	3

TOTAL 129

Political Science Courses

HONORS COURSES

Students completing a minimum of two honors courses in political science will receive an honors certification from the department, if their cumulative average in such courses is 3.5 and they complete their overall major requirements in political science with a minimum average of 3.45. Students who receive honors certification may count one honors course toward the minimum 30 credit requirement in their major, but all additional honors courses must be beyond this minimum requirement. Students should also be aware that they may take no more than 40 credits in political science, including honors courses, toward meeting the minimum 124 credit requirement for graduation.

INTRODUCTORY

PS 1010 Introduction to Politics I: Elements of Politics (3)

The concepts, terminology, problems and analytical approaches of the field of political science.

PS 1020 Introduction to Politics II: Political Institutions (3)

The study of prevailing political institutions in the world today, their dynamics as they relate to the governing process.

AMERICAN

PS 2100 American Government and Politics (3)

The basic political principles and patterns in the American tradition. A conceptual framework provides the base for examining the role of government, constitutionalism, federalism, civil rights, political processes and the changing relationships between the "levels" and "branches" of government.
Daly, Chang, Kahn

PS 2110 American State and Local Political Systems (3)

A systems analysis applied to American state and local politics, including the socio-economic setting and the responsiveness of American state and local political systems to current issues.
Rubin, Weiss

PS 2130 American Political Issues (3)

Issues of the day are studied in both their historical and institutional setting.
Hunt, Kahn

PS 3100 The Legislative Process (3)

An analysis of the formal and informal institutions and processes of the United States Congress.
Prerequisites: PS 1010, 1020 and 2100 or permission of instructor.
Kahn, Rubin

PS 3120 Political Parties (3)

The study of the behavior of American parties and interest groups and a comparison of their actions with theories of democracy.
Prerequisite: PS 1010, 1020 or permission of instructor.
Lederman

PS 3130 The American Judicial Process (3)

The politics of the American judicial system, how cases come before the courts and their impact upon the political system.
Prerequisites: PS 2100 or permission of instructor.
Israel

PS 3135 Political Participation (3)

Fundamental questions of "citizen politics" with the main emphasis on the nature and function of political participation in the American political process.
Israel, Kahn

PS 3140 The American Presidency (3)

In depth study of the presidency in terms of its institutional and behavioral aspects, with special emphasis on the exercise of the powers of the presidency.
Prerequisites: PS 1010, 1020 and 2100 or permission of instructor.
Kahn

PS 3150 American Constitutional Law (3)

Development of American Constitutional Law, both doctrinal and behavioral. Landmark cases examined, along with political and social topics, leading to an analysis of the position of the Supreme Court in the American system.
Prerequisite: PS 2100 or permission of instructor.
Hunt, Israel

PS 3151 Constitutional Law: Civil Liberties (3)

The First Amendment to the Constitution, and the Equal Protection Clause of the Fourteenth Amendment.
Prerequisite: PS 2100 or permission of instructor.
Hunt, Israel

PS 3160 Ethnic Politics in the United States (3)

Evaluation of the importance and impact of ethnic identifications in American politics: organizational styles characteristic of various ethnic groups; differences in political culture and political behavior among groups; and an assessment of the relative success of different ethnic groups in achieving their objectives.
Prerequisite: Three hours of political science or permission of instructor.
Boateng, Kahn, Laudicina

PS 3165 Women in American Political Life (3)

An examination of the diverse and changing roles played by women in the American political system; women as political participants, as office-holders and as advocates of issues relevant to their own needs; the differences between men and women in political behavior, the problems of women in government and the impact of the women's movement in public policy.

PS 3170 New Jersey: State Government and Politics (3)

An examination of governmental institutions and decision-making processes in New Jersey state government. Topics include; legislative-executive interaction, policy-making in departments and agencies, current issues.
Prerequisite: Three hours in political science, public administration or permission of instructor.

PS 3180 Governmental Advisory Systems (3)

Introduction to the detailed study of advisory roles in the various branches and levels of United States government. Describes and analyzes the work of expert staff in executive and legislative decision processes.
Prerequisite: PA 1000 or PS 2100.
Daly, Kahn, Rubin

PS 4100 Honors Seminar in American Government and Politics (3)

Open to advanced political science majors. Concentration on in-depth analyses of particular aspects of American political institutions and processes. As topics vary, course, where appropriate, may be taken more than once for credit. (See comment on political science honors courses).
Kahn

THEORY

PS 3200 Classical Political Theory (3)

A study of classical European political thought from pre-Platonic times to the dawn of the modern age.
Prerequisite: Six hours of political science or permission of instructor.
Hunt

PS 3210 European Political Theory: Machiavelli to Marx (3)

European political thought from the 15th to the 19th century, with special emphasis upon the major theorists and their contribution to the development of political theory.
Prerequisites: PS 1010 and 1020 or permission of instructor.
Hunt, Ross

PS 3220 Contemporary Political Ideologies (3)

Survey and analysis of the dominant ideologies of the twentieth century. Variants of Marxism, fascism, welfare liberalism, conservatism, the new left and libertarianism will be studied. Prerequisites: PS 1010 and 1020.

Hunt

PS 3250 American Political Theory (3)

The central doctrinal developments in American political theory, from pre-revolutionary beginnings to various contemporary positions. Important ideological positions, both orthodox and critical. The influence of theory on practice. Prerequisites: PS 1010 and 1020.

Hunt, Ross

COMPARATIVE

PS 3300 Comparative Government (3)

The comparative study of political institutions in such countries as the USSR, Great Britain, France and West Germany. Prerequisite: Six hours of political science or permission of instructor.

Boateng, Kelly

PS 3310 Comparative Non-Western Government (3)

A comparative analysis of the governments and policies of the non-western nations with emphasis upon the study of change and stability in their political ideology and institutions; the process of political development and the problems of political leadership.

Prerequisite: Six hours of political science or permission of instructor.

Boateng, Chang

PS 3320 The Politics of the Middle East (3)

A comparative study and analysis of the government and policies of the nations of the Levant with major focus on political development and change in the region; emphasis on institutions, leadership, and policy-making.

Prerequisites: PS 1010 and 1020 or permission of instructor.

Kahn

PS 3330 Far Eastern Politics (3)

A study of political culture, ideologies, political parties, constitutions, governmental institutions and policies in China, Japan, and Taiwan.

Prerequisite: Three credits in political science or permission of instructor.

Chang

PS 3340 Latin American Politics (3)

Comparative analysis of Latin American political systems with emphasis on political culture, political development and the conflict between tradition and modernity.

Prerequisite: PS 1010 or permission of instructor.

Boateng

PS 3350 Totalitarian Politics (3)

Survey and analysis of the doctrine and practice of unlimited state power.

Prerequisite: Three hours of political science or permission of instructor.

Ross

INTERNATIONAL

PS 3400 International Politics (3)

The state system and the balance of power, war in the pattern of international relations, suggest the subject matter.

Prerequisite: Six hours of political science or permission of instructor.

Chang, Kelly

PS 3410 International Organization (3)

A study of the creation and existence of those institutions designed to resolve international conflicts and promote international cooperation, with special emphasis upon the United Nations.

Prerequisites: PS 1010 and 1020.

Boateng, Kelly

PS 3418 The Arab-Israeli Conflict (3)

Analysis of the nature of the Arab-Israeli conflict, its roots, its background and prospects of its resolution; emphasis on direct and indirect participants and forces in the conflict. Prerequisite: Six hours of political science or permission of instructor.

Kahn

PS 3430 International Terrorism (3)

An examination of the evolution of political violence and the strategies of contemporary terrorism by international and transnational revolutionary groups. A critical analysis of the social, political, economic and legal ramifications on society and governments resulting from international terrorist activities. Prerequisite: PS 2600, 3220 or permission of instructor.

PS 3450 Conduct of United States Foreign Policy (3)

A study of political and administrative institutions and processes involved in foreign policy making. The development of foreign policy. How political and administrative organizations respond to change. The substance of modern foreign policy questions. Prerequisites: PS 1010 and 1020 or permission of instructor.

Kahn, Kelly

PS 3460 Human Rights and Politics in the 20th Century (3)

An exploration and evaluation of the development of human rights and its impact on the politics and institutions of the 20th century.

Prerequisite: Junior standing or permission of instructor.

PS 4400 Honors Seminar in International and Comparative Politics (3)

Open to advanced political science majors. Concentration on in-depth analyses of particular problems or issues in international and comparative politics. (See comment on political science honors courses).

Boateng, Kelly

PS 4410 Seminar in International Politics (3)

Analyses of particular problems and issues in international and comparative politics including the role of international institutions. Prior departmental arrangements for course admission is required because assignments may extend beyond the normal semester period. May be taken more than once for credit with departmental permission.

Prerequisite: permission of instructor.

Boateng, Chang, Kelly

BEHAVIOR

PS 3500 Political Behavior (3)

The empirical study of American politics, with emphasis on public opinion and support building through the mass media. Student research will be expected.

Prerequisite: PS 3120 or permission of instructor.

Israel

PS 3550 Scope and Methods of Political Science (3)

Focuses on what political scientists do, what their main concerns are and provides a methodological foundation for reading, understanding and criticizing the literature of political science.

Prerequisites: PS 1010, 1020; course is open to political science majors or by permission of department.

Kelly, Sanchez

CRIMINAL JUSTICE

PS 2600 (1600) Criminal Justice in America (3)

An introduction to the Criminal Justice System, with emphasis on the police, courts, and corrections in their political and social context. Topics will include: the relationship between the individual and the state, the politics of law enforcement, the meaning of the police power in contemporary American society, and the relationship between order and justice.

Israel, Sanchez

PS 3630 Police Role in the Community (3)

Human relations as they affect policing and police management. Prejudice and discrimination and their effects on the police in a changing society. The role of the modern police officer in attempting to balance peace, order and individual rights.

Prerequisite: PS 2600 or permission of instructor.

PS 3650 Juvenile Justice (3)

Theory and practice of the police programs for prevention and control of juvenile delinquency and youth crime; techniques, issues and problems. Constitutional questions and political influences.

Prerequisite: Soc 1000 or permission of instructor.

Sanchez

PS 3680 Constitutional Law: Criminal Procedures (3)

An analysis of the development of the Fourth, Fifth, and Sixth Amendments to the United States Constitution, the effect of the Due Process clause of the Fourteenth Amendment on the application of the Bill of Rights, and related issues revealed in leading Supreme Court decisions in Criminal Justice.

Prerequisite: PS 2600, or permission of instructor.

Israel

PS 3685 Substantive Criminal Law (3)

Common Law felonies, criminal culpability and criminal defenses.

Prerequisite: PS 2600.

Israel

PS 3690 The Role of the Prosecutor (3)

Ethical and practical considerations involved in the prosecutor's responsibility to see that justice is done. Limits of prosecutorial discretion, equal protection problems, separation of powers between the executive (prosecutor) and the judiciary, relationships with the Grand Jury, relations with defense counsel, and politics of the prosecutor's office. Prerequisite: PS 2600 or permission of instructor.

PS 4600 Honors Seminar in Criminal Justice (3)

Open to advanced students in the option in Criminal Justice. Concentration on in-depth analyses of particular aspects of the American criminal justice system. As topics vary, course, where appropriate, may be taken more than once for credit.

Prerequisites and/or corequisites: PS 2600, 2100, two upper level criminal justice electives, a 3.0 overall cumulative average and a 3.2 cumulative average in political science and public administration. Prerequisites and/or corequisites may be waived by instructor.

Israel, Sanchez

PS 4610 Issues in Criminal Justice (3)

Open to all students in the option in Criminal Justice. Course content will vary from semester to semester, and will be selected from a number of contemporary issues affecting criminal justice in America and abroad. These issues can include controversial topics in law enforcement, theory in criminal justice, court and legal issues and corrections. Prerequisite: PS 2600

Corequisite: one (1) 3000 level Criminal Justice elective.

PS 4650 Community Based Corrections (3)

Philosophy, theories and realities of dealing with delinquents in a community based setting. Selecting and administering the proper community based corrections for each type of client, such as the youth service bureau, group home, half-way house, non-residential group treatment center or other alternatives.

Prerequisite: PS 2600, 3650 or permission of instructor.

Sanchez

URBAN

PS 3700 The Urban Political System: Politics and Problems (3)

The analysis of the urban political system and its relations to other community systems, with emphasis on function and dysfunction.

Prerequisite: PS 2100.

Daly, Rubin

INTERNSHIP

PS 4800 Cooperative Education in Political Science (9)**PS 4801 Seminar for Cooperative Education Students in Political Science (6)**

Opportunity for students to obtain practical, long-term experience in supervised governmental or public interest organization work linked to related academic seminars. Student works approximately four and one-half days each week for approximately a full semester or the equivalent and participates in regular meetings of a related academic seminar. Financial remuneration as arranged. Six of the involved credits will count as major elective credits in political science and the remaining nine credits will count as free electives. (If a student is in a major other than political science, all 15 credits will count as free electives. However, the student's department may accept some of these credits as meeting major requirements.) No more than 40 credits in political science, including credits earned through this course, count toward the minimum requirements for graduation. PS 4800 and 4801 are taken concurrently. Students receiving credit for PS 4800 and 4801 may not also receive credit for PS 4802 and 4803.

Prerequisites: Junior status and permission of departmental selection board.

Rubin

PS 4802 Cooperative Education in Political Science II (6)**PS 4803 Seminar for Cooperative Education Students in Political Science II (3)**

Opportunity for students to obtain practical, long-term experience in supervised governmental or public interest organization work linked to related academic seminars. Student works approximately four and one-half days each week for approximately eight weeks or the equivalent and participates in regular meetings of a related academic seminar. Financial remuneration as arranged.

Three credits count as major elective credits in political science and the remaining six credits count as free electives. (If a student is in a major other than political science, all nine credits count as free electives. However, the student's department may accept some of these credits as meeting major requirements). No more than 40 credits in political science, including credits earned through this course, count toward the minimum requirements for graduation. PS 4802 and 4803 are taken concurrently. Students receiving credit for PS 4802 and 4803 may not also receive credit for PS 4800 and 4801.

Prerequisites: Junior status and permission of departmental selection board.

Rubin

INDEPENDENT STUDY

PS 4990 Independent Study: Tutorial Course for Political Science Majors (3)

A tutorial course for political science majors whose individual needs are not met by formal courses. Periodic meetings. Substantial research and reading is required.

Prerequisites: Twelve hours of political science; open only to political science majors who have made prior arrangements with a member.

Coordinator: Dr. Susan Lederman
J105G Ext. 2544

An interest in how government functions on the federal, state or local level and aspirations for a career in the public sector may lead a student to choose Public Administration as a major. As a public administration major, one can develop the knowledge and skills necessary for establishing a successful career in these areas.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18
Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12
PS 2100 American Government & Politics 3
PS 2110 American State & Local Political Systems 3

Select from two areas:
Economics or Geography 6
History
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4
Astronomy Meteorology
Biology Oceanography
Chemistry Physics
Geology

Mathematical Sciences 3
Computer Science
Mathematics

Health and Physical Education 2-3
Health Education
Physical Education

#A Science course may be substituted for this Core Course
**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

COGNATE COURSES 6

Select two courses: 6
CpS 1031 Computer Arithmetic Algorithms
Acc 2200 Principles of Accounting I
MgS2120 Business Statistics
PS 3550 Scope and Methods of Political Science

MAJOR REQUIREMENTS 30

REQUIRED COURSES 12
PA 1000 Introduction to Public Administration 3
PA 3010 Contemporary Public Organizations 3
PA 3030 Administration of Public Finances 3
PA 3110 American Federalism 3

MAJOR ELECTIVES 18
Six public administration courses; may include PS 3140 and PS 3700. No additional political science courses may be elected without prior departmental approval.

FREE ELECTIVES 35-36

TOTAL 124

B.A. Degree Option: Criminal Justice

Coordinator: Dr. Jose Sanchez
J105 Ext. 2507

The Criminal Justice option is housed within the Department of Political Science, where criminal justice students can major in either Political Science or Public Administration. The curriculum is flexible and interdisciplinary which provides great advantages in career choices. The option provides students with a background in both the substantive and procedural aspects of criminal law, criminology, and the criminal justice system. Many courses include observations in court proceedings and police functions as well as visits to correctional institutions and programs. A broad background in the social sciences is integrated with specialized criminal justice courses.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18
Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12
PS 1010 Introduction to Political Science I: Elements of Politics 3
PS 1020 Introduction to Political Science II: Political Institutions 3
Psy 1000 General Psychology 3
Soc 1000 Social Life and Society 3

Biological and Physical Sciences 4
Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3
Computer Science
Mathematics

Health and Physical Education 2-3
Health Education
Physical Education

#A Science course may be substituted for this Core Course
**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

COGNATE COURSES 12

PA 1000 Introduction to Public Administration 3
One course from each of the following three groups 9
PS 2110 American State and Local Political Systems
PA 3030 Administration of Public Finance
CpS 1031 Computer Arithmetic Algorithms
Acc 2200 Principles of Accounting I
MgS2120 Business Statistics
PS 3550 Scope and Methods of Political Science

Phi 3307 Philosophy of Law
Phi 3309 Theories of Punishment
Soc 2710 Crime and Delinquency

MAJOR REQUIREMENTS 30

REQUIRED COURSES 6
PS 2100 American Government and Politics 3
PS 2600 Criminal Justice in America 3

MAJOR ELECTIVES 24
Four courses selected with advisement from the following: 12

PS 3630 Police Role in the Community
PS 3650 Juvenile Justice
PS 3680 Constitutional Law: Criminal Procedure
PS 3685 Substantive Criminal Law
PS 3690 Role of Prosecutor
PS 4600 Honors Seminar in Criminal Justice
PS 4610 Issues in Criminal Justice
PS 4650 Community Based Corrections
PA 3600 Police Organization and Administration
PA 3610 Correctional Systems
PA 3620 Probation and Parole
PA 3640 Comparative Criminal Justice Systems
PA 3660 White Collar Crime
Four courses in public administration selected with advisement from areas other than criminal justice 12

FREE ELECTIVES 29-30

TOTAL 124

Minor

REQUIREMENTS 18

REQUIRED COURSES 12
MgS2120 Business Statistics or PS 3550 Scope and Methods of Political Science 3
PS 2100 American Government and Politics 3
PA 1000 Introduction to Public Administration 3
PA 3110 American Federalism 3

Electives 6
Two courses in public administration, selected with advisement.

Public Administration Courses

OVERVIEW AND ORGANIZATION

PA 1000 Introduction to Public Administration (3)
An introduction to the processes of administration with emphasis upon policy making in the national and state political systems and roles of groups and their impact upon administrative decision-making.
Barada, Daly, Lederman

PA 2700 Health Care System in the United States: Overview and Introduction (3)
Survey of the arena in which health care administration occurs; focusing on the relationship among the different provider institutions within the context of government and financial restrictions.
Barada

PA 3000 Public Management (3)
Analysis and evaluation of the techniques, skills and resources necessary for the effective direction and oversight of public agencies including: leadership styles, effective supervisory practices, and political context.
Prerequisite: PA 1000 or permission of instructor.
Daly, Kelly

PA 3010 Contemporary Public Organizations (3)
Theoretical and scientific bases of public organizations. Research methods.
Prerequisite: PA 1000 or PS 2100 or permission of instructor.
Fahrahi, Laudicina

PA 3020 Public Personnel Administration (3)
Survey of the processes of recruitment and managing personnel in public services. Philosophy of merit system, evolution of the career system, techniques of recruitment, comparative modern structures and the position classification system.
Prerequisite: PA 1000 or permission of instructor.
Kelly

PA 3030 Administration of the Public Finances (3)
How governments get and spend and handle revenue. Budgeting and taxing processes are analyzed in the dual perspective of public finance theory and political science.
Prerequisites: PA 1000, Eco 3320 or permission of instructor.
Laudicina, Lederman

PA 3050 Public Policy Evaluation (3)
Analysis and evaluation of the quantitative and qualitative techniques and skills necessary for effective planning and evaluation of programs in the public sector.
Prerequisite: PA 1000 or permission of instructor.
Lederman

PA 3060 Management Information Systems in the Public Sector (3)

Analysis and evaluation of the quantitative and qualitative techniques necessary for the utilization of management information systems in public organizations.
Prerequisite: PA 1000 or permission of instructor.
Fahrahi

PA 3070 Administration of Public Policy (3)
Examination of the administrative policy making process, involving both policy formulation and policy implementation. The demands on administrators from various sectors of the political system for policy change as well as bureaucratic influence on legislative policy making are also considered.
Prerequisite: PA 1000.
Lederman

LEVELS OF GOVERNMENT

PA 3110 American Federalism (3)
An analysis of the constitutional and institutional relationships among federal, state and local governments. Grants-in-aid, interstate compacts and intergovernmental cooperation in health, welfare and education.
Prerequisites: PA 1000, PS 1010, 1020, 2100, or permission of instructor.
Lederman

PA 3130 The Administration of Metropolitan Areas (3)
Administration of governmental services in metropolitan regions. The governmental organizations and procedures involved in responding to the needs of a rapidly changing urban environment. The roles of different jurisdictions which may overlap or compete for fiscal resources.
Prerequisite: PA 1000 or permission of instructor.
Daly

PA 3140 Administration of Local Government (3)
The practical requirements and the political context of central direction in the management of public affairs on a local level are explained from the viewpoint of a professional administrator.
Prerequisite: PA 1000, PS 2110 or permission of instructor.

PA 3150 New Jersey: Local and County Government (3)
An examination of local and county governing bodies in New Jersey, political and administrative processes, current issues and controversies.
Prerequisite: Three hours in political science, public administration or permission of instructor.
Lederman

COMPARATIVE

PA 3210 Urbanization in Developing Countries: Administrative Aspects (3)

Analysis of the political and administrative aspects of urbanization in developing countries. Problems of land use, housing, transportation and the financing of urban services. The role of public administrators in developed and underdeveloped nations are compared.
Prerequisite: PA 1000 or permission of instructor.
Boateng

APPLIED AREAS

PA 3330 Housing and Urban Renewal (3)

Public housing, public programs assisting private housing, and the legal, jurisdictional and administrative aspects of such programs. The role of urban renewal agencies and model cities.
Prerequisite: PA 1000 or permission of instructor.

PA 3340 Land Use Regulation (3)

Analysis of legal and administrative aspects of land use with emphasis on zoning, subdivision controls, eminent domain, interstate compacts and code enforcement. The interaction of various levels of government in land use regulation.
Prerequisite: PA 1000 or permission of instructor.

PA 3350 Collective Bargaining in the Public Sector (3)

Analysis of collective bargaining as a social and political process within an economic framework, with special emphasis on employee association in the public sector.
Prerequisite: PA 1000 or permission of instructor.

Kelly, N. Weiss

PA 3370 Administrative Issues in Energy (3)

Examination of the administrative issues which confront the U.S. with respect to the policy choices it must make regarding the use of renewable energy sources and the consumption of depletable energy reserves.
Prerequisite: PA 1000 or permission of instructor.

Boateng

PA 3380 Grantsmanship for Public Administrators (3)

Introduction to the intergovernmental grants process; examination of American intergovernmental relations and assistance structures; techniques for researching, planning, writing, packaging and lobbying grant and contract proposals.
Prerequisite: PA 3110 or permission of instructor.

Lender

PLANNING

PA 3400 Principles of Planning (3)

Need for planning in urban areas. Survey of the significance of urban areas and their development in particular locations. Aspects of new town developments.
Prerequisite: PA 1000 or permission of instructor.

PA 3420 Organizational Development in the Public Sector (3)

Analysis of the planning, theory, applications and history of organizational development of public organizations.
Prerequisite: PA 1000 or permission of instructor.

RULE OF LAW

PA 3500 Administrative Law (3)

Delegation of powers, separation of powers, rule-making by administrative agencies. Study of cases which affect the administrative process and relate to the scope of judicial review.
Prerequisite: Permission of instructor.

CRIMINAL JUSTICE

PA 3600 Police Organization and Administration (3)

An examination of the development, organization and administration of police departments and a consideration of the principle of organization best adapted to insure effective service to the community. Evaluation of line, staff and auxiliary functions, and analytic units of administration will be covered.
Prerequisite: PA 1000 or permission of instructor.

PA 3610 Correctional Systems (3)

Post-conviction procedures and strategies in dealing with clients of the criminal justice system, with emphasis on correctional services; attention paid to the evolution of correctional services, its current organization and operation, its association with the court system, and its inter-relationships with other elements of the justice system.
Prerequisite: PS 2600 or permission of instructor.

Sanchez

PA 3620 Probation and Parole (3)

A specialized approach to correctional strategies with emphasis on competencies and resources needed for effective probation and parole work and for entry into the system.
Prerequisite: PS 2600 or permission of instructor.

Sanchez

PA 3640 Comparative Criminal Justice Systems (3)

A study of criminal justice systems in selected nations, analyzed in comparison to systems in the United States. Attention will be paid to values, goals, administrative procedures and legal restraints.
Prerequisite: PS 2600 or permission of instructor.

PA 3660 White Collar and Corporate Crime (3)

The nature, extent and impact of illicit behavior on the part of corporations, government agencies and their employees. Problems encountered in establishing criminal responsibility for prosecutions and in applying meaningful sanctions to corporate acts, in the context of the political environment.
Prerequisites: PS 2100, 2600 or permission of instructor.
Sanchez

HEALTH CARE AND ADMINISTRATION

PA 3730 Health Services Personnel Administration (3)

Survey of the knowledge and skills essential to the development and maintenance of a personnel system within the health institution that is responsive to the human needs and legal rights of employees and to the prevailing social, political and economic milieu of the institution.
Prerequisite: PA 2700

PA 3750 Administration of Health Organizations and Agencies (3)

The modern health care institution from the internal point of view; in depth examination of the three major organizational components of the management structure—the board, administration and organized physicians; institutional influences upon the delivery of patient care.
Prerequisite: PA 2700 or permission of instructor.

Barada

PA 3760 Principles and Methods of Health Planning (3)

Introduction to the theories, concepts and principles upon which the practice of health planning is based, and the practice of health planning in the United States.
Prerequisite: PA 2700 or permission of instructor.

Barada

SEMINAR

PA 4700 Seminar in Public Administration (3)

A detailed examination of current issues and problems in the field of public administration; emphasis on individual student projects and research.
Prerequisites: PA 1000 plus three additional credits in public administration, junior or senior status; and permission of instructor.
Daly, Laudicina, Lederman

INTERNSHIP

PA 4800 Internship in Public Administration I (3)

Supervised placement one or two days per week in a public agency, offering direct participation in public administration. Concomitant one and one-half hour weekly seminar to integrate course knowledge with field experience.
Prerequisites: Six hours of Public Administration and permission of instructor.
Daly, Lederman

PA 4801 Internship in Public Administration II (3)

Continuation of PA 4800.
Prerequisites: PA 4800 and permission of instructor.
Daly, Lederman

PA 4810 Cooperative Education in Public Administration (9)**PA 4811 Seminar for Cooperative Education Students in Public Administration (6)**

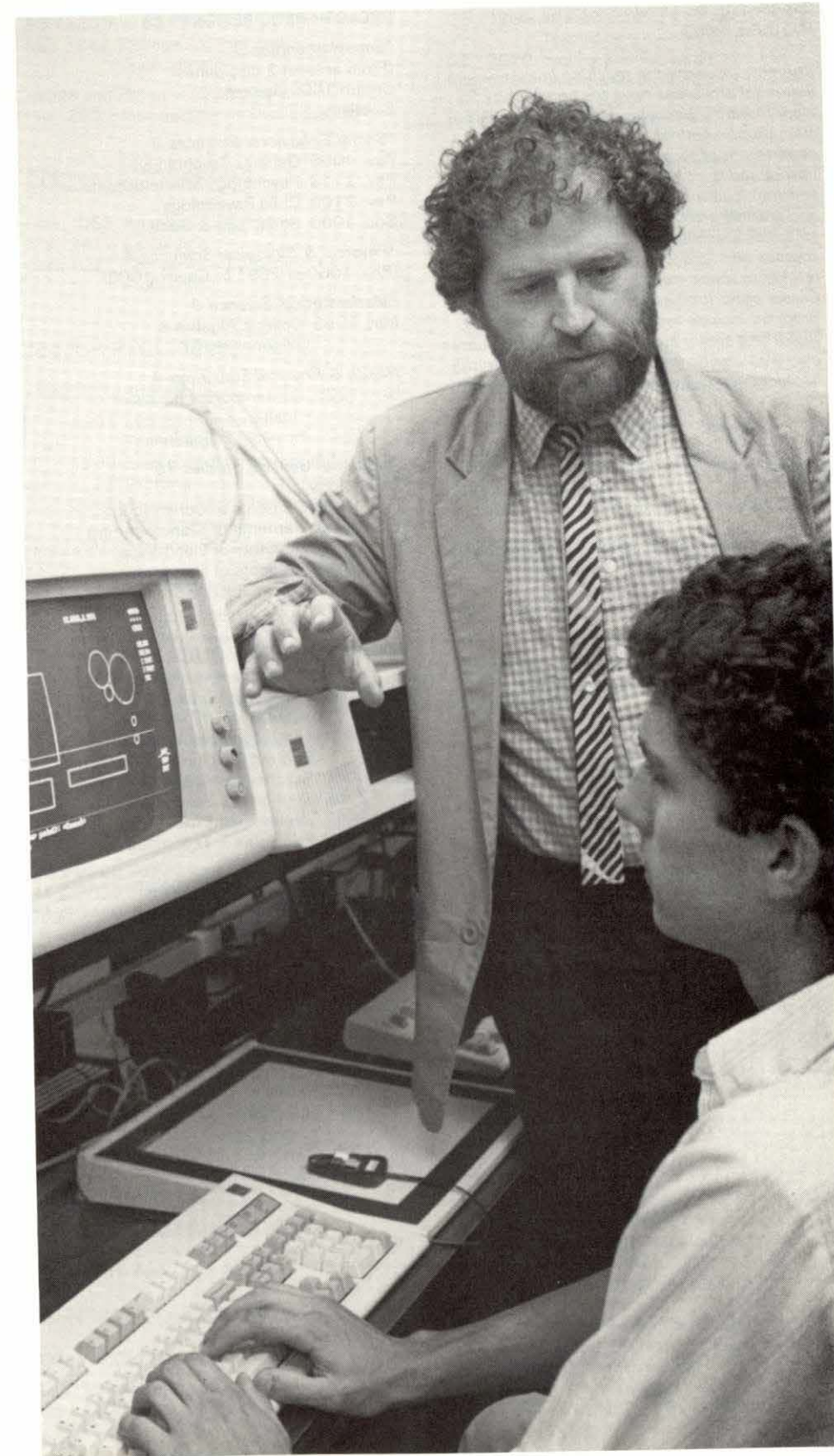
Opportunity for students to obtain long-term experience in supervised public agency work linked to related academic seminars. Student works full-time (forty hours a week) during the full fall or spring semester and attends weekly seminar series on topics related to agency work. Six of the involved credits count as major elective credits in Public Administration; the remaining nine credits count as free electives. No more than forty credits in Public Administration, including the 15 credits that can be earned through this course, can count toward the minimum 124 credits required for graduation.

PA 4810 and 4811 must be taken concurrently.

Prerequisites: Junior or senior status, PA 1000, nine additional credits in public administration and permission of instructor. Prerequisites may be waived by instructor.
Lederman

PA 4990 Independent Study in Public Administration (3)

Tutorial course for public administration majors, with required project reports. Periodic meetings, substantial research and reading required.
Prerequisites: Twelve hours of public administration. Open only to public administration majors who have made prior arrangements with a faculty member.



Coordinator: Dr. Marvin Sarapin
H110 Ext. 2063

Students interested in teaching in the industrial arts areas have the opportunity to work toward a bachelor of arts in technology education/industrial arts offered by the department of technology. Students are introduced to construction, manufacturing, communications, (drafting/design, electronics and graphic arts). They then elect an area (or areas) of specialization. The professional courses and field experiences are directly related to these areas of specialization.

Career opportunities for graduates of this program include teaching at the elementary, junior and senior high school levels. Graduates may also qualify to teach industrial arts to the handicapped by completing some additional courses.

In addition to providing the graduates with skills and knowledge that have a market outside of the classroom, the department of technology is very proud that 100 percent of its students seeking jobs in education find them.

With this major the student will complete an interdisciplinary academic sequence.

**B.A. Degree
Technology Education**

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 62

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry & Research 3
GE 2203 Landmarks of World Literature 3
GE 2400 Science & Technology 3

BREADTH REQUIREMENTS 29

*Eng./Humanities 9
(From at least 2 disciplines)
Comm 1400 Speech Electives 6

*Social/Behavioral Sciences 9
Psy 1000 General Psychology 3
Psy 2110 Psychology of Adolescents or 3
Psy 2100 Child Psychology 3
Soc 1000 Social Life & Society 3

*Physical & Biological Sciences 4
(Phy. 1000 or 2091 or Chem. 1000) 4

*Mathematical Science 3
Mat 1052 College Algebra & Trigonometry 3

Health & Physical Education 4
ID 1225 Contemporary Issues in Health 3
Physical Education 1

Additional General Studies 15
Technology 12
T 1300 Elements of Construction 3
T 1400 Elements of Manufacturing 3
T 1500 Elements of Electronics 3
T 1600 Elements of Graphics 3
General Education Elective 3

PROFESSIONAL EDUCATION 30

Educ3000 Curriculum Evaluation—Learner 3
Educ3401 Language Arts/Reading K-12 Subject Teaching 3
Educ4000 Teacher and Classroom 3
T 2106 Sophomore Field Experience 3
T 3107 Junior Field Experience 2
T 3108 Principles & Techniques of Teaching IA 3
T 4109 Curriculum & Laboratory Design 3
T 4120 Full Semester Student Teaching 10

ACADEMIC MAJOR 39

T 1200 Elements of Contemporary Drafting 4
T 1700 Elements of Power 3
T 1901 Introduction to Industrial Technology 2
T 3102 Comp. in Technology & Education 3

TECHNOLOGY MAJOR CLUSTER 14/16

(Choose ONE cluster)

Construction Cluster

T 2301 Machine Woodworking 3
T 2302 Furniture Design/Construction 3
T 3303 Carpentry & Building Construction 3
T 4304 Contemporary Trends 3
T 4305 Cabinetmaking 3

Manufacturing Cluster

T 2410 Mat/Processing I 3
T 2420 Mat/Processing II 3
T 3404 Machine Tool Production 3
T 3410 CAM/CNC 4
T 3430 CAD/CAM 3

Communication Cluster

(Under this cluster one must select ONE of the Areas A, B, or C)

A. Drafting & Design
T 2201 Technical Drafting 3
T 2202 Machine Drafting/Design 3
T 2220 CAD I 3
T 3200 Design Fundamentals 3
T 3204 Architectural Drafting 3

B. Electronics

T 1501 Circuit Analysis I 4
T 1502 Circuit Analysis II 4
T 2500 Digital Circuit Concepts 3
T 2508 Solid State Devices 4

C. Graphics

T 2602 Screen Production Reproduction 3
T 3603 B&W Photo Reproduction 3
T 4610 Print Production Workshop I 4
T 4611 Print Production Workshop II 4

Comprehensive Cluster

T 1501 Circuit Analysis I 4
T 2202 Machine Drafting/Design 3
T 2301 Machine Woodworking 3
T 2602 Screen Prod Reproduction 3
T 3404 Machine Tool Production 3

DEPARTMENT ELECTIVES 11/13

TOTAL 132

Chairperson: Dr. Daniel Cokewood
H110 Ext. 2063

The Industrial Technology program is designed to prepare individuals for technical-managerial, production-supervisory and related types of professional leadership positions. The curriculum is built on technical education and has a balanced program of studies drawn from a variety of disciplines relating to business and industry. Included are a sound knowledge and understanding of materials and manufacturing processes, principles of distribution and concepts of industrial management and human relations: experiences in communication skills, humanities and social sciences; and a proficiency level in the physical sciences, mathematics, design and technical skills to permit the graduate to capably cope with typical technical managerial and production problems. The program is fully accredited by the National Association of Industrial Technology.

Industrial Studies Scholarships are available for qualified students. See Financial Aid section.

**B.S. Degree
Option: Design**

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 63

CORE REQUIREMENTS 19
Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research Literature 3
Eng 2203 Landmarks of World Literature 3
Phy 2091 General Physics I 4

BREADTH REQUIREMENTS 33-34

Humanities 12
Comm 1400 Speech Communication 3
FA 1100 2-D Design 3
FA 1101 3-D Design 3

Select one course from the following areas:
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12
Psy 1000 General Psychology 3
Eco 1020 Principles of Economics I 3
Eco 1021 Principles of Economics II 3

Select one course from the following areas:
History
Political Science
Sociology or Anthropology

Biological and Physical Sciences 4
Phy 2092 General Physics II 3

Mathematical Sciences 3
Mat 1052 College Algebra and Trigonometry 3
Health and Physical Education 3
Ped 2500 Introduction to Biomechanics 3

COGNATE COURSES 9

Mat 1053 Analytical Geometry 3
Mat 2411 Calculus I 3
CpS 1031 Computer Arithmetic Algorithms 3

MAJOR REQUIREMENTS 72

CORE REQUIREMENTS

T 1901 Introduction to Industrial Technology 2
T 1200 Elements of Contemporary Drafting 4
T 2900 Preparation of Technical Documents 3
T 2903 Material Science 3

AREA SPECIALIZATION 33

T 3200 Design Fundamentals 3
T 3201 Model Design 3
T 4206 Technical Illustration 3
T 4207 Design Delineation 3
T 4210 Design Application 3
T 4211 Design Studio 6
T 2201 Technical Drafting 3
***Elective 3
T 2220 CAD I 3
T 2221 CAD II 3

MANAGEMENT 15

Acc 2200 Principles of Accounting 3
MgS3030 Personnel Management 3
MgS3410 Basic Marketing 3
T 3900 Industrial Statistics & Quality Control 3
T 3903 Industrial Purchasing 3

MAJOR ELECTIVES* 12

*Selected with approval of area advisor

TOTAL 136

**B.S. Degree
Option: Graphic Arts**

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 61-62

CORE REQUIREMENTS 19
Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3

GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
Phy 2091 General Physics I 4

BREADTH REQUIREMENTS 33-34

Humanities 12
Comm 1400 Speech Communication 3
Select three courses from at least two of the following areas:
Foreign Languages
†Fine Arts or Art History
†Music
Philosophy or Religion

Social and Behavioral Sciences 12
Psy 1000 General Psychology 3
Eco 1020 Principles of Economics I 3
Eco 1021 Principles of Economics II 3

Select one course from the following areas:
History
Political Science
Sociology or Anthropology

Biological and Physical Sciences 4
Phy 2092 General Physics II 3

Mathematical Sciences 3
Mat 1052 College Algebra and Trigonometry 3

Health and Physical Education 2-3
Health Education 3
Physical Education 6

COGNATE COURSES 9

Mat 1053 Analytical Geometry 3
Mat 2411 Calculus I 3
CpS 1031 Computer Arithmetic Algorithms 3

MAJOR REQUIREMENTS 71

CORE REQUIREMENTS 12

T 1901 Introduction to Industrial Technology 2
T 1200 Elements of Contemporary Drafting 4
T 2900 Preparation of Technical Documents 3
T 2903 Material Science 3

AREA OF SPECIALIZATION 32

T 2602 Screen Process 3
T 3603 Black & White Photography 3
T 3607 Black & White Photography II 3
T 3604 Color Photo: Slides & Prints 3
T 3605 Color Photo: Printing Color Negatives 3
T 4610 Print Production Workshop I 4
T 4611 Print Production Workshop II 4
T 4608 Color Separation I 3
T 4609 Color Separation II 3
T 1600 Elements of Graphics 3

MANAGEMENT 15

Acc 2200 Principles of Accounting	3
MgS3030 Personnel Management	3
MgS3410 Basic Marketing	3
T 3900 Industrial Statistics & Quality Control	3
T 3903 Industrial Purchasing	3

MAJOR ELECTIVES* 12
 *Selected with approval of area advisor

TOTAL 133/134

B.S. Degree
Option: Electronics

ID 1001 Freshman Seminar	1
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GENERAL EDUCATION 61-62

CORE REQUIREMENTS 19

Eng 1020 Composition	3
GE 1100 Emergence of the Modern World	3
GE 1200 Intellectual and Cultural Traditions	3
GE 2020 Inquiry and Research	3
Eng 2203 Landmarks of World Literature	3
Phy 2091 General Physics I	4

BREADTH REQUIREMENTS 33-34

Humanities 12
 Comm 1400 Speech Communication
 Selected three courses from at least two of the following areas:
 Foreign Languages
 †Fine Arts or Art History
 †Music
 Philosophy or Religion

Social and Behavioral Sciences 12
 Psy 1000 General Psychology
 Eco 1020 Principles of Economics I
 Eco 1021 Principles of Economics II
 Select one course from the following areas:
 History
 Political Science
 Sociology or Anthropology

Biological and Physical Sciences 4
 Phy 2092 General Physics II

Mathematical Sciences 3
 Mat 1052 College Algebra and Trigonometry

Health and Physical Education 2-3
 Health Education
 Physical Education

COGNATE COURSES 9

Mat 1053 Analytical Geometry	3
Mat 2411 Calculus I	3
CpS 1031 Computer Arithmetic Algorithms	3

MAJOR REQUIREMENTS 72

CORE REQUIREMENTS 12

T 1901 Introduction to Industrial Technology	2
T 1200 Elements of Contemporary Drafting	4
T 2900 Preparation of Technical Documents	3
T 2903 Material Science	3

AREA SPECIALIZATION 33

T 1501 Circuit Analysis I	4
T 1502 Circuit Analysis II	4
T 2500 Digital Circuit Concept	3
T 2508 Solid-State Devices	4
T 3500 Digital Systems	3
T 3508 Solid-State Design	3
T 3509 Microprocessor Theory	3
T 4504 Measure & Control	3
T 4509 Micro Systems	3
T 4510 Senior Project	3

MANAGEMENT 15

Acc 2200 Principles of Accounting	3
MgS3030 Personnel Management	3
MgS3410 Basic Marketing	3
T 3900 Industrial Statistics & Quality Control	3
T 3903 Industrial Purchasing	3

MAJOR ELECTIVES* 12

*Selected with approval of area advisor

TOTAL 134/135

B.S. Degree
Option: Computer Integrated Design and Manufacturing

ID 1001 Freshman Seminar	1
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GENERAL EDUCATION 61-62

CORE REQUIREMENTS 19

Eng 1020 Composition	3
GE 1100 Emergence of the Modern World	3
GE 1200 Intellectual and Cultural Traditions	3
GE 2020 Inquiry and Research	3
Eng 2203 Landmarks of World Literature	3
Phy 2091 General Physics I	4

BREADTH REQUIREMENTS 33-34

Humanities 12
 Comm 1400 Speech Communication
 Select three courses from at least two of the following:
 English
 Fine Arts
 Foreign Language
 Music
 Philosophy

Social and Behavioral Sciences 12

*Eco 1020 Principles of Economics I
 *Eco 1021 Principles of Economics II
 *Psy 1000 General Psychology
 Select one course from the following areas:
 History
 Political Science
 Sociology

Biological and Physical Sciences 4
 Phy 2092 General Physics II

Mathematical Sciences 3
 Mat 1052 College Algebra and Trigonometry

Health Disciplines 2-3
 Health Education
 Physical Education

COGNATE COURSES 9

Mat 2411 Calculus I	3
Mat 1053 Analytical Geometry	3
CpS 1031 Computer Arithmetic Algorithms	3

*Cognate Course
 **With area advisor approval

MAJOR REQUIREMENTS 73

CORE REQUIREMENTS 12

T 1901 Introduction to Industrial Technology	2
T 1200 Elements of Contemporary Drafting	4
T 2900 Preparation of Technical Documents	3
T 2903 Material Science	3

AREA SPECIALIZATION 34

T 2202 Computer Aided Machines Drafting and Design	3
T 2410 Mat./Processes I	3
T 2420 Mat./Processes II	3
T 3404 Machine Tool Production	3
T 3410 CAM/CNC	4
T 3430 CAD/CAM	3
T 4415 CAM/CNC/APT	3
T 4440 Robotics and Non-trad. Manufacturing	3
T 4421 Comp. Integrated Production and Inventory Control I	3
T 4431 Comp. Integrated Production and Inventory Control II	3
T 4450 Comp. Integrated Design and Manufacturing	3

MANAGEMENT 15

Acc 2200 Principles of Accounting	3
MgS3030 Personnel Management	3
MgS3410 Basic Marketing	3
T 3900 Industrial Statistics and Quality Control	3
T 3903 Industrial Purchasing	3

MAJOR ELECTIVES* 12

*Selected with approval of major advisor

TOTAL 135/136

B.S. Degree
Option: Electrical Contracting

ID 1001 Freshman Seminar	1
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GENERAL EDUCATION 61-62

CORE REQUIREMENTS 19

Eng 1020 Composition	3
GE 1100 Emergence of the Modern World	3
GE 1200 Intellectual and Cultural Traditions	3
GE 2020 Inquiry and Research	3
Eng 2203 Landmarks of World Literature	3
Phy 2091 General Physics I	4

BREADTH REQUIREMENTS 33-34

Humanities 12
 Comm 1400 Speech Communication
 Select three courses from at least two of the following areas:
 Foreign Languages
 †Fine Arts or Art History
 †Music
 Philosophy or Religion

Social and Behavioral Sciences 12
 Psy 1000 General Psychology
 Eco 1020 Principles of Economics I
 Eco 1021 Principles of Economics II
 Select one course from the following areas:
 History
 Political Science
 Sociology or Anthropology

Biological and Physical Sciences 4
 Phy 2092 General Physics II

Mathematical Sciences 3
 Mat 1052 College Algebra and Trigonometry

Health and Physical Education 2-3
 Health Education
 Physical Education

COGNATE COURSES 9

Mat 1053 Analytical Geometry	3
Mat 2411 Calculus I	3
CpS 1031 Computer Arithmetic Algorithms	3

MAJOR REQUIREMENTS 72

CORE REQUIREMENTS 12

T 1901 Introduction to Industrial Technology	2
T 1200 Elements of Contemporary Drafting	4
T 2900 Preparation of Technical Documents	3
T 2903 Material Science	3

AREA SPECIALIZATION 33

T 2804 Construction Electricity Theory	3
T 2806 Electrical Contracting Equipment	3
T 2809 Electrical Codes	3
T 2811 Electrical Blueprints	3
T 3831 Electrical Estimating	3
T 3833 Electrical and Electronic Control Systems	3
T 3837 Advanced Estimating Electrical Control	3
T 3845 Electrical Design	3
T 4810 Construction Law	3
T 4835 Construction Finance	3
T 4840 Construction Project Management	3

MANAGEMENT 15

Acc 2200 Principles of Accounting	3
MgS3030 Personnel Management	3
MgS3410 Basic Marketing	3
T 3900 Industrial Statistics & Quality Control	3
T 3903 Industrial Purchasing	3

MAJOR ELECTIVES* 12

*Selected with approval of area advisor

TOTAL 134-135

B.S. Degree
Option: Mechanical Contracting

ID 1001 Freshman Seminar	1
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GENERAL EDUCATION 61-62

CORE REQUIREMENTS 19

Eng 1020 Composition	3
GE 1100 Emergence of the Modern World	3
GE 1200 Intellectual and Cultural Traditions	3
GE 2020 Inquiry and Research	3
Eng 2203 Landmarks of World Literature	3
Phy 2091 General Physics I	4

BREADTH REQUIREMENTS 33-34

Humanities 12
 Comm 1400 Speech Communication
 Select three courses from at least two of the following areas:
 Foreign Languages
 †Fine Arts or Art History
 †Music
 Philosophy or Religion

Social and Behavioral Sciences 12
 Psy 1000 General Psychology
 Eco 1020 Principles of Economics I
 Eco 1021 Principles of Economics II

Select one course from the following areas:

History
 Political Science
 Sociology or Anthropology
Biological and Physical Sciences 4
 Phy 2092 General Physics II
Mathematical Sciences 3
 Mat 1052 College Algebra and Trigonometry
Health and Physical Education 2-3
 Health Education
 Physical Education

COGNATE COURSES 9

Mat 1053 Analytical Geometry	3
Mat 2411 Calculus I	3
CpS 1031 Computer Arithmetic Algorithms	3

MAJOR REQUIREMENTS 72

CORE REQUIREMENTS 12

T 1901 Introduction to Industrial Technology	2
T 1200 Elements of Contemporary Drafting	4
T 2900 Preparation of Technical Documents	3
T 2903 Material Science	3

AREA SPECIALIZATION 33

T 2805 HVAC Equipment	3
T 2810 Interpretation of Construction Drawings	3
T 2820 Building and Piping Systems Design	3
T 3830 Estimating Mechanical Contracting	3
T 3835 Advanced Mechanical Contracting Estimating	3
T 3840 Building Environmental Systems Design I	3
T 3850 Building Environmental Systems Design II	3
T 3855 Controlling Systems for HVAC	3
T 4810 Construction Law	3
T 4835 Construction Project Management	3
T 4840 Construction Finance	3

MANAGEMENT 15

Acc 2200 Principles of Accounting	3
MgS3030 Personnel Management	3
MgS3410 Basic Marketing	3
T 3900 Industrial Statistics & Quality Control	3
T 3903 Industrial Purchasing	3

MAJOR ELECTIVES* 12

*Selected with approval of area advisor

TOTAL 134-135

Minor**REQUIREMENTS 22****REQUIRED CORE COURSES 7**

T	2900	Preparation of Technical Documents	3
T	1200	Elements of Contemporary Drafting	4

SPECIALIZATION COURSES 15

selected at 2000 level or above in one of the following areas of the Industrial Studies departmental offerings:

Design
Electronics
Electrical Contracting
Graphic Arts
Manufacturing
Mechanical Contracting

*Note: Departmental advisement is encouraged.

Technology Courses**COURSES FOR NON-DEPARTMENTAL MAJORS****T 1000 Computers in Industrial Processes (1)**

Computer terms and exposure to computer-driven processes in the design, graphic, manufacturing and mechanical contracting industries. Exploration of the resulting social, economic and educational implications. Prerequisites: Completion of junior year of high school and a "B" average.

T 3068 The History of Photography (3)

History of photography from 1839 to the present. Emphasis placed on the development of the field with relation to its process, trends and major artists.

Lokuta

T 3301 Woodworking for the Non-Major (3)

Instruction and practical experience for the novice using woodworking, tools, machines, fasteners, bonding agents and finishes as related to forming simple functional objects. Peterson

T 4001 Technology for Children—Early Childhood and Elementary School Industrial Arts (3)

The role of industrial arts in pre-school, kindergarten and elementary education developed. Experience gained in using suitable tools and materials and in developing activities for the nursery school, kindergarten, and elementary grades.

Peterson

EDUCATION**T 2106 Industrial Arts Sophomore Field Experience (3)**

An introduction to industrial arts/technology education teaching with field experience

observation in multi-cultural, urban, and suburban settings from kindergarten through senior high school. Approximately one-third of the class activities are devoted to field observations.

Prerequisites: Eng 1020 and Comm 1400.

T 3102 Computers in Technology Education

Application of microcomputer hardware and software for technology education. Use of existing hardware and software for technology and training applications. No prior programming experience needed.

T 3107 Industrial Arts Junior Field Experience (2)

Experience in aiding and observing in an industrial arts/technology education laboratory in the field under the guidance and direction of a cooperating teacher and a college supervisor during the junior year. Experience is for one full day per week for a semester. Prerequisites: T 2106, Eng 1020 and Comm 1400.

T 3108 Principles and Techniques of Teaching Industrial Arts Education (3)

A study of the theory and practice of teaching industrial arts/technology education. Emphasis is placed on lesson planning, teaching methods, instructional aids, safety, and student organizations.

Prerequisites: T 2106, Eng 1020, Comm 1400.

T 4109 Industrial Arts Curriculum and Laboratory Design (3)

Presentation of industrial arts curriculum, the factors that influence it, and the educational concerns that must be considered in designing curriculum. Emphasis also placed on laboratory design and equipment selection and their relationship to curriculum.

Prerequisite: T 3107.

T 4110 Student Teaching (8)

A semester experience in full time teaching in a public school under the guidance and direction of a cooperating teacher and a college supervisor.

Prerequisites: Successful completion of 96 credits and T 3107.

T 4111 Exploring Special Education-Industrial Arts/Vocational Education (3)

An introductory course designed for those who contemplate working with special education students in the laboratory area. Required for those pursuing the collateral program in Special Education and Industrial Arts for the Handicapped.

T 4112 Manufacturing and Packaging in Settings for the Handicapped (3)

Processing methods, organization, and quality control in mass production of metal, plastic, ceramics, paper and other material products. Practical experience in adapting manufacturing and assembling products related to special needs populations.

Prerequisite: T 4111, 3301, 1300 or permission of instructor.

T 4120 Full Semester Student Teaching (10)

A full time, full semester teaching experience in industrial arts under guidance and direction of a cooperating public school teacher and a college supervisor.

T 4181 Independent Study in Industrial Education (3)

Industrial Education majors are given opportunity to develop independent projects or research studies in their field. Each student expected to initiate an independent program of study under the close supervision of a faculty member. Student is responsible for the plan of work, its accomplishment and suitable presentation at completion of course. Hours to be arranged by student and instructor; study shall involve a minimum of 135 clock hours of classroom and/or laboratory work.

Enrollment is by permission of advising faculty member and in compliance with College policy concerning independent study.

T 4182 Independent Study in Industrial Education II (3)

A continuation of T 4181.

T 4183 The World of Construction (3)

Comprehensive study of construction methods and related careers including an analysis of the managed-personnel-production system of construction, a synthesis of housing construction practices, and a synthesis of city and regional planning practices.

T 4184 The World of Manufacturing (3)

A comprehensive innovative study of manufacturing technology. A brief history and overview of major concepts; analysis of the managed-personnel-production system of manufacturing; synthesis of manufacturing practices as applied to the corporation. Preparation to teach the "World of Manufacturing" at the junior high school level.

DRAFTING AND DESIGN**T 1200 Elements of Contemporary Drafting (4)**

Application of drafting room standards, experience with drafting instruments, lettering, pencil and ink line work, freehand sketching, development of working drawings. Geometric construction, orthographic projection, sections and conventions, graphical math, dimensioning, descriptive geometry, and an introduction to Computer-Aided-Drafting application.

T 2201 Technical Drafting (3)

A comprehensive study of the spatial relationships of orthographic projection as related to auxiliary views, revolutions, intersections, and developments.

Riegler

T 2202 Machine Drafting and Design (3)

Shop processes; the design and application of fasteners, cams, gears, and common mechanisms. Design and preparation of a complete set of working drawings.

Prerequisite: T 1200 or 2201.

T 2220 Computer Aided Design I (3)

This course presents a comprehensive introduction to methods and applications of computer aided design systems. Emphasis is placed in the use of CAD hardware and software for automating the design processes and implementing the CAD into planning, costing, database design, productivity and automated production.

Prerequisites: T 1200, T 2201, or equivalent.

T 2230 Computer Aided Design II (3)

This course presents a comprehensive introduction to the methods and applications of surface, wire and solids modelling using 2D as well as 3D CAD software. Emphasis is placed in the use of the newly emerging expert systems approach to CAD through applications of artificial intelligence and automated design generation techniques.

Prerequisites: T 2220 or equivalent.

T 3200 Design Fundamentals (3)

An investigation of the basic aspects and the traditional concepts of design and of their implication to contemporary design.

T 3201 Model Design (3)

Planning, material selection and fabrication techniques of model making and their concurrent relationships to the total design process.

Prerequisite: T 3200.

T 3203 Electronic Drafting (3)

Industrial drafting practices as they apply to the electronics industry. Preparation of schematics, wiring diagrams, installation drawings, tube base diagrams and modular principles.

Prerequisites: T 1200 or 2201 and 1500.

T 3204 Architectural Drafting (3)

Construction details and fabrication techniques of a small residential building. Preparation of a complete set of working drawings.

Prerequisite: T 1200 or 2201.

Riegler

T 4205 Light Building Design (3)

A comprehensive study of the planning and design of residence or small, single-story commercial buildings. Preparation of a complete set of working plans and specifications.

Prerequisites: T 2201 and 3204.

Riegler

T 4206 Technical Illustration (3)

Pictorial reproduction with emphasis on the characteristics of axonometric and perspective projection.

Prerequisite: T 3200.

T 4207 Design Delineation (3)

Rendering techniques and methods as related to design delineations with an emphasis on industrial practices.

Prerequisite: T 4206.

T 4210 Design Application (3)

Application of basic design principles in the construction of a series of three-dimensional forms.

Prerequisite: T 3200.

CONSTRUCTION**T 1300 Elements of Construction (3)**

Designed to give a broad view of construction technology as related to building and production. Hands on experience as well as technical aspects of the area covered.

Peterson

T 2301 Woodworking (3)

Course provides for a study of wood as a material and how it can be transformed into an object of utility and beauty through hand and power tools. In addition to developing skills, techniques, safety and use and maintenance of hand and power tools, experience in joining and shaping wood and in using finishes is provided.

Peterson

T 2302 Furniture Construction (3)

Course is designed to provide the student with background and knowledge of the principles of furniture design and of approved methods and procedures of furniture construction. Content includes joinery and construction techniques related to leg and rail assemblies and upholstery fundamentals. Emphasis placed on the construction of period furniture and incorporated into individual design problems.

Prerequisite: T 2301.

T 3303 Carpentry and Building Construction (3)

Designed to give students knowledge of purchasing, plans and specifications, foundation, framing, finishing and estimating of residential buildings. Practical experiences in the use of tools, materials and methods of construction gained through the building of a small frame building.

T 4304 Contemporary Trends in Woodworking (3)

Exploration of latest materials and methods of fabrication with emphasis on research and experimentation. Self-direction on the part of students in selecting and solving problems is required.

Prerequisite: T 2301.

Peterson

T 4305 Cabinetmaking (3)

Joinery, finishing and machine production techniques related to cabinet construction including drawers and guide systems, framed panel construction, doors and the application of plastic laminates.

Prerequisite: T 2301.

Peterson

COMPUTER INTEGRATED DESIGN AND MANUFACTURING**T 1400 Elements of Manufacturing (3)**

Explores manufacturing and industrial organization as related to metal costing, sheet metal fabrication, machine operations, forging, heat treating and welding. Emphasis placed on effective laboratory practice as determined by established testing procedures.

Sladicka

T 2401 Welding Technology (3)

Development of basic welding skills and safe and intelligent operation of welding equipment. Successful completion provides opportunity for teacher certificate in areas of oxyacetylene and electric arc welding.

Sladicka

T 2402 Metal Fabrication (3)

Comprehensive understanding in the areas of sheet metal fabrication, ornamental metals, and art metal with emphasis placed on design, development of advanced skills, techniques, and procedures.

Prerequisites: T 1400 and 2401.

Sladicka

T 2410 Materials and Processes I (3)

A study of the properties and characteristics of industrial materials, the technology of joining processes, and the application of robotics to fabrication.

T 2420 Materials and Processes II (3)

A study of industrial casting, forging, forming, and molding processes. Emphasis is placed on evaluating the cost effectiveness of competing manufacturing processes related to industrial materials.

Prerequisite: T 2410.

T 3403 Foundry: Theory and Practices (3)

Emphasizes experience in a variety of industrial metal casting techniques including sandmolds, investment castings, full molds, shell molds, and other molding processes.

Prerequisites: T 1400 or permission of instructor.

Sladicka

T 3410 Computer Aided Manufacturing/Computer Numerical Programming (3)

Programming related to point-to-point and continuous path machining, tape systems, computer numerical control systems, setup and operations addressed.

Prerequisite: CpS 1031 or T 3102.

T 3920 Introduction to Nondestructive Testing (3)

Covers the principles and practices of radiography, ultrasonics, magnetic particle, liquid penetrant, eddy current and visual inspection as well as other special techniques of importance or promise. Classroom lectures and demonstrations supplemented by hands-on student laboratory exercises for reinforcement of the understanding of the basic principles.

T 3430 Introduction to Computer Aided Design/Computer Aided Manufacturing (3)

Comprehensive introduction to a high level language and software development for CAC/CAM systems, methods and applications. Emphasis on language use in automating the design and manufacturing processes and implementing the CAD and DAM systems into planning, costing, database design, productivity, measurement standards, design and automated production.

Prerequisite: T 3410.

T 3441 Metalsmithing: Cold Forming (3)
Emphasizes cold forming processes in the development of hand wrought metal objects. Techniques include cutting operations, joining operations, enameling, cold forming operations and surface texture-finishes.

T 4410 Inspection of Fabricated Structures (3)

An understanding of weld defects and their causes and the responsibilities of welding inspectors in evaluating such defects according to existing standards and codes. Prepares student for American Welding Society Certification Examination for Welding Inspectors.
Prerequisites: T 2401, 4408 or approval of instructor.
Goodman

T 4440 Robotics and Nontraditional Manufacturing (3)

A comprehensive introduction to methods and applications of Robotics, some of the nontraditional manufacturing processes and computerized production management systems. Emphasis is placed on the interaction of robots, turning and machining centers, nontraditional manufacturing processes (such as Electrical Discharge Machining, Laser Machining, Electrochemical Machining, etc.) and computer integrated production management systems with CNC/DNC as well as CAD/CAM systems. Students are gradually introduced to a Computer Integrated Manufacturing Systems environment.
Prerequisite: T 4415 or equivalent.

T 4441 Metalsmithing: Hot Forming (3)

Stresses hot forming processes in the development of hand wrought and cast metal objects. Techniques include blacksmithing, art metal casting, heat treating, hot forming operations, oxyacetylene welding and surface embellishment.

T 3404 Machine Metals (3)

A comprehensive study of machine tool operations and setups including aspects of quality control and use of industrial measuring instruments.
Prerequisite: T 1400.
Sladicka

T 4405 Products Manufacturing (3)

Simulation of industrial production, taught in conjunction with Machine Drafting and Design, with emphasis on the manufacture of a metal product.
Prerequisite: T 1400.
Sladicka

T 4406 Non Ferrous-Metallurgy (3)

Understanding of the properties of metals, methods of extracting and refining, the formulation of alloys, and the application of the appropriate metals for current technological purposes.

T 4407 Ferrous Metallurgy (3)

Designed to provide the student with a comprehensive understanding of the physical properties, metallurgy and application of steels. Current commercial heat treating, joining and forming practices discussed as they

relate to practical and economic uses.
Prerequisite: T 4406 or permission of instructor.

T 4408 Modern Metal Joining Processes (3)

The student is provided with an understanding of new joining processes, their economics, problems and applications in specific industries and situations. Review of pre-1940 processes included, updating them to current usage.
Prerequisite: T 2401.

T 4409 Commercial Aspects of the Metals Industry (3)

Comprehensive examination of all phases of the metals and metals joining industry as it presently exists in local, national and international market places.
Prerequisite: Senior level status or permission of instructor.

T 4415 Computer Aided Manufacturing/Computer Numerical Control Programming, APT (3)

Computer programming related to numerical control. Study Automatically Programmed Tools (APT); function and operation of controls; post processors and selected software systems. The course is continuation of T 3430.
Prerequisite: T 3430.

T 4420 Industrial Radiography (3)

Covers the principles and practices of the safe use of X and gamma radiation in the radiography of various industrial products and materials. Covers the principles of generation of X radiation and the propagation, absorption and scattering of radiation as effected by distance, material media and radiation energy. Equipment covered includes sources, film and film holders, film development apparatus, film densitometers, viewers and radiation safety monitors. Techniques covered include setting up for exposure, film processing and radiograph interpretation. Classroom lectures and discussions are supplemented by simple, hands-on laboratory exercises. Meets the requirements for ASNT TC 1a Level II training and final examination acceptable for general examination requirement for ASNT Level II certification. Also serves as preparation for ASNT Level III general examination.
Prerequisite: T 3420 or permission of instructor.

T 4421 Computer Integrated Production and Inventory Control I (3)

This course is the first of two courses that presents a comprehensive introduction to *Computer Integrated Production and Inventory Control Principles, Techniques and Systems*. Students will be introduced to long-range planning, forecasting, master production scheduling, material requirements planning, and aggregate inventory management. Appropriate production and inventory planning software will be used as instructional vehicles.
Prerequisite: T 4415 or permission of instructor.

T 4430 Ultrasonic Testing I (3)

Principles and practices governing the use of ultrasonic pulse-echo and through-transmission techniques in the inspection and characterization of materials and structures. Both straight beam and angle beam contact testing emphasized. Major topics include the principles of ultrasound generation, propagation and detection, ultrasonic test equipment, ultrasonic test techniques, design and use of calibration standards. Student laboratory exercises supplement and reinforce classroom lectures and demonstrations. Certificate issued to student upon the successful completion of the course is currently found to be acceptable evidence of meeting the general requirement for Level II certification in accordance with ASNT-TC 1a recommended practices. Course also serves as preparation for ASNT Level III General Examination.

T 4431 Computer Integrated Production and Inventory Control II (3)

This is the second of two courses. Students will be introduced to capacity requirements planning, input/output analysis, shop floor control, feedback and corrective action, and planning, designing, and implementing Computer Integrated Systems for Production and Inventory Control. Appropriate shop floor control software will be used as instructional vehicles.
Prerequisites: T 4421 or permission of instructor.

ELECTRONICS

T 1500 Elements of Electronics (3)

Technology of electronics through examination of its most basic concepts and fundamentals. Laboratory units allow the student to apply learnings, conduct quantitative measurements, gain experience in using electronic test instruments, and develop ability to write effective technical reports.
Cokewood, Jahn

T 1501 Circuit Analysis I (4)

Review of electrical fundamentals and detailed analysis of circuits and circuit elements energized by steady-state and transient d-c voltage sources.
Jahn, Shahrabi

T 1502 Circuit Analysis II (4)

Principles governing the behavior of d-c circuits and components extended to consider circuits energized by alternating voltages.
Prerequisite: T 1501.
Jahn, Shahrabi

T 2500 Digital Circuit Concepts (3)

Systematic introduction in digital concepts and circuits basic to most digital systems. Logic elements, digital devices and their arrangements stressed in a generic array of systems.
Prerequisites: T 1501, T 1502.
Cokewood, Shahrabi

T 2508 Solid-State Devices (4)

A comprehensive analysis of the wide array of solid-state devices with consideration of major

applications. Physical, crystalline and biasing properties. Electrical parameters, operating characteristics and ratings. Laboratory experiences.
Prerequisite: T 1501.
Cokewood, Jahn, Shahrabi

T 3504 Circuit-Systems (3)

Designed to treat selected applications into which electron devices and circuit elements can be combined. Circuit-systems of a general nature of those found in many common applications are given special emphasis.
Prerequisites: T 1502, 2508.
Jahn

T 3508 Fundamentals of Solid State Circuit Design (3)

Basic circuit design equations, concepts and procedures applied to actual solid state circuit design problems. Bias stabilization techniques, feedback circuits, small and large signal amplifiers, motor speed controls and light dimmer circuits.
Prerequisite: T 2508.
Cokewood

T 3509 Microprocessor Theory and Application (3)

A broad based introduction to microprocessors and related topics. Special emphasis placed on interfacing practices and applications.
Prerequisite: T 2500.
Cokewood

T 4504 Measurements and Control Systems (3)

An introduction to the concepts of analog and digital control systems. Emphasis is placed on types of controls, transducer, interfacing techniques, and the dynamic response of basic control systems.

T 4506 Fabrication and Development of Electronic Devices (3)

Basic skills and information necessary for the fabrication, design, and troubleshooting of all types of electronic devices, prototypes, chassis, and racks. Content will in part be determined by particular interests and abilities of the students, who will fabricate operational models or teaching aids for their personal use.
Prerequisite: T 3504.
Cokewood

T 4508 Linear Integrated Circuits and Special Semiconductor Devices (3)

Parameters and operating characteristics of linear integrated and special semiconductor devices are analyzed and applied with circuit design and application consideration.
Prerequisites: T 1502, 2508.
Cokewood, Jahn

T 4509 Micro-Systems Applications (3)

Introduction to the equipment, transducers, circuitry, and techniques for applying microprocessors/microcomputers to practical systems. Special emphasis placed on input and output transducers, signal conditioning and time techniques.
Prerequisites: T 3509 and knowledge of BASIC language.
Cokewood

ELECTRICAL CONTRACTING TECHNOLOGY

T 2804 Construction Electricity Theory (3)

Addresses basic AC-DC electrical theory. Includes electrical measures, circuits and components as related to the Electrical Contracting Industry Laboratory instrumentations and computer-aided techniques.

T 2806 Electrical Contracting Equipment (3)

An analysis of the technical potential and function of electrical systems and equipment utilized in the Electrical Contracting Industry.
Prerequisite: T 2804.

T 2809 Electrical Code (3)

Addresses the Electrical Code as it relates to the construction responsibilities of the Electrical Contractor.
Prerequisite: T 2806.

T 2811 Interpretation of Electrical Contracting Documents (3)

A brief introduction to drafting principles will be followed by a concentrated study of the interpretation and utilization of the information contained in a comprehensive set of construction drawings and specifications. The emphasis will be placed on the electrical portion of the drawings.
Prerequisite: T 2804.

T 3831 Electrical Contracting Estimating (3)

A study of electrical contracting estimating procedures which includes systematic methods of quantity take-offs, pricing and techniques such as labor, redesign, etc.
Prerequisite: T2809.

T 3837 Advanced Estimating for the Electrical Contracting Industry (3)

The development of a computer aided estimate of a recently completed electrical installation. In addition, all components of the student prepared estimates will be analyzed with respect to the contractor prepared estimate.
Prerequisite: T 3831.

T 3845 Electrical Design (3)

Design applications and principles of wiring and electrical systems for commercial and residential dwellings.
Prerequisite: T 3831.

T 3933 Electrical and Electronic Codes (3)

Exposure to the electrical and electronic control devices and related theories which are utilized in residential, commercial and industrial electrical systems.
Prerequisites: T 2811 and MA 2411.

GRAPHICS

T 1600 Elements of Graphics (3)

Experiences in the fundamentals of letter press printing, screen process reproduction and offset lithography.

T 2601 Advanced Letterpress Reproduction (3)

Designed to provide the student with a comprehensive background of knowledge and experience in the various aspects of letter press printing.
Prerequisite: T 1600.

T 2602 Screen Process Reproduction (3)

A background in screen process printing and experiences in related photo mechanics.
Prerequisite: T 1600.

T 3603 Black and White Photo I (3)

A background in basic black and white photography with emphasis on camera operation, film processing, photographic printing and print finishing techniques.
Prerequisite: Students must have their own camera.

T 3604 Color Photography: Slides and Positive Color Prints (3)

A background in color photography with emphasis on color theory filtration, processing E-6 transparency film, and color positive printing.
Prerequisite: T 3603 or FA 3270.

T 3605 Color Photography: Printing Color Negatives (3)

Advanced color photography with emphasis on color printing. Considerations such as: exposure, the use of color enlargers, processing color photographic paper and color theory as it relates to color negative film and prints.
Prerequisite: T 3603 or FA 3270.

T 3606 Scientific Photography (3)

Emphasis on basic applications of photography in the sciences. Macro, micro, infrared and ultraviolet photography will be explored.
Prerequisite: Students must have their own appropriate camera.

T 3607 Black and White Photography II (3)

Advanced black and white photography with emphasis on the zone system, lighting techniques, advanced camera operation and advanced darkroom techniques.
Prerequisite: T 3603 or FA 3270.

T 4606 Lithographic Reproduction I (3)

Opportunity to develop skills and technical information essential to the area of offset lithography.
Prerequisite: T 2602.

T 4608-4609 Color Separation I & II (3,3)

Comprehensive understanding of the principles of color separation and its utilization in the graphic arts.
Prerequisites: T 3605, 4607.

T 4610 Printing Production Workshop I (4)

Designed to equip the students with the management skills and technical knowledge essential to the area of offset lithography. Particular emphasis is placed on the development of pre-press skills in an industry-like environment while producing actual printing jobs.
Prerequisite: T 3603.

T 4611 Printing Production Workshop II (4)

Designed to equip the students with advanced management, production and technical knowledge essential to offset lithography. Particular emphasis is placed on the development of estimating and scheduling skills while producing actual printing jobs. Prerequisite: T 4610.

POWER**T 1700 Elements of Power (3)**

A study of the technology involved in harnessing and controlling power, including its source, generation, and transmission, and its application to powered devices and vehicles.

MECHANICAL CONTRACTING**T 2805 (2905) Heating, Ventilating, Air-Conditioning and Plumbing Systems and Equipment (3)**

An analysis of the technical potential and function of mechanical systems and equipment utilized in the mechanical contracting industry.

T 2810 (2910) Interpretation of Construction Drawings and Specifications (3)

Introduction to drafting principles followed by a concentrated study of the interpretation and utilization of information contained in a comprehensive set of construction drawings and specifications as required to meet the needs of middle management in the mechanical contracting industry.

T 2820 (2920) Building Piping Systems Design (3)

Design of water supply drainage and venting systems. Emphasis given to sizing and plumbing code regulations for New Jersey. Prerequisite: T 2810.

T 3830 (3930) Estimating for the Mechanical Contracting Industry (3)

Mechanical contracting estimating procedures including systematic methods of quantity take-offs and pricing. Techniques for estimating non-material costs such as labor, redesign, etc. Prerequisites: T 2810, 2820, 3840.

T 3835 (3935) Advanced Estimating for the Mechanical Contracting Industry (3)

The development of an estimate of a recently completed mechanical installation. In addition, all components of the student-prepared estimates are analyzed with respect to the contractor-prepared estimate. Prerequisite: T 3830.

T 3840 (3940) Building Environmental Systems Design I (3)

Fundamentals of heat load calculations; basic design, types and layout of steam and hot water heating systems; mechanical ventilation and air distribution devices. Prerequisite: Mat 1052.

T 3850 (3950) Building Environmental Systems Design II (3)

Fundamentals of cooling load calculations; basic design and layout of air-conditioning systems, including duct sizing methods the various types of air-conditioning equipment. Prerequisite: T 3840.

T 3855 Control Systems for Heating, Ventilating and Air-Conditioning

Principles of conventional and innovative heating, ventilating and air-conditioning control systems which include flow, pressure, temperature and humidity controls. Prerequisite: T 3850.

T 4810 (4910) Construction Law (3)

Basic fundamental principles of industrial law including the following areas: introduction, business organizations, contracts, uniform commercial code (sales), bankruptcy and insolvency, environmental law. Prerequisite: Junior or senior standing.

T 4835 (4935) Construction Project Management (3)

Analysis of the supervision techniques and procedures used by the project supervisor as related to a typical mechanical contracting project from job start-up to job analysis in retrospect. Prerequisite: T 3830.

T 4840 (4940) Construction Finance (3)

An analysis of supervision techniques and procedures which arise in an orderly sequence from the pre-bidding state through the legal conclusion of a job as related to the mechanical contracting industry. Prerequisite: T 3830.

TECHNOLOGY**T 1901 Introduction to Industrial Technology (2)**

Survey of the nature, content and implications of careers in industrial technology. Analysis and discussion of the current critical issues of industry. Thatcher

T 2900 Preparation of Technical Documents (3)

Advanced writing in scientific and technical fields; technical reports and papers, requisition procedures, personal evaluations and other communicative experiences of value to the technically oriented person. Thatcher

T 2903 Material Science (3)

Provides an understanding of the basic properties of all materials and how these properties are related to individual and industrial decision making in today's society. Friedman

T 3900 Industrial Statistics and Quality Control (3)

Introduction to the controlling of quality through the use of statistical methods. The application of significance tests, correlation analysis, analysis of variance, principles of reliability and sampling procedures. Prerequisite: Mat 1052. Thatcher

T 3901 Plant Layout (3)

Analysis of industrial plant layout procedures from initial planning to installation and evaluation phases. Prerequisite: T 2201.

T 3902 Material Handling (3)

Principles, techniques, procedures and equipment to meet present day's needs in moving, packaging, warehousing and shipping of wide varieties of materials.

T 3903 Principles of Industrial Purchasing (3)

An overview of purchasing procedures and functions to allow middle management personnel an introductory understanding of industrial purchasing.

T 4900 Industrial Safety (3)

Basic fundamental principles of industrial accident prevention; significant, accident statistics and costs; appraising safety performances; industrial plant hazards and safeguards; fine control fundamentals.

T 4901 Advanced Industrial Safety (3)

Provides an understanding and a contrast between safety theories and today's knowledge of human behavior and motivation. Prerequisite: T 4900 or permission of instructor.

T 4902 Occupational Health Hazards—Chemical (3)

Provides an understanding of chemical health hazards encountered in the work place, their recognition, evaluation and control. Prerequisite: T 4900 or may be taken concurrently.

T 4903 Occupational Health Hazards—Physical (3)

Provides an understanding of physical health hazards (noise, radiation, heat, illumination) encountered in the work place, their recognition, evaluation and control. Prerequisite: T 4902 or permission of instructor.

T 4950 Strength of Materials (3)

Study of the principles governing the determination of the stresses and deformations of a structural member when subjected to a defined external mechanical load. Intended for use of individuals concerned with the design and analysis of structures, piping, pressure vessels, machinery and industrial and consumer products. Prerequisites: Mat 1052; Phy 2091.

T 4996, 4997, 4998, 4999 Cooperative Education in Technology (3-12)

An opportunity for students majoring in Technology or Industrial Technology to obtain supervised work experience related to their major area of specialization. Prerequisites: Sophomore standing; 2.5 average in major; completion of 12 semester hours in major specialization requirements which must include 3 semester hours of study related to the proposed work experience. Limitations on assignment: Department approval. Departmental elective for Technology Department majors.

Academic Degrees, Programs

B.A. in Early Childhood

B.A. in Education of the Hearing Impaired

B.A. in Elementary Education

B.A. in Elementary Education, *Option: Bilingual Education*

B.A. in Health and Physical Education

B.A. in Physical Education, *Option: Adult Fitness*

B.A. in Physical Education, *Option: Athletic Training*

B.A. in Physical Education, *Option: Teaching Certification*

B.A. in Urban and Outdoor Recreation

B.A. in Speech Correction

B.A. in Teacher of the Handicapped

SCHOOL OF EDUCATION**Departments, Faculty****PHYSICAL EDUCATION, RECREATION AND HEALTH**

Physical Education Faculty: Andzel, Bakker, Ball, Chaison, Errington, Palgi, Scuderi, Shiposh (Chairperson)

Recreation Faculty: Benson, Valentine

Health Faculty: Blake, Chut, Darden, Fox, Krueger, Ramoth

COMMUNICATION SCIENCE AND EDUCATIONAL SERVICES

Faculty: Andrews, Carmichael, Cohen, Cook, Hart, Larghi, Lemke, Mazurkiewicz (Chairperson), Putnam, Schuman, Schwartz, Walter

SPECIAL EDUCATION AND INDIVIDUALIZED SERVICES

Faculty: Bachkai, Barnhart, Berson, Blake, Cangelosi, Dubin, Edelstein, Fisher (Chairperson), Gaza, M. Healy, S. Healy, Heller, Jonas, LeComte, Rosenberg, Roth, Segal, Shapiro, Shulman, Terr

EARLY CHILDHOOD AND FAMILY STUDIES

Faculty: Allen, Dorsey-Gaines, Dumais, Garnett, Goodman, Handler, Kelly, Knight (Chairperson), Mahan, Searson

INSTRUCTION, CURRICULUM AND ADMINISTRATION

Faculty: Amick, Baldassini, Banich, Celso, Esposito, Fosky, Franklin, Froude, Hancock, Healy, Hennings, Kavett, Kolodiy, Lopez, Nichols, Orfan, Ortiz, Preil, Prince, Schuhmann, Tehie, Weiger (Chairperson), Welch, Williams, Willis

The Department of Communication Sciences, a composite of content in reading, library/educational media, and educational psychology focuses on the improvement of the learning process and instruction through the study and utilization of print and non-print resources.

Library/Media Courses

RESOURCES AND SERVICES

LM 1500 Locating Information in Library Resources (3)

Designed to develop research skills through the investigation and study of college and public library resources.

LM 4050, 4051, 4052 Independent Study in Library/Media (1, 2 or 3)

Opportunity for students of advanced ability to pursue in a concentrated but informal manner a specific area of study in library/media (print or audio-visual) education not available through current course offerings.

Prerequisites: Approval of coordinator and faculty member.

MEDIA/TECHNOLOGY

LM 4700 Audio-Visual Media of Instruction (3)

General principles, problems and practices involved in the selection, utilization and evaluation of audio-visual instructional media, materials, resources and experiences. The preparation of teacher-made and student-made audio-visual instructional materials. Practice in the operation and general care of audio-visual instructional materials. Practice in the operation and general care of audio-visual equipment. Exposure to newer technologies and learning systems.

LM 4701 Planning and Producing Audio-Visual Materials (3)

Laboratory experience in the preparation and production of audio-visual materials such as transparencies, graphics, simple photography (35mm slides and 8mm film), and auditory media.

Prerequisite: LM 4700.

LM 4703 Educational Television: Theory and Practice (3)

Opportunity for students to plan, produce, and evaluate instructional television programs utilizing portable and fixed studio equipment.

LM 4705 Film as an Educational Medium (3)

Development, unique impact and status of the educational motion picture. Investigation of the physical characteristics of the medium and its place in the teaching-learning process. Preview and evaluation of a variety of current releases.

FIELD EXPERIENCE

LM 4900 Library/Media Center Senior Practicum (3)

An in-depth experience doing professional level work in a school/library media center under the guidance of a cooperating, certified and experienced library/media specialist and a college supervisor. The student will participate in the administrative, educational and technical processes of the center.

Prerequisites: LM 3000, 3010, 3020, 3030, 4000.

Communication Sciences Courses

DEVELOPMENTAL COURSES

CS 0410 Developmental Reading Study Skills Laboratory (3)

Practical study techniques, adapted to individual learning styles, are demonstrated to improve learning strategies.

CS 0411 Reading Improvement (NC)

This course is designed to develop proficiency in reading with a specific emphasis on vocabulary development and comprehension skills. Demonstration of college level performance concludes a student's participation in the course. Laboratory requirement.

COLLEGE LEVEL READING AND STUDY SKILLS

CS 1501 College Reading and Study Skills (3)

Reading and learning skills are programmed to increase efficiency in these areas. Skills include speed of comprehension, areas of comprehension, vocabulary and the study skills of concentration, note-taking, time-scheduling and test-organization. Recommended as an elective for those students who seek a strong development program in learning.

CS 2500 Speed Reading (3)

Designed for students who read well but would like to increase speed and efficiency. Speed reading techniques will be demonstrated and applied to several kinds of reading material.

CS 3450 Analytic and Critical Reading (3)

Designed for the student who possesses grade appropriate vocabulary and comprehension skills and is interested in developing higher competencies in reading. Course does not meet 6 hour state certification reading requirement.

Prerequisite: Course limited to students who are *not* enrolled in developmental course.

READING EDUCATION

All of the following courses in reading education include a study of appropriate trends and techniques for teaching students from a variety of cultural backgrounds.

CS 4400 Advanced Reading Techniques: Elementary Level (3)

Knowledge about the total field of reading is broadened. Assessment of reading progress and reading in the content areas are studied. Development of specific skills in multicultural settings is emphasized.

CS 4402 Reading Disabilities (3)

Diagnostic and remedial procedures for teacher use in working more effectively with remedial readers (in a culturally diverse world). *Andrews*

CS 4405 Reading in Early Childhood Education (3)

Learning to read as related to the development of language and readiness of the young child. Materials and methods that prepare children from multiethnic backgrounds for reading and beginning reading programs. *Carmichael*

CS 4407 Reading in Content Area I (2)

Reading in the content areas, critical reading, methods and the organization of a developmental reading program.

CS 4408 Reading in Content Area II (2)

Reading in content areas with emphasis on current trends in secondary reading, the development of specific comprehension skills, and the uses of innovative techniques, materials and computer software. Prerequisites: CS 4400 or 4407.

CS 4490 Reading in Society (3)

Perspectives on the varied functions of reading in society. An exploration of the historical, political, economic and pedagogical aspects of literacy. Does not fulfill reading requirements for state certification.

CS 4497, 4498, 4499 Independent Study in Reading (1, 2 or 3)

Opportunity for students of advanced ability to pursue in a concentrated but informal manner a specific area of study in reading education not available through current course offerings. Prerequisites: Approval of coordinator and faculty member.

INTERDISCIPLINARY COURSES

The following are found in the Interdisciplinary Courses Section. (See Index.)

ID 3204 Foundations of Reading: Theory and Practice (3)

ID 4203 Foundation in Content Reading: Theory and Practice (3)

Educational Psychology Courses

EdP 3803 Educational Psychology of the Adult Learner (3)

This course examines the physical, social, psychological and educational variables that affect adult learners; included are applications of assessment techniques for adults, theories of learning and motivation, and a survey of training programs for adults. (May not be used for teacher certification programs). Prerequisite: Psy 1000.

EdP 4808 Group Dynamics II (3)

Refinement of interpersonal and group skills such as observing and recording behaviors, listening and clarifying communications. Practice in assertion and leadership. Attendance is required. Limited to seniors. Prerequisite: Group Dynamics I or permission of instructor.

EdP 4901 Programs and Strategies in Training and Development (3)

Study of model programs in training and development in business, industry and other organizations; development of skills in the design and presentation of training programs; techniques of planning, implementation and evaluation; and impact of training programs within organizations.

INTERDISCIPLINARY COURSES

The following are found in the Interdisciplinary Courses section. (See Index.)

ID 4201 Group Dynamics (3)



Chairperson: Dr. Michael Knight
B101 Ext. 2094

The career opportunities in early childhood education include teaching and working with children from infancy to eight years of age in day care infant centers, nursery schools, pre-kindergarten programs and first, second and third grades. The graduate of this program is also prepared to be a director of day care or pre-school programs or to work as a human service educator in hospitals and in the courts. Upon graduation, students are qualified for New Jersey certification as teachers of elementary education (K-8) and teachers of nursery schools. Students are required to take the Academic Profile test for diagnostic purposes prior to admission to the program.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 60

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World 3

BREADTH REQUIREMENTS 29

*Humanities (9 credits from 3 areas)
Com 1400 Speech Communication 3
FA (Performing) 3
Mus (Performing) 3
*Social/Behavioral Sciences 9 (from 3 areas)
Psy 1000 General Psychology 3
Soc 1000 Social Life and Society 3
(Selected with Advisement, Academic Major)

Physical/Biological and Physical Science 3
Bio 1000 Principles of Biology 4

*Mathematical Sciences 3
Select one Math course

Health and Physical Education 4
ID 1225 Contemporary Issues in Health 3
PEd 1101, 1103 or 1151 1

ADDITIONAL GENERAL EDUCATION REQUIREMENTS 13

Psy 2100 Child Psychology 3
FA 1700 Art History 3
General Education Electives 7

ADDITIONAL LIBERAL STUDIES 6

GE 2010 Geography of Man 3
A course in American History 3

ACADEMIC MAJOR (at least 30 hours)

PROFESSIONAL EDUCATION 30

EC 2900 Sophomore Field Experience 3
EC 3400 Junior Student Teaching Experience 2
EC 4400 Senior Student Teaching Experience 10
ED 3000 Curriculum, Instruction and the Learner 3
ED 3400 Language Arts/Reading in the Pre-School and Elementary Curriculum 3
ED 4000 Teacher and Classroom 3
ED 4100 Teaching & Learning I 3
EC 4XXX Teaching & Learning II 3

FREE ELECTIVES 2* credits

TOTAL 129

Early Childhood Courses

INTRODUCTORY

EC 1000 Developing Skills of Child Care Staff Who Work With Families (2)

A beginning course to help child care staff interact with families in productive ways.

EC 1010 Overview of Early Childhood Education for High School Students (1)

Course explores basic concepts, issues, curricula areas and career opportunities in early childhood education.

Prerequisites: Completion of high school junior year with at least a "B" average or with permission of guidance counselor.

EC 2900 Field Experience in Multicultural Early Childhood Settings (3)

An observational and analytical study of teaching and learning in multicultural urban and suburban early childhood settings; includes 10 full days of guided visits to early childhood settings.

Prerequisites: Eng 1010 and Comm 1400. Required, elective or general education option: Required of all students in Early Childhood before admission to the major.
Searson, Mahan

LANGUAGE

EC 3100 Exploring Books with Young Children (3)

An analysis of literary trends in literature for the young child. Development of proficiency in

methods of selecting literature, techniques for storytelling, and writing for young children.

Handler, Peters

EC 3110 Language Arts in Early Childhood Education (6)

Development of basic language skills—listening, speaking, reading, writing, spelling—in young children. Special emphasis on prereading and formal reading instruction in the primary grades. Included as part of junior professional semester.

Allen, Dorsey-Gaines

EC 4100 Creative Techniques for Oral Language Development (3)

Students will examine materials and practices in the use of a variety of creative teaching strategies aimed at oral language development in children. Includes analysis of creative processes, role playing, and problem solving, movement learning, improvised drama, choral speaking, and puppetry. Emphasis on practical field applications.

Prerequisite: EC 3200.
Dumais

CURRICULUM AND METHODS

EC 1200 Introduction to Early Childhood Education (3)

The first in a 15 hour sequence to qualify as a group teacher in an approved early childhood center. Emphasis is on how to observe and record the behavior of young children. The student also learns how to interpret the meaning of a child's behavior. Course requires a total of 10 hours of actual observation in the field.

Prerequisite: High school equivalency.
Dorsey-Gaines, Mahan

EC 3200 Child Development and the Early Childhood Curriculum I (6)

The first part of a twelve-semester hour sequence showing the development of the curriculum for children of the nursery, kindergarten and primary grades. New aims, approaches, methods and materials in early childhood education that have been derived from current knowledge and research in child development.

Prerequisite: Psy 2100 and one of the following: EC 1200, 3100, 3210. Certification students must take EC 3200 and EC 1200, 3100 or 3210 for a total of nine hours.
Dorsey-Gaines, Searson

EC 3210 Working with the Infant and Toddler in a Childcare Setting (3)

Exploration of infancy, birth through three years; focusing on cognitive, affective and sensorimotor growth. Seminars on campus and at infant child care centers to observe growth patterns of infants and to develop infant care curriculum.

Handler

EC 3220 An Educational View of Young Children Through Film (3)

Through viewing selected films, the student will contrast and compare child rearing practices and educational systems across

cultures. Emphasis will be on children from birth through age 8.

EC 4200 Child Development and the Early Childhood Curriculum (6)

Emphasis is on program for the primary grades; various curricular approaches; functional learning experiences for children of different ages, maturity levels, and abilities; integration of subject areas; communication with parents. Prerequisites: EC 3200—Curriculum I required of Early Childhood majors.

Knight

EC 4210 Multicultural Education in the Early Childhood Years (3)

Designed to prepare preservice and inservice professional working with young children to create educational environments which promote multicultural understandings.

Dorsey-Gaines, Dumais

STUDENT TEACHING

EC 3400 Student Teaching in Early Childhood Education I (2)

Experience in teaching in a nursery school or day care center under the guidance and direction of a cooperating teacher and college supervisor during the junior year.

Prerequisite: EC 3200.

EC 4400 Student Teaching in Early Childhood Education II (10)

Experience in teaching first, second or third grade under the guidance and direction of a cooperating teacher and a college supervisor during the senior year.

Prerequisite: EC 3400.

SEMINARS AND INDEPENDENT STUDY

EC 4500 Seminar in Early Childhood Education (3)

Designed to enable the student to develop analytical and critical insights in the practical application of theory of teaching based upon experiences. Opportunity is provided to discuss students' concerns, the teacher as professional with children, colleagues, administrators, parents and community in a multicultural world.

Knight, Searson

EC 4510 Independent Study in Early Childhood Education (3)

This senior study is designed to extend knowledge, attitudes, and skills through individual experience and interpretation in the field of early childhood education. Methods of inquiry are examined as a prelude to independent study.

Prerequisites: EC 3110, 3200 and instructor's approval.

FAMILY STUDIES

EC 3610 Child Advocacy: Implications for Helping Practitioners (3)

To help practitioners understand issues, area of advocacy, and intervention techniques directed toward services and institutions that affect the lives of children, birth through nine



years, in a multi-cultural society.
Handler, Kelly, Mahan

EC 3620 Hospitalization and the Child (2)

Opportunities to develop and demonstrate one's ability to work in a hospital playroom setting. A minimum of twenty hours will be spent in that particular setting.

Prerequisites: Psy 2100, 2110.

EC 3630 Instituting a Child Life Program in a Hospital Playroom (3)

Understanding the mechanics involved in formulating and instituting a child life program through at least twenty hours of practical experience in a hospital playroom.

Prerequisites: Psy 2100, 2110, and EC 3620.

EC 4325 Practicum: Educational Implications for Serving Families (6)

Practicum in a specific human service organization such as: day care, library, museum, legal center, hospital ward, clinic, or

youth service bureau with concurrent seminar to develop skills in helping families actualize their educative understandings and abilities. Prerequisites: Junior or senior standing and enrollment in Family Studies Collateral. Soc 2100, EC 3800, 3610 and joint advisement by instructor and major departmental advisor. (This is of special importance to social work students for whom certain requirements will be waived because they have been met by social work courses.)
Kelly, Mahan

INTERDISCIPLINARY COURSES

The following courses are found under Interdisciplinary Courses. (See Index.)

ID 3202 Understanding Parenthood (3)

ID 4240 Understanding Family and Community Involvement in Education (3)

Chairperson: Dr. Myra Weiger
W105D Ext. 2175

Students wishing to teach children from kindergarten through the eighth grade may choose a career in elementary education. Successful completion of the program will qualify the student for New Jersey certification (K-8).

The student majoring in elementary education must choose an academic major listed in the college catalogue as an academic sequence.

REQUIREMENTS FOR ADMISSION TO B.A. ELEMENTARY EDUCATION (ALL OPTIONS)

Students are required to complete ICA 2800 and achieve a 2.5 G.P.A. and a "C" or better in STM 1900, Eng 1020 and a college-level math course prior to acceptance into the program.

Students are also required to take the Academic Profile Test for diagnostic purposes.

BILINGUAL OPTION

Students wishing to teach children whose native language is other than English may choose the bilingual option. Those successfully completing this program are granted New Jersey teacher certification in elementary education (K-8), and will have coursework towards bilingual/multi-cultural endorsement. The students in the bilingual option may choose any academic major in the catalog. An additional admission requirement to this program is competency in both languages of instruction, usually Spanish and English, as measured by the Language Proficiency Test administered by the Center for Bilingual Education at the college. Deficiencies in either language may be corrected through individual prescribed coursework.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 66

CORE REQUIREMENTS 18
Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual & Cultural Traditions 3
GE 2020 Inquiry & Research 3
Eng 2203 World Literature 3
GE 2400 Science & Technology in Modern World 3

BREADTH REQUIREMENTS 49

*English/Humanities 9
**Comm 1400 Speech 3
**AH 1700 Art History I Music 3

*Sociology/Behavioral Sciences 9
Psy 1000 General Psychology 3
Soc 1000 Social Life & Society or Ant 1800 Cultural Anthropology 3
**History: 3
**United States History 3

*Physical/Biological Sciences 4
**Bio 1000 Principles of Biology 4

*Mathematical Science (not including computer science) 3

Health & Physical Education 4
ID 1225 Issues/Values Contemporary Health 3

One of the following 1
PED 1101 Beginning Modern Dance 3
PED 1103 Beginning Jazz Dance 3
PED 1151 Fold & Square Dance 3

Additional Cognates 6

**Psy 2100 Child Psychology 3
**GE 2010 Geography of Man 3

Electives from any one of the above starred (*)
General Education areas: 13

ACADEMIC MAJOR 30

An academic major in a liberal arts area as outlined in the Kean catalog.

PROFESSIONAL EDUCATION 30

Sophomore Level
ICA 2800 Introduction to Field Experience in Elementary School 3

Junior Level
ICA 3800 Field Experience in Elementary School 2

ED 3400 Language Arts/Reading in the Pre-School & Elementary Curriculum 3

ED 3000 Curriculum, Evaluation & the Learner 3

ED 4000 Teacher and Classroom Education 3

ICA 3xxx Mathematics and Science in Education 3

ICA 3xxx Social Studies and Human Living Issues in Education 3

Senior Level
ICA 4801 Professional Internship Elementary Teaching & Curriculum 10

ELECTIVES 2

TOTAL 129

**B.A. Degree
Option: Bilingual Education**

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 66

CORE REQUIREMENTS 18
Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual & Cultural Traditions 3
GE 2020 Inquiry and Resources 3
Eng 2203 World Literature 3
GE 2400 Science & Technology in Modern World 3

BREADTH REQUIREMENTS 49

*English/Humanities 9
**Comm 1400 Speech 3
**AH 1700 Art History I Music 3

*Sociology/Behavioral Sciences 9
Psy 1000 General Psychology 3
Soc 1000 Social Life & Society or Ant 1800 Cultural Anthropology 3
**History: 3
United States History 3

*Physical/Biological Sciences 4
**Bio 1000 Principles of Biology 4

*Mathematical Science (not including computer science) 3

Health & Physical Education 4
ID 1225 Issues/Values Contemporary Health 3

One of the following: 1
PEd 1101 Beginning Modern Dance 3
PEd 1103 Beginning Jazz Dance 3
PEd 1151 Folk & Square Dance 3

ADDITIONAL COGNATES 6

**Psy 2100 Child Psychology 3
**GE 2010 Geography of Man 3

Electives from any one of the above starred (*)
General Education areas: 13

ACADEMIC MAJOR 30

An academic major in a liberal arts area as outlined in the Kean catalog

PROFESSIONAL EDUCATION 30

Sophomore Level
ICA 2800 Introduction to Field Experience in Elementary School 3

Junior Level
ICA 3800 Field Experience in Elementary School 2

ED 3400 Language Arts/Reading in the Pre-School & Elementary Curriculum 3

ED 3000 Curriculum, Evaluation & the Learner 3

ED 4000 Teacher and Classroom Education 3

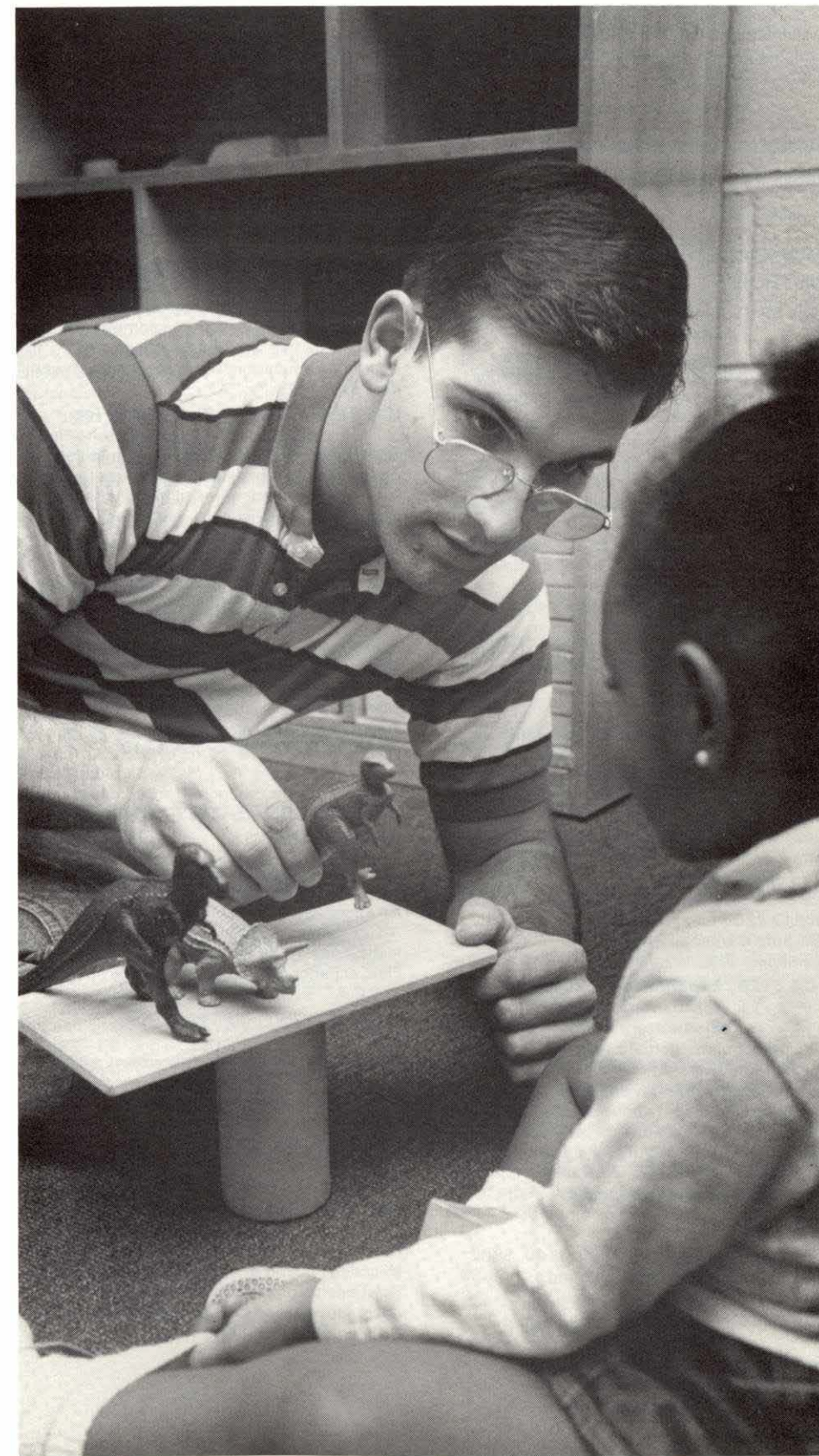
ICA 3xxx Mathematics and Science in Education 3

ICA 4440/ID 3251 Introduction to Bilingual Education 3

Senior Level
ICA 4801 Professional Internship, Elementary Teaching & Curriculum 10

ELECTIVES 2

TOTAL 129



The Department of Instruction, Curriculum and Administration offers a variety of programs in both Elementary Education and Instruction in Subject Areas K-12.

**Instruction, Curriculum,
and Administration
Courses**

**ELEMENTARY CURRICULUM AND
METHODS**

**ICA 3610 Elementary Curriculum and
Methodology (3)**

Elementary school objectives, practices, curriculum patterns and planning techniques. (Not open to elementary education students entering after 9/83.)
Prerequisite: None.

Prince

**ICA 3102 Science and Mathematics for
Special Populations (3)**

Adaptation of regular curriculum materials in science and mathematics, for use with handicapped populations. Use of special education materials in content areas. Developmental levels in content areas.
Prerequisites: At least one course in elementary college mathematics, one course in college laboratory science, and one course in special education.

Kolodiy

**ICA 3110 Experiences in Teaching
Language Arts in the
Elementary School (3)**

Study of the teaching of literature, linguistics, written expression, cursive and manuscript writing, listening, and speaking with some attention to ways of integrating music into the elementary program.

Corequisites: ICA 3800, 3120, 3130, 3140 and ID 3204 must be taken concurrently by full-time elementary majors.

Hennings, Ortiz, Weiger

**ICA 3120 Experiences in Teaching
Mathematics in the
Elementary School (3)**

The nature of mathematics and its implication for teaching. Exploration into teaching techniques, the use of visual and manipulative materials, learning theories as they pertain to mathematics education and current elementary school mathematics programs.
Prerequisites: At least one course in elementary college mathematics or Mat 1013 or 1016 and demonstrated competence in arithmetic.

Corequisites: ICA 3110, 3130, 3140, 3800 and ID 3204 for students entering as of 9/83.

Kavett, Kolodiy, Orfan

**ICA 4440 Foundations of Bilingual
Education (3)**

Examination of the history, legislation and concepts of bilingual education throughout the nation and neighboring countries.

**ICA 3121 Experiences in Geometry in
Elementary School
Mathematics (3)**

Examination of the role of geometry in the elementary school mathematics program through an experiential and reflective approach. Active participation in exploratory classroom experiences to familiarize students with basic geometric concepts and their application to contemporary mathematics problems.

Kavett, Orfan

ICA 3122 Computers in Education (3)

Introductory experience in using the computer, learning computer languages appropriate in educational settings, learning computer applications in educational settings, and examining educational hardware and software.

Kolodiy

**ICA 3410 Teaching Techniques for
Bilingual-Bicultural Schools (3)**

Examination and evaluation of alternative pedagogical methods and techniques for use in teaching content areas to bilingual-bicultural students in a multicultural-multiethnic environment.

Baldassini, Lopez, Ortiz

**ICA 4410 Language and Reading Skills in
Bilingual/Multicultural Schools
(3)**

Analysis of first and second language acquisition and development emphasizing techniques of helping bilingual-bicultural students develop language and reading skills in two languages.

Prerequisite: ID 3251 or ICA 4440.

Lopez, Ortiz

**INDEPENDENT STUDY, SERVICE
PROGRAMS**

**ICA 3900 Education and Community
Institution: S.C.A.T.E. (3)**

An invitation to students to consider the nature, aims and methods of community institutions in the education of our citizens. Field experience arranged under the auspices of S.C.A.T.E., *Student Committee for Advancement Through Education*.

Welch

**ICA 3901 Student Involvement and
Educational Governance (3)**

A formal introduction to prevalent issues in higher education and other educational institutions. Weekend seminar off-campus, participation in college community or community service.

**ICA 3902 Student Participation in
College Governance (3)**

Student participation in group decision-making by college governance or advisory committees. Relationship of such actions to the total governance of the College and the New Jersey Division of Higher Education.

**ICA 4910 Independent Study in
Instruction, Curriculum and
Administration (1-6)**

Intensive study in area of elementary and/or secondary education or educational foundations, carried on individually under guidance of a faculty member in education. Open only to seniors enrolled in elementary and secondary education programs with permission of instructor or department chairperson.

**INSTRUCTION IN SUBJECT
AREAS—EMPHASIS, GRADES 7-12**

These courses do not meet elementary education major requirements.

**ICA 4210 English Curriculum and
Methodology (4)**

Application of philosophy and process of English to curriculum development; overview of modern English curriculum (K-12). The production of instructional materials to be utilized in the classroom.

Prerequisite: ICA 3210 and ICA 3803.

Corequisite: ICA 4802.

Weiger

**ICA 4220 Mathematics Curriculum and
Methodology (4)**

Philosophy and techniques of teaching mathematics in the public school. Overview of mathematics curriculum K-12. Impact of computers. Production and critique of classroom instructional materials, with emphasis on grades 7-12.

Prerequisites: ICA 3220 and ICA 3803.

Corequisite: ICA 4802.

Kavett

**ICA 4230 Science Curriculum and
Methodology (4)**

Application of philosophy and process of science to curriculum development; overview of modern science curriculum (K-12). Production of instructional materials to be utilized in the classroom.

Prerequisites: ICA 3230 and ICA 3803.

Corequisite: ICA 4802.

Kolodiy

**ICA 4240 Social Studies Curriculum and
Methodology (4)**

Application of philosophy and process of social studies to curriculum development; overview of modern social studies curriculum (Grades K-12). The production of instructional materials to be utilized in the classroom.

Prerequisites: ICA 3240 and ICA 3803.

Corequisite: ICA 4802.

Froude

**ICA 4250 Foreign Language Curriculum
and Methodology (4)**

Application of foreign language curriculum in grades K-12. Techniques of planning for instruction and evaluation.

Prerequisites: ICA 3250 and ICA 3803.

Corequisite: ICA 4802.

Edreira, Schuhmann

K-12 CURRICULUM AND METHODS

**ICA 3112 Children's Literature in
Education (3)**

A critical study of children's books and their use in elementary and secondary school classrooms.

Prerequisite: English in the Elementary School, a comparable course, or permission of instructor.

Ortiz, Weiger

**ICA 3420 Theory and Practice of
Teaching English as a Second
Language I (3)**

Introduction to the linguistics method, materials and techniques of teaching English as a Second Language.

Ortiz

**ICA 3421 Theory and Practice of
Teaching English as a Second
Language II (3)**

Teaching, testing, and planning in the ESL classroom.

Prerequisite: ICA 3420.

Ortiz

ICA 4140 Teaching the Holocaust (3)

Implications of the holocaust for teaching the consequences of prejudice and racism. Emphasis on methods of teaching the holocaust to students.

Preil

FIELD EXPERIENCE

**ICA 2800 Introductory Field Experiences
in Elementary Schools (3)**

Observational and analytical study of teaching and learning in urban and suburban elementary schools that includes days of guided visits to schools K-8. Of ICA 2800 and 2801 students may take only one for credit.

Prerequisites: Eng 1020 and Comm 1400.

**ICA 2801 Introductory Field Experiences
in Subject Area Instruction
K-12 (3)**

Observational and analytical study of teaching and learning in multi-cultural urban and suburban educational settings that includes full days of guided visits to schools K-12. Of ICA 2800 and 2801 students may take only one course for credit.

Prerequisites: Eng 1020 and Comm 1400.

**ICA 3800 Field Experiences in the
Elementary School (2)**

Fifteen full days, once a week, to be spent in observing and participating in an elementary classroom. Course must be taken by elementary education majors concurrently with ICA 3110, 3120, 3130, 3140 and ID 3204.

Prerequisite: ICA 2800.

**ICA 3803 Field Experiences in
Instruction in Subject Areas
K-12 (2)**

Fifteen full days, or thirty half days, spent in observing and participating in a middle school or high school classroom with focus on goals and objectives, planning and teaching techniques, and curriculum patterns in the student's subject area of specialization.

Prerequisite: ICA 2801.

Corequisite: Junior methods course in subject area of instruction ICA 3210, 3220, 3230, 3240, or 3250.

**ICA 4801 Professional Internship in
Elementary Teaching and
Curriculum (10)**

A full semester, full-time, supervised teaching experience in elementary classrooms, with opportunity to observe the work of specialists in physical education, health, art, music, speech and reading.

Prerequisites: ICA 2800, 3800, 3110, 3120, 3130, 3140, and ID 3204.

**ICA 4802 Professional Internship for
Subject Area Teachers, K-12
(10)**

A full semester, full-time, supervised teaching experience in English, foreign language, mathematics, science or social studies. Prerequisites: ICA 2801, 3803, and one of the following: ICA 3210, 3220, 3230, 3240, or 3250.

Corequisites: ICA 4210 or 4220 or 4230 or 4240 or 4250.

**ICA 4804 Field Experiences in a
Bilingual/Multicultural Setting
(3)**

Individualized projects carried out by means of observations and visits to schools and community agencies that function in a bilingual setting and serve a bilingual population, as well as the sharing and analysis of the results and ideas culled from these experiences, during class meetings. Those teaching at the time of enrollment in this course will use their own schools and communities as the basis for their observations. For those not teaching, access to and observation of schools and agencies will be arranged.

Baldassini

FOUNDATIONS

**ICA 4020 Historical Perspectives in
American Education (3)**

Examination of the impact of humanistic thought and cultural pluralism in the formation of educational policy.

Franklin

**ICA 4021 Philosophical Perspectives of
Education in a Pluralistic
Society (3)**

Examination of the educational implications of life and work in a culturally diverse society.

Healy, Welch

**ICA 4022 Education and Social Change
(3)**

Examination of the forces which shape and are modified by the educational process. Discovery of the ways this happens. Where appropriate, applications for the improvement of the educational process.

Welch

**ICA 4025 Social Psychological Issues
and the American Teacher (3)**

Involvement of prospective teachers and citizens in discussions of major social issues facing the nation. Values and attitudes questioned, compared and examined for their effect on classroom teaching and interpersonal relationships.

Chairperson: Dr. Dolores Shiposh
D130A Ext. 2101

Graduates of this major will be prepared to teach health and physical education from kindergarten through the twelfth grade, develop and organize intramural programs, and provide effective coaching in interscholastic athletics.

A 2.5 cumulative grade point average (GPA) is required for admission into the program. See Physical Education Major Handbook for additional requirements and information for Option: Teacher Certification.

**B.A. Degree
Health and Physical
Education**

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 60

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World 3

BREADTH REQUIREMENTS 29

**Humanities (9 credits from three areas)*
Comm 1400 Speech Communication 3
**Social/Behavioral Sciences 9 (from 3 areas)*
Psy 1000 General Psychology 3
Soc 1000 Social Life & Society 3
Select one course from:
Economics or Geography
History
Political Science

**Biological and Physical Sciences 4*
Bio 1000 Principles of Biology
**Mathematical Sciences 3*
Select one Mat course (not including Computer Science)

Health and Physical Education 4
ID 1225 Contemporary Issues in Health 3
PEd 1151 Folk & Square Dance 1

Additional General Education Requirements 13
Psy 2100 Child Psychology 3
Bio 2402 Human Physiology & Anatomy 4
Electives from * areas 6

ACADEMIC MAJOR 43

PEd 1500 Introduction to Motor Learning 3
PEd 4605 Evaluation Physical Education 3
PEd 2500 Introduction to Biomechanics 3
PEd 3505 Kinesiology 3
PEd 3310 Physiology of Exercise 3
PEd 4600 Adapted Physical Education 2
PEd 4610 Org/Adm Physical Education 3
HEd 3231 First Aid 3

Three HED Courses 9
HED 2600, 3160, 3230, 3400, 3600, 3635, 3725, 4333, 4434, 4650

MOVEMENT FORMS 11

Dance—select one s.h.:
P.Ed. 1101, 1103, 2101, 2102

Gymnastics—select one
P.Ed. 1045, 1047, 2048

Team Sports—select three
P.Ed. 1010, 1030, 1035, 1055, 1065, 1070, 1075, 1095, 2010, 2030, 2035, 2065, 2095

Individual Sports—select three
P.Ed. 1000, 1005, 1015, 1020, 1025, 1040, 1080, 1081, 1088, 1091, 1092, 1098, 1130, 2000, 2025, 2040, 2082, 2083, 2084, 2088

Option
Select any three from above
Movement Form Categories

PROFESSIONAL EDUCATION 30

PEd 2800 Pre-Professional Field Experience 3
PEd 3610 Curriculum/Program: Elementary PEd 3
PEd 3611 Curriculum/Program: Secondary Adult Fitness 3
PEd 3690 Junior Field Experience: Elementary 1
PEd 3691 Junior Field Experience: Secondary 1
PEd 4690 Student Teaching 10
ED 3000 Curriculum Instruction, Evaluation & Learner 3
Ed 3401 Language Arts/Reading K-12 Subject Area Teaching 3
Ed 4000 Teacher & Classroom 3

TOTAL 134

Minor

REQUIRED COURSES 19

ID 1225 Critical Issues, Values of Contemporary Health 3
HEd 3231 First Aid and Accident Prevention 3
HEd 3537 School and Community Health Program 3
Bio 2409 Essentials of Human Physiology/Anatomy 4

Electives: 6
two courses in health education selected with advisement

The major in physical education provides for professional preparation in three areas of specialization: adult fitness, athletic training, and teaching certification. Students selecting the adult fitness positions in business and industry. Students selecting the athletic training option would be prepared for NATA certification examinations and would then be qualified athletic trainers. Students selecting the teaching option would be qualified to teach grades K-12. One of the teaching options is for physical education only; the other is for health and physical education. A 2.5 cumulative grade point average (GPA) is required for admission into the major. For other admission requirements refer to the Physical Education Majors' Handbook.

**B.A. Degree
Option: Adult Fitness**

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 57

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 39

**English/Humanities 9*
(From at least 2 disciplines)
Comm 1400 Speech Communications 3

**Social/Behavioral Sciences 9*
Psy 1000 General Psychology 3
Soc 1000 Social Life and Society 3
Select one course from:
Economics or Geography
History
Political Science

**Physical and Biological Sciences 4*
Bio 1000 Principles of Biology

**Mathematical Sciences (not including computer science) 3*

**Health and Physical Education 4*
ID 1225 Contemporary Issues in Health 3
PEd 1151 Folk and Square Dance 1

**Additional Required Cognate 7*
Bio 2402 Human Physiology and Anatomy 4
Psy 3120 Adult Psychology 3

COGNATES 3

Select courses from any of the previous starred (*) areas

MAJOR REQUIREMENTS 59

PEd 1200 Introduction to Motor Learning 3
MgS 2030 Business Organization and Management 3
PEd 2500 Introduction to Biomechanics 3
PEd 2800 Physical Education Pre-Professional Field Experience 3
HEd 3231 First Aid and Accident Prevention 3
PEd 3500 Care and Prevention of Athletic Injuries 3
PEd 3505 Kinesiology 3
PEd 3510 Physiology of Exercise 3
HEd 3600 Nutrition 3
PEd 3611 Curriculum/Program: Secondary/Adult Fitness 3
PEd 4605 Evaluation in Physical Education 3
HEd 4231 First Aid Instructor 3
PEd 4600 Adapted Physical Education 2
PEd 4625 Organization and Administration of Adult Fitness Programs 3
PEd 4626 Prescriptive Exercise Programs 3
PEd 4627 Adult Fitness Internship 3
PEd 3692 Junior Field Experience: Fitness 1

MOVEMENT FORMS 11

Dance—select one:
PEd 1101, 1103, 2101, 2102

Gymnastics—select one:
PEd 1045, 1047, 2048

Team Sports—select three:
PEd 1010, 1030, 1035, 1055, 1065, 1070, 1075, 1095, 2010, 2030, 2035, 2065, 2095

Individual Sports—select three:
PEd 1000, 1005, 1015, 1020, 1025, 1040, 1080, 1081, 1088, 1091, 1092, 1098, 1130, 2000, 2025, 2040, 2082, 2083, 2084, 2088

Option
Select any three from above Movement Form Categories

FREE ELECTIVES 12

TOTAL 129

**B.A. Degree
Option: Athletic Training**

Chairperson: Dr. Dolores Shiposh
D130A Ext. 2101

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 57

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 39

**English/Humanities 9*
(From at least 2 disciplines)
Comm 1400 Speech Communications 3

**Social/Behavioral Sciences 9*
Psy 1000 General Psychology 3
Soc 1000 Social Life and Society 3
Select one course from:
Economics or Geography
History
Political Science

**Physical and Biological Sciences 4*
Bio 1000 Principles of Biology 4

**Mathematical Sciences (not including computer science) 3*

**Health and Physical Education 4*
ID 1225 Contemporary Issues in Health 3
PEd 1151 Folk and Square Dance 1

Additional Required Cognate 7
Bio 2402 Human Physiology and Anatomy 4
Psy 2100 Child Psychology 3

Cognates
Select course from any of the previous starred (*) areas 3

MAJOR REQUIREMENTS 62-65

PEd 1500 Introduction to Motor Learning 3
PEd 2500 Introduction to Biomechanics 3
PEd 2800 Physical Education Pre-Professional Field Experience 3
HEd 3231 First Aid and Accident Prevention 3
Bio 3405 Gross Anatomy 4
PEd 3500 Care and Prevention of Athletic Injuries 3
PEd 3501 Advanced Athletic Training 3
PEd 3502 Clinical Experience in Athletic Training I 3
PEd 3503 Clinical Experience in Athletic Training II 3
PEd 3504 Therapeutic Modalities and Rehabilitation 3
PEd 3505 Kinesiology 3
PEd 3510 Physiology of Exercise 3
HEd 3600 Nutrition 3
PEd 4605 Evaluation of Physical Education 3
HEd 4231 First Aid Instructor 3
PEd 4600 Adapted Physical Education One of the following: 3
Psy 2100 Child Psychology**
Psy 2110 Psychology of Adolescence
Psy 3630 Social Psychology
Psy 4360 Physiological Psychology One of the following: 3
HEd 3537 School and Community HED Programs
HEd 4650 Community Health Counseling

MOVEMENT FORMS 11

Dance—select one:
PEd 1101, 1103, 2101, 2102

Gymnastics—select one:
PEd 1045, 1047, 2048

Team Sports—select three:
PEd 1010, 1030, 1035, 1055, 1065, 1070, 1075, 1095, 2010, 2030, 2035, 2065, 2095

Individual Sports—select three:
PEd 1000, 1005, 1015, 1020, 1025, 1040, 1080, 1081, 1088, 1091, 1092, 1098, 1130, 2000, 2025, 2040, 2082, 2083, 2084, 2088

Option
Select any three from above Movement Form Categories

FREE ELECTIVES 6-9

TOTAL 129

**B.A. Degree
Option: Teaching
Certification**

*Chairperson: Dr. Dolores Shiposh
D130A Ext. 2101*

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 60

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 29

**Humanities 9*
(from three areas)
Comm 1400 Speech Communication 3
**Social/Behavioral Sciences 9*
(from three areas)
Psy 1000 General Psychology 3
Soc 1000 Social Life and Society 3
Select one course from:
Economics or Geography 3
History
Political Science
**Physical and Biological Sciences 4*
Bio 1000 Principles of Biology

**Mathematical Sciences 3*
Select one Mat course (not including Computer Science)

Health and Physical Education 4

ID 1225 Contemporary Issues in Health 3
PEd 1151 Folk and Square Dance 1

**Additional General Education Requirements 13*

Psy 2100 Child Psychology 3
Bio 2402 Human Physiology and Anatomy 4

General Education Elective 6

PROFESSIONAL EDUCATION 30

PEd 2800 Pre-Professional Field Experience 3
PEd 3610 Curriculum/Program: Elementary PED 3
PEd 3611 Curriculum/Program: Secondary/Adult Fitness 3
PEd 3690 Junior Field Experience: Elementary 1
PEd 3691 Junior Field Experience: Secondary 1
PEd 4690 Student Teaching 10
ED 3000 Curriculum Instruction, Evaluation and Learner 3
ED 3401 Language Arts/Reading K-12 Subject Area Teaching 3
ED 4000 Teacher and Classroom 3

ACADEMIC MAJOR 37

PEd 1500 Introduction to Motor Learning 3
PEd 4605 Evaluation of Physical Education 3
PEd 2500 Introduction to Biomechanics 3
PEd 3505 Kinesiology 3
PEd 3310 Physiology of Exercise 3
PEd 4600 Adapted Physical Education 2
PEd 4610 Organization/Administration of Physical Education 3
HEd 3231 First Aid 3
Select one course: 3
HEd 3600 Nutrition 3
PEd 3500 Care and Prevention of Athletic Injuries 3
PEd 3515 Wellness 3
PEd Movement Forms 11

MOVEMENT FORMS 11

Dance—select one:
PEd 1101, 1103, 2101, 2102
Gymnastics—select one:
PEd 1045, 1047, 2048

Team Sports—select three:
PEd 1010, 1030, 1035, 1055, 1065, 1070, 1075, 1095, 2010, 2030, 2035, 2065, 2095

Individual Sports—select three:
PEd 1000, 1005, 1015, 1020, 1025, 1040, 1080, 1081, 1088, 1091, 1092, 1098, 1130, 2000, 2025, 2040, 2082, 2083, 2084, 2088

Option
Select any three from above Movement Form Categories

TOTAL 128

Health Education Courses

HEd 3150 Personal Health Maintenance (3)

Designed to prepare students to become active consumer health participants in the maintenance and promotion of their own and their family's health. Special supplies needed will not exceed \$10.

HEd 3160 Health Perspectives for Women (3)

An examination of the unique psychological, sociological, physical and sexual aspects of feminine health. Attention will be directed toward the development of consumer awareness necessary for interaction with the health care system.

HEd 4100 Independent Study in Health Education (1-3)

Intensive study in an area of health education implemented by the student under the guidance of a health education member in the department of Physical Education, Recreation, and Health. Open only to students with permission of the instructor and department chairperson to complete a specific need not available in currently offered established courses.

**This is the only course which fulfills the General Education Health Education requirement. (See Interdisciplinary Listings).*

FIRST AID, SAFETY, ACCIDENT PREVENTION

HEd 3230 Perspectives in Safety (3)

An in-depth study of the basic fundamentals of safety. Study will deal with school fire, auto and industrial safety.

HEd 3231 First Aid and Accident Prevention (3)

Theory and practice of First Aid and Cardiopulmonary Resuscitation and study of accident prevention procedures including non-swimming watersafety skills. Upon successful completion of this course, the student is eligible to receive the American Red Cross certification in Standard First Aid and Personal Safety and certification for CPR—(Cardiopulmonary Resuscitation)—Basic Life Support.
Blake

HEd 4231 First Aid Instructor Course (3)

Essential information and curriculum development required by American Red Cross for certification as an instructor of Standard First Aid and Personal Safety and Cardiopulmonary Resuscitation Basic Life Support.
Prerequisite: HEd 3231 or permission of instructor.
Blake

PSYCHOLOGICAL

HEd 3300 Community Mental Health (3)

A study of personality development and human adjustment with an examination of treatment procedures and prevention programs.

HEd 3700 (3325) Basic Concepts and Issues in Gerontology (3)

An introduction to processes and problems associated with aging, including the physiological, psychological and sociological aspects of senescence.

HEd 3725 (3350) Death in Perspective (3)

The past, present and future individual and societal concepts of dying, death and bereavement, death education, and exploration of related ethical issues.
Ramoth

HEd 4775 (4275) Close Encounters of the Institutional Kind: A Gerontology Field Experience (3)

Designed to stimulate thought on the subject of providing services to the institutional elderly through an actual week-long live-in experience at a geriatric residential care facility.
Prerequisites: HEd 3700 and three other credits in gerontology or age-related study or permission of instructor.

HEd 4700 (4300) Seminar in Issues of Gerontology (3)

Allows students to pursue an in-depth investigation into a specific interest area in gerontology.
Prerequisites: HEd 3700 plus an additional minimum of 9 credits in gerontology or permission of program coordinator.

HEd 4333 Drug Use and Abuse (3)

A comprehensive course dealing with alcoholic beverages, narcotics, and other addicting and habit-forming drugs, and the effect of their usage upon the individual and society.
Ramoth

HEd 4750 (4500) Practicum in Gerontology (3)

Practicum designed to provide students of gerontology with opportunity for intensive exploration, study and experience in a gerontology setting. A minimum of 105 hours of supervised experience is required.
Prerequisites: HEd 3700 plus an additional minimum of 9 credits in gerontology or permission of program coordinator.

SEXUALITY

HEd 3400 Human Sexuality (3)

An overview of sex and sexuality in today's society, with implications for evolving male-female relationship, dating patterns, marriage and responsible parenthood.
Darden, Fox, Krueger

HEd 4434 Contemporary Sexual Issues and Values (3)

Designed to prepare teachers of human sexuality for both elementary and secondary school levels. Attention given to teaching techniques, curriculum design and program implementation.
Prerequisite: HEd 3400.
Darden

HEd 4450 Sexual Function and Dysfunction (3)

Anatomical and physiological aspects of the human reproductive system and their relation to psychosexual maturation. Effects of psychological and sociological factors upon human sexuality.
Prerequisite: HEd 3400 or 4434.
Krueger

HEd 4725 Human Sexuality in the Later Years (3)

Course provides an in-depth investigation into specific issues and knowledge of human sexuality in the later years.
Prerequisite: HEd 3400 or permission of instructor.

EDUCATION

HEd 3506 Health Education in the Elementary School (1½)

An examination of health services, school health environment, and the school health curriculum at the elementary school level. Special attention will be paid to the role of the elementary school teacher as a health educator.
Blake, Darden

HEd 3533 Methods and Materials of Health Education in Elementary and Secondary Schools (3)

Knowledge, methods, skills, curriculum content and organization prerequisites to the implementation of dynamic health education in grades K-12.
Prerequisites: ID 1225, ID 3801.
Krueger

HEd 3537 School and Community Health Program (3)

The school and community health program, the teacher's role in school and community health services, healthful school environment, and health instruction in the elementary school.
Blake, Darden

COMMUNITY HEALTH

HEd 1600 Animal Control Officer's Training (3)

Preparation for pending State Certification as Animal Control Officers. Topics include: legal authority for animal control (federal, state, local); procedures for court action; community relations; animal behavior and health; shelter operations field trips.

HEd 2600 Consumer Health (3)

Criteria for critical decision making in the selection of health information, health products and health services, investigation of the effects of misconceptions, fads, and quackery in health behavior and attitudes.

HEd 3600 Nutrition (3)

Nutritional factors required for daily dietary needs as these facts relate to mental, physical and social performances.

HEd 3635 Introduction to Public Health (3)

Prevention, sociological and anthropological aspects, planning, and organization of community health problems and programs.
Chut

HEd 4650 Community Health Counseling (3)

An analysis of physical, mental, emotional and social health problems of elementary and secondary school pupils, as well as remedial procedures and handling of confidential records.

ID 1225 Critical Issues and Values of Contemporary Health (3)

Physical Education Courses

SPORT FORMS

PEd 1000 Beginning Archery (1)

Archery, terminology, safety and fundamental skills. Opportunities will be provided for competition and archery games.

PEd 1005 Badminton I (1)

Includes the skills, knowledge and strategies of badminton.
Bakker, Errington

PEd 1010 Beginning Basketball (1)

Fundamental skills, techniques, rules, and concept of play.
Bakker

PEd 1011 Strength Fitness (1)

An activity course focusing on body building methods and techniques such as free weights, cybex, nautilus and universal machines as a fitness activity.
Andzel

PEd 1015 Bowling (1)

The fundamentals of beginning bowling discussed and demonstrated, particularly the basic approaches and deliveries. Rules and scoring regulations also discussed.

PEd 1018 Canoeing (2)

Covers lake and river canoeing techniques. Qualifications for Red Cross Basic Canoeing Certificate will be met. Fee required. Prerequisites: PEd 1081 or equivalent; or successful completion of a swim test (ten minute support fully clothed).

PEd 1020 Personal Fitness I (1)

Development of cardiovascular, cardiorespiratory and musculoskeletal fitness through physiological conditioning.

PEd 1021 Personal Fitness II (1)

A continuation of Personal Fitness I stressing lifetime benefits of personal fitness. Prerequisites: Personal Fitness I or permission of instructor.

PEd 1025 Beginning Fencing (1)

Fundamentals of foil fencing and the rudiments of competition.

PEd 1030 Beginning Field Hockey (1)

Fundamental skills, techniques, rules and concepts of team play in field hockey.

PEd 1035 Beginning Football (1)

Basic motor skills and offensive and defensive strategies in football.

PEd 1040 Beginning Golf (1)

The basic skills of golf examined.

PEd 1045 Beginning Gymnastics (Men's Events) (1)

Required of all male physical education majors and an elective for non-majors. Emphasis on basic gymnastics skills in the six Olympic events for men: floor exercise, vaulting, parallel bars and horizontal bar, pommel horse and still rings. Designed to introduce the student to gymnastics and develop the student's skill.

PEd 1047 Beginning Gymnastics (Women's Events) (1)

Required of all female physical education majors and an elective for non-majors. Emphasis on basic gymnastics skills in the four Olympic events for women: floor exercise, vaulting, uneven parallel bars, and balance beam. Designed to introduce the student to gymnastics and develop the student's skill.

PEd 1055 Lacrosse (1)

Basic skills and techniques necessary to participate in lacrosse games.

PEd 1060 Skiing (1)

Suitable for beginning through intermediate downhill skiers. Techniques, conditioning, equipment, and safety addressed. Off campus, fee required (lift tickets and, if appropriate, equipment rental).

PEd 1065 Beginning Soccer (1)

Basic skills, techniques, rules and concepts of soccer.

PEd 1070 Beginning Softball (1)

Skills, techniques, rules and team strategies of softball.

PEd 1075 Speedball (1)

Skills, techniques, rules, and concepts of speedball.

PEd 1080 Beginning Swimming (1)

The basic swimming skills to provide a feeling of safety in deep water. One-minute support and a minimum of two pool lengths using two different strokes in two different positions. Only those students who cannot swim two lengths of the pool (50 yards) accepted.

PEd 1081 Intermediate Swimming (1)

The seven basic swimming strokes, beginner's diving, water games and stunts. Prerequisite: Course is designed for students who can swim for a distance of 50 yards and feel comfortable in deep water.

PEd 1088 Beginning Tennis (1)

Fundamental tennis skills: forehand and backhand, serve, and volley. Basic singles and doubles strategies and rules.

PEd 1090 Paddle (Platform) Tennis (1)

Covers the basic skills, rules and strategies for effective doubles play. Off-campus facilities used; fee required.

PEd 1091 Beginning Racquetball (1)

Racquetball skills: Strategies and rules. Off-campus courts will be used; fee required.

PEd 1092 Track and Field (1)

Beginning skills in track and field events.

PEd 1095 Beginning Volleyball (1)

Individual skills, techniques, and strategies of power volleyball.

PEd 1098 Wrestling (1)

Introduction to the fundamental techniques and strategies of free-style wrestling with emphasis on the biomechanics of the activity.

PEd 2000 Intermediate Archery (1)

Advanced shooting in target archery, target archery tournaments, field archery, field archery tournaments, archery games and novelties. Prerequisite: PEd 1000 or permission of instructor.

PEd 2010 Intermediate Basketball (1)

Advanced techniques of offensive and defensive patterns of basketball. Prerequisite: PEd 1010 or permission of instructor.

PEd 2025 Intermediate Fencing (1)

Advanced foil skills and techniques, and basic epee and sabre skills. Prerequisite: PEd 1025 or permission of instructor.

PEd 2030 Intermediate Field Hockey (1)

Advanced skills and techniques of field hockey, advanced team strategy.

PEd 2035 Intermediate Football (1)

More advanced fundamentals, rules, strategy, concepts and methods of teaching football. Prerequisite: PEd 1035 or permission of instructor.

PEd 2040 Intermediate Golf (1)

Covers performance, biomechanical analysis of advanced golf skills, and play analysis. Prerequisite: PEd 1040 or permission of instructor.

PEd 2048 Intermediate Gymnastics (Mixed Events) (1)

An elective course open to physical education majors and non-majors. Emphasis on more advanced gymnastics skills in the various Olympic events for men and women. Designed to advance the student's skill and knowledge in gymnastics beyond the basic skills. Prerequisite: Beginning Gymnastics or permission of instructor.

PEd 2055 Intermediate Soccer (1)

Emphasis on intermediate soccer skills, knowledge of offensive and defensive team strategies, and the appreciative aspects of spectating. Prerequisite: PEd 1065 or permission of instructor.

PEd 2082 Advanced Swimming Skills (1)

Course deals with the acquisition of advanced swimming skills, fundamental dives, basic stunts, synchronized swimming, and snorkeling. Equipment needed: snorkel, mask, fins. Prerequisite: Ability to swim front crawl, back crawl, breast stroke and side stroke in comfortable combination for ten minutes in deep water.

PEd 2083 American Red Cross Advanced Life Saving (1)

The acquisition of the American Red Cross Advanced Life Saving skills with its underlying Advanced Red Cross Life Saving certification awarded after successful completion of these skills. Equipment needed: snorkel, mask, fins. Prerequisite: Basic Rescue, or an equivalent, or the ability to swim ten minutes using six different strokes with ease.

PEd 2084 Swimming Fitness (1)

An activity program using swimming activities for aerobic fitness and wellness benefits. Prerequisites: The ability to swim front and back crawl, breast and side stroke in comfortable combination for ten minutes in deep water.

PEd 2085 Skin and Scuba Diving (1)

Basic skills of skin and scuba diving with special emphasis on safety. Leads to

PEd 2030 Intermediate Field Hockey (1)

Advanced skills and techniques of field hockey, advanced team strategy.

PEd 2035 Intermediate Football (1)

More advanced fundamentals, rules, strategy, concepts and methods of teaching football. Prerequisite: PEd 1035 or permission of instructor.

PEd 2040 Intermediate Golf (1)

Covers performance, biomechanical analysis of advanced golf skills, and play analysis. Prerequisite: PEd 1040 or permission of instructor.

PEd 2048 Intermediate Gymnastics (Mixed Events) (1)

An elective course open to physical education majors and non-majors. Emphasis on more advanced gymnastics skills in the various Olympic events for men and women. Designed to advance the student's skill and knowledge in gymnastics beyond the basic skills. Prerequisite: Beginning Gymnastics or permission of instructor.

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Emphasis on intermediate soccer skills, knowledge of offensive and defensive team strategies, and the appreciative aspects of spectating. Prerequisite: PEd 1065 or permission of instructor.

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An activity program using swimming activities for aerobic fitness and wellness benefits. Prerequisites: The ability to swim front and back crawl, breast and side stroke in comfortable combination for ten minutes in deep water.

PEd 2085 Skin and Scuba Diving (1)

Basic skills of skin and scuba diving with special emphasis on safety. Leads to

PEd 2102 Intermediate Modern Dance (1)

Intermediate experience level of movement techniques, improvisation and choreography. Prerequisite: PEd 1101 or permission of instructor.

PEd 2104 Intermediate Ballet I (1)

Development of the basic rules and movement vocabulary of intermediate ballet. Prerequisite: PEd 1106 or instructor's permission.

PEd 2105 Intermediate Ballet II (1)

Elements of artistry in ballet and higher levels of movement vocabulary of intermediate ballet. Prerequisite: PEd 2104 Intermediate Ballet I or instructor's permission.

PEd 3100 Creative Dance for Children (3)

Methods and materials in teaching of creative dance to children. Consideration will be given to the significance of creative movement in the education process.

PEd 3101 Creative Movement for Selected Populations (3)

Methods and materials in the teaching of creative movement for selected populations. Consideration given to the significance of creative movement in the educational, recreational and rehabilitative process.

PEd 3105 Dance History I (3)

Course traces the historic development of ethnic and social dance. Several visitations to dance performances required. This may involve the purchase of tickets.

PEd 3106 Dance History II (3)

Course traces the historic development of theatrical dance, dance therapy, dance in education and dance notation in western culture. Several visitations to dance performances required. This may involve the purchase of tickets.

PEd 3110 Dance Methods and Techniques for Physical Education Majors (2)

Methods and techniques of teaching modern dance.

PEd 3115 Modern Dance Composition (3)

The elements of modern dance, accompaniment and staging as they relate to dance composition. Prerequisite: PEd 2100 or permission of instructor.

PEd 3120 Dance Theater (3)

Study of basic techniques used in dance production including staging, accompaniment and learning a repertory dance culminating in a dance performance. Prerequisites: PEd 1102, 2101 or an audition.

PEd 3160 Folk Dance for Children (1)

Designed to build an extensive repertoire of children's folk dances for teachers, recreational leaders and camp counselors. Techniques of

international scuba certification (P.A.D.I.). Fee required for scuba equipment rental. Prerequisite: PEd 1081.

PEd 2088 Intermediate Tennis (1)

More advanced aspects of tennis: spin, overhead smash, drop shot, skills, strategies for the serve-and-volley game. Prerequisite: PEd 1088 or permission of instructor.

PEd 2095 Intermediate Volleyball (1)

Intermediate techniques and strategies of power volleyball. Prerequisite: PEd 1095 or permission of instructor.

DANCE

PEd 1101 Beginning Modern Dance (1)

The body's capabilities for expressive movement, discovering movement, mastering it technically and applying it creatively for expressive purposes.

PEd 1103 Beginning Jazz Dance (1)

Class provides the student with a basic understanding of contemporary jazz dance technique, both technical and rhythmical.

PEd 1105 Beginning Ballet I (1)

The historical development, the basic skill technique and the movement vocabulary in classical ballet.

PEd 1106 Beginning Ballet II (1)

A continuation of PEd 1105, Beginning Ballet I, placing emphasis upon higher skill levels of ballet vocabulary performance together with rhythmic accuracy, stage performance, and world wide ballet styles. Prerequisite: PEd 1105 or permission of instructor.

PEd 1130 Aerobic Dancing (1)

A total exercise experience, combining music and dancing, with emphasis upon development of cardiovascular fitness.

PEd 1151 Folk and Square Dance (1)

The techniques, materials and cultural background of folk dance and square dance.

PEd 1500 Introduction to Motor Learning (3)

Identifies factors affecting learning and performance. Surveys theories of motivation, development and learning as they pertain to the teaching of motor skills. Analyzes critically the process of motor skill development in relation to open and closed skills, and relative to the learner's stage of acquisition. Required of Physical Education majors.

PEd 2101 Intermediate Jazz Dance (1)

Development of intermediate level understandings and performance techniques related to jazz dance. Prerequisite: PEd 1103 or permission of instructor.

PEd 2102 Intermediate Modern Dance (1)

Intermediate experience level of movement techniques, improvisation and choreography. Prerequisite: PEd 1101 or permission of instructor.

PEd 2104 Intermediate Ballet I (1)

Development of the basic rules and movement vocabulary of intermediate ballet. Prerequisite: PEd 1106 or instructor's permission.

PEd 2105 Intermediate Ballet II (1)

Elements of artistry in ballet and higher levels of movement vocabulary of intermediate ballet. Prerequisite: PEd 2104 Intermediate Ballet I or instructor's permission.

PEd 3100 Creative Dance for Children (3)

Methods and materials in teaching of creative dance to children. Consideration will be given to the significance of creative movement in the education process.

PEd 3101 Creative Movement for Selected Populations (3)

Methods and materials in the teaching of creative movement for selected populations. Consideration given to the significance of creative movement in the educational, recreational and rehabilitative process.

PEd 3105 Dance History I (3)

Course traces the historic development of ethnic and social dance. Several visitations to dance performances required. This may involve the purchase of tickets.

PEd 3106 Dance History II (3)

Course traces the historic development of theatrical dance, dance therapy, dance in education and dance notation in western culture. Several visitations to dance performances required. This may involve the purchase of tickets.

PEd 3110 Dance Methods and Techniques for Physical Education Majors (2)

Methods and techniques of teaching modern dance.

PEd 3115 Modern Dance Composition (3)

The elements of modern dance, accompaniment and staging as they relate to dance composition. Prerequisite: PEd 2100 or permission of instructor.

PEd 3120 Dance Theater (3)

Study of basic techniques used in dance production including staging, accompaniment and learning a repertory dance culminating in a dance performance. Prerequisites: PEd 1102, 2101 or an audition.

PEd 3160 Folk Dance for Children (1)

Designed to build an extensive repertoire of children's folk dances for teachers, recreational leaders and camp counselors. Techniques of

analyzing, teaching and leading folk dancing for children from five through fourteen years of age.

COACHING AND OFFICIATING

PEd 3300 Scientific Principles of Coaching (3)

The biomechanical, physiological and psychological elements of coaching.

PEd 3305 Coaching and Officiating of Swimming (3)

A study of rules, techniques and procedures for officiating swimming meets and the exploration of training methods and meet strategies. Students will be prepared to take a recognized swimming officials rating examination.

PEd 3310 Coaching and Officiating of Baseball (3)

The rules, techniques and procedures for officiating baseball together with the strategies, fundamentals and psychology of coaching. Preparation for a recognized umpires rating examination.

PEd 3315 Coaching and Officiating of Basketball (3)

Individual strategies, coaching philosophies, player and coach conduct, practice session methods and integration of the coaches' and officials' roles in competitive basketball. Students will be prepared to take a recognized basketball officials rating examination.

PEd 3320 Coaching and Officiating Field Hockey (3)

Educationally sound coaching and officiating of field hockey will be studied. Students will be prepared to take a recognized field hockey officials rating examination.

PEd 3325 Coaching and Officiating Football (3)

Preparation of students to coach and officiate football. Students will be prepared to take a recognized football officials rating examination.

PEd 3330 Coaching and Administration of Tennis Competition (3)

Mechanics, physiology and psychology as applied to tennis with the rules, tournament organization and specific coaching techniques of tennis.

PEd 3340 Coaching and Officiating Volleyball (3)

The individual skills and team strategies for volleyball and consideration of coaching and officiating of volleyball. Students will be prepared to take a recognized officials rating examination.

PEd 3345 Coaching and Officiating Softball (3)

The rules, techniques and procedures of officiating softball together with the strategies, fundamentals and psychology of coaching softball will be examined.

PEd 3350 Coaching and Officiating Soccer (3)

Skill and strategy analysis of soccer together with the officiating and rule interpretations of soccer.

Errington

PEd 3355 Coaching and Officiating of Gymnastics (3)

Designed to introduce students to the scientific and practical concepts of coaching competitive gymnastics for both men and women, as well as evaluative techniques necessary to become a rated gymnastic official (judge).

PEd 3360 Perspectives on Coaching Children in Sports (3)

Social, psychological and physical implications of children's sports with techniques of coaching and training in selected sports for the volunteer coach at the youth league level.

Bakker

SCIENTIFIC FOUNDATIONS

PEd 2500 Biomechanics (3)

The application of biomechanics to human movement, emphasizing physical education activities.

Errington

PEd 3500 Care and Prevention of Athletic Injuries (3)

An examination of the most recent practices and procedures in the care and prevention of athletic injuries. A laboratory experience will center around prophylactic support and protective equipment for athletic preparation.

Prerequisites: Bio 2402 and PEd 3510.

Ball

PEd 3501 Advanced Athletic Training (3)

An in-depth study of on-the-field injury evaluation, management, initial and long-term treatment of athletic injuries. A laboratory experience will center on rehabilitation guidelines with criteria for return to activity.

Prerequisites: PEd 3500, 3505, and 3510.

Ball

PEd 3502 Clinical Experiences in Athletic Training I (3)

Practical field experiences applying techniques of advanced athletic training in a clinical setting, consisting of 200 hours internship and a weekly seminar to discuss the working experience.

Prerequisite: PEd 3500.

Corequisite: PEd 3501.

Ball

PEd 3503 Clinical Experiences in Athletic Training II (3)

Practical field experiences applying techniques of advanced athletic training in a clinical setting, consisting of 200 hours internship and a weekly seminar to discuss the working experience.

Prerequisites: PEd 3500 and 3502.

Corequisite: PEd 3501.

Ball

PEd 3504 Therapeutic Modalities in Athletic Training (3)

An in-depth examination of the thermotherapy and other rehabilitation modalities used in athletic training.

Prerequisite: PEd 3500 or permission of instructor.

Ball

PEd 3505 Kinesiology (3)

Analysis of human movement in terms of biomechanics and muscular anatomy.

Prerequisite: PEd 2500 or permission of instructor.

Ball, Errington

PEd 3510 Physiology of Exercise (3)

This course is designed to acquaint the student with the structure and function of skeletal muscles, energy sources, oxygen requirements for muscular activity and fitness assessment and exercise prescription utilizing the computer.

Prerequisites: Anatomy and Physiology.

Andzel, Palgi

PEd 3515 Wellness

Current concepts and practices of wellness (a mind-set that personifies a positive approach to health and fitness) as a lifestyle.

Prerequisite: ID 1225.

Andzel, Palgi

PEd 4626 Prescriptive Exercise Programming (3)

Principles and techniques for evaluating, prescribing, and monitoring exercise in an adult fitness program. General Electives: Required for Collateral in Adult Fitness.

Prerequisite: PEd 3510.

Andzel, Palgi

EDUCATION AND ADMINISTRATION

PEd 2600 Camping (3)

Camp philosophies, campcrafts, camp programs and activities, camp counseling, and campcraft skills. One 3 day weekend in camping situation required; laboratory fee. Satisfactory completion of course will meet requirements of the NJACA and the ACA for Campcraft certification.

PEd 2610 Adapted Aquatics: Instructor Training Course (3)

Course of study to prepare instructors of aquatic activities for special populations. Leads to certification by American Red Cross.

Prerequisite: Current Red Cross Water Safety Instructor rating or Basic Swimming Instructor Certificate.

PEd 3600 Play and Rhythm Activities in Early Childhood Education (3)

Designed to provide the student interested in early childhood education with an understanding and appreciation of the contribution that play and rhythm activities can make towards the development of the whole child concept during this formative stage of growth.

Chaison

PEd 3605 Water Safety Instructor (3)

Emphasizes proficiency in all aquatic skills, expertise in teaching Red Cross swimming and water safety skills. The course is recognized by Red Cross certification.

Prerequisites: Current Red Cross Advanced Life Saving Certificate acquired or renewed within the last 3 years; a Red Cross Swimmer Certificate or Swim II.

PEd 3610 Curriculum and Programming in Elementary Physical Education (3)

Curriculum development in elementary physical education in a variety of cultural settings. Teaching styles and strategies, fundamental skills and movement forms, along with integration of physical education with other instructional programs.

Prerequisite: Junior status

Corequisite: PEd 3690

Required of Physical Education Majors:

Teaching Certification Option

Health and Physical Education Majors:

Teaching Certification Option

PEd 3611 Curriculum and Programming in Secondary Physical Education and Adult Fitness (3)

Curriculum development in secondary physical education and adult fitness in a variety of cultural settings. Teaching styles and strategies, fundamental skills and movement forms.

Prerequisite: Junior status

Corequisites: PEd 3691 or PEd 3692

Required of Physical Education Majors:

Teaching Certification Option

Health and Education Majors: Teaching Certification Option

Physical Education Majors: Adult Fitness Option

Option

PEd 3615 Physical Education in the Elementary School (1-1/2)

A laboratory workshop program using classroom, gymnasium and outdoor play space situations to examine methods and materials in physical education for several grades. Philosophy, objectives, and principles of physical education prepares the student to cooperate effectively with the specialist.

Scuderi

PEd 3690 Physical Education Junior Field Experience: Elementary (1)

Students spend one-half day a week (45 hours) per semester in an elementary school setting. Application of content learned in PEd 3610 with emphasis on observational techniques, the teaching/learning process, and program organization and management. On-site observation by college supervisors.

Corequisite: PEd 3610.

PEd 3691 Physical Education Junior Field Experience: Secondary (1)

Students spend one-half day a week (45 hours) per semester in a secondary school setting. Application of content learned in PEd 3610 with emphasis on observational techniques, the teaching/learning process, and program organization and management. On-site observation by college supervisors.

PEd 3692 Physical Education Junior Field Experience: Fitness (1)

Students spend one-half day a week (45 hours) per semester in an appropriate fitness setting. Application of content learned in PEd 3610 with emphasis on observational techniques, the teaching/learning process, and program organization and management. On-site observation by college supervisors.

PEd 4600 Adapted Physical Education (2)

Theory and implementation of current concepts in physical education for special populations.

Ball

PEd 4605 Evaluation in Physical Education (3)

Approaches to testing and evaluation, basic statistical concepts, the construction of skills and knowledge tests, and evaluation in the effective domain.

PEd 4610 Introduction to Organization, Administration and Supervision of Physical Education (3)

The total physical education program examined in both urban and suburban schools in terms of organization, administration and supervision.

Prerequisite: PEd 3610 or 3611.

PEd 4615 Organization and Administration of Intramural Sports (3)

History, present status, objective of intramural movement; organization and affiliation with other departments; units of competition from elementary to college level; program of activities; group, team, and individual schedule making and scoring plans; rules, regulations, awards; special administrative problems.

PEd 4620 Introduction to Administration of Interscholastic Athletics (3)

Basic organization and administrative procedures that are necessary for an interscholastic athletic program to function.

PEd 4625 Organization and Administration of Adult Fitness Programs (3)

Required for collateral and/or option in physical education in Adult Fitness in Business and Industry.

Prerequisites: 2 required courses in the Adult Fitness Collateral.

Andzel, Palgi

PEd 4627 Internship in Adult Fitness in Business and Industry (3)

Practical field experience applying techniques of adult fitness in a business and industry setting, consisting of 200 hours internship and a weekly seminar to discuss the working experience.

Prerequisite: 18 semester hours of collateral requirements.

PEd 4690 Student Teaching (10)*

A 16-week experience in full time teaching, 8 weeks each in a public elementary and secondary school, under the guidance and direction of a cooperating teacher and a college supervisor.

Prerequisites: HEd 1100, PEd 1500, PEd 1800, Bio 2402, PEd 2500, PEd 3505 or PEd 3510, PEd 3611, EdP 3801, Psy 2100, 10 semester hours of activities, completion of 90 hours, 2.5 cum in major courses, 65 hour group work experience, physical examination, evidence of active interest in department and college activities.

For those seeking dual certification of Health & Physical Education, additional prerequisites include: HEd 3533 Health electives.

SOCIAL AND PHILOSOPHICAL FOUNDATIONS

PEd 2800 Physical Education: Pre-Professional Field Experience (3)

An analytical and observational study of physical education in a multicultural society. Approximately one-third of the course involves supervised field-based experiences.

Prerequisite: None.

Shiposh

PEd 4800 The Meaning of Human Movement (3)

The nature and forms of individual and collective movement. The interrelationships of the physical, intellectual and psychological aspects of movements as it varies with the occurrence. Classroom study and a variety of selected movement experiences. Of particular value to students concerned with movement behavior, both as individuals and as human beings responsible for modifying the behavior of others.

PEd 4805 Sports and International Relations (3)

Exploration and analysis of social and political forces in sports and physical education on the national and international level.

PEd 4820 Physical Education and Education as Observed in Other Countries (3)

Travel to other countries to visit selected educational institutions examining teaching methodology, curriculum, rehabilitation programs and attitudes in education at large, physical education in particular.

PEd 4830 Women in Sports (3)

Historical, legislative, biophysical, and socio psychological dimensions of women and sport with a focus on American women in sports.

Shiposh

INDEPENDENT STUDY

PEd 4901 Independent Study in Physical Education (1)

Supervised research study of a problem in physical education. Prerequisites: Junior or senior physical education major and department chairperson permission.

PEd 4902 Independent Study in Physical Education (2)

Supervised research study, of some depth, into a selected problem in physical education. Prerequisites: Junior or Senior Physical Education major status and chairpersons permission.

PEd 4903 (4900) Independent Study in Physical Education (3)

Supervised in-depth research study of a selected problem in physical education. Prerequisites: Senior physical education major and department chairperson's permission.

*Course under revision—see coordinator

Coordinator: Dr. John Valentine
T118 Ext. 2214

The major in Urban and Outdoor Recreation prepares students for a career in one of the following branches of the recreation profession: Therapeutic Recreation, Community Recreation, Industrial Recreation, Commercial Recreation, Outdoor Recreation, Military Recreation, and Municipal Recreation.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 53

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World 3

BREADTH REQUIREMENTS 35

*Humanities 12 (from at least 3 disciplines)
Comm 1400 Speech Communication 3
Select from:
Fine Arts or Art History
Foreign Languages
Music
Philosophy or Religion
Social and Behavioral Sciences: 12
Psy 1000 General Psychology 3
Eco 1020 Principles of Economics I 3
Soc 1000 Social Life and Society 3
Choose one course from:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology
Biological and Physical Sciences 4
Astronomy Geology
Biology Meteorology
Chemistry Physics
Mathematical Sciences 3
Health and Physical Education 3
ID 1225 Critical Issues & Values of Contemporary Health 3

COGNATE REQUIREMENT 1

Physical Education 1

MAJOR REQUIREMENTS 44

Rec 2901 Foundations of American Recreation 3
Rec 2903 Lifetime Recreation Activities 3
Rec 2910 Program Organization and Facility Design 3
Rec 3810 Recreation and the Environment 3
Rec 3900 Social Recreation 3
Rec 3903 Recreation, Administration, Supervision, and Management 3
Rec 3910 In-Semester Practicum 3
Rec 4500 Internship 5
Rec 4900 Recreation Leadership Skills 3
Rec 4903 Senior Seminar Problem Solving 3
PEd 2600 Camping 3
MgS3030 Personnel Management 3

MAJOR ELECTIVES 6

(selected with departmental advisement)

FREE ELECTIVES 27

TOTAL 124

Minor

REQUIRED COURSES 18

Rec 2901 Foundations of American Recreation 3
Rec 2903 Lifetime Recreation Activities 3
Rec 2910 Program Organization and Facility Design 3
Rec 3900 Social Recreation 3
Rec 4900 Recreation Leadership Skills 3
PEd 2600 Camping 3

Recreation Courses

Rec 1100 Introduction to the Recreation and Leisure Profession (3)

A survey of recreation/leisure services, utilizing field visits to municipal, community, outdoor, industrial, therapeutic, armed forces, correctional, and commercial recreation sites.

Rec 2901 Foundations of American Recreation (3)

The chronological development of recreation in America, the various philosophies and the impact of technology on the recreation movement.

Rec 2903 Lifetime Recreation Activities (3)

Development of minimum competency in selected individual lifetime physical recreational activities. Fees for use of off-campus facilities will depend upon the activity.

Rec 2910 Program Organization and Facility Design (3)

Program organization and facility design of public and private recreational agencies studied.

Rec 3300 Recreation for Special Populations (3)

Overview of a special field in recreation focusing on recovery and adjustment to illness or disability.
Valentine

Rec 3310 Principles and Practices of Therapeutic Recreation (3)

Course examines principles and practices of administration and leadership in the field of therapeutic recreation. Emphasis placed on learning appropriate and successful techniques for delivery of therapeutic recreation programs.
Prerequisite: Rec 3300 or permission of the instructor.

Rec 3320 Recreation and the Aged (3)

Study of recreation services for the aged including concepts relating to the design and delivery of leisure activity programs in the community and the institution.
Prerequisite: Rec 3300, HEd 3325 or permission of instructor.

Rec 3410 Technical Design of Recreation Areas (3)

Introduction to basic aesthetic and functional design and construction variables of outdoor and indoor recreation areas and facilities, including parks, playgrounds, recreation centers, marinas and campgrounds. Field trips are required.
Prerequisites: Rec 2100, 3400 or permission of instructor.
Lavery

Rec 3420 Management and Maintenance of Recreation and Park Facilities (3)

Examination of the methods used in the proper management and maintenance of park and recreation facilities, including the general principles and common problems of managing local park systems, recreation areas and facilities as well as the technical maintenance procedures used in normal operations of such facilities. A fieldwork experience is included as part of the course requirement.
Prerequisite: Rec 3410, 3400 or permission of instructor.
Lavery

Rec 3470 Winter Outdoor Recreation Facility Operations (3)

Detailed examination of the aspects of recreation and tourism operations of winter recreation facilities. Students attend lecture sessions and field experiences dealing with the management and administration of selected winter recreation facilities. Such operations as ski areas, ice skating arenas, winter resorts and winter recreation retail stores studied. Special emphasis on ski area management and construction.
Prerequisites: Rec 2901 and declared recreation major, or permission of the instructor.

Rec 3500 Commercial Recreation and Tourism (3)

Analysis of the commercial recreation and tourism industry. Includes a study of participant profiles, types of commercial recreation and tourist enterprises/services, marketing strategies, and national tourism studies. Employment opportunities, trends and issues highlighted. Field visits are required.
Prerequisite: Rec 2901 or permission of instructor.

Rec 3640 Fundraising in Recreation Agencies (3)

Introduction to the various types of financing methods used by professional and volunteer workers in recreation agencies. Special emphasis on fundraising, grantsmanship, fees and charges.
Prerequisite: Rec 2910 or permission of instructor.
Lavery

Rec 3700 Campus Recreation Programs in Colleges and Universities (3)

The philosophical base and practical application of concepts related to the organization and administration of campus recreation (intramural sports, sports clubs, facilities, and open recreation programs at the college/university level.)
Prerequisites: Rec 2910, 2903 or permission of instructor.

Rec 3730 Therapeutic Recreation with the Socially and Emotionally Disabled (3)

Study of applicable techniques and treatment concepts of therapeutic recreation for persons with social and mental disorders in both community and institutional settings.
Prerequisite: Rec 3300 or permission of instructor.

Rec 3800 Environmental Recognizance (3)

Designed to provide awareness of environmental and ecological problems, patterns and relationships. Interdisciplinary strategies of moving from concept to practice affecting urban regions. Explorations of various lengths in the fields and community. A resident field expedition and outdoor laboratory experiences required.

Rec 3810 Recreation and the Environment (3)

An exploration of the natural environmental factors that have significant impact on recreation/leisure activities. Field trips will be required.

Rec 3900 Social Recreation (3)

Techniques and methods of conducting social games, mixers, dances, parties and special events for large and small groups of all ages.

Rec 3903 Recreation Administration, Supervision and Management (3)

Administrative patterns and management in the various recreational organizations including facilities, financing, equipment and personnel involved in programs and the relationships between organizations.
Lavery

Rec 3910 In-Semester Practicum (3)

A course designed to provide every recreation major, in the junior year, with an opportunity for intensive exploration, study and experience in an operating agency in a chosen field. A minimum of 105 hours of supervised experiences is required.
Prerequisites: Rec 2901, 3903 and one other major course and permission of instructor.
Benson

Rec 4330 Recreation/Leisure and Stress Management (3)

Principles and methods utilized in assessing an individual's skills, values, and interests that influence leisure choices, participation in recreation activities (leisure counseling), and their relationship to stress reduction.
Prerequisites: Rec 2901, Rec 2910, Psy 3540 or permission of the instructor.

Rec 4500 Internship in Recreation (3)

Practical application of recreation skills at a cooperating recreation or outdoor education agency. Students will return to campus or an off-campus center for courses. A minimum of 175 hours of supervised experience is required.
Prerequisite: Enrollment by permission of instructor.

Rec 4600 Independent Study (3)

Individualized course that focuses on a specific area of study in Recreation and/or Leisure.
Prerequisites: Rec 2901, Rec 3903.

Rec 4700 Recreation in Hotels and Resorts (3)

Recreation administration services, practices, and problem areas concerning quality leisure activities and experiences in commercial enterprises. Characteristics of successful facilities, their patterns of recreation programming and use of equipment and supplies will be examined. A consideration of growth patterns and trends will be emphasized.
Prerequisites: Rec 1100, Rec 2901, or Rec 3903.

Rec 4900 Recreation Leadership Skills (3)

Principles, procedures and techniques for effective leadership in a variety of recreational organizations.

Rec 4903 Senior Seminar—Problem Solving (3)

Each student is to develop a proposal for a specific area in recreation or environmental interpretation in which he/she has great individual interest. These will provide the basis for seminar discussions. Current problems, trends and developments will be considered.
Prerequisites: Rec 3910, 4500.
Benson

Coordinator: Dr. Beatrice D. Edelstein
CSI Ext. 2218

The special education needs of the deaf and hard of hearing students necessitate having teachers with appropriate skills and knowledge to meet those needs—teachers with the desire to contribute to this personally and professionally rewarding field of education. The program in Education of the Hearing Impaired prepares students for this special area of education.

The Kean College Speech and Hearing Center is one of the facilities available to the students in the program. Observations at this center and at community clinics and public school classrooms are a part of the students' program, as are sophomore and junior field experiences and senior year student teaching. Students completing this program and meeting all the graduation and certification criteria will be eligible for New Jersey certification as teachers of the deaf or hard of hearing, as well as certification by the Council on Education of the Deaf (CED). All education of the Hearing Impaired majors must pass a Speech and Language screening in order to be accepted into the program.

With this major the student will complete an interdisciplinary academic sequence.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 59

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World 3

BREADTH REQUIREMENTS

*Humanities (9 credits from three areas)
Comm 1400 Speech and Communication 3
Any Art Course 3
Select one course from:
Foreign Languages
Music
Philosophy or Religion
*Social/Behavioral Sciences 9 (from at least 2 disciplines)
Psy 1000 General Psychology 3
Select two courses from two areas:
Economics or Geography
History
Political Science
Sociology or Anthropology
*Physical and Biological Sciences 4
Bio 1000 Principles of Biology 4
*Mathematical Sciences 3
Mat 1016 Statistics 3
Health and Physical Education 4
ID 1225 Contemporary Issues in Health 3
One of the following: 1
PEd 1101 Beginning Modern Dance
PEd 1103 Beginning Jazz Dance
PEd 1151 Folk and Square Dance
Electives 9
(from any of the above (*) areas)

ADDITIONAL COGNATES 3

Psy 2100 Child Psychology or
Psy 2110 Psychology of Adolescence

ACADEMIC SEQUENCE 42

SPE 2052 Introduction Psychology Handicapped 3
SPE 4053 Orientation to Psychology Testing 3
SPE 2251 Hearing Disorders 3
SPE 2255 Normal Language Development 3
SPE 2260 Anatomy & Phys. of Ear and Speech Mechanism 3
SPE 3252 Language Disorders 3
SPE 3259 Basic Audiology 3
SPE 4262 Signing I 3
SPE 4263 Signing II 3
SPE 2254 Phonetics 3
SPE 3254 Speech and Language of the Hearing Impaired 3
SPE 2051 The Exceptional Individual 3
SPE xxxx Mentally Retarded, Emotionally Disturbed, Learning Disabled 3

PROFESSIONAL EDUCATION 30

SPE 1250 Pre-Admission Field Experience 3
SPE 3262 Aural Rehabilitation 3
SPE 3263 Methods of Teaching the Deaf & Hard of Hearing I 3
SPE 3264 Methods of Teaching the Deaf & Hard of Hearing II 3
Edu 3400 Reading and Language Arts 3
SPE xxxx Mental Retardation, Emotional Disturbance, and Learning Disabilities 3
SPE 3255 Language and Reading of the Hearing Impaired 1
SPE 3265 Junior Field Experience—Education of the Hearing Impaired I 1
SPE 3266 Junior Field Experience—Education of the Hearing Impaired II 1
SPE 4204 Student Teaching 10
*SPE 4268 Teaching Content Areas to the Deaf and Hard of Hearing 3

TOTAL 132

Coordinator: Dr. Martin Shulman
CSI103 Ext. 2218

Students desiring to work in the area of communication problems can prepare for a career as a speech pathologist in the Kean College degree program in speech and hearing. The graduate of this program will be prepared to identify, assess and correct all types of speech disorders including articulation, voice, language and stuttering problems. A master's degree in speech pathology is required for certification. With a master's degree, employment opportunities are at hospital, community and university clinics, public schools and private practices. Students seeking preparation for this rewarding area of professional activity will observe and work under supervision in the Kean College Speech and Hearing Center and many community facilities. All Speech and Hearing majors must pass a speech and language screening in order to be accepted into the program. The student will complete an interdisciplinary academic sequence within this major. (Program under revision)

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 57

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World 3

BREADTH REQUIREMENTS 33

Humanities 12 (from at least 3 areas)
Com 1400 Speech Communication 3
Select three courses from:
Fine Arts or Art History
Foreign Languages
Music
Philosophy or Religion
Behavioral and Social Sciences 12
Psy 1000 General Psychology 3
Psy 2100 Child Psychology 3
Select two courses from two areas:
Economics or Geography
History
Political Science
Sociology or Anthropology
Biological and Physical Sciences 4
Bio 1000 Principles of Biology 4
Mathematical Sciences 3
Mat 1016 Descriptive Statistics 3
Health and Physical Education 4
ID 1125 Critical Issues and Values of Contemporary Health Physical Education 3
Additional Required Cognate 4
Bio 2402 Principles of Human Anatomy & Physics 4

MAJOR REQUIREMENTS 46

SPE 2051 The Exceptional Individual 3
SPE 2251 Introduction to Speech, Language, Hearing Disorders 3
SPE 2254 Phonetics 3
SPE 2255 Normal Language Development 3
SPE 2260 Anatomy & Physiology of Ear & Speech 3
SPE 2261 Speech and Hearing Science 3
SPE 3253 Language Disorders 3
SPE 3256 Disorders of Artic & Voice 3
SPE 3257 Organic Disorders of Speech & Language 3
SPE 3259 Basic Audiology 3
SPE 3262 Aural Rehabilitation 3
SPE 4257 Theory of Clinical Practice I 2
SPE 4258 Theory of Clinical Practice II 2
SPE 4259 Nature & Etiology of Stuttering 3
SPE 4260 Practicum in Speech Pathology I 3
SPE 4261 Practicum in Speech Pathology II 3

PROFESSIONAL EDUCATION 26

SPE 1250 Preadmission Field Experience in Speech and Hearing 3
ICA 3610 Elementary Curriculum and Methods 3
ED 3000 Curriculum Evaluation and the Learner 3
SPE 4053 Orientation to Psychology Testing 3
SPE 4270 Diagnostic Methods in Speech Language Pathology 3
SPE 4203 Practicum: Schools 8
One course in foundations:
ID 2200 Teacher, School and Society or
ID 4250 School and Society: Cultural Minority and Urban Education 3

TOTAL 130

Coordinator: Dr. David Barnhart
CSE103 Ext. 2264

Students in the teacher of the handicapped program will prepare to teach children who are mentally retarded, neurologically or perceptually impaired, emotionally disturbed, physically handicapped or multiply handicapped. The state certificate in teacher of the handicapped is valid for grades K-12. Teacher certification requirements include the satisfactory completion of field experiences in the sophomore and junior years. A full semester of student teaching is required during the senior year. Students may be interested in pursuing positions in public and private school teaching, sheltered workshops, group homes, supervised apartments, programs for handicapped adults and with private agencies for the handicapped.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 56

CORE REQUIREMENTS 18
Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World 3

BREADTH REQUIREMENTS 29

Humanities (9 credits from three areas)
Comm 1400 Speech Communication 3

Select two courses from:
Fine Arts
Foreign Languages
Music
Philosophy or Religion

Social/Behavioral Sciences 9
Psy 1000 General Psychology 3
Soc 1000 Social Life & Society 3
One of the following: 3
Soc 2100 Sociology of the Family
PSc 3650 Juvenile Justice

***Physical and Biological Sciences 4**

***Mathematical Sciences 3**

Health and Physical Education 4
ID 1225 Contemporary Issues in Health 3
One of the following 1
PEd 1101 Beginning Modern Dance
PEd 1103 Beginning Jazz Dance
PEd 1151 Beginning Folk and Square Dance

Additional General Education Requirements 9

Psy 2100 Child Psychology or
Psy 2110 Adolescent Psychology or
Psy 3110 Life Span Psychology 3
Two of the following: 6
Psy 3310 Psychology of Learning
Psy 3320 Theories of Personality
Psy 4380 Psychology of Perception

ACADEMIC MAJOR 30

SpE 2051 The Exceptional Individual 3
SpE 2052 Psychology of the Handicapped 3
Two of the following: 6
SpE 2154 Introduction to Mental Retardation
SpE 2155 Introduction to Learning Disabilities
SpE 2156 The Emotionally Disturbed
SpE 2157 The Severely Multiply Handicapped

Required

SpE 3161 Career Development of Exceptional Youth 3
SpE 3251 Communication Disorders of Exceptional Children 3
SpE 4053 Orientation to Psychological Testing 3
SpE 4262 Signing 3
SpE 3051 Computer Technology for Special Populations 3
One of the following: 3

HEd 3725 Death in Perspective
HEd 3400 Human Sexuality
HEd 2231 First Aid and Accident Prevention
HEd 4333 Alcohol and Narcotics Education
EC 3600 Understanding Parenthood
PEd 4600 Adapted Physical Education
Rec 3300 Recreation for Special Populations

Additional Liberal Studies 10

PROFESSIONAL EDUCATION 30

SpE 2120 Sophomore Field Experience 3
ICA 3102 Science and Math for Special Populations 3
ED 3400 Language Arts/Reading in the Preschool and Elementary Curriculum 3
SpE 3171 Special Education Methods and Curriculum I 3
SpE 3172 Special Education Field Experience I 1
SpE 3173 Special Education Methods and Curriculum II 3
SpE 3174 Special Education Field Experience II 1
SpE 4134 Student Teaching Handicapped 10
One of the following: 3
SpE 4151 Arts and Crafts for the Exceptional Child
LM 4700 Audio Visual Media of Instruction
Mus 3400 Therapeutic Use of Music

FREE ELECTIVES 2

TOTAL 129

Special Education Courses

GENERAL AND INTRODUCTORY

SpE 2051 The Exceptional Individual (3)
Early detection and proper care of disabilities. Etiology, diagnosis and prognosis, different treatments and programming from birth through adulthood covered. Emphasis on State and Federal legislation for the handicapped.

SpE 2052 Introduction to Psychology of the Handicapped
An examination of attitudes towards people with disabilities. An understanding of the characteristics of "handicap" and the concept of individual differences. Role playing, simulations, case studies and field experiences. Techniques for relating to persons who happen to be disabled.

SpE 3050 Mainstreaming: Process and Techniques (3)
Preparation of education majors to teach mainstreamed children. Includes awareness of legislation, placement decision, attitude development, mainstreaming models and teaching strategies.

SpE 4053 Orientation to Psychological Testing
An overview of clinical tests and other assessment techniques used with handicapped children. An introduction to the way instruments are constructed and validated. Practice in the administration of tests under supervision.

TEACHER OF THE HANDICAPPED

SpE 2120 Sophomore Field Experience in Teacher of the Handicapped
Introduction to professional education of the handicapped. Includes ten full days of visitations to special education classes, schools and residential facilities for various types of handicapped children.

SpE 2154 Introduction to Mental Retardation (3)
Emphasis placed on physical, emotional and social characteristics of the mentally retarded. Identification, diagnosis and treatment of the mentally retarded included.
Prerequisite: SpE 2051.

SpE 2155 Introduction to Learning Disabilities (3)
Overview of theories and practices in psycho-educational diagnosis and remediation of children's learning disabilities. The areas of perception, cognition, language and motivation will be explored in relation to school subject matter and classroom performance.
Prerequisite: SpE 2051.

SpE 2156 The Emotionally Disturbed (3)
Overview of the emotional and social characteristics of the emotionally disturbed. Emphasis is on the theories of causation, evaluation and educational programs available to the emotionally disturbed.
Prerequisite: SpE 2051.

SpE 2157 The Severely Multiply Handicapped (3)
Overview of the concept, definition and classification of severely multiply handicapped persons. Emphasis is on learning characteristics, resources, ethical issues and programming.
Prerequisite: SpE 2051.

SpE 3161 Career Education for the Handicapped (3)
Overview of theories and practices in career development for the handicapped. Includes vocational competencies, family, business and industry, and community resources.

SpE 3171 Special Education Methods and Curriculum I (3)
Basic methods course in special education. Includes historical perspective, resources, legislation, classification, curriculum design, teaching strategies, scheduling and introduction to computer programs for handicapped students.
Prerequisite: SpE 2154, 2155, 2156, or 2157.
Corequisite: SpE 3172 Field Experience I.

SpE 3172 Special Education Field Experience I (1)
Students spend 1/2 day per week (45 hours) per semester in a selected special education setting. Application of content learned in SpE 3171. Emphasis on case study, curriculum content, basic teaching strategies and scheduling. On-site observation by college supervisors.
Corequisite: SpE 3171.

SpE 3173 Special Education Methods and Curriculum II (3)
Basic methods course in special education. Includes techniques of observation of children, instructional strategies, classroom environment, evaluation, materials selection, working with parents, self-evaluation, classroom management and computer application for handicapped students.
Prerequisite: SpE 3171.
Corequisite: SpE 3174.

SpE 3174 Special Education Field Experience II (1)
Emphasis on observational techniques, lesson planning, monitoring and reporting pupil progress, selection of materials and classroom structure and management. On-site observation by college supervisors. Students spend 1/2 day per week (45 hours) per semester in a selected special education setting.
Corequisite: SpE 3173.

SpE 4134 Student Teaching: Handicapped (10)
Full-time teaching experience for a full semester in an educational setting under the direction of a college supervisor and cooperating teacher. Prerequisites: Successful completion of 90 credits and SpE 3173.

SpE 4151 Arts and Crafts for Exceptional Children (3)
Relevant and adaptable craft activities for handicapped children. Projects geared toward adapting common craft projects for use with children and varying handicapping conditions. Practicum work with handicapped children included.
Prerequisite: SpE 3171.

SPEECH CORRECTION/EDUCATION OF THE HEARING IMPAIRED

SpE 1250 Introductory Field Experiences in Speech/Language Pathology, Audiology and Education of the Hearing Impaired (3)
Exposure to individuals with various types and degrees of speech/language and hearing handicaps in various work settings. Includes 10 full days of visits to special classes, schools, clinics and hospitals.
Heller, LeComte

SpE 2251 Introduction to Speech, Language and Hearing Disorders (3)
Orientation to field of speech pathology, audiology and education of the hearing impaired: overview of communication and disorders of communication in individuals of all ages. Consideration of nature, etiology, symptoms, remediation of both organic and non-organic disorders of speech, language and hearing.
Shulman

SpE 2254 Phonetics (3)
Study of the sound patterns of languages: phonetic transcription: acoustic and anatomic aspects: application to disorders of articulation and dialects. Prerequisite: SpE 2251
Shulman, LeComte

SpE 2255 Normal Language Development (3)
A study of the linguistic and psychological bases of the speech and hearing processes. The ontogenetic and phylogenetic development of speech as a communication tool. Implications for the study of speech in psychology, semantics, and thought.
LeComte, Shulman

SpE 2260 Anatomy and Physiology of the Ear and Speech Mechanism (3)
A study of the basic structures and functions of the auditory and speech mechanisms: application to fields of audiology, speech pathology and education of the hearing impaired.
Shulman

SpE 2261 Speech and Hearing Science (3)
Provides basic information necessary for understanding the speech and hearing process; includes a review psycho-physiological bases of speech, hearing and language.
Prerequisite: SpE 2260.
Terr

SpE 3251 Communication Disorders of the Exceptional Child (3)

Introduction to the nature and etiology of speech, language and hearing disorders in the exceptional child. The stages of normal speech and languages development as well as procedures involved in identification, evaluation and remediation will be highlighted for application for the classroom teacher.

LeComte

SpE 3254 Speech and Language of the Hearing Impaired (3)

The impact of hearing impairment on the acquisition and development of speech and language; training in the assessment of speech and language; a variety of methods, strategies, and techniques for speech and language intervention; the development of appropriate goals and objectives for speech and language IEPs (Individualized Education Plan). Prerequisites: SpE 2251, SpE 2255.

Edelstein

SpE 3256 Disorders of Articulation and Voice (3)

A study of the nature, etiologies, examination, diagnoses and remedial techniques associated with disorders of articulation and voice. Case discussions and clinic observation. Prerequisites: SpE 2251.

LeComte

SpE 3257 Organic Disorders of Speech and Language (3)

A study of the nature, etiologies, and remedial techniques associated with aphasia, cerebral palsy, and cleft-palate. Case discussions and clinic observation.

Prerequisites: SpE 2251, 2254 and 2260.

Heller, LeComte

SpE 3259 Basic Audiology (3)

An introduction to the theory and practice of pure tone and speech audiometry. Interpretations of audiograms for education, medical and industrial applications. Observation and limited clinical experience are made available for the students.

Prerequisite: SpE 2260.

Terr

SpE 3262 Aural Rehabilitation (3)

A review of auditory and visual perception. Development of skill in using amplification devices, lip-reading tests, and interpretations of audiometric findings. Practical experience in auditory training and lip-reading with individuals and groups of all age levels.

Prerequisite: SpE 3259.

Terr

SpE 3263 Methods of Teaching the Hearing Impaired I (3)

Nature and educational implications of hearing impairment; training in a variety of methods and strategies for instruction and the social and academic considerations necessary for the appropriate education of hearing impaired students.

Prerequisites: SpE 2051, 2251.

Edelstein

SpE 3264 Methods of Teaching the Hearing Impaired II (3)

Evaluation and assessment of hearing impaired students; interpretation of test results; presentation of assessment instruments; training in application of test results to development of students individualized education plans; adaptation of materials for hearing impaired.

Prerequisite: SpE 3263.

Edelstein

SpE 3265 Education of the Hearing Impaired Field Experience I (1)

Students spend one-half day per week (45 hours) per semester in a variety of regular education settings. Application of content learned in SpE 3263. Emphasis on curriculum content and basic teaching strategies. On-site observation by college supervisors.

Corequisite: SpE 3263.

SpE 3266 Education of the Hearing Impaired Field Experience II (1)

Students spend one-half day per week (45 hours) per semester in a variety of educational settings for hearing impaired students. Application of content learned in SpE 3263 and SpE 3264. Emphasis on the development of appropriate instructional goals and objectives and utilization of materials for instruction. On-site observation by college supervisors.

Co-requisite: SpE 3264.

SpE 4203 School Practicum (3)

Experience in an educational setting under the direction of a college supervisor and cooperating teacher.

Prerequisite: SpE 4260.

Edelstein

SpE 4204 Student Teaching Program in Education of the Hearing Impaired (10)

Full-time teaching experience in an educational setting with hearing impaired children, under the direction of a college supervisor and cooperating teacher.

Prerequisites: SpE 3264, SpE 4268.

SpE 4257 Theory of Clinical Practice in Speech and Hearing I (2)

Theory of clinical experiences with individuals having various types and degrees of speech and hearing impairments. Organization of speech and hearing programs in schools.

Prerequisites: SpE 3256 and 3257.

Heller

SpE 4258 Theory of Clinical Practice in Speech and Hearing II (2)

A continuation of SpE 4257 which is a prerequisite. Organization of speech and hearing programs in hospitals or clinics.

Prerequisites: SpE 4257, 3256, 3257.

Heller

SpE 4259 Nature and Etiology of Stuttering (3)

Introduction to analysis of major theories on stuttering. Study of preventive principles, diagnostic and therapeutic procedures in the clinic and school.

Prerequisite: SpE 2251.

Shulman

SpE 4260 Practicum in Speech and Hearing Disorders I (3)

Supervised clinical practice with children and adults presenting a variety of speech and hearing disorders.

Prerequisites: SpE 3256 and 3257.

SpE 4261 Practicum in Speech and Hearing Disorders II (3)

A continuation of SpE 4260 which is a prerequisite.

Prerequisites: SpE 4260, 3256, 3257.

SpE 4262 Signing (3)

Manual sign as a tool for communicating with hearing impaired people. Emphasis on the clear and correct expression and reception of messages through the use of fingerspelling and manual signs.

SpE 4263 Signing II (3)

Manual sign as a tool for communicating with hearing impaired people. Emphasis is on the development of vocabulary, fluency and conversation in existing basic expressive and receptive sign skills.

Prerequisite: SpE 4262.

Edelstein

SpE 4268 Teaching Content Areas to the Hearing Impaired (3)

Curriculum design and development in Math, Science, Social Studies, Literature, and Health Education for Hearing Impaired students; training in a variety of educational strategies and techniques and in the use of educational materials for instruction.

Prerequisite: SpE 3264.

Edelstein

SpE 4270 Diagnostic Methods in Speech/Language Pathology (3)

Considerations in evaluation of communication skills; including interviewing, articulation, language, voice and fluency testing, and examination of speech mechanism. Practicum in diagnostics.

Prerequisite: SpE 3256.

Shulman

INDEPENDENT STUDY**SpE 4301-4303 Independent Study in Special Education and Individualized Services (1, 2 or 3)**

Opportunity for students of advanced ability to pursue in a concentrated manner a specific area of study in special education and individualized services not available through current course offerings.

Prerequisites: Approval of coordinator and faculty member.

Academic Degrees, Programs

B.A. in Art History

B.A. in Communications

B.A. in English

B.A. in English, *Writing Option*

B.A. in English, Comparative Literature

B.A. in English, *Teacher Certification Option*

B.A. in Fine Arts

B.A. in Fine Arts, *Teacher Certification Option*

B.F.A. in Fine Arts, *Studio Art*

B.F.A. in Fine Arts, *Interior Design*

B.F.A. in Fine Arts, *Visual Communications*

B.A. in French

B.A. in History

B.A. in History, *Teacher Certification Option*

B.A. in Music

B.A. in Music, *Teacher Certification Option*

B.A. in Philosophy and Religion

B.A. in Psychology

B.A. in Sociology

B.A. in Sociology, *Teacher Certification Option*

B.S.W. in Social Work

B.A. in Spanish

B.A. in Spanish, *Teacher Certification Option*

B.A. in Theatre

SCHOOL OF LIBERAL ARTS**Departments, Faculty****COMMUNICATIONS AND THEATRE**

Faculty: Baker, Dunn, Harper, Londino, D. Lumsden, G. Lumsden, Murphy (Chairperson), Remmers, Rhoades, Trzesinski

ENGLISH

Faculty: Adames, Banks, Bauer, Brilliant, DeFanti, Evans, Fyne, Gover, Haselton, Kafka, Katz, Kennedy, Krueger, O'Day, Okin, Reicker, Reppy, Rodriguez-Bachiller, Scotto, Shaffer-Koros (Chairperson), Thomason, Weinstein

FINE ARTS

Faculty: Blue, Buncamper, Burger, Cohan, Coon, Cornish, Derman, Fuhrman, Giacalone, Gonella, Goodwin (Chairperson), Greenberg, Holloway, Jochnowitz, Jones, Landa, Lipscomb, Lord, Metzger, Nicolescu, Pierro, Rohloff, Schwartz, Shaw, Stotz, Topper, Troy, Velez, Victoria, Wallach

FOREIGN LANGUAGES, LITERATURES AND CULTURES

Faculty: Aleman, Edreira, Feito, Gnarra, Markle, Portuondo, Rodriguez (Chairperson), Salins, Wendell

HISTORY

Faculty: Didsbury, Fridlington, Furer, N. Goldberg, Letterese, Lutz, Mayer, Rice, Siegel, Socarras, Spaulding, S. Strauss, L.H. Zimmer (Chairperson)

MUSIC

Faculty: Cullen, Engelhard, Feldman, Golub, Grace, Herron, Hoyle, Montgomery (Chairperson), W. Price, L.J. Zimmer

PHILOSOPHY AND RELIGION

Faculty: Burt, Catalano, D'Souza (Chairperson), Fethe, Pashman, Pezzolo, Sitelman, Stern

PSYCHOLOGY

Faculty: Avioli, Bousquet, Bruel, Danielson, DiSalvi, Escudero, Feigenbaum, Fraunfelker, Gonsalves, M. Harris, Jaffe, Kaplowitz, Kind, Lorber, Moldawsky, Morelli, R. Roth, Samenfeld (Chairperson), Saperstein, S. Schwartz, Springer, F. Stern

SOCIOLOGY, ANTHROPOLOGY AND SOCIAL WORK

Sociology Faculty: Kamerman, Langer, Mayo (Chairperson), Naughton, Stimson, Wase, Wheeler, White, Yellin

Anthropology Faculty: White

Social Work Faculty: Elias, Graves (Coordinator), Herina, Schreiber, Williams

Africana Studies Coordinator: Wheeler-Hall

Coordinator: Prof. Virginia Stotz
VE420 Ext. 2055

Art history, a traditional liberal arts discipline, is concerned with the understanding and interpretation of the visual arts within a historical context. This major prepares students for work in galleries, museums, research and related fields. Additional background in the humanities, especially languages, and courses in museum training are recommended. Programs should be selected with advisement.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4

Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3

Computer Science
Mathematics

Health and Physical Education 2-3

Health Education
Physical Education

A Science course may be substituted for this Core Course

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement

†Excluding teaching methods courses

MAJOR REQUIREMENTS 30

REQUIRED COURSES 18

FA 1100 Two-Dimensional Design 3
FA 1101 Three-Dimensional Design 3
AH 1700-1701 Art History I and II 6
FA 3800 Philosophy of Art 3
AH 4700 Problems in Art History 3

MAJOR ELECTIVES 12

Any four additional courses in art history

FREE ELECTIVES 42-43

(50% at 3000-4000 Level)

TOTAL 124

Art History Courses

ART HISTORY

AH 1700 Art History I (3)
A study of important works of painting, sculpture and architecture from prehistory to the Renaissance with emphasis on stylistic analysis and the relationship of art to its cultural and historical setting.

AH 1701 Art History II (3)
A study of important works of painting, sculpture and architecture from the Renaissance to the present with emphasis on stylistic analysis and the relationship of art to its cultural and historical setting.

AH 3700 American Art (3)
American art and its cultural and historical contexts from colonial times to the present.

AH 3710 Italian Renaissance Painting (3)
Italian painting of the fourteenth, fifteenth and sixteenth centuries.

AH 3720 Baroque Art (3)
European painting, sculpture, and architecture in the age of Rembrandt.

AH 3738 Eighteenth Century Art (3)
European painting, sculpture and architecture from the time of Louis XIV through the age of the French Revolution.

AH 3740 Modern Art (3)
From cubism to abstract expressionism. Study of major artists, art works and movements in Europe and America from 1900 to 1945.

AH 3741 Contemporary Art (3)
Study of painting and sculpture in Europe and America from 1945 to present.

AH 3745 Impressionism and Post-Impressionism (3)
European art from Manet to Van Gogh and Toulouse-Lautrec.

AH 3748 History of Visual Communications (3)
Historical survey of visual communications from ancient times to present, including illustration, book design, printing, graphic design, advertising, photography, film and electronic media.

AH 3750 The Art of China (3)
The art of China from Neolithic time to the Ch'ing Dynasty.

AH 3751 The Art of Japan (3)
The art of Japan from prehistoric times to the end of the Edo Period with emphasis on painting, sculpture and architecture.

AH 3752 The Art of India
The art and culture of India including Buddhist art, Moslem art, Hindu art and art of Southeast Asia.

AH 3760 Medieval Art (3)
Architecture, painting, and sculpture of the Early Medieval, Romanesque, and Gothic periods.

AH 3770 Greek and Roman Art (3)
Works of art from Archaic and Classical Greece, the Hellenistic Age and the Roman Republic and Empire.

AH 3780 The History of African Art (3)
A study of geographical, historical, and anthropological backgrounds of the people of Africa, south of the Sahara. In addition, the course will survey the art of the West Guinea coast and some North Central African states (Mali, Upper Volta, Liberia, Ivory Coast, Nigeria, Camerons, and the Congo).

AH 3781 Afro-American Art (3)
An historical survey of Afro-American artist from the Colonial era to the present, including crafts, painting, sculpture, graphics and photography.

AH 3790 History of Furniture and Interiors (3)
Chronological examination of the formal, structural and motivating characteristics of furniture and interior decoration in significant periods, especially the classic, Gothic, Italian, French, English, and American. Textiles, their qualities, designs, and colors. Special attention given to the adaptation of past work to contemporary usage.

AH 3792 History of Architecture (3)
Chronological survey of selected key monuments from prehistory to the twentieth century emphasizing structural, programmatic, and formal analysis. Site planning of buildings and the evolution of cities and city planning. Architecture as deeply related to the culture and events of its time.

AH 3795 Pre-Columbian Arts of Central America (3)
A survey of the cultures of Mexico and Central America prior to the conquests of Cortez beginning in 1519, considering the archaeological evidence in a chronological sequence, stressing their arts and using interdisciplinary methodologies.

AH 4700 Problems in Art History (3)
Principles and problems in art history studied through independent research and group critique. Advanced level.
Prerequisite: Permission of instructor.

AH 4710 History of Drawings and Prints (3)
Techniques, uses, and historical development of drawing and printmaking, with emphasis from Durer and Rembrandt through the modern era.
Prerequisite: FA 1701 or 3260 or 3261.



Chairperson, Dr. James Murphy
VE410 Ext. 2349

The Department of Communications and Theatre offers a B.A. in Communications and a B.A. in Theatre. The B.A. in Communications provides coursework in the areas of Broadcast Communication and Public Communication. Each specialty will provide the student with a myriad of future career opportunities in business and the broadcast industry. The B.A. in Theatre offers students intensive training in all aspects of production, from acting to set design. With this broad range of experience in stage craft, the Theatre major may pursue a career in any aspect of professional or educational theatre. All majors are encouraged to gain practical experience by joining the FCC-licensed campus radio station WKNJ and participating in all of the Kean College Theatre Series productions.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020	Composition	3
GE 1100	Emergence of the Modern World	3
GE 1200	Intellectual and Cultural Traditions	3
GE 2020	Inquiry and Research	3
GE 2203	Landmarks of World Literature	3
GE 2400	Science and Technology in the Modern World #	3

BREADTH REQUIREMENTS 33-34

Humanities 12
Comm 1400 Speech Communication
Three courses from at least two areas:
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4

Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3
Computer Science
Mathematics

Health and Physical Education 2-3
Health Education
Physical Education

A Science course may be substituted for this Core Course
**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement.
†Excluding teaching methods courses

MAJOR REQUIREMENTS 36

REQUIRED COURSES 18		
Comm 2415	Group Communication	3
Comm 3500	Communication Theory	3
Comm 2500	Introduction to Mass Media	3
Comm 2405	Public Speaking I	3
Comm 3410	Voice & Speech	3
Comm 3510	Persuasive Communication	3

MAJOR ELECTIVES 18

Concentration Selected By Advisement
Broadcast Communication or Public Communication
(9 s.h. at 3000/4000 level)

ADDITIONAL COGNATE COURSES 12

The 1100	Acting I	3
The 1200	Introduction to Theatre	3
Two courses from the following:		
English: Writing or Language		3
Electives		23-24

TOTAL 124

Minor

REQUIREMENTS 18

REQUIRED COURSES FOR THEATRE EMPHASIS

Comm 1400	Speech Communications	3
The 1100	Acting I	3
The 1200	Introduction to Theatre	3
The 2300	Technical Theatre Production	3
Three Theatre courses of which two must be 3000-4000 level		
9		

REQUIRED COURSES FOR SPEECH-MEDIA EMPHASIS

Comm 1400	Speech Communications	3
Comm 2405	Public Speaking	3
Comm 2425	Nature and Experience of Communication	3
Comm 2500	Introduction to Mass Media	3
Three Communications courses of which two must be 3000-4000 level		
9		

*Comm 1400 required through General Education

Communication Courses

Comm 0100 (STM 1000) Developmental Oral Communication (3)

Examination of individual's role in the oral communication process and development of speech skills with emphasis on message development, idea organization, delivery and language usage. To be taken on a pass/fail basis.

Comm 1400 (STM 1900) Speech Communication (3)

Theory and practice of speech-communication principles in interpersonal, small group and large audience situations.

Comm 2405 (STM 2905) Public Speaking (3)

The preparation and delivery of various types of speeches for public audiences.
Prerequisite: Comm 1400 (STM 1900) or permission of instructor.
D. Lumsden, G. Lumsden, Baker

Comm 2410 (STM 2910) Debate (3)

A study of the principles of parliamentary procedure which govern formal groups and legislative bodies, integrated with a study of reasoning, evidence, proof, and formal debate.
Prerequisite: Comm 1400 (STM 1900) or permission of instructor.
D. Lumsden

Comm 2415 (STM 2915) Group Communication (3)

An analysis of the theory and process involved in group problem solving.
Prerequisite: Comm 1400 (STM 1900).
G. Lumsden, Remmers

Comm 2420 (STM 2705) Oral Interpretation (3)

A literary analysis and performance course in the oral reading of prose, poetry and drama.
Prerequisite: Comm 1400 (STM 1900).
Dunn

Comm 2425 (STM 2970) Nature and Experience of Communication (3)

A survey of the theories and models of communication and their relevance in intra- and interpersonal communications through practical application.
Prerequisite: Comm 1400 (STM 1900).
D. Lumsden, G. Lumsden

Comm 2500 (STM 2975) Introduction to Mass Media (3)

The effects of mass media in American society and the development of taste for the popular arts.
Prerequisite: Comm 1400 (STM 1900).
Londino, Trzesinski

Comm 2810 Radio Production (3)

Introduction to the basic techniques of radio production.
Trzesinski

Comm 3410 (STM 3900) Voice and Speech (3)

Voice and speech improvement, treating the voice as a subjective, living phenomenon.
Prerequisite: Comm 1400 (STM 1900).

Comm 3415 (STM 3915) Oral Interpretation of Children's Literature (3)

Theory and practice in the oral interpretation of children's literature with special emphasis on storytelling, prose and poetry reading.
Prerequisite: Comm 1400 (STM 1900).
Dunn

Comm 3510 (STM 3950) Persuasive Communication (3)

Examination of the nature of persuasion in human interaction situations.
Prerequisite: Comm 1400 (STM 1900).
D. Lumsden, G. Lumsden

Comm 3520 (STM 3965) Organizational Communication (3)

Examination of communication behavior in an organizational structure, implementation of communication principles through in-class presentations.
Prerequisite: Comm 1400 (STM 1900).
D. Lumsden

Comm 3550 (STM 3985) History of Broadcasting (3)

The development of radio and television in the United States with emphasis on the major social, cultural, economic and political influences on the broadcast media.
Prerequisite: Comm 2500 (STM 2975).
Londino, Trzesinski

Comm 3560 (STM 3990) Development of Cinematic Drama (3)

Survey of the historical development of motion pictures: themes, aesthetic standards, special attitudes and directional styles studied through lectures and film screenings. Laboratory fee.
Prerequisite: Comm 1400 (STM 1900).
Trzesinski

Comm 3610 (STM 3700) Speech for Broadcasting (3)

Radio and television announcing techniques, including voice improvement, interviewing, narrating, disc jockeying.
Prerequisite: Comm 1400 (STM 1900).
Trzesinski

Comm 3620 (STM 3980) Broadcast Journalism (3)

Instruction in theoretical and practical radio and television journalism techniques with writing assignments in news, features, sports, editorials and documentaries.
Prerequisite: Comm 2500 (STM 2975).
Trzesinski

Comm 3660 (STM 3825) Public Relations (3)

Principles and practices of planning and implementing public relations programs.
Prerequisite: Comm 2500 (STM 2975).
Remmers

Comm 3675 Broadcast Advertising (3)

The history and practice of radio and television advertising. Emphasis will be placed on the research and development of a commercial campaign for broadcasting.
Prerequisite: Comm 2500.

Comm 3690 (STM 3510) Communication for Allied Health Professionals (3)

Health care delivery as a communication system; development of abilities as communicators within the system.
Prerequisite: Acceptance in the Physical Therapy Program.
D. Lumsden, G. Lumsden

Comm 4410 (STM 4910) Oral Interpretation of Poetry (3)

An exploration of the interrelatedness of the poet, the poem and the reader in the oral performance of poetry.
Prerequisite: Comm 2420 (STM 2705).
Dunn

Comm 4520 Telecommunications (3)

An introduction to telecommunications technology.
Prerequisite: Comm 2500.
Trzesinski

Comm/The (STM) 4955-4956-4957 Cooperative Education: Work-Study in Communications/Theatre (3,6,12)

Supervised placement in an employment position utilizing background in speech, theatre and/or media. May be repeated for credit. A maximum of twelve (12) credit hours in cooperative education may be applied towards the B.A. Degree. No more than forty semester hours in communications and theatre studies may be counted towards the 124 hours for the degree; therefore, credits in cooperative education which exceed the total of forty are taken beyond the degree requirements. Prerequisites: Minimum of 24 hours in communication and theatre courses and approval of communication and theatre coordinator.

Chairperson: Dr. Carole Shaffer-Koros
W303D Ext. 2092

The English major provides students wishing to pursue an interest in language and literature with a foundation that is culturally rich and academically rewarding. The major also provides a basis for advanced study in English, law, or journalism; for secondary school teaching; and for communications-oriented positions in business, industry, and the community.

**B.A. Degree
Option: Standard**

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least two areas:
**English (2000 level literature or drama) or Communications and Theatre

†Fine Arts or Art History
Foreign Languages (two foreign language courses at the 2000-4000 level)
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4
Astronomy Meteorology
Biology Oceanography
Chemistry Physics
Geology

Mathematical Sciences 3
Computer Science
Mathematics

Health and Physical Education 2-3
Health Education
Physical Education

A Science course may be substituted for this Core Course

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement

†Excluding teaching methods courses

COGNATE COURSES 3

Comm 1400 Speech Communication 3

MAJOR REQUIREMENTS 30

REQUIRED COURSES 15

Eng 2205 British Literature I or* 3
Eng 2206 British Literature II 3
Eng 2220 American Literature to 1860 or* 3
Eng 2221 American Literature 1860-1914 3
Eng 2215 Shakespeare Survey 3
Eng 2000 Analytical Writing About Literature 3
Eng 4800 Senior English Seminar** or 3
Eng 4600 Senior Honors Seminar** 3

*It is desirable that students take both parts of these surveys
**Qualified juniors may enroll for the seminars with permission of the department

MAJOR ELECTIVES 9

Must include one language course selected with advisement and courses from at least two of the following groups: figures, genre, period.

FREE ELECTIVES 38-39

(50% at 3000-4000 Level)

TOTAL 124

**B.A. Degree
Option: Writing**

Designed for students interested in careers involving writing (such as business, the professions, journalism, or the creative arts) and also for those students who wish to pursue graduate programs in writing.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4
Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3
Computer Science
Mathematics

Health and Physical Education 2-3
Health Education
Physical Education

A Science course may be substituted for this Core Course

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement

†Excluding teaching methods courses

COGNATE COURSES 3

Comm 1400 Speech Communication 3

MAJOR REQUIREMENTS 30

REQUIRED COURSES 15

Eng 2205 British Literature I or* 3
Eng 2206 British Literature II 3
Eng 2220 American Literature to 1860 or* 3
Eng 2221 American Literature 1860-1914 3
Eng 2215 Shakespeare Survey 3
Eng 2000 Analytical Writing About Literature 3
Eng 4800 Senior English Seminar** or 3
Eng 4600 Senior Honors Seminar** 3

*It is desirable that students take both parts of these surveys
**Qualified juniors may enroll for the seminars with permission of the department

MAJOR ELECTIVES 15

Must include one language course selected with advisement and 12 s.h. in writing courses, with at least half at the 3000-4000 level.

FREE ELECTIVES 39-40

TOTAL 124

**B.A. Degree
Option: Comparative Literature**

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Two courses in a foreign language at 2000 level and above 6
Two courses from at least two areas: 6
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4
Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3
Computer Science
Mathematics

Health and Physical Education 2-3
Health Education
Physical Education

A Science course may be substituted for this Core Course

**Only one course may be used from English Communication and Theatre and toward the Humanities Requirement
†Excluding teaching methods courses

COGNATE COURSES 3

Eng 2240 Introduction to Comparative Literature 3

MAJOR REQUIREMENTS 30

REQUIRED COURSES 21

Eng 4550 Theory and Criticism: The Literature about Literature 3
Six courses, selected with advisement from the English and/or Foreign languages departments as follows:
Two literature courses dealing with various cultures 6
Two courses in American and or English Literature 6
Two courses in foreign literature in original language 6

MAJOR ELECTIVES 9

Three courses from English or Foreign Languages departments with a maximum of 6 s.h. in Literature in Translation

FREE ELECTIVES 39-40

TOTAL 124

**B.A. Degree
Option: Teacher Certification**

The following program meets the standards for state approval of teacher education in English K-12.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 67

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 World Literature 3
GE 2400 Science & Technology in the Modern World 3

BREADTH REQUIREMENTS 49

**Humanities 9*
(from at least 2 disciplines)
Comm 1400 (STM 1900) Speech 3
Two courses from two areas:
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

†Excluding teaching methods courses

**Social and Behavioral Sciences 9*

Psy 1000 General Psychology 3
Soc 1000 Social Life & Society, or 3
Ant 1800 Cultural Anthropology
Economics or Geography
History
Political Science 3

Biological and Physical Sciences 4
Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3
One course in Mathematics

Health and Physical Education 4

ID 1225 Contemporary Issues in Health 3
Physical Education 1

Additional General Education Courses 20

Comm 2405 (STM 2905) Public Speaking 3
Eng 2255 Literature for the Adolescent 3
Psy 2110 Psychology of Adolescence 3
Electives 11
(from any of the above * areas)

MAJOR REQUIREMENTS 30

Eng 2220	American Literature to 1860, <i>or</i>	
Eng 2221	American Literature from 1860	3
Eng 2205	British Literature I, <i>or</i>	
Eng 2206	British Literature II	3
Eng 2215	Shakespeare Survey	3
Eng 2000	Analytical Writing About Literature	3
Eng 4800	Senior Seminar, <i>or</i>	
Eng 4600	Senior Honors Seminar	3

ELECTIVES 15

Must include one language course selected with advisement and courses from at least two of the following groups: figures, genre, period.

PROFESSIONAL SEQUENCE 30

Ed 3401	Language Arts/Reading	3
Ed 3000	Curriculum, Evaluation & Learner	3
Ed 4000	Teachers & Classroom	3
ICA 3210	English K-12	3
ICA 4xxx	Computers & AV Aids <i>or</i>	
ICA 4xxx	Bilingual/ESL: Curriculum & Instruction <i>or</i>	
ICA 4xxx	Humanities & Humane Education	3
ICA 2801	Introductory Field Experience K-12	3
ICA 3803	Junior Field Experience K-12	2
ICA 4802	Professional Internship: Secondary Education	10

TOTAL 128

Minor

Students may select one or four emphases to develop their general understanding of literature, writing and/or linguistics, or to enhance academic or professional skills based in another major.

REQUIREMENTS 18

REQUIRED COURSES 6

Eng 2000	Analytical Writing about Literature	3
	One English course outside of concentration, selected with advisement	3

ELECTIVES 12

four courses selected with advisement from departmental offerings, at least two on the 3000-4000 level, to complete one of the following concentrations:
General
Literature
Writing
Linguistics

English Courses

ENGLISH AS A SECOND LANGUAGE

Enrollment in the following twelve courses is limited to students whose native language is not English. There are special requirements related to these courses and their application to the baccalaureate degree. See the Academic Standards and Procedures section of this catalog for all information on the English as a Second Language Program.

The following courses with ESL designations are graded on pass/fail basis only. Credit earned for these courses does not fulfill degree requirements.

ESL 0100 English as a Second Language I (6)

Study of English grammar and structure for the student whose native language is not English, with emphasis on speaking and listening skills. Required of all students whose scores on a placement test indicate that they are not prepared to do college work in English.

ESL 0102 English Pronunciation (3)

Practice to improve English pronunciation of non-native speakers.
Prerequisite: Consent of program director.

ESL 0103 Listening Skills (3)

Extensive practice in developing listening skills through exercises in dictation, following oral directions, notetaking, etc.
Prerequisite: Consent of program director.

ESL 0200 English as a Second Language II (6)

Continued study of English grammar and structure and additional practice in listening and speaking skills in English for students whose native language is not English. Instruction in writing and reading short passages.
Prerequisite: ESL 0100 or consent of program director.

ESL 0202 Pronunciation II (3)

Continuation of English Pronunciation I for students who require additional practice.
Prerequisite: ESL 0102 or consent of program director.

ESL 0203 Listening Skills II (3)

Continuation of Listening Skills I. Additional practice in developing listening skills through dictation, oral directions, notetaking, etc.

ESL 0302 Vocabulary Development I (3)

Systematic expansion of English vocabulary, including idioms, academic vocabulary, course content vocabulary.
Prerequisite: ESL 0200 or consent of program director.

ESL 0303 English Conversation (3)

Designed to develop fluency in the spoken language and to enlarge student's English vocabulary.
Prerequisite: Consent of program director.

ESL 0402 Vocabulary Development II (3)

Continuing systematic expansion of English vocabulary.
Prerequisite: ESL 0302 or consent of program director.

Degree credit granted for the following Eng courses:

Eng 1300 Beginning Writing in English (6)

Extensive practice in the fundamentals of written sentence structure and of expository paragraphs. Graded on pass/fail basis only.
Prerequisite: ESL 0200 or consent of program director.

Eng 1400 Advanced Writing (6)

Extensive practice in writing expository English prose. May be taken before or concurrently with Eng 1403.
Prerequisite: Eng 1300 or consent of program director.

Eng 1403 Investigative Skills (3)

Research methodology, including use of the library, information gathering, organizing and writing the research paper, writing of expository prose based on readings from essays, short stories, poetry and drama. May be taken after or concurrently with Eng 1400.
Prerequisite: Eng 1300 or consent of program director.

DEVELOPMENTAL

Degree credit not granted for these courses.

Eng 0108 Developmental English I (NC)

Basic skills course encouraging fluency in student writing through intensive practice and exposure to a variety of topics. Required of all students whose scores on the New Jersey College Basic Skills Placement Test indicate the need for additional work before enrollment in Eng 1020 or Eng 0109. To be taken on a Pass/Fail basis. Not for college credit. (Additional 1 1/4 weekly writing lab. required.)
Prerequisite: Permission of program director.

Eng 0109 Developmental English II (NC)

Basic writing course focusing on paragraph and essay development, awareness of sentence structure, and editing skills. Required of all students whose scores on the New Jersey College Basic Skills Placement Test indicate the need for additional work before enrollment in Eng 1020. To be taken on a Pass/Fail basis. Not for college credit. (Additional 1 1/4 weekly writing lab. required.)
Prerequisite: Permission of program director.

WRITING

Eng 1020 is prerequisite to all English courses beyond the 1000 level except in cases of exemption or permission of the instructor.

Eng 1020 Composition (3)

Introduction to expository writing; emphasis on logic, rhetoric and critical thinking.
Prerequisite: Satisfactory performance on writing sections of the New Jersey College Basic Skills Placement Test or successful completion of developmental writing requirements.

Core Course, General Education; requirement of all students (except ESL students).

Eng 2000 Analytical Writing about Literature (3)

Critical reading and writing about fiction, poetry, and drama.
Prerequisite: Eng 1020
Bauer, Katz

Eng 2010 Creative Writing (3)

Instruction and practice to develop skills in the writing of fiction, poetry and drama.
Banks, Bauer, Okin

Eng 3000 Writing Poems (3)

Probe and practice in the nature of poetic vision as expressed through the symbols of early language on to contemporary patterns.
Thomason

Eng 3005 Advanced Composition (3)

Instruction in more sophisticated methods of invention and more advanced techniques in expository, analytical and persuasive writing than offered in English 1020. Emphasis on identifying and addressing specific audiences and on appreciating and developing varieties of style. Practice in editing and evaluating both professional and student writing.
Prerequisite: Eng 1020 and permission of instructor.
Bauer, Katz, Weinstein

Eng 3010 Playwriting (3)

A course in the writing of play scripts.
Okin

Eng 3090 Business, Professional and Technical Writing (3)

The study and practice of writing reports, letters, resumes, memoranda, research projects, proposals, etc. with emphasis on audience appraisal, writing content, and presentation in terms of current techniques.
Scotto

Eng 4005 Writing Fiction (3)

The theory and practice of writing fiction.
Banks

LINGUISTICS

Eng 2101 Origin and Structure of the English Language (3)

An overview of the history of the English language and of the grammatical structure in English.
Prerequisite: Eng 1020.
Brilliant

Eng 3101 (2100) Introduction to Linguistics (3)

Introduction to the systematic study of language and the chief concerns of modern linguistics.
Brilliant, Rodriguez-Bachiller

Eng 3105 Language, Meaning and Human Behavior (3)

Theories of meaning and behavioral consequences of language.
Thomason, Banks

Eng 3109 American English Grammar (3)

A linguistic analysis of the structure of American English—its sound system, vocabulary, and syntax.

Eng 3115 Applied Linguistics (3)

Selected topics in applied linguistics, specifically second language learning and dialect.
Prerequisite: Eng 3101 or permission of instructor.
Brilliant, Rodriguez-Bachiller

Eng 4109 (3110) Theories of American English Grammar (3)

Syntax of contemporary American English, through analysis of structural and generative grammar, usage, and dialect.
Prerequisite: Eng 3101 or Eng 3109 or permission of instructor.

Eng 4110 (3100) Historical Development of the English Language (3)

The development of English traced from Old English to Modern British and American English. Some account given of the Indo-European and Germanic heritage of English, but attention is focused on phonological, morphological, syntactic, and semantic developments within English.
Prerequisite: Three semester hours of English language or literature.
Brilliant

Eng 4120 Sociolinguistics (3)

Analysis of language as a reflection of society and language use in specific social contexts. Introduction of research tools for language studies.
Prerequisite: GE 2020 or equivalent Senior standing or permission of the instructor.
Banks

SURVEY

Eng 2203 Landmarks of World Literature (3)

Representative readings in the literatures of the world's cultures from earliest times to the present, with emphasis on selected themes and genres.
Prerequisite: Eng 1020 Composition.
Core Course, General Education; required of all students.
Shaffer-Koros, Gover, Reicker, Banks

Eng 2205 British Literature I (3)

Major writers, styles, and ideas in English literature from Beowulf through the 18th century.

Eng 2206 British Literature II (3)

Major writers, styles, and ideas in English literature from 1800 to the 20th century.

Eng 2210 World Drama (3)

Introduction to the range and depth of dramatic literature from various times and nations. A wide selection of plays read and studied, including plays by authors extending from Sophocles and Shakespeare to Beckett and Albee.
Evans

Eng 2215 Shakespeare Survey (3)

An introduction to Shakespeare's comedies, histories, and tragedies.

Eng 2220 American Literature to 1860 (3)

A survey from colonial times to the Civil War with emphasis on Franklin, Cooper, Poe, Emerson, Thoreau, and Melville.

Eng 2221 American Literature from 1860 to 1914 (3)

A survey from the Civil War to World War I with emphasis on Whitman, Twain, James, Howells, Crane, and Dreiser.

Eng 2240 Introduction to Comparative Literature (3)

Introduction to the theory and methods of comparative literature: its history, growth, and present status; its varied approaches to literature; the role of translation; and specific bibliographic tools.
Shaffer-Koros

Eng 2250 Children's Literature (3)

A survey of traditional and modern stories, poems, plays, and informational materials for children.
Krueger

Eng 2255 Literature for the Adolescent (3)

A study of traditional and contemporary literature of interest and value to adolescents.
Krueger

Eng 2260 Yiddish Literature in Translation (3)

Survey of the poetry, fiction, essays and literary tendencies within Yiddish writing, primarily in the U.S., over the last hundred years. Among the writers covered are Sholem Aleichem, Y. L. Peretz, Sholem Asch, Israel Joshua Singer and Isaac Bashevis Singer. Field trip(s) to New York City Yiddish Cultural Center included.
Weinstein

Eng 3200 Black American Literature (3)

Historical study of writings of Afro-American poets, novelists, and essayists, with emphasis on the contribution of the Afro-American to American letters.
Kafka

Eng 3205 Literature of the East (3)

Traditional and contemporary writings (epic, novel, poetry, short story, drama) from the Near and Far East examined for literary, aesthetic, and trans-cultural values.
Shaffer-Koros

Eng 3210 Russian Literature in Translation (3)

Representative works in English translation of major writers from Pushkin to Solzhenitsyn.
Fyne

Eng 4710 Literature and the Supernatural (3)

The influences on our culture of magic, occult philosophies, witchcraft, and the para-normal, examined from traditional and contemporary sources in literature and the arts.

HONORS PROGRAM

The Honors Program in English is designed to provide able and strongly motivated students with the opportunity to study subjects in greater depth than in standard courses, to carry on independent research, and to develop creative projects.

Honors courses are open to all Kean College students who have fulfilled the General Education Eng 1020 requirement or its equivalent, and who have a "B" or better average.

Eng 3600 Honors Course in Modern Literature (3)

Honors course for qualified students who will be expected to study selected literary works dating from the late nineteenth century to the present.

Prerequisite: "B" average. *May not be taken if student has already completed Eng 3350. O'Day*

Eng 3601 Honors Course in Poetry (3)

This course concerns itself with the corpus, origins, and use of poetry. It stresses poems as prisms of a period and a culture along with their relation to social currents of our time. Emphasis is on major, significant, or revealing poems, far-ranging in time and place.

Prerequisite: "B" average. *Credit not given for both Eng 3500 and 3601.*

Thomason

Eng 3603 Honors Course in Greek and Roman Literature in Translation (3)

The most important landmarks in Greek and Roman literature, with emphasis on the development of genres and themes and their continuation into the present. May be taken in place of, but not in addition to, Eng 3300. Prerequisite: "B" average.

Eng 3605 Honors Course in Language, Meaning and Human Behavior (3)

This course focuses on the field of general semantics, specifically on the various social aspects of language behavior.

Prerequisite: "B" average or better. *Credit not given for both Eng 3105 and Eng 3605.*

Thomason

Eng 4600 Senior Honors Seminar (3)

Individual and intensive reading and investigation in a selected area of a thesis or a creative project.

Prerequisites: Senior status, English major, "B" or better average. (Qualified juniors may enroll in the seminar with permission of the department.)

Eng 4620 Honors Course in Robert Frost (3)

A close reading of Frost's poetry supplemented by criticism and Frost's biography.

Prerequisite: "B" average or better.

Evans

Eng 4630 Honors Course in James Joyce (3)

A study of the major works of Joyce, from *Dubliners* to selections from *Finnegans Wake*, with emphasis on the development of Joyce's art.

Prerequisite: "B" average.

Kennedy

SEMINARS AND INDEPENDENT STUDY

Eng 4800 Senior English Seminar (3)

Intensive study and research in an area of literature or language proposed by the student; culminates in a thesis which is presented to the seminar group.

Prerequisite: Senior status, English major. (Qualified Juniors may enroll with permission of the department.) Required for English majors. (Eng 4600 Senior Honors Seminar may be substituted.)

Eng 4808 Publishing Field Placement (12)

Supervised placement in a publishing house, where a student will learn the rudiments of the publishing trade through broad exposure to the operations of the press and/or intense training in a particular department.

Prerequisite: Selection by committee composed of English Department chairperson, instructor of Publishing Field Placement course, and one other member of the English Department. Special prerequisite: Ability to type.

Shaffer-Koros

Eng 4810, 4811, 4812 Independent Study for English Majors (1, 2, or 3)

Opportunity for English majors of advanced ability to pursue in a concentrated manner a specific area of study in literature, language, or writing not available through current course offerings. Approximately forty-five hours of supervised work required for each credit hour. May be repeated for credit. *Only six credits may be applied toward the 124 credits for graduation.*

Prerequisites: Twelve hours in English, and permission of instructor. (The 12 hour requirement can be waived with permission of the department chairperson.)

JOURNALISM

Eng 2920 Journalism (3)

Instruction in theoretical and practical journalistic techniques, with assignments in feature writing, reporting, proofreading and editing.

Fyne

Eng 2935 Feature Writing in Journalism (3)

Instruction and practice in the principles of writing feature articles for both newspapers and magazines with emphasis on style, organization, and human interest.

Fyne

Eng 2975 Journalism in the Free Society (3)

Analysis and evaluation of the journalist's role in a free society emphasizing the need for objective reporting.

Fyne

Eng 3920 Specialty Writing in Journalism (3)

Instruction and practice in the principles of writing specialty articles, such as sports and business articles, editorials and performing arts reviews for newspapers and magazines.

Prerequisite: Eng 2920.

Fyne

Eng 3925 Editing Skills in Journalism (3)

Instruction and workshop experience in the principles and practical skills required for editing newspapers and magazines, including newsroom administration.

Fyne

Eng 3930 Sports Writing in Journalism (3)

Instruction and practice in the principles of writing timely sports articles for newspapers and magazines.

Prerequisites: Eng 2920 or permission of instructor.

Eng 4910 Journalism/Public Relations Field Placement (6)

Supervised placement in the fast-moving city room environment of a daily newspaper or in an established public relations department of a large firm, institution, company, etc., where a student will learn to write news stories under actual deadline conditions.

Prerequisites: Eng 2920, 2935, 3925, typing ability and prior permission of instructor.

Fyne

INTERDISCIPLINARY COURSES

The following courses are found under Interdisciplinary Courses. (See Index.)

ID 3010 Philosophy in Literature (3)

Pashman, Weinstein

ID 4545 Marketing Communications Workshop (3)

*Chairperson: Prof. E. Austin Goodwin
VE 403B Ext. 2803*

The Fine Arts Department offers a Major in Fine Arts and a Major in Art History. The Fine Arts Major includes a B.A. in Fine Arts, a B.A. in Fine Arts: Teacher Certification and a B.F.A. with options in Interior Design, Studio Art and Visual Communications. For a description of the B.A. in Art History see separate listing in catalog.

FINE ART MAJORS

*B.A. in Fine Arts 30-42 credit hours in the major
A program designed for those interested in a general Fine Arts and Liberal Arts background.*

B.A. in Fine Arts: Teacher Certification: 42 credit hours in the major. This program is designed for those interested in the Fine Arts and also meets the standards for state approval of Art Teacher Education, K-12.

*B.F.A.: 72 credit hours in the major.
An intensive program beyond the B.A. which allows for professional specialization in a particular studio area.*

*The options are:
Option: Interior Design
Option: Studio Art
Option: Visual Communications*

B.A. Degree

*Program Coordinator: Prof. Michael Metzger
VE 436 Ext. 2697*

This is an elective program based upon an extension of the 21 semester hour Foundation Courses. This program gives the student opportunity to select major electives from a wide range of Fine Arts and Art History courses. The student may thus emphasize personal directions and strengths. This program is appropriate for double majors and can lead to varied careers in the arts or to advanced study.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020	Composition	3
GE 1100	Emergence of the Modern World	3
GE 1200	Intellectual and Cultural Traditions	3
GE 2020	Inquiry and Research	3
Eng 2203	Landmarks of World Literature	3
GE 2400	Science and Technology in the Modern World #	3

BREADTH REQUIREMENTS 33-34

Humanities 12

Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre

†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4

Astronomy Meteorology
Biology Oceanography
Chemistry Physics
Geology

*Mathematical Sciences 3
Computer Science
Mathematics*

*Health and Physical Education 2-3
Health Education
Physical Education*

A Science course may be substituted for this Core Course

***Only one course may be used from English and Communications and Theatre toward the Humanities Requirement*

†Excluding teaching methods courses

COGNATE COURSES 6

AH 1700-1701 Art History I and II 6

MAJOR REQUIREMENTS 42

REQUIRED COURSES 21

FA 1100	Two-Dimensional Design	3
FA 1101	Three-Dimensional Design	3
FA 1230	Drawing I	3
FA 1231	Drawing II	3
FA 2100	Color Theory	3
FA 2200	Introduction to Painting for F.A. Majors	3
FA 3276	Sculpture Workshop: Fabrication or	3
FA 3277	Sculpture Workshop: Modeling & Casting	

MAJOR ELECTIVES 24

Fine Arts courses selected with advisement. Three credits may be an Art History course.

FREE ELECTIVES 36-37

(50% at 3000-4000 Level)

TOTAL 124

Program Coordinator: Dr. Pearl Greenberg
VE 424 Ext. 2308

The Teacher Certification program assumes that the best art teachers are also practicing artists. It is a broad program of study in studio art and crafts, art history and education. Graduates may pursue careers as art teachers and artists or may also fill varied roles in museums and galleries. This program meets requirements for N.J. Certification to teach grades K-12. In order to be accepted a student must be interviewed, show a portfolio of art works, and have a grade point average of 2.5 or above.

**B.A. Degree
Option: Teacher
Certification**

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 66

CORE REQUIREMENTS 18
Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World 3

BREADTH REQUIREMENTS 29

Humanities 9
Comm 1400 Speech Communication 3
Select two courses from English, Music, Philosophy
Social and Behavioral Sciences 9
Psy 1000 General Psychology 3
Select two courses from two different areas Economics or Geography, History, Political Science
Biological and Physical Sciences 4
Astronomy Geology
Biology Meteorology
Chemistry Physics
Mathematical Sciences 3
One course in Mathematics
Health and Physical Education 4
ID 1225 Contemporary Issues in Health 3
Physical Education 1

*†Excluding teaching methods courses
#The 9 credits under Academic Sequence labeled General Education Component are counted in this total of 59.*

ADDITIONAL GENERAL EDUCATION REQUIREMENTS 13

Psy 2100 Child Psychology or 3
Psy 2110 Adolescent Psychology
Soc 1000 Social Life & Society or 3
Ant 1800 Cultural Anthropology
General Education Electives 7

COGNATE COURSES 6

AH 1700-01 Art History I & II 6

MAJOR REQUIREMENTS 30

FOUNDATION COURSES 21
FA 1100 Two-Dimensional Design 3
FA 1101 Three-Dimensional Design 3
FA 1230 Drawing I 3
FA 1231 Drawing II 3
FA 2100 Color Theory 3
FA 2200 Introduction to Painting for F.A. Majors 3
FA 3276 Sculpture Workshop: Fabrication or 3
FA 3277 Sculpture Workshop: Modeling & Casting 3



MAJOR ELECTIVES 9

Fine Arts courses selected with advisement. Three credits may be an Art History course.

PROFESSIONAL EDUCATION 30

FA 2900 Field Experience in Multicultural Art Ed Settings 3
FA 3900 Art Education I 3
FA 3902 Artist/Teacher Field Experience I 1
FA 3901 Art Education II 3
FA 3903 Artist/Teacher Field Experience II 1
FA 4990 Student Teaching 10

EDUCATION CORE:

ED 3000 Curriculum, Evaluation and the Learner 3
ED 3401 Language Arts/Reading in K-12 Subject Area Teaching 3
ED 4xxx Teacher and Classroom 3

TOTAL CREDITS 127

The B.F.A. degree requires 72 hours in the major and offers intensive professional programs which require specialization from among the particular options listed below. General Education requirements are the same for all B.F.A. options.

**B.F.A. Degree
Option: Interior Design**

Program Coordinator: Dr. Asher Derman
VE 308 Ext. 2681

This option is planned to prepare students for entrance into the interior design profession by promoting aesthetic awareness, creative development and an understanding of the designer's responsibility to the client. The curriculum provides training in designing for the work place, residential, commercial and merchandising environments. For a broader understanding of contemporary interior design issues students are urged to take course work in other areas such as technology, management science, psychology and art history. Admission to this program is dependent upon completion of a minimum of 30 credits in the major, a major grade point average of B (3.0) and faculty approval based upon portfolio review done each Spring.



ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS
Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
AH 1700-1701 Art History I and II 6
Two courses from two areas:
**English (2000 level literature or drama) or Communications/Theatre Foreign Languages
†Music
Philosophy or Religion
Social and Behavioral Sciences 12
Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4
Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3
Computer Science
Mathematics
Health and Physical Education 2-3
Health Education
Physical Education

*#A Science course may be substituted for this Core Course
**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses*

MAJOR REQUIREMENTS 72

FOUNDATION COURSES 21

FA 1100 Two-Dimensional Design 3
FA 1101 Three-Dimensional Design 3
FA 1230-1231 Drawing I and II 6
FA 2100 Color Theory 3
FA 2200 Introduction to Painting for Non-art Majors 3
FA 3276 Sculpture Workshop: Fabrication or
FA 3277 Sculpture Workshop: Modeling and Casting 3

OPTION REQUIREMENTS 51

FA 3401 Introduction to Interior Design 3
FA 3402 Interior Design Studio I 3
FA 3410 Drafting I 3
FA 3411 Drafting II 3
FA 3420 Textiles for Interior Design 3
FA 3441 Interior Design Studio II 3
FA 3490 Lighting for Interiors 3
AH 3790 History of Furniture and Interiors 3
AH 3792 History of Architecture 3
FA 4401 Graphic Presentation for Interior Design I 3
FA 4402 Graphic Presentation for Interior Design II 3
FA 4405 Residential Design 3
FA 4410 Design Projects for Interiors 3
FA 4420 Commercial Design 3
FA 4450 Interior Design: Trade Information Business Practices 3
Two of the following: FA 3280, 3282, 3289, 3290 6

FREE ELECTIVES 6-7

TOTAL 130

**B.F.A. Degree
Option: Studio Art**

Program Coordinator: Prof. Michael Metzger
VE 436 Ext. 2697

This option is planned to prepare the student who wishes to be a professional artist. It also provides a strong creative base for further graduate study. The student is offered a choice of concentration in studio art or studio crafts. Admission to this program is dependent upon completion of a minimum of 30 credits in the major, a major grade point average of B (3.0) and faculty approval based upon portfolio review done each Spring.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
AH 1700-1701 Art History I and II
Two courses from two areas:
**English (2000 level literature or drama) or Communications and Theatre
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4

Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3

Computer Science
Mathematics

Health and Physical Education 2-3

Health Education
Physical Education

A Science course may be substituted for this Core Course

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement

†Excluding teaching methods courses

MAJOR REQUIREMENTS 72

FOUNDATION COURSES 21

FA 1100 Two-Dimensional Design 3
FA 1101 Three-Dimensional Design 3
FA 1230-1231 Drawing I and II 6
FA 2100 Color Theory 3
FA 2200 Introduction to Painting for Fine Arts Majors 3
FA 3276 Sculpture Workshop: Fabrication or 3
FA 3277 Sculpture Workshop: Modeling and Casting 3

OPTION REQUIREMENTS 21

FA 3230 Life Drawing 3
FA 3260 Printmaking: Relief and Intaglio or 3
FA 3261 Printmaking: Lithography and Screen Printing 3
FA 3270 Photography or 3
FA 3600 Filmmaking 3
FA 3800 Philosophy of Art 3
One of the following: 3
FA 3280 Ceramics I
FA 3282 Jewelry: Fabrication and Lapidary or
FA 3283 Jewelry: Casting and Enameling
FA 3284 Introduction to Textiles
FA 3290 The Woodworker's Art
Two courses from studio arts and studio crafts offerings not previously taken, selected with departmental advisement. 6

AREA OF SPECIALIZATION 30

Complete one area of emphasis:

Studio Art

AH 3740 Modern Art 3
Seven of the following:
FA2210, 3200, 3260, 3261, 3271, 3276, 3277, 3600, 3601, 3602, 4262, 4270, 4276, 4000, 4001 21

Two courses in studio crafts 6

Studio Craft

AH 3740 Modern Art 3
One course from every craft area which has not yet been taken 3-9
Six to eight of the following: 18-24
FA3260, 3261, 3270, 3281, 3283, 3285, 3286, 3287, 3288, 3289, 3290, 3291, 3600, 3601, 4000, 4001, 4280, 4281, 4283

FREE ELECTIVES 6-7

TOTAL 130

**B.F.A. Degree
Option: Visual
Communications**

Program Coordinator: Prof. Robin Landa
VE 303A Ext. 3196

This option prepares students for careers in the communication arts including graphic design, advertising, illustration and media. The curriculum includes a broad foundation in the visual arts, art history and professional design courses. Interdepartmental study is encouraged in related communications areas such as marketing, printing, technology, mediastudies and computer science. The program provides a blend of experiences—practical, theoretical, aesthetic and technical—which develop entry level job skills as well as establish a broad foundation for professional career growth. Admission to this program is dependent upon completion of a minimum of 30 credits in the major, a major grade point average of B (3.0) and faculty approval based upon portfolio review done each Spring.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
AH 1700-1701 Art History I and II
Two courses from two areas:
**English (2000 level literature or drama) or Communications and Theatre
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4

Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3

Computer Science
Mathematics

Health and Physical Education 2-3

Health Education
Physical Education

A Science course may be substituted for this Core Course

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement

†Excluding teaching methods courses

MAJOR REQUIREMENTS 72

FOUNDATION COURSES 21

FA 1100 Two-Dimensional Design 3
FA 1101 Three-Dimensional Design 3
FA 1230-1231 Drawing I and II 6
FA 2100 Color Theory 3
FA 2200 Introduction to Painting for Fine Arts Majors 3
FA 3276 Sculpture Workshop: Fabrication or 3
FA 3277 Sculpture Workshop: Modeling and Casting 3

OPTION REQUIREMENTS 21

FA 1300 Visual Communications Seminar 3
FA 3270 Photography 3
FA 3300 Lettering 3
FA 3301 Preparing Art for Printing Fundamentals 3
AH 3748 History of Visual Communications 3
One of the following: 3
FA 3311 Graphic Design
FA 3312 Advertising Design
FA 3340 Illustration I
FA 3670 Television Production I

AREA OF SPECIALIZATION 30

Complete one area of emphasis:

Graphic Design

FA 3230 Life Drawing 3
FA 3311 Graphic Design (if not taken before) 3
FA 3312 Advertising Design (if not taken before) 3
FA 4302 Portfolio 3
AH 3740 Modern Art 3
Two or three of the following:
FA3271, 3304, 3314, 3330, 3340, 3370, 3670 6-9
Three additional FA courses selected with departmental advisement 9

Illustration

FA 3201 Painting II 3
FA 3230 Life Drawing 3
FA 3340 Illustration I (if not taken before) 3
FA 3341 Illustration II 3
FA 4302 Portfolio 3
AH 3740 Modern Art 3
Two or three of the following:
FA2210, 3260, 3261, 3271, 3304, 3330, 3670 6-9
Two additional FA courses selected with departmental advisement 6

Media

FA 3271 Intermediate Photography 3
FA 3670 Television Production I (if not taken before) 3
FA 3600 Filmmaking 3
FA 4302 Portfolio 3
Three or four of the following:
FA3370, 3601, 3602, 3671, 3672, 4270; IS 3604, 3605 9-12
Three additional FA courses selected with departmental advisement 9

Elective Apprenticeship 6
taken in addition to the 130 s.h. required for the degree:

FA 4300 Communications Apprenticeship

FREE ELECTIVES 6-7

TOTAL 130



Fine Arts Courses

GENERAL AND INTRODUCTORY

FA 1000 Introduction to Art (3)

An art experience which gives students the opportunity to deal directly with materials and ideas. Through the studio emphasis chosen, students explore the nature of art and the creative process. For non-art majors only.

FA 1001 Beginning Painting for Non-Art Majors (3)

An introductory studio course for *non-art majors* dealing with the materials, techniques, and history of the painting medium. A course offering a direct experience with the creative process through color and paint, as well as an introduction to historical and contemporary painting through slides and museum/gallery visits. No previous art experience necessary.

FA 1003 Beginning Printmaking for Non-Art Majors (3)

An introductory studio course for *non-art majors* dealing with the hand printed image as an art form. A course offering an experience with the creative process through printmaking, as well as an introduction to historical and contemporary forms of printmaking through slides and museum/gallery visits. No previous art experience necessary.

FA 1010 Contemporary trends in Interior Design (3)

Explorations in the origins of recent residential, commercial and public interior design. Emphasis on design concepts, philosophy, aesthetics and functions for non-art majors only.

FA 4000-4001 Independent Study in Fine Arts (3,3)

Independent projects or research in a specific field of interest, by arrangement with a sponsoring professor. May be repeated once for credit.

Prerequisite: Permission of instructor.

DESIGN

FA 1100 Two-Dimensional Design (3)

Basic studio course which deals with the structuring of two-dimensional space. Such visual elements as shape, line, color and texture are explored in relationship to communicating ideas. May be taken concurrently with FA 1101.

FA 1101 Three-Dimensional Design (3)

Relationships between concept, visual organization, three-dimensional materials and processes are studied. The integrative nature of the design process and competence in working with a variety of materials are dealt with in the studio environment.

FA 2100 Color Theory (3)

A studio course which investigates various color theories and their interaction with perceptual, cultural and individual responses. *Cade, Cornish*

FA 3110 Introduction to Computer Graphics Design (3)

Studio course which emphasizes high quality visual output while exploring the computer as a tool for the artist and designer.

FA 3111 Computer Graphics II (3)

Various aspects of computer graphics utilizing more advanced hardware and software are explored in this studio course. Prerequisite: FA 3110

FA 3112 Computer Animation (3)

Exploration of hi-resolution computer animation using basic and assembly language programming techniques. Prerequisite: FA 3111, or permission of instructor.

STUDIO

FA 1230 Drawing I (3)

Materials and methods in drawing, with emphasis on personal vision and expression. Historic development of style in drawing.

FA 1231 Drawing II (3)

Problems of organization and expression in space of natural and man-made forms. Observation of appearance, development of perception and training of memory; structure and creative interpretation of form. Prerequisite: FA 1230.

FA 2210 Watercolor (3)

Materials and methods in the art of watercolor with experience in both opaque and transparent pigments. Theory and studio practice with historic developments in style.

FA 2200 Introduction to Painting for Art Majors (3)

An introduction to fundamental methods and theory of painting with emphasis on both traditional and contemporary forms and materials. For art majors only. Prerequisite: FA 1100, 1200, 2100 (or as Co-requisite)

FA 3202 Painting Workshop (3)

A continuation of FA 2200: Introduction to Painting for Art Majors and FA 1001: Beginning Painting for Non-Art Majors. Emphasis on student choice and the development of a series of paintings in a single medium. Prerequisite: FA 1001, 2200. May be repeated for credit.

FA 3230 Life Drawing (3)

A study of human form through drawing from life. The human form in the expression of other cultures and our own. May be repeated once for credit. Prerequisite: FA 1230.

FA 3260 Printmaking: Relief and Intaglio (3)

Studio course with concentration on the processes of relief and intaglio printing. Original images and concepts through a variety of techniques. Prerequisite: FA 1230.

FA 3261 Printmaking: Lithography and Screen Printing (3)

Studio course with concentration on the processes of lithography and screen printing (serigraphy). Original images and concepts through a variety of techniques. Prerequisite: FA 1230.

FA 3270 Photography (3)

Basic photography, including exposure, developing, printing, and enlarging. Historic and contemporary forms in photography. 35mm camera is required.

FA 3271 Intermediate Photography (3)

Technical procedures for achieving consistent and high quality images in black-and-white photography. The student should have an adjustable small-format camera. Prerequisite: FA 3270 or equivalent.

FA 3276 Sculpture Workshop: Fabrication (3)

Studio course in the materials and methods of sculpture emphasizing individual expression and selection through fabrication techniques. Field trip(s). Prerequisites: FA 1100, 1101, 1231; prerequisite or corequisite: FA 2100.

FA 3277 Sculpture Workshop: Modeling and Casting (3)

A studio course in the materials and methods of sculpture emphasizing individual expression and selection, through modeling and casting processes. Field trip(s). Prerequisite: FA 1100, 1101, 1231, 2100 (or as co-requisite).

FA 3280 Ceramics I (3)

Three-dimensional form as it relates to clay. Deals with hand-building, potter's wheel, surface treatment, chemical and physical properties of clay and glazes. Ceramics as an art form. Prerequisites: Junior standing or permission of the instructor.

FA 3281 Ceramics II (3)

Continuation of Ceramics I, with emphasis on student's controlling more of the process, including preparation of clay and glazes, and loading and firing kilns.

FA 3282 Jewelry: Fabrication and Lapidary (3)

Introductory studio course which explores the design and execution of jewelry constructed with components fashioned from basic non-ferrous metal sheet, wire, and tubing stock. Methods of relating other materials to metal are also considered. Fundamental forming, joining, and surfacing techniques are covered. The cutting and polishing of gemstone materials into basic cabochon stones for use in jewelry is also included. Explores the esthetic premise of jewelry as an art form.

FA 3283 Jewelry: Casting and Enameling (3)

Introductory studio course which deals with the design and execution of jewelry employing the methods of lost wax casting. Methods of relating other jewelry materials with cast metal forms are also considered. Basic joining and finishing techniques are covered. Embellishment of metal surfaces with vitreous jeweler's enamels is studied. Considers the concept of jewelry as an expressive art form.

FA 3284 Introduction to Textiles (3)

Introductory studio course in textiles as an art form. Weaving, knotting, applied decoration, study of fibers. Historical development and contemporary forms in textiles.

FA 3285 Surface Designs on Fabrics (3)

The materials and processes for embellishment of the fabric surface including the direct application of dyes, resist dyeing and printing.

FA 3286 Weaving I (3)

Studio course in the design and production of woven fabrics. Techniques in the use of primitive, table and floor looms. Fiber, color, and draft analysis.

FA 3287 Weaving II (3)

Continuation of content introduced in FA 3286. Multi-harness looms and innovative techniques. Prerequisite: FA 3286.

FA 3288 Furniture-Making I (3)

Designing and making furniture as an art form. Emphasis on creativity and originality. Techniques of fabrication, joining and finishing. Integration of concept, materials and process. Materials include wood, metal, plastic, fiber.

FA 3289 Furniture-Making II (3)

Further experimentation with furniture as an art form. Individual problems in designing and making furniture continuing previously acquired skills. Emphasis on originality and creativity with design as a process. May be repeated once for credit. Prerequisite: FA 3288 or IS 1300 or permission of instructor.

FA 3290 The Woodworker's Art (3)

Designing and working with wood, emphasizing original expression. Exploring the nature of wood, and related fibrous materials, and working with tools, equipment, processes of the designer-craftsman woodworker.

FA 3291 Design for Cabinetry (3)

Aesthetic, architectural and functional aspects of cabinetry for interior and woodworking designers. Principles of design, utilization and installation of cabinet/storage forms. Study of, and studio practice with, standard and experimental materials and procedures. Prerequisite: FA 1401 or FA 3288 or permission of instructor.

FA 4262 Advanced Printmaking (3)

Course for the advanced student familiar with basic printmaking techniques and concepts. Course work on an individualized basis. Prerequisites: FA 3260 and 3261.

FA 4270 Problems in Photography (3)

Individual and group problems in photography, selected to build upon previously acquired photographic skills, amplify expressive powers, and strengthen understanding of two-dimensional design.

Prerequisite: FA 3271 or equivalent.

FA 4276 Advanced Sculpture (3)

Continuation of experiences in FA 3276 and 3277 on an individualized basis. Prerequisites: FA 3276, 3277.

FA 4280 Advanced Ceramics (3)

Continuation of Ceramics I and II, with an emphasis on individual student's identification of individual problems and goals. Technical information includes clay body and glaze chemistry and kiln design and repair. May be repeated for credit.

Prerequisite: FA 3280, FA 3281.

FA 4281 Whiteware (3)

Study of whiteware techniques, using casting, throwing, and handbuilding skills.

Development of porcelain, white stoneware, and talc clay bodies; with subsequent use and development of celadons, low fire glazes, underglazes, and overglaze techniques.

Prerequisite: FA 3281 or permission of instructor.

FA 4283 Advanced Jewelry (3)

Continuation of experience of FA 3282 or FA 3283 on an individualized basis. Techniques such as electroforming, electroplating, silversmithing and forging, mokume gan, reticulation, niello, photoetching, and others may be explored. Exotic materials and specialized equipment are introduced. May be repeated once for credit.

Prerequisite: FA 3282 or FA 3283.

VISUAL COMMUNICATIONS

FA 1300 Visual Communications Seminar (3)

Media used in visual communications. Advertising and editorial art and design; advertising agency skills, marketing study, photography, various specialties. The interrelationships of media and evaluation of their uses. For fine arts majors enrolled in visual communications option only.

FA 2303 Calligraphy Fundamentals (3)

An approach to beautiful lettering as it evolved from cursive writing of the Renaissance to contemporary typefaces. In-depth study of Chancery Cursive, Black Letter, Uncial and Roman faces. Emphasis on execution employing both visual and mechanical aspects.

FA 3300 Lettering (3)

Studio course to develop skill in lettering. Type indication for layouts. Finished lettering for reproduction. Emphasis on proportion, spacing, structure, recognition of basic styles and their appropriate usage. Historical development of letter forms.

Prerequisite: FA 1100.

FA 3301 Preparing Art for Printing (3)

Development of studio skills utilized in the preparation of camera-ready art work for reproduction by commercial printing processes; use of drafting tools, paste-up, single-color and pre-separated multi-color art work, keyline mechanicals, paper and ink selection, specifications to printer; introduction to principles of letterpress, gravure, screen printing; with emphasis on offset lithography.

FA 3304 Typography (3)

Studio course to explore typography as a craft and as a design tool. Typesetting hardware, specialized vocabulary, copyfitting and type specification, layout and type indication. Communication design problems emphasizing typography as a primary visual element. Prerequisite: FA 3300.

FA 3305 Airbrush Fundamentals (3)

Studio course to develop skill in airbrush painting. Emphasis on skill development leading to rendering.

Prerequisites: FA 1230 and FA 1231 or by permission of instructor

Jochnowitz.

FA 3310 Commercial Design Fundamentals (3)

Overview of the use of art and design for communication in a modern industrial society. Designing with typography, photography, illustration, and other elements specific to the mass communication media. Two and three-dimensional media including graphic design, advertising, editorial, packaging and display. Emphasis on development of executional skills for rough and comprehensive layout. Prerequisites: FA 1230, 3300.

FA 3311 Graphic Design (3)

The use of art and design for the varied communications needs of business and industry exclusive of advertising. Trademarks and corporate identity, brochures, publications, environmental graphics, posters, etc. Emphasis on maximizing creativity within given framework.

Prerequisite: FA 3310.

FA 3312 Advertising Design (3)

The use of art and design as a selling tool in the mass communications media. Magazine and newspaper ads, television and radio commercials, outdoor advertising, direct mail. The single ad and the ad campaign. Emphasis on co-ordinating written and visual communications skills in directing persuasive advertising messages to a target audience. Prerequisite: FA 3310.

FA 3313 Graphic Design For Non-Print Media (3)

Application of graphic design in non-print communication media—television, film, audiovisual.

Prerequisite: FA 3310.

FA 3314 Three Dimensional Graphic Design (3)

Graphic design as it pertains to packaging, display, exhibit and environmental design. Emphasis on creative problem-solving with specific practical objectives and limitations. Prerequisites: FA 1101, 3310.

FA 3330 Design Production Studio (3)

Studio course involving publication design. Students work under professional conditions with visual communications faculty and director of publications in design and production of Kean College printed material. Direct contact with paper merchants, typographers and commercial printers. Prerequisites: FA 3301, 3311.

FA 3340-3341 Illustration I & II (3,3)

Studio course designed to teach the preparation and presentation of illustrative art for various commercial media which will be consistent with recognized professional standards. Second semester emphasizes the development of personal style.

FA 3240 is prerequisite to FA 3341. 3341 may be repeated once for credit.

Prerequisites: FA 1100, 1230.

Jochnowitz

FA 3350 Corporate and Institutional Uses of Graphic Design (3)

Principles of evaluating design and working with graphic designers, printers, photographers and other communications professionals. Applications in areas of marketing, product and corporate image, sales promotion and in-house publications. Emphasis on use of terminology and methods.

FA 3370 Commercial Photography Fundamentals (3)

Photography for advertising, industrial and editorial applications. Emphasis on creative solutions to problems with specific objectives. Prerequisite: FA 3270 or IS 3603.

FA 4300 Communications Apprenticeship (6)

Work experience in the Commercial Art field arranged with the cooperation of area business, industry, art and design studios, and advertising agencies. Eligibility of student into course based upon portfolio review by visual communications faculty and availability of positions in professional agencies. Taken beyond 124 hours required for degree. Prerequisite: Permission of instructor.

FA 4302 Portfolio (3)

An ongoing review of the student's portfolio of creative work. Emphasis on meeting standards of professional competence and developing individual strengths. Evaluation by fine arts faculty in appropriate area of specialization. For fine arts majors enrolled in visual communications option.

Prerequisite: Permission of instructor.

INTERIOR DESIGN

FA 3401 Introduction to Interior Design (3)

Introduction to design and utilization of interior spaces, residential, business and industrial, public and multipurpose. Role of the interior designer in using social and technical modes of the contemporary world. Emphasis on form, function and cultural behavior. Prerequisite: FA 1100 or FA 1230 or permission of instructor.

FA 3402 Interior Design Studio I (3)

Studio-workshop course. Practical application of design, familiarity with floor plans, furniture, selection and arrangement, floor and wall composition, color harmony and decoration. Prerequisites: FA 1100 or FA 1230 or permission of instructor.

FA 3410 Drafting for Interior Design I (3)

A studio-workshop course in which the student learns the proper use of basic drafting instruments and materials applied to interior design planning, interior floorplans, elevations and interior details. Additional fees: materials and instruments. Prerequisite: FA 3401, FA 3402 or permission of instructor.

FA 3411 Drafting for Interior Design II (3)

Continuation of Drafting for Interior Design I with emphasis placed on one and two point perspective, architectural detail, shade and shadow. Prerequisite: FA 3410 and acceptance into BFA Program.

FA 3420 Textiles for Interior Design (3)

Basic techniques of textile design, construction of materials and surface patterns, silkscreen, tie dye and batik; textiles for interiors and other commercial applications. Prerequisite: FA 3401 or permission of instructor.

FA 3441 Interior Design Studio II (3)

Studio-workshop course. Student given assignments in use of space, color, form, texture and their specific influence in selected architectural surroundings. Prerequisite: FA 3411 and acceptance into BFA Program.

FA 3490 Lighting for Interiors (3)

Study of lighting methods and technology for interiors; its influence on space, color, texture and form as applied to the designing of interior spaces.

Prerequisite: FA 3410 or permission of instructor.

FA 4401 Graphic Presentation for Interior Design I (3)

Introduction to graphic presentation techniques used by the interior designer for professional presentations. Additional fees for materials and equipment: field trips. Prerequisite: FA 3411 and acceptance into the BFA Program.

FA 4402 Graphic Presentation for Interior Design II (3)

Further development of graphic presentation techniques used by the interior designer for professional presentations with focus on individual expertise. Additional fees: materials, equipment and field trips. Prerequisite: FA 4401.

FA 4405 Residential Design (3)

Studio course for the interior designer as applied to the home environment. Additional fees, materials and field trips. Prerequisite: FA 3441, FA 4401; may be repeated for credit.

FA 4410 Design Projects for Interiors (3)

Studio course of advanced interior design in residential, commercial and environmental planning. Portfolio development for professional job application. Fees for materials. Prerequisite: FA 3441, FA 4401; may be repeated for credit.

FA 4420 Commercial Interior Design (3)

Studio course for the study of interior design as applied to commercial and public spaces. Field trips and additional fees may be required. Prerequisite: FA 3441, FA 4401; may be repeated for credit.

FA 4430 Special Projects for Interior Design (3)

Studio workshop course of advanced interior design projects undertaken from concept to completion of installation. On campus projects or off campus non-profit assignments provide an actual involvement in the design, specifications and resources within a designated budget. Students work together under supervised instruction. As projects vary, course may be repeated twice. Field trips and additional fees may be required. Prerequisite: Permission of interior design coordinator.

FA 4435 Human Factors in Interior Design (3)

Survey of the contribution made by Interior Design to the health, safety and well being of clients and the public as well as a review of the basic physiologic, psychological and social needs that designers must accommodate. Prerequisite: FA 3420, FA 3490, FA 3402, or permission of instructor.

FA 4450 Interior Design: Trade Information and Practices (3)

General survey of the business and legal aspects of interior design together with an exploration of the major sources of trade information and procedures. Special topics include shop organization, interior design estimates, psychological aspects of consultation, presentations and customer satisfaction.

Prerequisite: Permission of instructor.

FA 4490 Interior Design Apprenticeship (3)

An apprenticeship in the field, designed to involve the student in the actual activities and processes that are utilized in a professional atmosphere. Seniors only. (Taken in excess of the 124 hours required for graduation). Prerequisite: Acceptance into the BFA and departmental approval.

MUSEUM TRAINING

FA 4500 Museum Training: Theory (3)

The functions of the museum. Aspects of professional museum work; collection administration, education services. Prerequisites: FA 1100, 1700 and 1701 or permission of instructor.

FA 4501 Museum Training: Practice (3)

The application of the theory of museum training. Techniques of exhibition and curatorship, care of collections and connoisseurship. Introductory demonstrations in conservation for curators given in a technical laboratory.

Prerequisites: FA 1100, 1700, 1701 and 4500 or permission of instructor.

FILM AND TELEVISION MEDIA

FA 3600-3601 Filmmaking I & II (3,3)

Studio course dealing with design and expression in the medium of the film. Practical and aesthetic problems in the creation of the film.

Prerequisite: FA 3600 is prerequisite to 3601.

FA 3670-3671 Television Production I & II (3,3)

Basic television production methods and techniques including such areas as television graphics, visual and aural effects, picture composition, settings and backgrounds, lighting and programming. Group productions and individually produced programs for the more advanced.

Prerequisites: FA 3670 is prerequisite to FA 3671.

FA 3672 Experimental Television (3)

The potential of the television medium is explored by the individual through a variety of treatments including the mechanical, theatrical, filmic, objective and subjective. The use of a variety of equipment for creative, experimental purposes.

Prerequisite: FA 3671.

PHILOSOPHY AND ESTHETICS

FA 3800 Philosophy of Art (3)

Concepts of esthetics examined through readings and examination of art products.

Prerequisite: Phi 1100.

ART EDUCATION

FA 2900 Field Experience in Multicultural Art Ed Settings (3)

An observational and analytical study of teaching and learning about art in multicultural urban and suburban educational settings; includes visits to various education settings. Required for Fine Arts Teacher Certification.

FA 3900 Introduction to Art Education I (3)

Elementary Art Education teaching methodology including observation of teaching procedures, working with small groups, evaluation of programs, discussions, demonstrations and readings. Students are required to spend 1/2 day per week in the field preparing to teach K-6. Fall semester/Junior year. Required for Fine Arts Teacher Certification.

Prerequisite: FA 2900 and Junior standing. Corequisite: FA 3902.

FA 3901 Introduction to Art Education II (3)

Secondary Art Education teaching methodology including observation of teaching procedures, working with small groups, evaluation of programs, discussions, demonstrations and readings. Students are required to spend 1/2 day per week in the field preparing to teach 7-12. Spring semester/Junior year. Required for Fine Arts Teacher Certification.

Prerequisite: FA 3900/3902 and Junior standing.

Corequisite: FA 3903.

FA 3902 Artist Teacher Field Experience I (1)

Supervised field experience. Emphasis is on curriculum content and basic teaching strategies. Students spend 1/2 day per week (45 hours) per semester in a selected art education setting, K-6. Required for Fine Arts Teacher Certification.

Prerequisite: FA 2900.

FA 3903 Artist Teacher Field Experience II (1)

Supervised field experience. Emphasis is on curriculum content and basic teaching strategies. Students spend 1/2 day per week (45 hours) per semester in a selected art education setting, 7-12. Required for Fine Arts Teacher Certification.

Prerequisite: FA 3900, FA 3902.

Corequisite: FA 3901.

FA 3910 Art in Education (3)

Understanding the child's natural modes of expression, selection of media to develop this expression, and finding ways of teaching in the elementary school which will increase aesthetic awareness, develop skills, enrich experience, and invite expression. Not intended for fine arts majors.

Prerequisite: Junior standing or permission of instructor.

FA 3920 Art in Early Childhood Education (3)

Content similar to that of Fine Arts 3910 but dealing with children of the nursery school age through the third grade. Not intended for fine arts majors.

Prerequisite: Junior standing or permission of instructor.

FA 3921 Art Media for Occupational Therapists (3)

Understanding natural modes of expression through arts and crafts and the selection of media suitable to diverse age, social, economic and cultural groups; analysis of tasks and skills needed, and the knowledge required to teach techniques for working with individuals and groups. Required during sophomore year for admission to Occupational Therapy program. Closed to all others, except with permission of instructor.

Prerequisites: Bio 1000; Psy 1000, 2100 and OT 2400. Recommended: FA 1000.

FA 4921 Art Media in Gerontology (3)

Art media and programs for use with the elderly in natural and confined settings. Prerequisites: FA 1000, HEd 3325 and one semester of sociology or psychology or permission of instructor.

FA 4950 Problems in Art Education (3)

Principles and practices in art education studied through individual research and group critique.

Prerequisite: FA 3902.

FA 4990 Student Teaching in Fine Arts (10)

Students will teach in two different educational settings under the direction of a college art supervisor and cooperating art teachers. The experience will include work with normal, gifted and talented, mainstreamed, special education and ethnically diverse students. Required for Fine Arts Teacher Certification.

Prerequisite: FA 3901/3903 (For graduate students: FA 5016/3903).

Corequisite: FA 4900 (For graduate students: FA 5901).

TRAVEL AND EXPERIMENTAL COURSES

FA 341T Italian Art and Design: A Study Tour (3)

An art experience which involves travel in Italy for the purpose of viewing design, art and architecture. Pass-Fail grade only. May only be used as a free elective.

Prerequisites: Junior standing or permission of instructor.

FA 342T Germany, Austria, Switzerland, Czechoslovakia Art and Design: A Study Tour (3)

An art experience which involves travel in Germany, Austria, Switzerland, and Czechoslovakia for the purpose of viewing design, art and architecture. Pass-Fail grade only. May only be used as a free elective.

Prerequisites: Junior standing or permission of instructor.

FA 343T Spain, Portugal and Morocco, Art and Design: A Study Tour (3)

An art experience which involves travel in Spain, Portugal and Morocco for the purpose of viewing design, art and architecture. Pass-Fail grade only. May only be used as a free elective.

Prerequisites: Junior standing or permission of the instructor.

FA 344T Fine Arts, Architecture and Design (3)

An on-site two-week tour of major architectural monuments and interiors and museums of Fine and Decorative Arts; preparatory seminars will feature noted English experts on the subjects.

INTERDISCIPLINARY COURSES

The following are found under Interdisciplinary courses. (See Index.)

ID 3700 Survival of Classical Mythology in Art (3)**ID 4051 Art for the Exceptional Child (3)****ID 4545 Marketing Communications Workshop (3)****ID 4850 Interrelating the Arts (3)**

Chairperson: Dr. Israel Rodriguez
J309 Ext. 2289

Exploration of French culture and civilization, grammar, history, literature and related areas. Provides excellent background for advanced professional study and a variety of careers.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3

GE 1100 Emergence of the Modern World 3

GE 1200 Intellectual and Cultural Traditions 3

GE 2020 Inquiry and Research 3

Eng 2203 Landmarks of World Literature 3

GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12

Select from at least three areas:

**English (2000 level literature or drama) or Communications and Theatre

†Fine Arts or Art History

Foreign Languages

†Music

Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:

Economics or Geography

History

Political Science

Psychology

Sociology or Anthropology

Biological and Physical Sciences 4

Astronomy Geology

Biology Meteorology

Chemistry Physics

Mathematical Sciences 3

Computer Science

Mathematics

Health and Physical Education 2-3

Health Education

Physical Education

#A Science course may be substituted for this Core Course

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement

†Excluding teaching methods courses

MAJOR REQUIREMENTS 30

A student must have language proficiency at the intermediate level prior to beginning major requirements.

REQUIRED COURSES 6

FR 3100 Advanced French Composition 3

FR 3105 Advanced French Conversation 3

MAJOR ELECTIVES 24

Selected from 3000-4000 level courses given in French

FREE ELECTIVES 40-42

TOTAL 124

French Courses

LANGUAGE

Fr 1101-1102 Elementary French (6)

Designed to enable the student to achieve a ready comprehension of spoken French, ability to speak in clear, simple sentences and considerable ease in reading French. Credit given only upon completion of both semesters.

Fr 1110-1115 French Abroad (Summer Program at Angers, France) (6)

A four-week program of intensive practice in spoken and written French at the Centre International d'Etudes Francaises de l'Universite Catholique de l'Ouest in Angers, France. Excursions to the castles of the Loire Valley, Brittany and Paris are included. Open to students with very elementary or no experience in the language. Prerequisite: Age eighteen or over, regardless of educational affiliation.

Fr 2101-2102 Intermediate French (6)

Designed to expand the student's competence and fluency in speaking, understanding, reading and writing French, and to acquaint the student with various aspects of the literature and culture of France. Credit given only upon completion of both semesters. Prerequisite: Fr 1102 or permission of instructor.

Fr 2105 Practical Conversational French (3)

A course designed to increase proficiency in speaking French, stressing practical daily conversation.

Prerequisite: Fr 1102 or equivalent.

Fr 2110-2115 French Abroad—Summer Program (6)

A four-week program of intensive practice in spoken and written French at the Centre International d'Etudes Francaises de l'Universite Catholique de l'Ouest in Angers, France. Excursions to the castles of the Loire Valley, Brittany and Paris are included. Prerequisite: One year of college French.

Fr 3100 Advanced French Composition (3)

An intensive review of grammar and study of the problems of written composition in the French language. Prerequisite: Fr 2102 or permission of instructor.

Fr 3105 Advanced French Conversation (3)

Intensive concentration on vocabulary building, pronunciation, diction, phonetics, through oral discussions. Not open to native speakers. Prerequisite: Fr 2102 or permission of instructor.

Fr 3110-3115 French Abroad (Summer Program at Angers, France) (6)

A four-week program of intensive practice in spoken and written French at the Centre International d'Etudes Francaises de l'Universite Catholique de l'Ouest in Angers, France. Excursions to the castles of the Loire Valley, Brittany and Paris are included. Prerequisite: Two years of college French.

Fr 3120 French Phonetics (3)

Comprehensive study of French speech sounds, problems of articulation, rhythm, accentuation and intonation. Intensive language laboratory work. Prerequisite: Fr 2102 or permission of instructor.

Fr 3125 Applied Linguistics in Teaching and in Structural Literary Criticism (3)

Linguistic analysis of current French speech based on historical evolution of the language. Analysis of the major problems encountered by English-speaking people in learning French. Structuralism and structuralist literary criticism. Prerequisite: Fr 2102 or permission of instructor.

Fr 3130 Contemporary Reading in French I (3)

Designed to develop the student's skills in reading French and to enhance linguistic and cultural knowledge of contemporary French. Prerequisites: French 3100 or permission of the instructor.

Fr 3150 French for Business I (3)

Introduction to mercantile practices, documents and terminology needed for understanding of the business usages of French in France and French speaking countries. Course conducted in French. Prerequisite: French 2102 or permission of instructor.

Fr 3155 French for Business II (3)

A continuation of French 3150. Course conducted in French.

Prerequisite: French 3150 or permission of the instructor.

Fr 4100 French Grammar: Morphology and Syntax (3)

An in-depth study of the morphological and structural features of French grammar with special emphasis on those areas of interference with the English language that present the greatest difficulties to the student of French.

Prerequisite: Fr 3100 or permission of instructor.

Fr 4105 Translation (French-English) (3)

Designed to teach the student the basic techniques of oral, literal and literary translation from French into English and from English into French.

Prerequisite: Fr 3100 or permission of instructor.

SURVEY

Fr 3200 Masterpieces of French Literature I (3)

Reading, interpretation and analysis of selected texts in French literature, from medieval times. Course conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Fr 3205 Masterpieces of French Literature II (3)

Continuation of Fr 3200.

Prerequisite: Fr 2102 or permission of instructor.

Fr 3210 French Civilization I (3)

An illustrated lecture course on the culture and civilization of France from the Middle Ages to modern times. Emphasis on geography, history, arts and letters, economic and social problems, philosophy and education. Conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Markle

Fr 3215 French Civilization II (3)

Continuation of Fr 3210, with emphasis on the nineteenth and twentieth centuries.

Prerequisite: Fr 2102 or permission of instructor.

Markle

PERIODS

Fr 4300 French Medieval Literature (3)

A study of selected works illustrating the development of French literature from its first manifestations to the fifteenth century. Course conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Markle

Fr 4305 French Literature of the Renaissance (3)

A study of selected readings illustrating the evolution of the literary esthetics of the sixteenth century. Course conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Wendell

Fr 4311-4312 The Classical Age I & II (3,3)

A study of the classical literary movement of the seventeenth century and its impact on all subsequent writers. Course conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Markle

Fr 4315 The Age of Enlightenment (3)

Introduction to eighteenth century French literature with the emphasis on the participation of Montesquieu, Voltaire, Diderot and Rousseau in the intellectual and aesthetic currents of the period. Conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Wendell

Fr 4320 Twentieth Century French Literature I (3)

Introduction to the expression of the various philosophical, religious and esthetic tenets in the poetry, plays and fiction from the beginning of the twentieth century to the end of World War II. Course conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Gnarra

Fr 4325 Twentieth Century French Literature II (3)

Introduction to existentialist and avant-garde literature. Course conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Gnarra

GENRES

Fr 4400 Introduction to the History of French Drama (3)

The major developments of French dramatic literature from its origin to the present times, studied through the most representative plays of the various periods. Conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Gnarra

Fr 4405 The French Novel (3)

In-depth study and analysis of the narrative techniques and informing ideas of representative novels of the major French literary periods. Course conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Wendell

Fr 4410 The Poetry of France (3)

Study of the form and content of the French poetic tradition, analysis of selected poems, representative of significant formal and thematic developments. Course conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Wendell

THEMES

Fr 4600 Pre-Romanticism and Romanticism (3)

Reading, analysis and interpretation of the poetry, drama and novel of the pre-romantic and romantic period. Course conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Gnarra

Fr 4605 Realism and Naturalism (3)

A study of the movement of ideas, the evolution of literary esthetics and the material and scientific progress of the French society in the second part of the nineteenth century. Course conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

Gnarra

SEMINARS AND INDEPENDENT STUDY

Fr 4700 Seminar in French Literature (3)

A carefully delimited, concentrated study of a single author, genre, theme, literary technique or problem as selected by the instructor. Course conducted in French.

Prerequisite: Nine hours in French literature.

Fr 4710 Independent Study in French Language or Literature (3)

The opportunity for students of advanced ability on any level of matriculation to pursue in a concentrated, but informal manner a specific area of study in foreign language or literature not available through current course offerings with a member of the department's faculty. The maximum opportunity for student initiative and individual attention.

Prerequisite: Fr 3100 or permission of instructor.

Foreign Language Courses

FL 3010 Comparative Phonology (3)

Basic phonological components of present day Spanish and their relationship to modern English. Application of phonological principles to the teaching of Spanish. Required of Spanish majors in the secondary collateral program.

Prerequisite: Eng 2100 or permission of instructor.

Aleman

FL 3100-3105 Masterpieces of French Literature in Translation I & II (6)

A study of the forms of the French novel and drama, represented by such authors as Racine, Moliere, Sartre, Beckett, Laclous, Balzac, Proust; ideas expressed in French literature by such writers as Montaigne, Descartes, Pascal, Voltaire, Rousseau, Camus.

Wendell

FL 3200 Man and Society in Modern German Literature (3)

Writers' responses to political and social challenges in the Weimar Republic, Nazi Germany, and contemporary East and West Germany. Authors include Brecht, Hesse, Thomas Mann, Heinrich Böll, Günter Grass.

Salins

FL 3300-3305 Masterpieces of Hebrew Literature in Translation I & II (3,3)

An introduction to the masterpieces of Hebrew literature in English translation. Reading, interpretation, and analysis of selected texts in Hebrew literature, from ancient to modern times. An introduction by means of modern critical methods of study to the history, literature and religion of Israel in the selected excerpts of Old Testament, Mishnah, Talmud, Gronica, Shmuel Hanaggid, Al Harizi, Mendelssohn, Wesly, Krochmal, J.L. Gordon, Ahad Ha'Am, Bialik and Agnon.

Prerequisite: Eng 1000.

FL 3310-3315 Hebrew Culture I & II (3,3)

An illustrated lecture course on the culture and civilization of Jews from Biblical to medieval and modern times. Emphasis placed on religion, culture, education, economic and social problems.

FL 3320 Modern Israeli Literature from Israeli Independence to the Present in Translation (3)

Reading, interpretation and analysis of Modern Israeli Literature. Emphasis on the writing of Bialik, Tchernichovsky, Agnon, Hazaz, Greenberg and Shlonsky.

FL 3325 The Holocaust Literature in Translation (3)

Reading, interpretation and analysis of Holocaust Literature. Emphasis on such writings as Agnon, Greenberg, Ringelblum, Kaplan, Huberant, Lazar, and Wiesel. Course includes readings based on memoirs, testimonies and diaries of victims as well as survivors of the Holocaust.

FL 3400-3405 Italian Literary Heritage I & II (3,3)

Course designed to acquaint students with the development of Italian literature through the study of some of its most important and representative works.

Prerequisites: It 1101-1102 or Eng 2201-2202 or permission of instructor.

FL 3510-3515 The Literature of the Spanish People I & II (3,3)

Course designed to acquaint students with the development of Spanish literature through the study of some of its most important and representative works.

INTERDISCIPLINARY COURSES

The following are found under *Interdisciplinary Courses*. (See Index.)

ID 3600 The Romance of Words (3)

Aleman

ID 3660 Continental and American Realism (3)

Gnarra

German Courses

LANGUAGE

Ger 1101-1102 Elementary German I & II (6)

Designed to enable the student to achieve a ready comprehension of spoken German, an ability to speak in clear, simple sentences and considerable ease in reading German. Credit given only upon completion of both semesters.

Ger 2101-2102 Intermediate German I & II (6)

Designed to expand the student's competence and fluency in speaking, understanding, reading and writing German, and to acquaint the student with various aspects of the literature and culture of Germany. Credit for graduation given only upon completion of both semesters.

Prerequisite: Ger 1102 or permission of instructor.

Ger 3100 Advanced German Conversation and Composition I (3)

Intensive practice in spoken and written German, stressing verbal fluency, accurate and idiomatic expression. Discussions and compositions based on selected readings in the various areas of German culture.

Prerequisite: Ger 2102 or permission of instructor.

Salins

Ger 3105 Advanced German Conversation and Composition II (3)

A continuation of Ger 3100.

Prerequisite: Ger 2102 or permission of instructor.

Salins

SURVEY

Ger 3200 Masterpieces of German Literature I (3)

Reading, interpretation and analysis of selected texts of representative authors of the German literature. Course conducted in German.

Prerequisite: Ger 2102 or permission of instructor.

Salins

Ger 3205 Masterpieces of German Literature II (3)

A continuation of Ger 3200.

Prerequisite: Ger 2102 or permission of instructor.

Salins

Ger 3210 German Civilization I (3)

An illustrated lecture course on the cultural and social history of Germany from the Reformation to Romanticism. Conducted in German.

Prerequisite: Ger 2102 or permission of instructor.

Salins

Ger 3215 German Civilization II (3)

Continuation of Ger 3210, with emphasis on the nineteenth and twentieth centuries.

Conducted in German.

Prerequisite: Ger 2102 or permission of instructor.

Salins

Ger 3215 German Civilization II (3)

Continuation of Ger 3210, with emphasis on the nineteenth and twentieth centuries. Conducted in German.

Prerequisite: Ger 3100 or 3105 or permission of instructor.

Salins

Ger 4710 Independent Study in German Language or Literature (3)

The opportunity for students of advanced ability on any level of matriculation to pursue in a concentrated, but informal manner a specific area of study in foreign language or literature not available through current course offerings with a member of the department's faculty. The maximum opportunity for student initiative and individual attention.

Hebrew Courses

LANGUAGE

Heb 1101-1102 Elementary Hebrew I & II (6)

An introductory course in modern spoken and written Hebrew which is geared to students who have no previous knowledge of modern Hebrew. Initially, stress is placed on oral Hebrew and basic vocabulary building with gradual introduction of fundamental rules of grammar necessary for written communication. Both semesters must be taken in order to receive course credit.

Heb 2101-2102 Intermediate Hebrew I & II (6)

Designed to expand the student's competence and fluency in speaking, understanding, reading and writing Hebrew, and to acquaint the student with various aspects of the literature and culture of the Jewish people and Israel. Credit given only upon completion of both semesters.

Prerequisite: Heb 1102 or permission of instructor.

Heb 3100 Advanced Hebrew Conversation and Composition I (3)

Intensive practice in spoken and written Hebrew, stressing verbal fluency, accurate and idiomatic expression. Discussions and composition based on selected readings in the various areas of Hebrew literature and culture. Prerequisite: Heb 2102 or permission of instructor.

Heb 3105 Advanced Hebrew Conversation and Composition II (3)

Intensive practice in spoken and written Hebrew, stressing verbal fluency, accurate idiomatic expression. Discussions and composition based on selected readings in modern Hebrew literature and poetry. Prerequisite: Heb 2102 or permission of instructor.

SURVEY

Heb 3200-3205 History of Hebrew Literature I & II (3,3)

Introduction to representative masterpieces and major movements of Hebrew literature from the Biblical, Mishnaic, Talmudic, Medieval to the contemporary period. Prerequisite: Heb 2102 or the permission of the instructor.

Italian Courses

LANGUAGE

It 1101-1102 Elementary Italian I & II (6)

Designed to enable the student to achieve a ready comprehension of spoken Italian, an ability to speak in clear, simple sentences and considerable ease in reading Italian. Credit given only upon completion of both semesters.

It 2101-2102 Intermediate Italian I & II (6)

Designed to expand the student's competence and fluency in speaking, understanding, reading and writing Italian and to acquaint the student with various aspects of the literature and culture of Italy. Credit given only upon completion of both semesters. Prerequisite: It 1102 or permission of instructor.

It 3100 Advanced Italian Composition (3)

An intensive review of grammar and study of the problems of written composition in the Italian language. Prerequisite: It 2102 or permission of instructor.

It 3105 Advanced Italian Conversation (3)

Concentration on vocabulary building, pronunciation, diction and phonetics through oral discussions. Prerequisite: It 2102 or permission of instructor.

SURVEY

It 3210 Italian Civilization I (3)

An illustrated lecture course on the culture of Italy from its Roman origin through the Renaissance. Topics to be viewed are the geography, arts and letters, economic and social developments, philosophy of life and education, with emphasis on their interrelationships. Conducted in Italian. Prerequisite: It 2102 or permission of instructor.

It 3215 Italian Civilization II (3)

An illustrated lecture course on the culture of Italy after the Renaissance until and including the twentieth century. Geography, arts and letters, economic and social developments, philosophy of life and education, with emphasis on their interrelationships. Course conducted in Italian. Prerequisite: It 2102 or permission of instructor.

PERIODS

It 4305 Humanism and the Renaissance of Italy (3)

A study of the emergence of the ideal Renaissance man in the humanist movement and its realization in the literature of the Italian Renaissance. Course conducted in Italian. Prerequisite: It 2102 or permission of instructor.

It 4320 Italian Literature of the Twentieth Century (3)

Twentieth century Italian Literature studied from D'Annunzio through post-World War I writers, tracing new concepts such as *crepuscularismo*, *decadentismo*, *futurismo*, *neorealismo* and considering each movement as a particular expression of modern society. Course conducted in Italian. Prerequisite: It 2102 or permission of instructor.

Russian Courses

Rus 1101-1102 Elementary Russian I & II (3,3)

Designed to enable students to achieve a ready comprehension of spoken Russian and ability to express themselves in clear, simple sentences and considerable ease in reading simple texts. Credit given only upon completion of both semesters.

Rus 2101-2102 Intermediate Russian I & II (3,3)

Designed to expand the student's competence and fluency in speaking, understanding, reading and writing Russian and to acquaint them with various aspects of the culture of the Soviet Union. Credit for graduation given only upon completion of both semesters. Prerequisite: Rus 1102 or permission of instructor.

Chairperson: Dr. Lawrence Zimmer
W-205D Ext. 2167-2168

Through the study of history, one can search for an understanding of the history of human groupings—countries, religions and civilizations—which have generated the emotions, symbols and values of contemporary life. The student can appreciate the complex causes of the rise and fall of civilizations and the underlying realities of leadership, social class and power.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4

Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3

Computer Science
Mathematics

Health and Physical Education 2-3

Health Education
Physical Education

A Science course may be substituted for this Core Course

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

MAJOR REQUIREMENTS 30

REQUIRED COURSES 18

His 1030 History of Western Civilization I or
His 1040 History of Western Civilization II or one other course in Western Civilization at 1000-2000 level 3
His 2303 United States History to 1877 3
His 2304 United States History 1877-Present 3
One 2000-3000 level course selected from: African, Asian, Latin American or Middle Eastern History 3
Two 3000-4000 level courses in European History 6

MAJOR ELECTIVES 12

Advanced electives and comparative studies at 3000-4000 level; may include HIS 4990 Senior Seminar.

FREE ELECTIVES 41-42

TOTAL 124

Minor in History

REQUIREMENTS 21

ELECTIVES 6

two courses selected from the following:
His 1030 History of Western Civilization I 3
His 1040 History of Western Civilization II 3
His 2303 United States History to 1877 3
His 2304 United States History—1877 to Present 3
Other introductory 1000 level course(s) in history 3/6

ELECTIVES 15

selected from upper division (3000 and 4000 level) courses with departmental advisement

B.A. Degree Option: Teacher Certification

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 68

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 50

**Humanities 9*
Comm 1400 Speech Communication 3
Two courses from two areas: 6
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

**Social and Behavioral Sciences 9*

Psy 1000 General Psychology 3
Choose one of the following: 3
Eco 2030 History of Economic Thought 3
Eco 2040 American Economic Development 3
Eco 2041 European Economic Development 3
Eco 3050 Comparative Economic Systems 3
Soc 1000 Social Life and Society or 3
Ant 1800 Cultural Anthropology 3

Biological and Physical Sciences 4

Astronomy Geology
Biology Meteorology
Chemistry Physics

**Mathematical Sciences 3*

One course in Mathematics

**Health and Physical Education 4*

ID 1225 Contemporary Issues in Health Physical Education 3
1

***ADDITIONAL COGNATES 21**

Psy 2110 Psychology of Adolescence 3
Choose one of the following:
GE 1010 Earth, Environment of Man, or 3
GE 3950 Geography of New Jersey 3
His 3326 History of New Jersey 3
Choose one of the following: 3
Political Science 2110, 3150, 3151, 3160, 3170, or 3310

Elective from any one of the areas of English/Humanities, Social/Behavioral Sciences, Physical/Biological Sciences, Mathematical Sciences 9

MAJOR REQUIREMENTS 30

Choose *one* of the following:

- His 1030 History of Western Civilization I, *or*
- His 1040 History of Western Civilization II, *or*
- One other 1000-2000 level course in Western Civilization 3
- His 2303 U.S. History to 1877 3
- His 2304 U.S. History, 1877 to Present 3

Choose *one* 2000-3000 level course from any of the following four history categories: (a) African, (b) Asian, (c) Latin American, (d) Middle Eastern 3

Choose *two* 3000-4000 level courses in European History: 6

MAJOR ELECTIVES: 12

Choose *four* advanced electives in comparative studies at 3000-4000 level which may include His 4900 Senior Seminar in History

PROFESSIONAL EDUCATION 30

FIELD EXPERIENCE 15

- ICA 2801 Introduction Field Experience K-12 3
- ICA 3803 Junior Field Experience K-12 2
- ICA 4802 Professional Internship: Secondary Education 10

EDUCATION CORE 9

- ED 3401 Language Arts/Reading K-12 3
- ED 3000 Curriculum, Evaluation & Learner 3
- ED 4000 Teacher & Classroom 3

SPECIALITY 3

- ICA 3xxx Social Studies K-12 3

EDUCATION ELECTIVE 3

- ICA 4xxx Computers & A-V Aids, *or*
- ICA 4xxx Bilingual/ESL: Curriculum & Instruction, *or*
- ICA 4xxx Humanistic & Humane Education 3

TOTAL 129

History Courses

INTRODUCTORY

His 1020 Roots of the Present (3)

Historical approach to the origins of current world, national and local problems. Historical approach to analyses of and written exercises about current problems.

Prerequisites: Limited to Developmental students and/or permission of chairperson.

His 1030 History of Western Civilization I (3)

A survey of the historical development of modern civilization from early times. Special attention given to cultural diffusion and integration, to institutions and ideas.

His 1040 History of Western Civilization II (3)

A continuation of His 1030 from mid-17th century to the present.

His 1050 Origins of Political and Social Values: The Judeo-Christian-Classical Fusion (3)

A study of the development in ancient times of the great ethical and political traditions of the Jews, Greeks and Romans. The role of Christianity in assimilating these values and transmitting them to later ages.

Goldberg, Letterese

His 1051 The Processes of Civilization: Cultural Borrowings and the Emergence of Western Man (3)

The significance of the interaction of Byzantine, Islamic and Western European cultures in the emergence of Western man.

Spaulding

His 1052 The Grand Design of the Modern State: The Formation of the European Community (3)

A survey of the development of the individual European governments from feudal monarchies. Their attempts to transcend nationalism by inter-state cooperation, from 400 to 1453.

Zimmer

His 1053 Capitalism, Technics and Culture: European Reconnaissance and Expansion (3)

Survey of the developments in European history which led to European expansion into Asia, Africa and the Americas. Assessment of the character of European dominance of these areas and the disengagement from European dominance.

Strauss

His 1060 From Scientific Revolution to Democratic Revolutions.

The Intellectual Revolution of the 17th and 18th centuries with special emphasis on the resultant revolutionary upheavals from England to Russia.

Siegel, Strauss

His 1061 Freedom and Organization: Nationalism, Imperialism and Industrialism (3)

The events of the century and a half since the end of the Napoleonic Wars which illuminate the problems of Western man. The contemporary search for balance between individual freedom and submission to authority is the lens through which the course is focused.

Goldberg, Zimmer

His 1062 Modern World Civilization: Crises of the Contemporary World (3)

A survey of world civilization in modern times stressing the geopolitical, economic, and social inter-connections among the major regions of the globe.

Staff

His 1070 Women in Western Civilization (3)

Role of women in Western civilization. Contributions of women as individuals and as a group.

Strauss

His 2000-2001 Historical Explorations with Film: Scientific Discovery and the Ascent of Man (3,3)

Using the widely acclaimed *Ascent of Man* film series created by the late Jacob Bronowski, course explores the great moments of scientific discovery against a historical perspective which spans over two million years of human history from the earliest flint tools to the theory of relativity. Special reading materials developed for the films utilized along with lectures and discussions by guest specialists from the humanities and the sciences.

Siegel

His 2050 History of Western Medicine (3)

History of social progress of medicine, until 1900, in the Western World. Special emphasis on scientific and technological advancement, care of the sick, treatment of diseases, and the training of medical practitioners.

ANCIENT

His 2120 World Archaeology (3)

Archaeology as a method of historical inquiry; relationship of archaeological and literary evidence; survey of major archaeological sites.

His 3110 Greek Civilization (3)

Hellenic history and culture from prehistoric origins to the creation of the Graeco-oriental or "Hellenistic" civilization. Political experience of the Greeks and their intellectual and artistic contribution to Western civilization. Formation of the Polis, Greek imperialism, the heroic and tragic world-view and the development of philosophic method.

Prerequisite: Six hours of history.

His 3120 Roman Civilization (3)

Rome's growth and decline from Etruscan times to the Barbarian invasions. Rome's success in creating a government unity throughout the Mediterranean world. The internal consequences of the acquisition of empire.

Prerequisite: Six hours of history.

His 3121 The Ancient City (3)

Urbanization from the beginning of history to the fall of the Roman Empire. Study of the problems faced by early city dwellers as related to the modern urban situation.

Prerequisite: Six hours of history.

His 3150 A Greek Adventure (3)

A three-week archeological and historical tour of Greece with emphasis on the Bronze Age and the Classical Age. Visits to important archaeological sites and museums on the mainland, Crete and the Aegean Islands. Continuity of cultural institutions from the past to the present. Travel costs vary. Check with instructor or Director of International Studies. May only be used as a free elective. Graded on pass/fail basis only.

Prerequisite: Permission of instructor.

His 4110 The Roman Revolution: 133 B.C.-A.D. 14 (3)

A study of the social and political upheavals of the late Roman Republic, 133 B.C.-A.D. 14, commonly referred to as the Roman Revolution; in-depth study of some personalities of the last generation of the republic; causes of the fall of republican form of government and the rise of autocracy.

Prerequisite: Six hours of history.

His 4120 Archaeology (3)

Introduction to the methods of archaeology and survey of recent archaeological excavation. Emphasis on classical archaeology but study of other cultures included.

Prerequisite: Six hours of history.

His 4150 Athens in the Age of Pericles (3)

The history of Athens during the height of its greatness, the fifth century, B.C.; the origins and development of Athenian democracy and empire; surviving monuments, both literary and artistic, as sources for Athenian history; the war with Sparta as precursor to the degeneration of 5th century values and culture; acknowledgement of the legacy of Athens.

Prerequisite: Six hours of history or permission of instructor.

EUROPEAN

His 3231 Medieval Europe: History and Civilization I (3)

Europe from the Barbarian invasions to the renaissance of the 12th century. A survey of the history, institutions and culture of the middle centuries of Western civilization.

Prerequisite: Six hours of history.

Zimmer

His 3232 Medieval Europe: History and Civilization II (3)

A continuation of His 3231 which is not a prerequisite. The height of the Middle Ages; the decline and end of medieval civilization.

Prerequisite: Six hours of history.

Zimmer

His 3233 England in the Middle Ages (3)

England from the coming of the Anglo-Saxons to the Tudor Era; Pre-Christian English society, the Danish and Norman conquests and occupations, fruition under the early Plantagenets. The development of Parliament, the Hundred Years War and the War of the Roses.

Prerequisite: Six hours of history or permission of instructor.

Zimmer

His 3236 The Tudor-Stuart Age: Society in Conflict (3)

Study of 16th and 17th century England as a period of ferment and revolution. Focus will be on the political and religious upheavals, cultural achievements, economic changes and overseas expansion which characterized the Age.

Prerequisite: Six hours of history.

Strauss

His 3237 The Emergence of Modern England: 1689-1815 (3)

England's progress during the 17th and 18th centuries toward big power status. Cultural, political and social developments discussed with emphasis on England's emergence as a modern industrial power. Literary as well as historical sources used.

Prerequisite: Six hours of history.

Strauss

His 3238 The Age of Reform: England Since 1815 (3)

Describes the political and social reform movements in England: the emergence of liberalism and the fight for an extended suffrage; the conflicts between laissez-faire and state intervention; isolationism and interventionism. Literary as well as historical sources used.

Prerequisite: Six hours of history.

Strauss

His 3239 France and the Revolutionary Tradition Since Napoleon (3)

History of modern France, highlighting the impact of modern ideologies of social change and revolution upon French politics and culture since 1815. Emphasis placed on the uniquely French responses to the great social transformations which have fashioned contemporary world society.

Prerequisite: Six hours of history.

Siegel

His 3240 Renaissance and Reformation (3)

An analysis of the development of the Renaissance and Reformation in their relation to the formulation of a base for the building of contemporary secular society.

Prerequisite: Six hours of history.

Zimmer

His 3241 The Wealth of Nations: Roots of the 20th Century World Economy (3)

The development of modern capitalism and "economic man" up to the twentieth century. Analysis of the history of trade, empire, banking and material civilization which form the essence of our contemporary capitalistic world system.

Prerequisites: Six hours in history or junior standing or permission of instructor.

Siegel

His 3244 The Nazi Era: Germany Before the Holocaust (3)

The period in which the political and social history of totalitarian Germany under Hitler which led to world war and attempts at genocide. Does not fulfill major requirements. Prerequisites: Sophomore standing or permission of instructor.

Goldberg

His 3252 European Intellectual History in the 19th and 20th Centuries (3)

An examination of the main currents of European thought in the 19th and 20th centuries. Emphasis on source readings and discussion in philosophy, literature, science, political, literary and artistic theory. Some attempt is made to estimate the degree of penetration into the masses of the theories of the intellectuals.

Prerequisite: Six hours of history.

His 3280 Spain: The Rise of the First World Power (3)

The historical development of the Iberian peninsula from the earliest times to the moment of emergence of Spain as a unified state.

Prerequisite: Six hours of history or permission of instructor.

His 3281 Imperial Spain (3)

The Spanish Empire and its development from 1516 to 1700; the social, political, economic and religious factors that contributed to its development and eventually to its downfall. Prerequisite: Six hours of history or permission of instructor.

His 4220 The Revolutionary Era, 1789-1870 (3)

A detailed examination of the French Revolution of 1789 is followed by a study of its legacy. The role of nationalism, the development of socialism in 19th century Europe, the unification of Italy and Germany and the emergences of *realpolitik*.

Prerequisite: Six hours of history.

His 4233 Tsarist Russia: From the Moscovite Period to the Great Emancipation (3)

Imperial Russia under the Rurik and Romanov Tsars studied as an important aspect of the growth of European Absolutism and the social system of the Old Regime. The unique problems of the Moscovite state traced to the eve of the Russian Revolutionary Movement. Culture, personalities and institutions critically evaluated by readings in the classic and contemporary literature.

Prerequisite: Six hours of history.

Siegel

His 4234 Revolutionary and Soviet Russia (3)

Modernization and revolution in modern Russia from the first liberal reforms of Alexander II to the contemporary developments in the U.S.S.R. Russia's participation in the critical moments of the last century; the industrial revolutions, world wars, and the continuing ideological struggle between varying forms of liberalism and communism. The problems of continuity and change in modern Russia since 1917 highlighted by readings and discussions.

Prerequisite: Six hours of history.

Siegel

His 4235 Industrial Revolution: Topics in the History of Technological Society (3)

Selected topics in the social history of machines, their inventors, and industrial revolutions which have transformed world societies with increasing power since the end of the Middle Ages. Extensive investigations of conditions for technological innovation such as war.

Prerequisites: His 2000, 2001 or junior standing or permission of instructor.

Siegel

His 4237 Europe Since 1870 (3)

Changes in European societies since the unification of Italy and Germany, with particular attention to nationalism and imperialism, democracy and dictatorship. Post-war trends toward European integration assessed in terms of Europe's position in the late 20th century world.

Prerequisite: Six hours of history.

Letterese

His 4238 History of Germany, 1805 to Present (3)

Internal contradictions which have taken the German people through international aggression, dictatorship and then to affluence in a challenging democratic environment.

Prerequisite: Six hours of history or permission of instructor.

Goldberg

His 4241 German Culture Between the Wars: A View from "The Cabaret" (3)

A reflection of the ideas and activities of Germany's thinkers, artists and writers who were part of an extremely varied cultural life centered in Berlin between the World Wars.

Prerequisite: Six hours of history or permission of instructor.

Goldberg

His 4242 Twentieth Century France: Imperial Glory to Identity Crisis (3)

Twentieth century France traced from the aftermath of the Dreyfus Affair to the present. The struggles of a declining European "great power" to preserve its historical role, cultural "mission," and national identity amidst the catastrophic transformations of the twentieth century, the decline of imperial Europe and the restructuring of the world into ideological spheres controlled by superpowers.

Prerequisite: Six hours of history.

Siegel

His 4250 The Papacy and Its History

The political development of the Papacy and its role and influence in shaping Western history and civilization.

Prerequisite: Junior level or permission of instructor.

Socarras

AMERICAN

His 2303 United States History to 1877 (3)

A comprehensive study of the American people, including the colonial period, the struggle for independence and the national period through Reconstruction.

His 2304 United States History—1877 to Present (3)

A study of the development of American industrialism, westward expansion, the reform impulse and foreign affairs to the present day.

His 2305 A Videotape Trip Through America's Last Forty Years (3)

An examination—principally through the use of videotapes—of the major political, economic, social, diplomatic, and cultural developments in America during the last forty years. The videotape presentations will focus especially on the Civil Rights Movement, the Vietnam War, and the Watergate scandal.

His 2381 History of Latin America to 1825 (3)

A historical survey of the peoples and cultures of Latin America from the pre-Columbian periods to the wars of independence.

Prerequisite: Six hours of history.

His 2382 History of Latin America: 1825 to Present (3)

A historical survey of the peoples and cultures of Latin America beginning with the wars of independence and concluding with the role of Latin America in the present day.

Prerequisite: Six hours of history.

His 3300 Public History I (3)

An introduction to the new studies in applied history which focuses upon techniques and materials to prepare students for alternative careers for historians in government, corporate, and private organizations.

Prerequisite: Sophomore standing.

Zimmer

His 3301 Public History II (3)

Studies in the management and technology of cultural resource preservation, with emphasis on historic preservation and archival techniques.

Prerequisite: His 3300.

Zimmer

His 3305 The History of the Black American—to 1900 (3)

The role of Black persons in the United States from the colonial period to 1900, stressing African roots, slavery, Reconstruction and the era of Jim Crow.

Prerequisite: Six hours of history.

Rice

His 3306 20th Century Black History (3)

The development of the Black community during the 20th century, from the Age of Accommodation to the rise of Black militancy in the 1960s.

Prerequisite: Six hours of history.

Rice

His 3323 Progress of American Medicine (3)

A survey history of the development of the medical profession in the United States. Medical education and practice, scientific research, public health and their institutions.

Does not fulfill major requirements.

Prerequisite: Sophomore standing or permission of instructor.

Goldberg

His 3324 The American West (3)

History of the advancing frontier in the United States from colonial times through the nineteenth century with an analysis of its effect upon the institutional and intellectual development of the American people. Emphasis on the historiography of the American frontier.

Prerequisite: Six hours of history.

Fridlington

His 3326 History of New Jersey (3)

Social and political development of New Jersey within context of American history.

Prerequisite: Six hours of history.

Fridlington

His 3330 The Labor Movements in America: 1864 to Present (3)

Analysis of the reaction of the American working class to the rise of the industrial state. Examination of the trade union movement and the millenarian movements.

Prerequisite: Six hours of history.

His 3331 The History of Sports in the United States (3)

The history of the United States during the two hundred years of this nation's existence; the birth and phenomenal growth of sports in the United States and the relationship of sports to American society.

Furer

His 3340 20th Century America (3)

An examination of the major economic, social, political and diplomatic trends in the 20th century, with emphasis on the quest for social justice at home and abroad.

Prerequisite: Six hours of history.

Rice

His 3360 History of Business in America (3)

Survey of rise of American business institutions and practices from colonial times to present. Emphasis on influence of businessmen in shaping of American values and role of American businessmen in contemporary society. *Does not fulfill major requirements.*

Prerequisite: Sophomore standing or permission of instructor.

Fridlington

His 3363 America in the 1960's: The Turbulent Decade (3)

Study of the social, political, economic, philosophical and religious tensions in America in the 1960's including involvement in Vietnam and role of the media. Special attention to the dynamic influence of American youth. *Credit will not be given for this course and mid-year study program course, His 7014.*

Prerequisite: Junior standing or permission of instructor.

Letterese

His 3381 Cuba and the Modern World (3)

History of Cuba from discovery to present, with close examination of the formation of the Cuban nationality and factors that have shaped the island's present situation.

Prerequisite: Junior standing or permission of instructor.

His 4319 The British Colonies and the American Revolution (3)

An examination of the basis of American society covering the colonial period of American history and the American Revolution. Social, economic and political origins and events treated in relation to modern American practices and institutions.

Prerequisite: Six hours of history.

His 4361 The American City (3)

The growth of urban America, beginning with the colonial seaports through the 20th century, including the spread of industrialization, transportation and communication. The impact of the city on American culture. Present day problems—race relations, the population explosion, the rise of suburbia, and the development of megalopolis.

Prerequisite: Six hours of history.

Furer

His 4362 Pre-Columbia Civilizations: The Andean Region (3)

Examination of the pre-Hispanic civilizations that developed in the Andean region of South America with special attention to their influence in the present day culture of the area.

Prerequisite: Six hours of history or permission of instructor.

His 4363 Pre-Columbian Civilizations: Mesoamerica (3)

Examination of the pre-Hispanic civilizations that developed in Mexico and Central America with special attention to their influence in the present day culture of the area.

Prerequisite: Six hours of history or permission of the instructor.

His 4365 American Foreign Affairs I: 1775-1899 (3)

A basic survey of American diplomatic history to 1899 dealing with the formation and implementation of American foreign policy with a view to its effect on the world situation and domestic developments.

Prerequisites: His 2303-2304.

Mayer

His 4366 American Foreign Affairs II: 1899 to Present (3)

The emergence of the United States as a world power examined with particular attention to imperialism, World Wars I and II, and the Cold War.

Prerequisites: His 2303-2304.

Mayer

His 4367 The History of American Immigration (3)

The society of the United States as a mosaic made up of various immigrant groups. Each successive wave of newcomers treated separately: their origins and character; their settlement and reception in the United States; their reaction to the new world; their impact on their adopted country; the effect of the exodus on their homelands; and United States immigration policies.

Prerequisite: Six hours of history.

Furer

His 4368 The Civil War and Reconstruction (3)

Inquiry into social classes in the Old South; slavery as an institution; the Civil War on the military, home, and diplomatic fronts; Reconstruction; Grantism. Emphasis on the study of various schools of historical thought on the character of slavery, on the causes of the Civil War, and on the nature of Reconstruction.

Prerequisite: Six hours of history.

Rice

ASIAN

His 2471 History of Far Eastern Civilization to 1600 (3)

Survey of the major historical developments in China, Korea, Japan and Vietnam, from earliest times to the seventeenth century.

Didsbury

His 2472 Modernization of China and Japan, 1600 to Present (3)

The major developments in the recent history of China and Japan with particular reference to changes in institutions and values resulting from Western imperialism in East Asia in the nineteenth and twentieth centuries.

Didsbury

His 3400 Diplomatic History of the Far East in the 19th and 20th Centuries (3)

A survey of the diplomatic relations and power politics of the Western powers in the Far East; the rise of the Japanese Empire as a world power, and its repercussions on China in particular.

Prerequisite: Six hours of history.

Didsbury

His 3410 China in the 20th Century (3)

A study of Nationalist and Communist China with special emphasis upon the rise of nationalism and the problems of industrialization.

Prerequisite: Six hours of history.

Didsbury

His 4410 The Rise of Modern Japan, 1600-1970 (3)

Focus on Japan's transition to modernity and its rise to world power status in the twentieth century.

Prerequisite: Six hours of history.

Didsbury

AFRICAN

His 2500 Survey of African Prehistory and History (3)

A survey of Africa's prehistory and history from earliest times to the 20th century in the light of archaeological and anthropological findings as well as written documents. Attention focused on the development of African contacts with Asia, Europe, and the Americas, and on Africa's internal history.

Spaulding

His 2510 Political History of Africa in the 20th Century (3)

A study of the development of African nationalism in the 20th century and its emergence from European colonial domination.
Spaulding

MIDDLE EASTERN

His 3600 Historical Survey of Islamic Civilization in the Near East (3)

From the emergence of Islam until the dissolution of the Caliphate in the 20th century.
Prerequisite: Six hours of history.
Spaulding

His 3610 The Ottoman Empire (3)

A study of the rise and decline of Ottoman power, from vibrant conqueror to "the sick man of Europe."
Prerequisite: Six hours of history.
Spaulding

His 3620 Modern Israel (3)

Development of Zionism from the era of the French Revolution through the establishment and development of the State of Israel.
Prerequisite: Sophomore standing or permission of instructor.
Zimmer

COMPARATIVE

His 3843 Sex in History (3)

Sexual codes and customs and how they affected relationships between men and women throughout the ages; consideration of sexual attitudes in the context of social, economics and political change. *Does not fulfill major requirements.*

Prerequisite: Sophomore standing or permission of instructor.
Strauss

His 3850 Explorations in Psychohistory (3)

Assessment of various writings in the field of psychohistory, a discipline which combines the art of psychoanalytic and historical interpretations. *Does not fulfill major requirements.*
Prerequisite: Sophomore standing or permission of instructor.
Mayer

His 3860 Jewish History (3)

Beginning with the period of the Patriarchs, an overall picture of the most important eras in the history of the Jewish people.
Prerequisite: Sophomore standing or permission of instructor.
Zimmer

His 3861 Modern Jewish History (3)

The survival of the Jewish People and culture in the Enlightenment and the era of nationalism; the problems and crises posed by pogroms and the Dreyfus Affair with the attendant birth of political Zionism; the emergence of the State of Israel in the aftermath of the Holocaust.
Prerequisite: Sophomore standing or permission of instructor.
Zimmer

His 4840 Women in History (3)

The role of women in different cultures throughout the ages. The lives of outstanding women and movements seeking "liberation" of women.
Prerequisite: Six hours of history.
Strauss

His 4841 Women in the Modern Age (3)

The advances women have made through protest movements and reform activities; their changing conceptions of themselves and goals of the future through "Liberation."
Prerequisite: Six hours of history.
Strauss

His 4870 Planning for Tomorrow Today: Alternative Futures (3)

Introduction to a number of the more significant current "alternative futures" studies produced by scientific and academic research groups around the world. In addition to this examination of key futurist research, the methods employed by futurists to arrive at their forecasts are studied.

Prerequisites: Junior standing or permission of instructor.
Didsbury

His 4875 The Emergence of Law in Society (3)

Development of the legal norm from the primitive stages of society to the organization of the first legal systems before modern times.
Prerequisites: Six hours of history and/or political science or permission of instructor.

His 4882 The Modern Scientific and Technological Impact on Culture (3)

A comparative study of the impact of modern science and technology upon Western Christian, Far Eastern, Islamic and Hindu civilizations, showing their uniform, varied and unsettling effects upon traditional cultural patterns and ideals.
Prerequisite: Six hours of history or permission of instructor.
Didsbury

SEMINARS AND INDEPENDENT STUDY

His 4990 Senior Seminar in History (3)

Open only to senior history majors. Geared to the highest competency. Staffed by department members who will give insight into the problems of historical methodology and research.
Prerequisite: Twelve hours of history.

His 4991 Field Work and Seminar in Urban Studies (3)

Provides direct participation in the urban process through supervised placement two full days per week in a public or private agency in a city during one semester of the junior or senior year. Seminar held each week to discuss the field experience and general urban problems. Internship planned individually to fit student program.
Prerequisite: Fifteen hours of the Collateral Program in Urban Studies.
Furer

His 4995 Independent Study in History (3)

Opportunity for history majors to develop independent research projects in particular fields under the guidance of members of the department. Meeting hours arranged by student and advisor and consist of at least thirty fifty-minute periods. The student is responsible for the plan of work, its development, and a final presentation in conformity with standards set by the advisor.
Prerequisite: Six hours of history.

INTERDISCIPLINARY COURSES

The following are found in the Interdisciplinary courses section. (See Index.)

ID 3100 Greek and Roman Mythology (3)

ID 3900 Interdisciplinary Seminar on Futurism (3)

ID 4001 Myth and Symbolism in Pre-Hispanic Mexico (3)

ID 4002 Egyptian Mythology (3)

ID 4100 China During the Age of Confucius (3)

ID 4200 The Victorian Age 1837-1901 (3)

Strauss

*Acting Chairperson: Dr. Ted Hoyle
TPA123 Ext. 2106*

The department offers two courses of study: a liberal arts major with preparation for careers in various phases of music and an education major which meets state certification requirements for teaching public school music. Acceptance to the program involves a placement test and a satisfactory audition in a major performance area (voice or instrument). A minor in music is also available. Auditions should be scheduled prior to registration for the first semester. Performance in at least two music ensembles is required each semester. Specific requirements related to ensembles are stated in the Ensembles Requirements Document. All music majors participate as soloists at student recitals each year. They are encouraged to appear in a junior recital and must appear in a senior recital in order to fulfill graduation requirements. Attendance at music forums and student recitals is also required.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Mus 1000 Music Survey 3
(section designated music majors and minors only)
Mus 1050 Music Fundamentals* 3
(section designated music majors and minors only)

*Unless waived by examination

Select from two of the following:
English (2000 level literature or drama) or Communications and Theatre
Fine Arts or Art History
Foreign Language
Philosophy or Religion

Social and Behavioral Sciences 12
Psy 1000 General Psychology 3
Select from three areas:
Economics or Geography
History
Political Sciences
Sociology or Anthropology

Biological and Physical Sciences 4
Astronomy Meteorology
Biology Oceanography
Chemistry Physics
Geology

Mathematical Sciences 3
Mathematics
Computer Science
Health and Physical Education 2-3
ID 1225 Contemporary Issues in Health 3
Physical Education 1

MAJOR REQUIREMENTS 49

REQUIRED COURSES 43

GENERAL EDUCATION COMPONENT 12

Mus 1101 Music Theory I 3
Mus 2201 Music History I 3
Music Electives with advisement 6
Other courses required for the Major in Music
Mus 1102 Music Theory II 3
Mus 1201 Basic Sight-Singing and Ear Training 3
Mus 2103 Music Theory III 3
Mus 2104 Music Theory IV 4
Mus 2202 Music History II 3
Mus 3111 Form and Analysis 3
Mus 28-- 38-- Ensembles 8
Mus 36-- Private Studio Lessons 8

FREE ELECTIVES 19-23

TOTAL 124

Minor

Mus 1050 Music Fundamentals is a prerequisite to the minor in music. It may be taken to fulfill the General Education requirements under the humanities cluster or it may be waived by examination.

REQUIREMENTS 18

REQUIRED COURSES 9

Mus 1000 Music Survey 3
(section designated music majors and minors only)
Mus 1101 Music Theory I 3
Mus 1201 Basic Sight-singing and Ear Training 3

B.A. Degree Option: Teacher Certification

Coordinator: Dr. Doris Engelhard
TPA 131 Ext. 2654

The following program meets the standards for state approval of teacher education in Music K-12, pending results of the National Teacher's Examination (administered during the senior year).

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 60

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 29

Humanities
Comm 1400 Speech Communication 3
Mus 1000 Survey 3
(section designated music majors and minors only)
Mus 1050 Music Fundamentals 3
(section designated music majors and minors only)

One course from:

Social and Behavioral Sciences 9
Psy 1000 General Psychology 3
Select from two areas: 6
Economics or Geography
History
Political Sciences
Sociology or Anthropology

Biological and Physical Sciences 4

Astronomy
Chemistry
Geology

Mathematical Sciences 3

One course in Mathematics

Health and Physical Education

ID 1225 Contemporary Issues in Health 3
Physical Education 1

ADDITIONAL GENERAL EDUCATION REQUIREMENTS 13

Mus 1501-2/1513-14 Class Voice/Piano 1
Mus 1551 Class Strings .5
Mus 1560 Class Woodwinds .5
Mus 1570 Class Brass .5
Mus 1590 Class Percussion .5
Mus 3121 Conducting 4
Psy 2100 Child Psychology or 3
Psy 2116 Psychology of Adolescence
Ant 1800 or Soc 1000

MAJOR REQUIREMENTS 46

Mus 1101 Music Theory I 3
Mus 2201 Music History I 3
Music Electives with advisement 6

Other courses required for the Major in Music 34

Mus 1102 Music Theory II 3
Mus 1201 Basic Sight-Singing and Ear Training 3
Mus 2103 Music Theory III 3
Mus 2104 Music Theory IV 4
Mus 2204 Music History II 3
Mus 3111 Form and Analysis 3
Mus 28-- 38-- Ensembles (7)*
Mus 36-- Private Studio Lessons 8
(Senior Recital to be recorded as Private Studio Lesson grade on student's final grade roster)

PROFESSIONAL EDUCATION 30

Ed 3000 Curriculum, Instruction, Evaluation and the Learner 3
Ed 3401 Language Arts/Reading in K-12 Subject Area Teaching 3
Ed 4000 Teacher and Classroom 3
Mus 2900 Sophomore Field Experience 3
Mus 3310 Elementary School Music 3
Mus 3311 Elementary Field Experience 1
Mus 3320 Secondary School Music 3
Mus 3321 Secondary Field Experience 1
Mus 4300 Student Teaching 10

ADDITIONAL REQUIREMENTS

Class Voice, Piano, as needed in addition to Additional General Education Requirements to pass piano/voice proficiency examinations. Voice, Piano, Guitar Repertory classes as applicable.

*Ensembles: Semester hours may vary. See Ensembles Requirement Document for specific details.

TOTAL 137

Music Courses

SURVEY AND INTRODUCTION

Mus 1000 Music Survey (3)
Understanding of music through study of music elements, forms, terms, styles, composers, and representative compositions in class, outside listening and music performance attendance.

Mus 1050 Music Fundamentals (3)
Introduction to rudiments of music and notation. Developing understanding of the music language and facility in music reading and aural perception, through class and individual vocal and instrumental practice and written work. This course is designed as preparation for Mus 2305, 2310 music education courses required of early childhood and elementary education majors.

THEORY AND MUSICIANSHIP

Mus 1101 Music Theory I (3)
Introduction to diatonic triads and inversions. Melodic construction and intervals. Rhythmic work, ear training, sight-singing, and keyboard harmony.
Prerequisite: Music 1050 or permission of instructor.

Mus 1102 Music Theory II (3)
Introduction to chromatically altered chords. Basic contrapuntal techniques and voice-teaching. Rudiments of form. Ear training sight-singing, and keyboard harmony.
Prerequisite: Music 1101 or permission of instructor.

Mus 1201 Basic Sight-singing and Ear-Training (3)

Review of music rudiments, aural recognition of melodic and harmonic components and intensive sight-singing activities, using both fixed and movable "Do."

Mus 2103 Music Theory III (3)
Further explanation of chromatic harmony. The study of modulation. Analyses of varying textures. Binary and Ternary form. Ninth chords and choral substitution. Ear training, sight-singing, and keyboard harmony.
Prerequisite: Mus 1102 or permission of instructor.

Mus 2104 Music Theory IV (4)
Review of traditional harmony. Rondo, Variation and Sonata forms. Impressionism, polytonality, and atonality. Schoenberg and the 12-tone row. Analysis of larger works, ear training and sight-singing.
Prerequisite: Music 2103.

Mus 3101 Counterpoint (2)
Species and free 2- and 3-part counterpoint.
Prerequisite: Mus 2104 or equivalent.
Montgomery

Mus 3102 Fugue (2)
Invertible counterpoint and writing of complete 3- and 4-voice fugues.
Prerequisite: Mus 3101 or equivalent.
Montgomery

Mus 3104 Advanced Sight-singing and Ear-training (3)

Course designed to further develop sight-singing and ear training skills. May be repeated once for credit.
Prerequisite: Mus 1201 or consent of department chairperson.

Mus 3121 Conducting (4)
This course is designed to provide the student with conducting skills used in choral and instrumental rehearsal and performance—class is divided into two 9-week sequences, Choral, then Instrumental. Concurrent with enrollment in the Conducting course, participation in specific choral and instrumental ensembles as deemed necessary by the instructor is required.
Prerequisites: Mus 2103.

Mus 3131 Orchestration I (3)
Instrumental ranges and playing characteristics, principles of scoring, reductions from full scores, and scoring for small instrumental ensembles.
Prerequisite: Mus 2104 or equivalent.

Mus 3133 Instrumental Arranging (2)
Scoring for various instrumental combinations other than orchestra, including concert, stage, dance, jazz, band, chamber groups or various combos.
Prerequisite: Mus 3131 or equivalent.
Zimmer

Mus 3134 Choral Arranging (2)
Arranging for various vocal combinations with or without accompaniment, using works by others or original compositions.
Prerequisite: Mus 3131 or equivalent.
Cullen

Mus 3135 Introduction to Electronic Music (3)
An introduction to electronic music, including its history, compositional techniques employed, the electronic synthesis of sound, music synthesizers, and the computer.
Prerequisite: Permission of instructor.

Mus 3140 Composition (2)
Technique and problems of composition for various performing media. May be repeated for credit.
Prerequisites: Mus 2140 and submission of original compositions.

HISTORY AND LITERATURE

Mus 2201 Music History I (3)
Development of music in primitive, ancient and exotic cultures, and in Western civilization from the beginning of Christianity through Classicism.
Prerequisite: Mus 1000, 1202 or department consent.

Mus 2202 Music History II (3)
Historic development of music from the culmination of the Classic Era to the present.
Prerequisite: Mus 1000, 2201 or department consent.

Mus 2220 Music in World Culture (3)
An anthropological approach to music examining it in its cultural context and as a symbolic form of human expression, drawing examples from a wide range of cultures (Africa, Asia, North and South America).

Mus 2230 African Music Tradition (2)
Music of Black Africa and its influence in shaping the music heritage of Black Americans: plantation, gospel, spirituals, blues, jazz, rock and soul.

Mus 3201 History of Musical Instruments (3)
An examination of musical instruments found in both primitive, tribal and modern societies. Emphasis upon the European tradition, tracing its development from the Middle Ages to the modern era.
Prerequisite: Mus 1000, 2201 or consent of instructor.
Grace

Mus 3205 Russian Music (3)
A detailed study of Russian Music from 1837 to the present. Emphasis will be placed on major composers and their stylistic development.
Prerequisite: Music 1000 or 2202 or consent of instructor.

Mus 3210 Baroque Music (3)
Study of the music style and characteristic forms with examples from a cross-section of major composers and works of the period 1600-1750.
Prerequisite: Music major curriculum, Mus 1000 or department consent.

Mus 3220 Music in the Classical Era (3)
Study of the music style and characteristic forms with examples from a cross-section of major composers and works during the rococo and classical periods in music: 1750-1820's.
Prerequisite: Music major curriculum, Mus 1000 or department consent.

Mus 3230 Music in the Romantic Era (3)
Study of the music style and characteristic forms with examples from a cross-section of major composers and works of the 19th century.
Prerequisite: Music major curriculum, Mus 1000 or department consent.

Mus 3240 Contemporary Music (3)
Study of the main trends in the 20th century music with examples from representative contemporary composers and works.
Prerequisite: Music major curriculum, Mus 1000 or department consent.

Mus 3245 Sacred Music (3)
A chronological study of twenty centuries of the sacred music of Western civilization, the significance of this music as a reflection of contemporaneous societies and its uses in those societies.
Prerequisite: Mus 1000 or consent of department chairperson.
Cullen

Mus 3250 Jazz in American Culture: From Dixieland to Rock (3)

The development and influence of American Jazz from its beginnings in New Orleans to the present highlighting the musical styles of innovative vocalists and instrumentalists and their influence upon American culture.
Yurochko

Mus 3255 Music of the American Theatre (3)

The evolution of theater music in the United States from the nineteenth century minstrel shows to the musicals of the present.
Feldman

Mus 3260 Opera Literature to Understanding Opera (3)

A survey of opera from the Baroque to the present with emphasis on major composers and their stylistic contributions. Class will attend performances at the Metropolitan and New York City Operas.
Prerequisite: Music 1000 or 2202 or consent of instructor.

Mus 4200 Solo Voice Literature (3)
Study of representative concert works for solo voice of various periods, styles and national origins.
Prerequisite: Music major curriculum, Mus 1000 or department consent.

Mus 4210 Choral Literature (3)
Study of representative choral works, unaccompanied and accompanied, from the Middle Ages through the present, and characteristic forms used in the choral medium.
Prerequisite: Music major curriculum, Mus 1000 or department consent.
Cullen

Mus 4211 Songs of Sorrow and Solace (3)

A detailed study of monumental and miniature masterpieces of musical settings of poetry, prose and prayer expressing various reactions to the universal experiences of death, grief and consolation.
Prerequisite: Mus 1000 or consent of department chairperson.
Cullen

Mus 4230 Keyboard Literature (3)
Study of keyboard literature with emphasis on major keyboard works for piano and its predecessors from early organ music through the present.
Prerequisite: Music major curriculum, Mus 1000 or department consent.
Feldman

Mus 4240 Chamber Music Literature (3)
The evolution of small instrumental ensembles from Middle Ages through the present, with emphasis on the development of chamber music starting with the baroque, and study of representative works in the medium.
Prerequisite: Music major curriculum, Mus 1000 or department consent.
Hoyle

Mus 4250 Symphonic Literature (3)

Development of the orchestral literature since the Baroque through the present, with the study of characteristic forms and representative works for orchestra.
Prerequisite: Music major curriculum, Mus 1000 or department consent.

Mus 4260 Indian Classical Music (Sitar) (3)

The development of Indian classical music from antiquity to the present day, with the study of characteristic forms and representative works for the Sitar.
Prerequisite: Mus 1000 or department consent.

Mus 4265 J.S. Bach (3)

An examination of the life, times, and music of Bach especially in relationship to the music of the entire Baroque era.
Prerequisite: Mus 1000 or 2202 or consent of department chairperson.
Grace

Mus 4267 W. A. Mozart (3)

A detailed study of the life and works of Mozart, showing his stylistic development from the early compositions through the Requiem Mass.
Prerequisite: Music 1000 or Music 2202 or consent of instructor.

Mus 4268 Ludwig Van Beethoven (3)

A detailed study of the life and works of Beethoven showing his stylistic development from the early piano sonatas through the last string quartets.
Prerequisite: Mus 1000 or 2202 or consent of department chairperson.
Golub

Mus 4269 Richard Wagner (3)

A detailed study of the life and works of Richard Wagner showing his stylistic development from the early works through the last operas.
Prerequisite: Mus 1000 or 2202 or consent of department chairperson.
Golub

Mus 4270 Gustave Mahler (3)

A detailed study of the life and works of Gustave Mahler showing his stylistic development from the early songs through the last symphonies.
Prerequisite: Mus 1000 or 2202 or consent of department chairperson.
Golub

Mus 4271 Debussy and Ravel (3)

Detailed study of selected representative works of Debussy and Ravel. Emphasis on selected readings and major masterworks of both composers.
Prerequisite: Mus 1000 or consent of department chairperson.
Hoyle

Mus 4272 Igor Stravinsky (3)

A detailed study of the life and works of Igor Stravinsky, showing his development from his early post-romantic nationalistic style through his last serial compositions.
Prerequisite: Mus 1000 or consent of department chairperson.
Golub

Mus 4274 Scriabin, Delius and Ives (3)

Detailed study of three turn-of-the-century composers; their very dissimilar careers and compositions; the remarkable correspondence of their creative inspirations.
Prerequisite: Mus 1000, 2202 or consent of department chairperson.
Hoyle

Mus 4277 Giuseppe Verdi (3)

A detailed study of the life and operas of Giuseppe Verdi showing his stylistic development from the early works through Falstaff.
Prerequisite: Mus 1000, 2202 or consent of department chairperson.
Golub

Mus 4278 Giacomo Puccini (3)

A detailed study of the life and works of Giacomo Puccini showing his stylistic development from early instrumental compositions through *Turandot*.
Prerequisites: Music 1000 or Music 2202 or consent of the instructor.

EDUCATION

Mus 2305 Early Childhood Music Education (3)

Music activities and materials for nursery school through grade 3. Direct participation in singing and rhythmic activities, playing and reading music with simple melody instruments, use of the autoharp and rhythm instruments, use and evaluation of books, curriculum materials and recordings. Emphasis on activities and materials for gifted and talented students, ethnically diverse groups, mainstreaming and special education classes.
Prerequisite: Mus 1050 or permission of instructor.
Engelhard, Price

Mus 2310 Elementary School Music Education (3)

Music activities and materials for children in the elementary grades. Direct participation in singing and rhythmic activities, playing and reading music with simple melody instruments, use of the autoharp, rhythm instruments and recordings, use and evaluation of books and materials for music education on the elementary and grade school level.
Prerequisite: Mus 1050 or permission of the instructor.
Engelhard, Price

Mus 2900 Foundations and Principles of Music Education (3)

An observational and analytical study of music education programs, K-12 in multicultural urban and suburban educational settings. Approximately one-third of the course involves a supervised field-based experience. Required of all students in music education before admission to the program.
Prerequisite: Sophomore music education level.

Mus 3310 Elementary School Music (3)

Music activities and materials, classroom music procedure and beginning choral techniques for the elementary school. Emphasis on activities and materials for gifted and talented students, ethnically diverse groups, mainstreaming and special education classes.
Prerequisite: Music education major curriculum.
Corequisite: Music 3311.

Mus 3311 Elementary School Music Field Experience (1)

Students spend 1/2 day per week per semester in a selected elementary school music setting. Application of content learned in Music 3310. Emphasis on curriculum content, basic teaching strategies and scheduling. On-site observation by college supervisors.
Prerequisite: Music education major curriculum.
Corequisite: Music 3310.

Mus 3320 Secondary School Music (3)

Course development, microcomputer teaching, organization problems, music in world cultures, instrumental and choral groups, voice classification, show production and music clubs. Study and evaluation of texts and materials. Emphasis on activities and materials for gifted and talented students, ethnically diverse groups, mainstreaming and special education classes.
Prerequisite: Music education major curriculum.
Corequisite: Music 3321.

Mus 3321 Secondary School Music Field Experience (1)

Students spend 1/2 day per week per semester in a selected secondary school music setting. Application of content learned in Music 3320. Emphasis on curriculum content, basic teaching strategies and scheduling. On-site observation by college supervisors.
Prerequisite: Music education major curriculum.
Corequisite: Music 3320.

Mus 3330 Choral Methods (2)

Administration of choral program: organization, procedures, rehearsal techniques regarding voice production, diction, repertory, program planning, performance problems of style and interpretation, special needs of gifted and handicapped persons.
Prerequisites: Conducting I, choral singing experience or permission of chairperson or instructor.

Mus 3341 Instrumental Repair (3)

Study of the proper techniques used in the repair and maintenance of string, brass, percussion and woodwind instruments.

Mus 4300 Student Teaching (10)

Students will teach for a fifteen week period in both elementary and secondary school under the direction of a college supervisor and cooperating teacher. The experience will include work with normal students, gifted and talented students, special education classes, mainstreaming, and ethnically diverse groups.
Prerequisites: Music education core requirements.

THERAPY

Mus 3400 Therapeutic Use of Music (3)

A study of music as a therapeutic means of dealing with exceptional children and adults.
Prerequisite: SpE 2052 or permission of instructor.
Zimmer, L. J.

Mus 3410 Music in Physical Therapy (3)

Use of music in various rhythmic movements, dealing with all parts of the body. Theoretical musical notation. Use of instruments for the handicapped.
Prerequisite: Mus 3400 or permission of instructor.
Zimmer, L. J.

Mus 4400 Music for the Child in Special Education (3)

Use of music in learning other subjects, i.e., mathematics, English and speech and development of conceptual learning.
Prerequisite: Mus 3410 or permission of instructor.
Zimmer, L. J.

CLASS LESSONS

Class lessons in basic performance technique, once a week (75 minutes). Required for music education majors, but open to others by department consent if space is available.

Mus 1501-1502 Voice I-II (½ ½)**Mus 1511-1514 Piano I-IV (½ ½ ½ ½)****Mus 1551 Strings (½)****Mus 1560 Woodwinds (½)****Mus 1570 Brass (½)****Mus 1590 Percussion (½)**

For non-music majors only:

Mus 1517-1518 Elementary Piano I & II (3,3)

A beginner's course for non-majors to develop general keyboard facility through sight reading, harmonizing well-known melodies, and the performance of easy classics. Mus 1517 is prerequisite to 1518. *Music majors may not take this course for credit.*

PRIVATE STUDIO LESSONS

One private 50 minute lesson, per week, each semester, required of and reserved for music majors. May be repeated for credit.

Mus 3600 Voice (2)**Mus 3610 Piano (2)****Mus 3620 Organ (2)****Mus 3630 Harp (2)****Mus 3640 Guitar (2)****Mus 3650 Violin (2)****Mus 3651 Viola (2)****Mus 3652 Cello (2)****Mus 3653 Double Bass (2)****Mus 3660 Flute (2)****Mus 3661 Oboe (2)****Mus 3662 Clarinet (2)****Mus 3663 Saxophone (2)****Mus 3664 Bassoon (2)****Mus 3670 Trumpet or Cornet (2)****Mus 3671 French Horn (2)****Mus 3672 Trombone or Euphonium****Baritone Horn (2)****Mus 3673 Tuba (2)****Mus 3690 Percussion (2)**

PERFORMANCE AND REPERTORY

Mus 2701-2702 Score Reading I & II (1,1)

Reading of all clefs and transposing instruments, written and sight transposition at keyboard, condensed score reduction, playing from the open scores, progressing from simpler and shorter to full orchestral passages.
Prerequisite: Demonstrated keyboard proficiency.

Mus 2710 Accompanying (½)

Study and practice of piano accompanying, including sight-reading and transposition, for vocal and instrumental works. Two semesters required for piano majors.
Prerequisite: Demonstrated piano proficiency.

Mus 2879 Jazz Ensembles (1)

The study, rehearsal, playing and performance of representative musical compositions in the various jazz and jazz/rock styles.
Prerequisite: Permission of instructor.
Yurochko

Mus 3700 Voice Repertory (½)

Study and performance of representative cross-section in the solo voice repertory.
Corequisite: Private or class voice. May be repeated for credit.

Mus 3710 Piano Repertory (½)

Study and performance of representative cross-section of the piano repertory. May be repeated for credit.
Corequisite: Private piano lessons.

Mus 3720 Guitar Repertoire Class (½)

Study and performance of representative cross-section of the guitar repertory. May be repeated for credit.
Corequisite: Private guitar lessons.
Perry

Mus 3750 Chamber Music (½)

Study and performance of representative cross-section of chamber music works. May be repeated for credit.
Prerequisite: Music major curriculum or demonstrated performance proficiency.

ENSEMBLES

Study, rehearsal and performance of representative works in various styles and from different periods. May be repeated for credit. Open to all students. Attendance at all rehearsals and performances is mandatory, including those occurring at other than designated class times.
Prerequisite: Audition or consent of conductor.

Mus 2810 Chorale (1)

Bleeke

Mus 2820 Women's Chorus (½)

Montgomery

Mus 2830 Men's Chorus (½)**Mus 2840 Opera Class (½)****Mus 2850 String Orchestra (½)****Mus 2860 Woodwind Choir (½)**

Zimmer, L. J.

Mus 2870 Brass Choir (½)**Mus 2879 Jazz Ensemble (1)****Mus 2880 Jazz Workshop (½)****Mus 2890 Percussion Ensemble (½)****Mus 2895 Guitar Ensemble (½)**

Perry

Full curricular ensembles:

Mus 3800 Concert Chorus (½)**Mus 3850 Orchestra (½)****Mus 3860 Band (1)**

INDEPENDENT STUDY

Mus 4901, 4902, 4903 Independent Study in Music (1,2,3)

The opportunity for students of advanced ability to pursue in a concentrated but informal manner a specific area of study in music not available through current course offerings.
Prerequisite: Consent of department chairperson.

Mus 4939 Elementary Classic Guitar Workshop (3)

Introductory course for those desiring to play the classic guitar. Study of the fundamental techniques used on this instrument. Class and individual instruction. Students will learn to read music. Must have nylon string guitar.

Mus 4940 Opera Workshop (4)

Introductory course concentrating on operatic roles and presentations. Study of the basic techniques used in opera including vocal production, staging, accompanying, and writing.
Prerequisite: All candidates will be required to either audition or to provide an audition tape to determine their qualifications as to vocal and musical ability.

Chairperson: Dr. Mervyn D'Souza
J104B Ext. 2312

A broad-ranged interdisciplinary program designed to help the student understand the ways in which religious and philosophical issues appear throughout our culture, in politics, art, history and ethics.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:
Economic or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4

Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3

Computer Science
Mathematics

Health and Physical Education 2-3

Health Education
Physical Education

#A Science course may be substituted for this Core Course

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement

†Excluding teaching methods courses

MAJOR REQUIREMENTS 30

REQUIRED COURSES 12

Phi 1100 Philosophy or an alternate philosophy course at 1000 level 3
Phi 2500 Language and Logic or an alternate course in logic selected with departmental advisement 3
One course in history of philosophy at 2000 level or above 3
One course in religion at 2000 level or above 3

MAJOR ELECTIVES 18

Selected with advisement

FREE ELECTIVES 41-42

TOTAL 124

Philosophy Courses

INTRODUCTORY

Phi 1100 Philosophy (3)

A general introduction to the ideas of great philosophers, major schools of thought, and basic issues. Among the topics considered are the meaning of philosophy, reality, knowledge, values and social philosophy.

Phi 1101 Honors Course in Philosophy (3)

A general introduction to the ideas of the great philosophers, major schools of thought and basic issues dealing with knowledge, values and experience. Classical philosophical writings are examined to show their philosophical and historical influence. This course may be substituted for Phi. 1100. Prerequisite: Top 25% entering students on SAT verbal scores, or 3.0 cumulative average. Credit not given for both Phi. 1100 and 1101.

HISTORY OF PHILOSOPHY

Phi 2200 Ancient Philosophy (3)

Classical philosophical views on man, morality, education, art and politics. Emphasis on the philosophies of Plato and Aristotle. Prerequisite: Three hours in philosophy or permission of instructor.
Fethe

Phi 2203 Oriental Philosophy (3)

A study of fundamental and characteristic problems in philosophy as they are considered in the Oriental traditions.
D'Souza

Phi 3200 Modern Philosophy: The Age of Genius (3)

Survey of the beginnings of modern philosophical thought concerning human freedom, the nature of reality, the foundations of knowledge and the conflict between reason and emotion. Emphasis on the philosophies of Descartes, Spinoza, Hobbes and Leibniz. Prerequisite: Three hours in philosophy or permission of instructor.
Fethe

Phi 3205 Making of the Modern Mind: A Critical Exposition of Hume and Kant (3)

Study of the role of reason and experience in the philosophies of Hume and Kant and the impact of these philosophers on modern thought. Prerequisite: Three hours in philosophy or permission of instructor.

Phi 3208 Hegel, Marx and Nietzsche: 19th Century German Philosophy (3)

A study of some of the great metaphysical systems produced by nineteenth century German philosophy. Among the philosophers to be considered will be Hegel, Marx, Nietzsche, Fichte and Schopenhauer. Prerequisite: Three hours in philosophy or permission of instructor.

Phi 4200 Contemporary Philosophy: The Analytic School (3)

Fundamental themes and methods of twentieth century British and American analytical philosophy. Among philosophers covered are Moore, Russell, Wittgenstein and Ayer. Prerequisite: Three hours in philosophy or permission of instructor.

VALUE THEORY

Phi 2300 Introduction to Ethics (3)

A study of representative major efforts to establish a rational basis for ethical standards and the relevance of their ideas to contemporary controversy concerning traditional moral values. Prerequisite: Three semester hours in philosophy or permission of instructor.

Phi 2302 Philosophy of Peace (3)

Philosophical analysis of ideological conflicts, causes of war, world community, the morality of war, alternatives to violence, the concept of justice. Prerequisite: Three hours in philosophy or permission of instructor.
Burt

Phi 3300 Social and Political Philosophy (3)

The nature of the good society; the justification and criticism of social institutions as well as proposals for their reconstruction; a critique of the basic moral assumptions underlying various political doctrines and an analysis of concepts like law, natural law, rights, political obligation, equality, liberty and the common good. Prerequisite: Three hours in philosophy or permission of instructor.

Phi 3302 Communities and Communes (3)

Devising community philosophies and planning alternative community life styles: work, play, leisure, technology, sex, male and female roles, decision making, religion, education, family, social class, property and rights. Prerequisite: Three hours in philosophy or permission of instructor.

Phi 3303 Energy, Environment and Alternative Technology (3)

Human values and life styles as they relate to alternative technology, use of the environment, solar energy vs. nuclear reactors and fossil fuels, ownership of industry, life in the factory and on the farm. Prerequisite: Three hours in philosophy or permission of instructor.
Burt

Phi 3305 Aesthetics (3)

A critical analysis of the meaning of aesthetic terms, the aesthetic experience, the structure of the aesthetic object, the nature of creative activity, and the nature of aesthetic judgment and its possibility of verification. Prerequisite: Three hours in philosophy or permission of instructor.
Sitelman

Phi 3307 The Philosophy of Law (3)

A critical discussion of the most prominent theories of the sources, nature, and function of the law, as well as a study of basic problems such as the logic of legal argumentation and the relation between law and morality.
Pezzolo

Phi 3308 Values in Conflict (3)

An introduction to the basic theories of values and ethics, with practical application to problems which the student may face in personal and professional life.
Fethe

Phi 3309 Theories of Punishment (3)

A description and critical appraisal of various philosophical and legal justifications for punishment. Special emphasis on philosophical pictures of human nature relative to punishment.
Pezzolo

Phi 3310 Business Ethics (3)

A critical examination of the role of moral principles in modern business practices. The course evaluates many professional codes of ethics and considers how the search for economic profit is related to the welfare of society.
W. Stern

Phi 3311 Values and Society (3)

Practical and theoretical introduction to problems in ethics and social philosophy. Emphasis on developing philosophical techniques for making decisions about actions, social issues and life styles. Prerequisite: Three hours in philosophy or permission of instructor.
Fethe

Phi 3312 Contemporary Ethical Theory (3)

Analysis of significant problems in ethical theory: the nature of the good; the moral ought; naturalistic fallacy; metaethics and the meaning of ethical terms. Prerequisite: Three hours in philosophy or permission of instructor.

Phi 3313 Justice and Human Rights (3)

Philosophical theories of social justice and their application to contemporary problems in human rights. Emphasis on issues related to equality, discrimination and reverse discrimination, economic justice and the right to violence. Prerequisite: Three hours in philosophy or permission of instructor.
Fethe

Phi 3314 Moral Problems in Medicine and Health Care (3)

Introduction to philosophical theories dealing with moral problems in medicine and health care. Emphasis is given to problems concerning patients' rights, justice in health care distribution and experimenting on human subjects. Prerequisite: Three hours in philosophy or permission of instructor.
Fethe

METAPHYSICS, PHILOSOPHY OF MAN, THEORY OF ACTION

Phi 2400 Philosophy of Man (3)

A study of some of the modern and classical philosophical approaches to the nature of man: perception and intellection, free will and determinism, soul and mechanism; mind and body. An investigation into some of the philosophical foundations of modern theories of psychology. Prerequisite: Three hours in philosophy or permission of instructor.

Phi 3402 Existentialism (3)

The nature and modes of human consciousness, the meaning of embodied existence and being-in-the-world, the problem of freedom and value. Selected readings from the philosophies of Nietzsche, Kierkegaard, Husserl, Jaspers, Heidegger, Sartre, Camus and Merleau-Ponty.

Prerequisite: Three hours in philosophy or permission of instructor.
Catalano

Phi 3404 Philosophy of Mind (3)

A conceptual study attempting to analyze the following topics: the mind, its relation to the body, the problems of motivation, intention, freedom, action, the self, the unconscious, emotion, memory and imagination.

Prerequisite: Three hours in philosophy or permission of instructor.

Phi 3406 Contemporary Schools of Philosophy (3)

Major philosophic clashes of our time: the uses of language; the sources, limits, and test of knowledge; and the nature of the universe, man, morality, and the good society. Modern and traditional approaches including idealism, existentialism, neoscholasticism, pragmatism, logical empiricism and realism.

THEORY OF KNOWLEDGE AND LOGIC

Phi 2500 Language and Logic (3)

Development of the basic principles of rational thinking: definitions and fallacies; elements of classical and modern logic.
Fethe, Stern

Phi 2510 Understanding Arguments (3)

Practical introduction to the principles of informal logic and their use in constructing sound arguments and recognizing defective reasoning. Examples of arguments are taken from a variety of fields to help the student develop critical thinking.
Fethe

Phi 3503 Theory of Knowledge (3)

Analysis of the concepts of knowledge, belief, truth, falsity, error, meaning and ideas. Prerequisite: Three hours in philosophy or permission of instructor.

SEMINARS AND INDEPENDENT STUDY

Phi 4600 Seminar in Great Philosophers (3)

The study of one or more of the great philosophers with emphasis on primary sources. The philosophers to be studied will vary. Prerequisites: Nine hours in philosophy or 6 semester hours with permission of instructor.

Phi 4605 Seminar in Major Philosophical Problems (3)

The study in depth of one major philosophical issue. The problems to be studied vary. Prerequisites: Nine hours of philosophy or 6 semester hours with permission of instructor.

Phi 4610 Independent Study in Philosophy (3)

Independent research projects under the guidance of members of the department. Meeting hours and times are arranged by the student and instructor. Prerequisites: Nine hours in philosophy or six hours with permission of instructor.

Religion Courses

Rel 1700 Introduction to Comparative Religion (3)

A survey of Hinduism, Buddhism, Taoism, Confucianism, Judaism, Christianity and Islam, emphasizing the origin, tenets, development and contemporary situation of each religion. D'Souza

Rel 2700 Oriental Religions: Hinduism and Buddhism (3)

The history and thought of Hinduism and Buddhism; their role in the culture of India and East Asia. D'Souza

Rel 2702 Western Religions: Judaism, Islam and Christianity (3)

The history and impact of three major Western religions; their differences and similarities; their role in the formation of contemporary religious thought. Prerequisites: Three hours in philosophy or religion.

Rel 3700 Philosophy of Religion (3)

The philosophical basis of the major Western religions. Attention is given to traditional proofs of God's existence, the problem of evil, the relation between science and religion, and religion's responses to the challenges of atheism and secularism. Prerequisite: Three hours in philosophy or religion or permission of instructor. D'Souza

Rel 3701 The New Religions in America (3)

Background, survey and analysis of Oriental mysticism in America; Zen, Yoga, Meher Baba, Transcendental Meditation, Krishnamurti, Tibetan Buddhism, International Society for Krishna Consciousness and other contemporary movements. Prerequisite: Three hours in philosophy or religion or permission of instructor. D'Souza

Rel 3702 Foundations of Mystical Experience (3)

Critical analysis of the truth-claims underlying mystical experience. Prerequisite: Phi 1040 or permission of instructor.

Rel 3704 Types of Religious Philosophy (3)

A study of two or three classical Western philosophers of religion selected from the following: Aquinas (classical theism), Eckhart (mysticism), Spinoza (pantheism), Hume (skepticism), Kant (moral theism), Hegel (absolute idealism), Kierkegaard (existentialism).

Prerequisite: Three hours of philosophy or permission of instructor. D'Souza

Rel 3705 Major Ideas in Jewish Religion (3)

The major ideas of Jewish religious thought beginning with the Old Testament, and the Talmud. Jewish philosophers from Philo of Alexandria and Saadya Goan; some of the great Jewish philosophers of the Middle Ages. Prerequisite: Three hours in philosophy or religion or permission of instructor.

Sitelman

Rel 3706 Major Trends in Jewish Philosophy in the 19th and 20th Centuries (3)

An analysis of the problems and issues in Jewish thought in the past century and a half, set against the background of general philosophy and within the scope of changes in Jewish life during the same period. Prerequisite: Three hours in philosophy or religion or permission of instructor. Sitelman

Rel 4615 Independent Study in Religion (3)

Independent research projects under the guidance of members of the department. Meeting hours and times are arranged by the student and instructor. Prerequisites: Nine hours in philosophy/religion or 6 hours with permission of instructor.

Rel 4800 Honors Courses in Critical Issues in Modern Religion (3)

A study of selected significant issues in modern religious thought—natural science and religion; biology and religion; social theory and religion; history and religion. Arrangements have been made to utilize the resources of lecturers from the natural, biological and social sciences.

Prerequisite: "B" average. Junior or Senior level and permission of Instructor. D'Souza

INTERDISCIPLINARY COURSES

The following are found in the Interdisciplinary courses section (See Index.)

ID 3010 Philosophy in Literature (3)

Pashman

ID 3315 Ethics and Public Policy (3)

D'Souza



Psychology Courses

GENERAL

Psy 1000 General Psychology (3)

Introduction to the study of behavior; biological bases of behavior, perception, learning, cognition, motivation, development, personality, measurement, psychopathology, social behavior. Foundation for those interested in the behavioral sciences or social service occupations.

Psy 1001 Individualized General Psychology (3)

An alternative to Psy 1000, intended for students who desire self-paced individualized instruction. Students will be given objectives for short units. Individual evaluation for each unit will demonstrate mastery of unit objectives or the need for additional study or individual tutoring before the student proceeds to the next unit in the sequence.

Psy 1005 Honors General Psychology (3)

Introduction to the study of behavior; biological bases of behavior, perception, learning, cognition, motivation, development, personality, measurement, psychopathology, social behavior. Foundation for those interested in the behavioral sciences or social service occupations. Can be substituted for Psy 1000.

Prerequisites: In top 25% of entering students on SAT verbal scores, in top 25% of high school graduating class and permission of psychology department honors committee. Kind

DEVELOPMENTAL

Psy 1100Z Academic Applications of Cognitive Learning Theory (3)

Development of skills essential to successful academic performance: comprehension, memory, analytical thinking, problem solving, communication, test preparation, self-evaluation. Provision of a variety of learning strategies based on the application of theories and research in learning and cognitive psychology. Must be taken concurrently with another academic course. Does not count toward the major in psychology.

Psy 2100 Child Psychology (3)

Emphasis on the major processes in human behavior which have their roots in early childhood: hereditary and environmental sources affecting social, emotional, intellectual and physical development. Prerequisite: Psy 1000.

Psy 2110 Psychology of Adolescence (3)

An examination of the nature of adolescence as characterized by the group of developmental problems (biological, psychological, and social in origin) typically occurring during the second decade of life. Prerequisite: Psy 1000. DiSalvi, Feigenbaum

Biological and Physical Sciences 4 (Biology, chemistry or physics recommended)

Mathematical Sciences 3 (Mat 1052 College Algebra and Trigonometry or Mat 1053 Analytic Geometry recommended)

Health and Physical Education 2-3 Health Education Physical Education

#A Science course may be substituted for this Core Course

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

MAJOR REQUIREMENTS 31

REQUIRED COURSES 19

Psy 3200 Psychological Statistics	3
Psy 3310 Psychology of Learning	3
Psy 3320 Theories of Personality	3
Psy 4200 Tests and Measurements	3
***Psy 4230 Experimental Psychology	4
***Psy 4940 Seminar: Issues in Contemporary Psychology	3

MAJOR ELECTIVES 12

Four psychology courses selected with departmental advisement.

FREE ELECTIVES 40-41

TOTAL 124

***May be taken as honors courses. See Psy 1005, 4235, 4945

Minor

A variety of specializations may be taken within the minor in psychology. Some examples are: developmental, for those who wish to gain a perspective on human behavior over the lifespan; business-related, for those who plan to work in business or industry; education-related, for those who plan to teach; experimental, for those who wish to develop research skills; professional, for those who plan to enter a graduate program in psychology. Particulars of these or other individualized approaches should be discussed with departmental advisor, Dr. Bousquet. Psy 1000 General Psychology is a prerequisite to all psychology courses.

Chairperson: Dr. Herbert Samenfeld
J330 Ext. 2170

The major in Psychology is intended to acquaint students with the scientific field of knowledge of human and animal behavior and the research methods by which such knowledge is acquired. The student develops research and measurement skills, interpersonal skills and communication skills in addition to an understanding of the developmental and other processes which explain human behavior. The person who majors in psychology is generally prepared for a wide variety of roles, including mental health technician, research assistant, parent, teacher, human services provider, personnel administrator, statistical assistant and graduate student in psychology or other professional areas.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition	3
GE 1100 Emergence of the Modern World	3
GE 1200 Intellectual and Cultural Traditions	3
GE 2020 Inquiry and Research	3
Eng 2203 Landmarks of World Literature	3
GE 2400 Science and Technology in the Modern World #	3

BREADTH REQUIREMENTS 33-34

Humanities 12

Select from at least three areas:

- **English (2000 level literature or drama) or Communications and Theatre
- †Fine Arts or Art History
- Foreign Languages
- †Music
- Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:

- ***Psy 1000 General Psychology 3
- Sociology or Anthropology (Soc 1000 and one other sociology or anthropology course recommended)
- Economics, Geography
- History
- Political Science

Psy 3110 Life-Span Developmental Psychology (3)

Examination of the psychological development of the individual across the life-span. The influence of biological, sociological, and historical changes on psychological development is discussed. Developmental concepts and theories are reviewed and applied in the study of the various ages. Prerequisite: Psy 1000.

Avioli, Danielson

Psy 3120 Adult Psychology (3)

Human development from young adulthood into later maturity: application of the developmental approach as a systematic framework for viewing the adult years and the aging process; interaction of psychological, social, and physiological aspects of development.

Prerequisite: Psy 2100 or 2110.

Bruel, DiSalvi

Psy 3130 The Psychology of Aging (3)

Developmental processes in later life: the effects of aging on various aspects of behavior, including motivation, memory, learning, motor performance, intellectual ability, problem solving, personality, social adjustment and psychopathology.

Prerequisite: Psy 2100 or 2110.

Avioli

EXPERIMENTAL AND MEASUREMENT**Psy 3200 Psychological Statistics (3)**

Introduction to statistical procedures by which data are described and used for inference. Measures of central tendency, variability, correlation, regression, probability, hypothesis testing and nonparametric statistics.

Prerequisite: Psy 1000.

Harris, Kind, S. Schwartz

Psy 4200 Tests and Measurements (3)

An introduction to concepts of psychological testing and a survey of various instruments used in psychology to measure intelligence, aptitudes, achievement, attitudes and personality.

Prerequisite: Psy 3200.

Fraunfelker

Psy 4230 Experimental Psychology (4)

Systematic methods used in conducting and evaluating psychological research, primarily experimental. Topics include identifying and defining research problems, classifying variables, experimental design and analysis, collecting and evaluating data and writing research reports (includes laboratory sessions). Credit may not be received for both Psy 4230 and Psy 4235.

Prerequisite: Psy 3200.

Psy 4235 Honors Experimental Psychology (4)

Systematic methods used in conducting and evaluating psychological research, primarily experimental. Topics include identifying and defining research problems, classifying variables, experimental design and analysis, collecting and evaluating data and writing research reports. Major project will be proposed to be carried out in Honors Seminar. May be substituted for Psy 4230. Credit may not be received for both Psy 4230 and Psy 4235.

Prerequisites: Psy 3200; 3.5 GPA in Psychology; Interview with honors committee. *Harris*

SPECIALIZED AREAS: THEORETICAL AND EXPERIMENTAL**Psy 3310 Psychology of Learning (3)**

Major principles of learning examined in terms of theoretical origins, current research and strategic applications.

Prerequisite: Psy 1000.

Bousquet, Jaffe, Morelli

Psy 3320 Theories of Personality (3)

Various systematized conceptualizations of personality including psychoanalytic, behavioral, cognitive, personalistic, phenomenological. Current areas of research including cognitive and biological factors. Relationships to clinical applications.

Prerequisite: Psy 1000.

Psy 3330 Psychology of Consciousness (3)

Survey of recent trends and findings in the psychological investigation of consciousness. Topical areas include theories of the mind, brain bilaterality, experienced time, dreams and hypnosis, language, meditation, biofeedback and consideration of the mind/body problem.

Prerequisites: Six hours of psychology and junior standing.

Springer

Psy 3340 Psychology of Women (3)

An exploration of the theories and research on the physiological and psychological factors affecting contemporary women. Topics of interest to both males and females.

Prerequisite: Psy 1000.

Gonsalves, Kind

Psy 3360 Theories of Motivation (3)

Motivation studied through systematic theory and current research. Topics include physiological and regulatory system, ethology, drives, arousal, hedonism, reinforcement, need-systems and motivation as related to personality theory.

Prerequisite: Psy 1000.

Kaplowitz, Kind

Psy 3380 Psychology of the Arts (3)

The psychological processes that make possible the creation of and response to the arts are explored by examining the psychology of the participants in the artistic process—the artist, the performer, the audience, and the critic.

Prerequisites: Six hours of psychology.

Psy 4310 History and Systems of Psychology (3)

History of psychology from its origins to its modern systematic conceptualizations. The influence of early systems, theories and schools on contemporary psychology.

Prerequisite: Psy 1000.

Fraunfelker, Jaffe

Psy 4360 Physiological Psychology (3)

Study of the physiological bases of behavior. Fundamentals of neuronal and synaptic activity, the nervous and endocrine systems. Traditional topics such as memory, motivation and emotion as well as current research areas covered.

Prerequisite: Psy 1000; Bio 2402 recommended.

Harris

Psy 4380 Psychology of Perception (3)

A review of theories of perception and a study of the environmental variables and underlying physiological processes which determine the selective human interaction with environmental events.

Prerequisite: Psy 1000.

S. Schwartz

Psy 4390 Cognitive Processes (3)

Function, structures and processes of cognition. Theories and research findings concerning cognition and related topics; learning, problem solving, concept formation, behavioral and experiential aspects of thinking, psycholinguistics, memory and creativity.

Prerequisite: Psy 3310.

Bousquet

SPECIALIZED AREAS: APPLIED**Psy 3400 Organizational Behavior (3)**

Psychological perspectives on aspects within work organizations. Representative aspects include basic processes and problems; motivation, personnel policies, authority issues and control, organizational information processing, productivity, job redesign, organization development and workers' participation.

Prerequisite: Psy 1000.

Springer

Psy 3420 Environmental Psychology (3)

Principles of psychology applied to experienced physical settings and their effects upon various aspects of human behavior. Selected topics include the built environment, psycho-environmental issues, environmental stresses, crowding, perceptual and motivational aspects of work, play and therapeutic environments.

Prerequisite: Psy 1000.

Psy 4400 Principles of Behavioral Analysis (3)

The analysis of behavior directed toward the explicit prediction and control of the behavior of humans. The detailed account of the terms, concepts, methodology and research findings of a scientific analysis of behavior according to the theory and principles of operant conditioning.

Prerequisite: Psy 3310.

Jaffe, Morelli

Psy 4420 Industrial/Organizational Psychology (3)

Principles of psychology applied to industrial problems and organization. Selected topics in personnel selection and training, human factors engineering, worker morale, consumer and organizational psychology.

Prerequisites: Psy 1000 and a course in statistics.

Springer

Psy 4440 Functional Neuropsychology (3)

Review of neurological variation and disorders associated with behavioral dysfunction or atypical development. Remediation alternatives based on neuropsychological research on such topics as brain organization, sensory-motor integration, dysphasias, biofeedback, and behavioral controls.

Prerequisites: Bio 2402 and Psy 3540.

Youtz

Psy 4450 Survey of Therapeutic Psychology (3)

Basic principles, major theories and research in therapeutic psychology. Includes psychoanalytic, humanistic and behavioral models.

Prerequisite: Psy 3540.

Saperstein

PERSONALITY DYNAMICS**Psy 3540 Abnormal Psychology (3)**

Deviant and disordered behavior, its overt manifestations and its psychological, biological, and social origins.

Prerequisite: Psy 1000.

Psy 4520 Psychodynamics of Individual and Group Behavior (3)

The psychodynamic influences on individual and group behavior, as explicated in major works of psychoanalytic psychology.

Prerequisite: Psy 3320.

Saperstein

SOCIAL PSYCHOLOGY AND GROUP PROCESSES**Psy 3630 Social Psychology (3)**

The social determinants of behavior. An examination of theories and current research in such areas as: aggression, attitudes, communication, conformity, group processes and interpersonal perception.

Prerequisite: Psy 1000.

Kaplowitz, Kind, Lorber

Psy 3650 Understanding Self and Others (3)

Experientially based personal growth experience. Focuses on understanding and involvement and small group interaction and personal growth processes through structured exercises. Emphasis on skill building in interpersonal process.

Prerequisite: Psy 1000.

Feigenbaum, Saperstein, F. Stern

Psy 3660 Community Psychology (3)

Emphasis on the transactions between people and social systems. Methods of intervention in and evaluation of the ways persons and various levels of environment fit together. Origins and developments of community psychology examined. Applications for psychologists and other community service providers considered.

Prerequisite: Psy 1000.

SEMINARS AND INDIVIDUALIZED STUDY**Psy 4930 Seminar in Advanced General Psychology for Teaching Assistants (3)**

A seminar for advanced students in psychology interested in acting as teaching assistants in Psy 1001. Seminar discussions analyze problems encountered by beginning students and serve as comprehensive review of major topics in general psychology for students who desire firm basis for advanced studies in psychology. Provides experience in developing interpersonal skills required for scholastic advisement.

Prerequisites: Psy 3200, 3310, 3320 and permission of instructor.

Psy 4940 Seminar: Issues in Contemporary Psychology (3)

Synthesis of student's previous course work in psychology, with consideration of significant current developments in theory, research and practice. Credit cannot be received for both Psy 4940 and 4945.

Prerequisite: Open only to senior psychology majors.

Psy 4945 Honors Seminar: Issues in Contemporary Psychology (3)

Synthesis of student's previous course work in psychology with a consideration of significant current developments in theory, research and practice. Completion of senior research project: data collection and analysis, oral and written presentations. May be substituted for Psy 4940. Credit cannot be received for both Psy 4940 and 4945.

Prerequisite: Psy 4235 and permission of honors committee.

Harris

Psy 4950 Field Experience in Psychology (3)

A learning experience derived from a field experience, usually off-campus, related to the major. Specific job or volunteer work in institutional, industrial, governmental or social setting to be arranged in conference with course instructor. Weekly seminar to integrate course knowledge with field experience.

Prerequisites: Junior or senior psychology major, minimum 3.00 GPA in psychology, courses appropriate to specific placement and permission of instructor.

Psy 4970 Independent Study in Psychology (3)

In-depth study of an appropriate topic of individual interest under the supervision of a member of the department. Meeting hours arranged by the student and the instructor to consist of the equivalent of thirty 75-minute periods. Content not to duplicate any existing course.

Prerequisites: Senior psychology major, 3.00 GPA in major, permission of instructor and department chairperson.

Chairperson: Dr. Mary Lou Mayo
J305B Ext. 2090

The Sociology major prepares students for a variety of introductory level positions in business, government, public service, social research, teaching, and urban affairs. It offers a systematic understanding of the interpersonal dynamics and relationships that arise from human interactions. The major also gives the student exposure to the thinking and procedures of science as applied to humans, individually and collectively. Students interested in specific careers may select their elective courses in areas of concentrated study which include: medical, business and work, research methods, law and society, urban society, or social service. The major also offers a variety of courses well suited to the prospective teacher on either the secondary or elementary school level. Students should consult with departmental advisors about courses in each area of concentration.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12
Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4
Astronomy Meteorology
Biology Oceanography
Chemistry Physics
Geology

Mathematical Sciences 3
Computer Science
Mathematics

Health and Physical Education 2-3
Health Education
Physical Education

A Science course may be substituted for this Core Course
**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

MAJOR REQUIREMENTS 30

REQUIRED COURSES 12

Soc 1000 Social Life and Society 3
Soc 2050 Social Statistics 3
Soc 2052 Methods of Social Research 3
Soc 3050 Development of Sociological Theory 3

MAJOR ELECTIVES 18

Six Sociology courses; at least four must be on the 3000-4000 level.

FREE ELECTIVES 41-42

TOTAL 124

B.A. Degree Option: Teacher Certification

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 68

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 50

***English/Humanities 9**
(from at least 3 disciplines)
Com 1400 Speech Communication 3
***Social and Behavioral Sciences 9**
(from at least 3 disciplines)
Psy 1000 General Psychology 3
One of the following: 3
Eco 2030 History of Economic Thought or
Eco 2040 American Economic Development or
Eco 2041 European Economic Development or
Eco 3050 Comparative Economic Systems 3
One of the following: 3
PS 2110, 3150, 3151, 3160, 3170 or 3310
***Biological and Physical Sciences 4**
***Mathematical Sciences 3**
(not including computer science)
***Health and Physical Education 4**
ID 1225 Issues/Values in Contemporary Health Physical Education 1

ADDITIONAL COGNATES 21

GE 1010 Earth, Environment of Man or
GE 3950 Geography of New Jersey 3
His 2303 United States History to 1877 3
His 2304 United States History, 1877 to Present 3
His 3326 History of New Jersey 3
One of the following: 3
His 2381 History of Latin America to 1825 or
His 2382 History of Latin America, 1825 to Present or
His 2500 Survey of African Prehistory and History or
His 2510 Political History of Africa in 20th Century or
His 3425 Southeast Asia in 20th Century
Psy 2110 Psychology of Adolescence

ELECTIVES 3

From * areas:

MAJOR REQUIREMENTS 30

Soc 1000 Social Life and Society 3
Soc 2050 Social Statistics 3
Soc 2052 Methods of Social Research 3
Soc 3050 Developing Social Theory 3

MAJOR ELECTIVES 18

3 courses at 3000 level
3 courses at 4000 level

PROFESSIONAL EDUCATION 30

FIELD EXPERIENCE

ICA 2801 Introductory Field Experience K-12 3
ICA 3803 Junior Field Experience K-12 2
ICA 4802 Professional Internship: Secondary Education 10

EDUCATION CORE

ED 3401 Language Arts/Reading K-12 3
ED 3000 Curriculum, Evaluation and the Learner 3
ED 4000 Teacher and Classroom 3

SPECIALTY

ICA 3xxx Social Studies K-12 3

EDUCATION ELECTIVE 3

ICA 4xxx Computers & A-V Aids or
ICA 4xxx Bilingual/ESL: Curriculum and Instruction or
ICA 4xxx Humanistic and Humane Education

TOTAL 129

Minor

Six courses (18 s.h.) in Sociology: Sociology 1000; two courses on the 2000 level and three courses on the 3000 and 4000 level.

Sociology Courses

GENERAL AND CONCEPTUAL

Soc 1000 Social Life and Society: Introduction to Sociology (3)

Social life, society, and the individual. An introduction to the viewpoints of sociology.

Soc 1001 Social Life and Society: Honors Course (3)

Social life, society, and the individual. An introduction to the theories, research, and methods of sociology. May be substituted for Soc 1000 as a prerequisite. Prerequisites: Verbal SAT score of 450 or higher, or sophomore or above with 3.0 overall grade point average.

THEORY AND METHOD

Soc 2050 Social Statistics (3)

An analysis of the measurement problems involved in the treatment of sociological data. An introduction to statistical techniques most frequently used in sociological research. Prerequisites: Knowledge of high school algebra sufficient and Soc 1000 or permission of department chairperson. *Stimson*

Soc 2052 Methods of Social Research (3)

The collection, organization, analysis and reporting of problem-centered social data, including sampling, interview techniques, the construction of questionnaires and the conduct of surveys. Prerequisite: Soc 1000. *Stimson*

Soc 3050 Development of Sociological Theory (3)

A critical survey of the major theoretical viewpoints in nineteenth and early twentieth century sociological thought. Prerequisite: Six hours of sociology or permission of department chairperson. *Yellin*

Soc 3052 Qualitative Methods in Social Research (3)

An introduction to the qualitative aspects of research with emphasis on the theory and practice of the techniques of content analysis, participant observation and interviewing. Prerequisites: Soc 2050 and 2052. *Stimson*

Soc 3060 Society and Self (3)

Analysis of the influence of social factors on the nature of self-attitudes. Beliefs and values. Review of theory and research on the nature of the socialization process. Prerequisite: Soc 1000 or permission of department chairperson. *Kammerman, Stimson*

Soc 4051 Contemporary Sociological Theory (3)

An investigation of various theoretical frameworks utilized by sociologists in viewing societies, social institutions and social interaction. An analysis of the major work of a number of twentieth century theorists. Prerequisite: Six hours of sociology or permission of department chairperson. *Yellin*

Soc 4052 Evaluation Research (3)

An introduction to the direct application of research methods to the evaluation of any purposive change plan; a social program, and advertising campaign, job training. Prerequisites: Soc 2050 and 2052 or permission of department chairperson. *Stimson*

Soc 4054, 4055 Advanced Research Seminar I, II (3,3)

Direct involvement in the methodological and statistical techniques needed to collect and analyze "real-life" quantitative data. Large scale data analysis techniques. Experience in preparing data results for application to ongoing policy processes. Prerequisites: Soc 2050 and 2052 or their equivalent and permission of department chairperson. CpS 1931 is recommended. Soc 4054 is prerequisite for Soc 4055. *Stimson*

Soc 4060 Personal and Social Interaction (3)

Face-to-face interaction, how the individual relates to others at work, in friendships, and in intimate relationships. Prerequisite: Soc 1000 or permission of department chairperson. *Kammerman, Stimson*

Soc 4090 Independent Study (3)

An opportunity for the senior sociology student to develop and carry out an individual project subject to the permission of an advisor and the department chairperson. Meetings arranged by the student and advisor.

Soc 4095 Internship in Sociology (3)

Sociology majors will be provided with one or two days per week of supervised experience in work settings appropriate to sociological learning. Seminars will integrate work experience and sociological theory. Prerequisite: Junior or Senior Sociology majors and permission of the instructors.

INSTITUTIONS

Soc 2100 Sociology of the Family (3)

Analysis of sociological factors in marriage and the family in modern society, with cross-cultural comparisons. Prerequisite: Soc 1000. *Mayo*

Soc 2150 Sociology of Sport (3)

Sport as a major institution in modern society and a significant aspect of popular culture: the relation of sport to other institutions (government, culture, education), social processes and cultural values. Prerequisite: Soc 1000.

Soc 3110 Sociology of Education (3)

Education as a social institution and an organizational complex. The relationship between educational objectives and cultural values, manifest and latent functions of education.

Prerequisite: Soc 1000.

Soc 3150 Urban Sociology (3)

Analysis of the process of urbanization, urban settlement patterns, social structure, and life styles. Consideration of the particular problems posed by the urban setting.

Prerequisite: Soc 1000.

Mayo

Soc 3151 The Community (3)

An analysis of human communities studied in relationship to the global processes of industrialization and urbanization. Review of the theories and research on various types of communities with a focus on changing bases for the construction of community and inter-community relationships.

Prerequisite: Soc 1000.

Mayo, Naughton

Soc 3404 Society and Computer Culture (3)

Sociological investigation of relationships among computers, culture, and society. Social effects of the computer as an example of technological expansion within societies. The social bases for computer development. Familiarity with computers helpful.

Prerequisite: Soc 1000 or permission of department chairperson.

Naughton

Soc 4100 Sociology of Religion (3)

A comparative and analytical treatment of religion as a social institution. The relation of religion to family, government, economy and other structures. Religion considered as an agent of change and stability in society.

Prerequisite: Soc 1000.

Yellin

Soc 4110 Political Sociology (3)

A review and analysis of theory and research on the nature and distribution of power in society. A study of the social variables and processes determining stability and change in the political institution.

Prerequisite: Soc 1000.

Yellin

Soc 4120 The American Dream: Democracy and Capitalism (3)

The American Dream as a set of strongly held values, beliefs, and attitudes embodying the aspirations of people. Competing approaches on ways to achieve the American Dream including economic democracy. The Future of the American Dream in a global context.

Prerequisites: Six hours taken from two of the following: Sociology, Political Science, or Economics or the permission of the instructor.

Wheeler

Soc 4150 Sociology of Death (3)

Examination of the social aspects of death and dying. An analysis of cultural factors involved

in death-related behavior through the use of a cross-societal perspective. Discussion of mutual relationships between an individual's death and social systems.

Prerequisite: Soc 1000 or permission of department chairperson.

Kamerman, Yellin

Soc 4300 Sociology of Health Care (3)

An examination of the influence of social and cultural phenomena on sickness and health. Analysis of the organization of medical care and medical institutions.

Prerequisite: Soc 1000 or permission of department chairperson.

Kamerman

FORMAL ORGANIZATIONS

Soc 3200 Work and Careers: A Sociological Approach (3)

The world of work in modern industrial society examined and analyzed in terms of management theory, human relations and occupations.

Prerequisite: Soc 1000 or permission of department chairperson.

Wheeler

Soc 4200 Complex Organizations (3)

A survey of theory and research on complex or formal organizations. Major emphasis on the bureaucratic model, its modifications and special adaptations.

Prerequisite: Soc 1000.

Wheeler

SOCIAL DIFFERENTIATION

Soc 2300 American Ethnic & Racial Groups (3)

The cultural traditions and social relations among ethnic and racial groups in American society.

Prerequisite: Soc 1000.

Naughton

Soc 2305 Hispanic Americans in Contemporary Society (3)

An intensive investigation of Hispanic ethnic groups in modern United States society, with attention focused on the dynamics of migration and settlement, enduring socio-cultural patterns, and the processes and problems of inclusion and assimilation.

Prerequisite: Soc 1000.

Naughton

Soc 2308 The Female World: Fairy Tale and Fact (3)

Women as members of a society; how their life chances are influenced by how societies define women and how these societies act toward women. Emphasis on society in the United States.

Prerequisite: Soc 1000.

Soc 2350 Sociology of Dress and Adornment (3)

The examination of dress as a social phenomenon; the ways in which dress has

been and is used to maintain society's social, economic and political structures; use of dress by subcultures and individuals.

Prerequisite: Soc 1000.

Kamerman

Soc 3170 Japanese Challenge: Lessons for America (3)

A comparative study of Japanese society: the family, community, workplace, politics, and government. An evaluation of the claim that Japan is "number one" in crucial areas challenging America today such as worker productivity, crime control, quality and equality in education, and industrial policy.

Prerequisite: Soc 1000.

Wheeler

Soc 3350 Social Inequality in America (3)

An analysis of wealth, power, and prestige in America. Comparisons with other societies.

Prerequisite: Soc 1000.

Wheeler, Yellin

Soc 3360 Population (3)

An investigation of the composition and distribution of the population in the United States and selected countries. An analysis of the determinants and consequences of change in the basic processes of fertility, mortality and migration.

Prerequisite: Soc 1000 or permission of department chairperson.

Mayo

Soc 3370 Sociology of the American Jewish Community (3)

Sociological analysis of the American Jewish Community; historical evolution of the community; social structure and religious movements; Jewish demography and politics; patterns of Jewish identification; anti-semitism and Jewish reactions; future trends in the American Jewish community.

Prerequisite: Soc 1000 or permission of department chairperson.

Langer

Soc 4301 Sex and Society (3)

An analysis of the social and cultural determinants of sexual behavior. Examination of the social roles of men and women and the possible influence of sex differences on the organization of society.

Prerequisite: Soc 1000.

Yellin

Soc 4350 Sociology of Aging (3)

Aging as a social process at the individual and the societal level. The demography of age strata, strata boundaries and age related experience in American society.

Prerequisite: Soc 1000.

SOCIAL DYNAMICS

Soc 3400 Collective Behavior (3)

A review of concepts about human interaction in unstructured situations as in a panic, craze, a riot. The role of rumor, propaganda and public opinion in such phenomena. Studies in depth of selected contemporary examples.

Prerequisite: Soc 1000.

Wheeler

Soc 3410 Social Movements (3)

An examination of sociological and social psychological theories of the origins and career patterns of social movements. Study in depth of selected examples.

Prerequisite: Soc 1000.

Wheeler

Soc 4401 Social Change (3)

An investigation of various theoretical frameworks utilized by sociologists in viewing social change. An analysis of numerous case studies of change in modern societies.

Prerequisite: Soc 1000.

Naughton

Soc 4450 Sociology of Extreme Situations (3)

A sociological analysis of extreme situations. Emphasis on the mass murder and death camp experiences of Jews during World War II; comparisons with other extreme situations such as trench warfare, the bombing of Hiroshima and its aftermath,

institutionalization in asylums and prisons, and mass suicide. Social problems of survivors and their families.

Prerequisite: Soc 1000.

Langer

DEVIANCE AND DISORGANIZATION

Soc 2710 Crime and Delinquency (3)

An analysis of crime and delinquency as social phenomena. The relationship of crime and delinquency to various social institutions such as the economy, the family, the law.

Prerequisite: Soc 1000.

Langer

Soc 4700 Sociology of Deviance (3)

Analysis of deviant behavior as a general characteristic of social systems. Critical review of various sociological theories concerning the nature and functions of deviance.

Prerequisite: Soc 1000.

Langer



Anthropology Courses

Ant 1800 Cultural Anthropology (3)

The structures and functions of the culture systems of both simple and complex societies, employing the methods and concepts of anthropology.

White

Ant 2801 Introduction to Afro-American Culture I

A cultural exploration of Afro-American music, art, literature from their African roots to their diverse expressions.

White

Ant 2802 Introduction to Afro-American Culture II

An examination of the Afro-American experience in the United States from slavery to the present from the perspective of the social sciences.

White

Ant 2805 Films of the African World Experience (3)

A survey of the images of people of African descent in film designed to explore the contrast between the Afrocentric vs. the Eurocentric perspective. Attention will be given to works depicting various types of movie-myth Blacks from Sambo to Super Spade, but will emphasize the films of African world filmmakers.

Wheeler-Hall

Ant 2810 Physical Anthropology (3)

A systematic examination of theories of human evolution; an investigation into genetic processes and the physiological basis for racial origins and variations. A consideration of natural and cultural selection, ethnology and eugenics.

Ant 2820 Urban Anthropology (3)

An analysis of the city as a cultural setting using anthropological methods including ethnographic field work.

Prerequisite: Ant 1800 or permission of instructor.

White

Ant 3820 Dynamics in Tribal and Peasant Economic Life (3)

Anthropological perspective on the dynamics of tribal and peasant economies.

Prerequisites: Soc 1000, Ant 1800 or Eco 1020 or 1021.

Ant 3830 Anthropology of North American Indian Cultures (3)

Study of North American Indian cultures 35,000 B.C.-1800 A.D. concluding with the disruptive effect of European settlements on these cultures.

Prerequisite: Ant 1800 or permission of department chairperson.

White

Coordinator: Dr. Conrad Graves
J309 Ext. 2576

The Social Work Program is accredited by the Council on Social Work Education and prepares students for beginning social work practice. It further provides the educational background necessary to enable students to apply to graduate schools for advanced standing, whereby they can earn the M.S.W. degree in one year. Professional opportunities exist within both the public and private sector, including public welfare, probation, child welfare, mental health facilities, family service, educational system, nursing homes, hospitals, rehabilitation programs and shelters.

B.S.W. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
 GE 1100 Emergence of the Modern World 3
 GE 1200 Intellectual and Cultural Traditions 3
 GE 2020 Inquiry and Research 3
 Eng 2203 Landmarks of World Literature 3
 GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
 Select from at least three areas:
 **English (2000 level literature or drama) or Communications and Theatre
 †Fine Arts or Art History
 Foreign Languages
 †Music
 Philosophy or Religion
 Social and Behavioral Sciences 12
 Eco 1020 Principles of Economics I 3
 PS 2100 American Government and Politics 3
 Psy 1000 General Psychology 3
 Soc 1000 Social Life and Society 3
 Biological and Physical Sciences 4
 Bio 1000 Principles of Biology 4
 Mathematical Sciences 3
 Computer Science
 Mathematics
 Health and Physical Education 2-3
 Health Education
 Physical Education

#A Science course may be substituted for this Core Course
 **Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
 †Excluding teaching methods courses

COGNATE COURSES 9

Soc 2050 Social Statistics 3
 Psy 2100 Child Psychology 3
 Soc 2052 Methods of Social Research 3

MAJOR REQUIREMENTS 40

REQUIRED COURSES 34

SW 2900 Introduction to Social Work 3
 SW 2950 Human Behavior and Social Environment 3
 SW 3950 Methods of Social Work I 3
 SW 3951 Field Experience I 2
 SW 3952 Methods of Social Work II 3
 SW 3953 Field Experience II 2
 SW 3954 Methods of Social Work III 3
 SW 4900-4901 Field Practice III and IV 8
 *SW 4000 Contemporary Social Policy and Services 3
 SW 4910-4911 Senior Integrative Seminar I and II 4

MAJOR ELECTIVES 6

Two additional social work courses selected with the guidance of advisor
 *(limited to seniors)

FREE ELECTIVES 22-23

TOTAL 124

Social Work Courses

SW 2900 Introduction to Social Work (3)
 An exploration of the social work profession through looking at the problem areas in which social workers become involved and the various agencies and methods by which these areas are addressed.
 Graves, Williams
SW 2950 Human Behavior and Social Environment (3)
 An analysis of human functioning from the perspectives of developmental, family group and large system influences.
 Prerequisites: SW 2900, Psy 2100 or permission of department chairperson.
 Elias, Schreiber, Herina
SW 3901 Comparative Social Welfare (3)
 A study of social welfare programs outside the United States with particular emphasis on policies developed to meet recurring social welfare problems.
 Prerequisite: SW 2900.
 Graves

SW 3902 Social Welfare in Scandinavia (3)

A critical analysis of the social welfare structure of selected Scandinavian countries through active participation in a study tour to those countries. Course does not count toward Social Work Major requirements.
 Prerequisite: SW 2900 or permission of department chairperson.
 Herina

SW 3950 Methods of Social Work I (3)

Examination of the major methods of social intervention with individuals, groups, and communities, with focus on the values, ethics and skills of the social work profession. Case analysis and observation of helping techniques are utilized. Taken concurrently with SW 3951.
 Elias, Herina, Schreiber

SW 3951 Field Experience I (2)

Supervised field experience for development of beginning social work skills and theory. Taken concurrently with SW 3950. Pass/fail basis only.

SW 3952 Methods of Social Work II (3)

A continuation of SW 3950. Development of the theoretical framework of the integrated approach to social work practice. Methods, goals and skills of social work practice. Taken concurrently with SW 3953.
 Prerequisite: SW 3950.
 Elias, Herina, Schreiber

SW 3953 Field Experience II (2)

Supervised field experience for further development of social work skills and theory. Taken concurrently with SW 3952.
 Prerequisites: SW 3950 and 3951.

SW 3954 Methods of Social Work III: Macro Practice (3)

Generic social work practice enlarged with focus on intervention on group, organizational, community and institutional levels.
 Prerequisites: SW 3950 and 3951.
 Graves, Williams

SW 4000 Contemporary Social Policy and Services (3)

Study of current social welfare programs in relation to the policies and provisions required to meet the various social needs of the people in this and other countries.
 Field observations of selected community helping programs: (limited to second semester juniors or seniors).
 Graves, Schreiber

SW 4900 Field Experience III (4)

Supervised placement two days per week in a community welfare or social service setting, offering direct participation in the helping process. Concomitant two hour weekly seminar to integrate course knowledge with field experience.
 Prerequisites: SW 3952 and 3953.
 Corequisite: 4910.

SW 4901 Field Experience IV (4)

Continuation of field experience seminar on an advanced level. Supervised field experience in a community social agency offering increased opportunity for primary direct services to clients.
 Prerequisites: SW 4900 and 4910.
 Corequisite: 4911.

SW 4910 Senior Integrative Seminar I (2)

Weekly seminar to integrate social work content and theory with field experience.
 Corequisite: SW 4900.
 Elias, Graves, Herina, Schreiber

SW 4911 Senior Integrative Seminar II (2)

Continuation of weekly seminar to help students integrate theory and practice.
 Corequisite: SW 4901.
 Elias, Graves, Herina, Schreiber

SW 4950 Organization and Delivery of Social Services (3)

Structure and setting of social services from the vantage point of the social problems to which such services are addressed.
 Prerequisites: SW 3952 and 3953.
 Graves, Williams

SW 4960 Social Work with Groups (3)

A specialized method course in deepening understanding of and to facilitate skills in working with groups to bring about planned change effort.
 Prerequisite: SW 3951.
 Schreiber

SW 4970 Social Work with Individuals and Families (3)

A specialized methods course deepening the understanding of skills in social work study, diagnosis and treatment. Emphasis on the individual adult and child as well as the family unit in order to engage the client(s) in the planned change effort.
 Prerequisite: SW 3951.
 Herina

SW 4971 Practice and Issues in Service to Children (3)

A comprehensive study of current trends and issues in the field of child welfare including focus on the nature of services, the kinds of problems they are designed to meet and evaluation of the services.
 Prerequisites: SW 3952 and 3953.
 Herina

SW 4980 Community Organization (3)

A specialized method course deepening understanding of the principles, methods and integration of community practice in social work.
 Prerequisite: SW 3951.
 Graves, Williams

SW 4990 Independent Study in Social Work (3)

Individual student's involvement in a project or readings; unique learning opportunity for the student who can proceed in educational growth at his/her own pace.
 Prerequisites: SW 2052, 3953 and permission of instructor and department chairperson.



Chairperson: Dr. Israel Rodriguez
J309 Ext. 2789

Exploration of Spanish culture and civilization, grammar, history, literature and related areas. Provides excellent background for advanced professional study and a variety of careers.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three areas:
**English (2000 level literature or drama) or Communications and Theatre
†Fine Arts or Art History
Foreign Languages
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4

Astronomy Geology
Biology Meteorology
Chemistry Physics

Mathematical Sciences 3

Computer Science
Mathematics

Health and Physical Education 2-3

Health Education
Physical Education

A Science course may be substituted for this Core Course

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement

†Excluding teaching methods courses

MAJOR REQUIREMENTS 30

A student must have language proficiency at the intermediate level prior to beginning major requirements.

REQUIRED COURSES 6

Spa 3100 Advanced Spanish Composition 3
Spa 3105 Advanced Spanish Conversation 3

MAJOR ELECTIVES 24

Selected from 3000-4000 level courses in Spanish

FREE ELECTIVES 41-42

TOTAL 124

B.A. Degree Option: Teacher Certification

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 67

CORE REQUIREMENTS 18

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 World Literature 3
GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 48

*English/Humanities (from at least 3 disciplines) 9

Comm 1400 Speech

*Social/Behavioral Sciences 9

Psy 1000 General Psychology 3
Soc 1000 Social Life & Society or
Ant 1800 Cultural Anthropology 3
Select one course from:
Economics or Geography
History
Political Science

*Physical/Biological Sciences 4

*Mathematical Sciences (not including computer science) 3

Health & Physical Education 4

ID 1225 Issues/Values Contemporary Health 3

PEd 1

Additional General Education Requirements 19

Psy 2110 Psychology of Adolescents 3
FL 3010 Composition Phonology 3
Spa 3125 Applied Linguistics 3
Spa 4100 Spanish Grammar 3
Electives from any one of the above * areas 7

MAJOR REQUIREMENTS 30

REQUIRED COURSES 6

Spa 3100 Advanced Spanish Composition 3
Spa 3105 Advanced Spanish Conversation 3

MAJOR ELECTIVES 24

Selected from 3000-4000 level courses in Spanish with department advisement

PROFESSIONAL EDUCATION 30

FIELD EXPERIENCE 15

ICA 2801 Introduction Field Experience K-12 3
ICA 3803 Junior Field Experience K-12 2
ICA 4802 Professional Internship: Secondary Education 10

EDUCATION CORE 9

ED 3401 Language Arts/Reading K-12 3
ED 3000 Curriculum, Instructional, Evaluation & Learner 3
ED 4000 Teacher & Classroom 3

SPECIALTY 3

ICA 3xxx Foreign Language K-12 3

EDUCATION ELECTIVE 3

ICA 4xxx Computers & A-V Aids, or
ICA 4xxx Bilingual/ESL: Curriculum & Instruction, or
ICA 4xxx Humanistic & Humane Education 3

TOTAL 127

Spanish Courses

LANGUAGE

Sp 1101-1102 Elementary Spanish I & II (6)

Designed to enable the student to achieve a ready comprehension of spoken Spanish, an ability to speak in clear simple sentences, and considerable ease in reading Spanish. Credit given only upon completion of both semesters.

Sp 2101-2102 Intermediate Spanish I & II (6)

Designed to expand the student's competence and fluency in speaking, understanding, reading and writing Spanish, and to acquaint the student with Spain and the Spanish way of life. Credit given only upon completion of both semesters.
Prerequisite: Sp 1102 or permission of instructor.

Sp 3100 Advanced Spanish Composition (3)

An intensive review of grammar and study of the problems of written composition in the Spanish language.
Prerequisite: Sp 2102 or permission of instructor.

Sp 3103 Spanish Conversation (3)

Aspects of Hispanic life and customs through intensive oral and aural practice in discussions and reports and occasional field trips. Intended for students who wish to increase their fluency in the colloquial language. Not open to native speakers.
Prerequisite: Sp 2102 or permission of instructor.

Sp 3105 Advanced Spanish Conversation (3)

Intensive concentration in vocabulary building, pronunciation, diction, phonetics, through oral discussions. Not open to native speakers.
Prerequisite: Sp 2102 or permission of instructor.

Sp 3110 Commercial Spanish (3)

Designed to acquaint the student with the mercantile practices, documents and terminology needed for the understanding of the business usages of the Spanish speaking countries. Course conducted in Spanish.
Prerequisite: Sp 2102 or permission of instructor.

Sp 3115 Spanish Phonetics (3)

An in-depth study of Spanish phonetics, covering certain necessary aspects of historical phonetics.
Prerequisites: Sp 3100 and Sp 3105 or permission of instructor.

Sp 3120 Special Problems in Spanish Grammar (3)

Students will study the grammatical problems which confront native Spanish speakers raised and educated in an English speaking community.
Prerequisite: Open only to native speakers.

Sp 3125 Contrastive Applied Linguistics in Spanish (3)

Linguistic approach to the teaching of Spanish. Required of majors in the secondary collateral program. Course conducted in Spanish.
Prerequisite: Permission of instructor.

Sp 3130 Intensive Spanish Language (6)

Complete review of Spanish grammar, phonology and practical conversation geared to the needs of the non-native teacher of Spanish. Not open to the native speaker.
Prerequisites: Sp 3100 and 3105 or permission of instructor.

Sp 4100 Spanish Grammar: Morphology and Syntax (3)

An in-depth study of the most important morphological and structural features of Spanish grammar with special emphasis in those areas of interference with the English language that present the greatest difficulties to the student of Spanish.
Prerequisite: Sp 3100 or permission of instructor.

Sp 4105 Translation (Spanish-English) (3)

Designed for the instruction of useful techniques in translation and interpretation from Spanish into English and English into Spanish.
Prerequisite: Sp 3100 or permission of instructor.

SURVEY

Sp 3200-3205 History of Spanish Literature I & II (3,3)

An introductory study of representative masterpieces and major movements of Spanish literature from its beginnings to the contemporary period. Course conducted in Spanish.
Prerequisite: Sp 3100 or permission of instructor.

Sp 3210 Spanish Civilization I (3)

An illustrated lecture course on the culture and civilization of Spain, from the Middle Ages to the Renaissance. Emphasis will be placed on history, geography, arts and letters, economic and social problems, philosophy and education. Conducted in Spanish.
Prerequisite: Sp 2102 or permission of instructor.

Sp 3215 Spanish Civilization II (3)

A continuation of Spanish Civilization I. Deals with the Spanish history and culture from the Renaissance to present day Spain. Course conducted in Spanish.

Prerequisite: Sp 2102 or permission of instructor.

Sp 3220 Colonial Spanish-American Literature (3)

Reading, interpretation and analysis of selected authors and texts in Colonial Spanish-American Literature from its origins to 1832. Course conducted in Spanish.

Prerequisite: Sp 2102 or permission of instructor.

Sp 3225 Latin American Civilization I (3)

An illustrated lecture course on the culture of Latin America from the Pre-Colombian times to Independence. Emphasis will be placed on the geographical and historical background, arts and letters, economic and social problems, philosophy and education. Course conducted in Spanish.
Prerequisite: Sp 2102 or permission of instructor.

Prerequisite: Sp 2102 or permission of instructor.

Sp 3230 Latin American Civilization II (3)

A continuation of Latin American Civilization I. Deals with the culture and civilization of Latin America from the time of the Independence to the present day. Course conducted in Spanish.
Prerequisite: Sp 2102 or permission of instructor.

Sp 3240 Development of Puerto Rican Culture (3)

A study of Puerto Rico, its people and customs, and the development of Puerto Rican culture since the discovery to the present. Course conducted in Spanish.

Prerequisite: Sp 2102 or permission of instructor.

Sp 4200 Islamic Spain (3)

A study of the impact of Islam in Spain, its peculiar development in the peninsula from 711 A.D. to 1492, and its importance in the formation of the Spanish character and culture. The overall importance of Islamic Spain with respect to European Medieval culture.
Prerequisite: Sp 3210 or permission of instructor.

PERIODS

Sp 4301 Spanish Medieval Literature I (3)

A study of selected works illustrating the development of Spanish literature from its first manifestations to the 14th century. Includes both prose and poetry, introducing the student to old Spanish texts. Course conducted in Spanish.

Prerequisite: Sp 2102 or permission of instructor.

Sp 4302 Spanish Medieval Literature II (3)

A study of selected works illustrating the development of Spanish literature from its first manifestations in the 14th century to the end of the Middle Ages. Includes both prose and poetry, introducing the student to old Spanish texts. Course conducted in Spanish.

Prerequisite: Sp 2102 or permission of instructor.

Sp 4303 The XVIII Century in Spain: Literature and Culture (3)

Literature and intellectual life of Spain during the 18th century through the reading, interpretation and analysis of selected authors and texts. Course conducted in Spanish.

Sp 4305 Literary Currents in Nineteenth Century Spain (3)

Reading, interpretation and analysis of selected authors and texts in 19th century Spain, with an in-depth study of the major literary movements during that period. Course conducted in Spanish.

Sp 4310 The Generation of '98 (3)

A study of selected works of the Generation of '98 through the analysis of representative authors. Course conducted in Spanish.

Sp 4315 Twentieth Century Literature in Spain (3)

Reading, interpretation and analysis of selected authors and texts in twentieth century literature in Spain. Course conducted in Spanish.

GENRE

Sp 3400 Theory of Literature (3)

Fundamental approaches to prose and poetry; literary theory and criticism. Course conducted in Spanish.

Prerequisite: Sp 3100 or permission of instructor.

Sp 4400 Spanish Renaissance and Baroque Theatre (3)

A study of the Spanish theater during the Golden Centuries, through the analysis of representative plays and authors. Course conducted in Spanish.

Prerequisite: Sp 2102 or permission of instructor.

Sp 4405 Spanish Renaissance and Baroque Prose (3)

A study of the prose of Spain during the Golden Centuries through the analysis of representative works of the most important plays and authors. Course conducted in Spanish.

Prerequisite: Sp 2102 or permission of instructor.

Sp 4410 Spanish Renaissance and Baroque Poetry (3)

A study of the poetry of Spain during the Golden Centuries through the analysis of representative works of the most important poets. Course conducted in Spanish.

Sp 4415 The Spanish-American Novel (3)

A study of the main novelistic currents in Spanish-America from its origins to the twentieth century. Course conducted in Spanish.

Prerequisite: Sp 2102 or permission of instructor.

Sp 4420 Twentieth Century Spanish-American Poetry (3)

Reading, interpretation and analysis of selected authors and texts from post-modernism to present time. Course conducted in Spanish.

Sp 4425 Essay in Spanish-American Literature (3)

A study of the genre from its beginning to the present time through the analysis of representative authors. Course conducted in Spanish.

FIGURES

Sp 4500 Cervantes (3)

In-depth study and analysis of the literary techniques of Cervantes and of his most representative works. Course conducted in Spanish.

Prerequisite: Sp 2102 or permission of instructor.

THEMES

Sp 4600 Modernism (3)

A study of the origins and development of Modernism through the analysis of representative authors. Course conducted in Spanish.

Prerequisite: Sp 2102 or permission of instructor.

Sp 4605 Gaudesca Literature (3)

A study of selected works illustrating the development of the "gaucho" literature from its first manifestations to the twentieth century. Course conducted in Spanish.

Prerequisite: Sp 2102 or permission of instructor.

Sp 4610 Romanticism (3)

Study of the origins and development of Romanticism through the analysis of representative authors in Spain and Spanish America. Course conducted in Spanish.

Prerequisite: Sp 2101 or permission of instructor.

SEMINARS AND INDEPENDENT STUDY

Sp 4700 Seminar in Spanish Literature (3)

A carefully delimited, concentrated study of a single author, genre, theme, literary technique or problem, as selected by the instructor. Course conducted in Spanish.

Prerequisite: Nine hours in Spanish Literature.

Sp 4710 Independent Study in Spanish Language or Literature (3)

The opportunity for students of advanced ability on any level of matriculation to pursue in a concentrated, but informal manner a specific area of study in foreign language or literature not available through current course offerings with a member of the department's faculty. The maximum for student initiative and individual attention.

Prerequisite: Sp 3100 or permission of instructor.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3

GE 1100 Emergence of the Modern World 3

GE 1200 Intellectual and Cultural Traditions 3

GE 2020 Inquiry and Research 3

Eng 2203 Landmarks of World Literature 3

GE 2400 Science and Technology in the Modern World # 3

BREADTH REQUIREMENTS 33-34

Humanities 12

Comm 1400 Speech Communication

Three courses from at least two areas:

†Fine Arts or Art History

Foreign Languages

†Music

Philosophy or Religion

Social and Behavioral Sciences 12

Select from at least three areas:

Economics or Geography

History

Political Science

Psychology

Sociology or Anthropology

Biological and Physical Sciences 4

Astronomy Geology

Biology Meteorology

Chemistry Physics

Mathematical Sciences 3

Computer Science

Mathematics

Health and Physical Education 2-3

Health Education

Physical Education

#A Science course may be substituted for this Core Course

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement

†Excluding teaching methods courses

MAJOR REQUIREMENTS 36

REQUIRED COURSES 18

The 1200 Introduction to Theatre 3

The 1100 Acting I 3

The 2300 Technical Theatre Production 3

The 4240 History of Theatre 3

The 2801-4 Theatre Lab 3

(6½ credits (3))

The 3975-77 Theatre Practicum 3

MAJOR ELECTIVES THEATRE 18

(15 s.h. at 3000-4000 level)

ADDITIONAL COGNATE COURSES 12

Eng 2215 Shakespeare Survey 3

English: Two courses in Literature of Theatre 6

Comm 3900 Voice & Speech 3

FREE ELECTIVES 23-24

TOTAL 124

Theatre Courses

THE 1100 (STM 2960) Acting I (3)

A study of the development of acting as an art form with practice in theories and techniques, including some work in characterization.

Murphy, Rhoades

THE 1200 (STM 2920) Introduction to the Theatre (3)

A basic survey of the art and craft of the theatre.

Murphy, Rhoades

THE 2081-4 (STM 2401-4) Theatre Laboratory I-IV (½, ½, ½, ½)

Practical laboratory with production experiences provided in all areas of theatre. Students receive grade of pass or fail.

THE 2110 (STM 2935) Movement I (3)

Control of the actor's body, including the art of pantomime, and historic dance for the stage. Prerequisite: Comm 2100 (STM 2960).

THE 2300 (STM 2925) Technical Theatre Production (3)

An introduction to the basic elements of scenery, costuming, make-up, sound and lighting.

Harper

THE 2355 (STM 2955) Makeup I (3)

Basic straight and character makeup, using grease-paint, pancake and plastics.

THE 3110 (STM 3920) Acting II: Theatre Scene Studies (3)

Practical application of the acting skills through scene study.

Prerequisite: THE 2100 (STM 2960).

THE 3130 (STM 3930) Acting III (3)

An advanced course in acting as a creative process, including acting theories, methods and styles.

Prerequisites: Comm 1400, and THE 2100 (STM 1900 and 2960).

Rhoades

THE 3190 (STM 3905) Stage Dialects (3)

Dialect as a tool in oral interpretation, using phonetic transcription to develop auditory, muscular and imitative speech skills. Prerequisites: Comm 1400 (STM 1900).

THE 3210 (STM 3925) Directing I (3)

Examination of the historic and contemporary role of the director; the preparation of a prompt book and work from play selection through rehearsal procedures to final production. Techniques applied to scene and one-act production by student-directors. Prerequisite: THE 2100 (STM 2960) or permission of instructor.

Murphy, Rhoades

THE 3215 (STM 3935) Creative Drama (3)

Exploration of the creative process, involving use of body movement, color, sound, light, space and language.

Dunn

THE 3240 (STM 3940) Children's Theatre (3)

Theory and practice of the theatre for children.

Rhoades

THE 3250 (STM 3952) Creating Plays for Children's Theatre (3)

The theory, method and practice of writing plays for children's theatre production. Scenes from plays will be staged in class. Prerequisite: Any course in written composition.

THE 3310 (STM 3405) Costuming I (3)

Historical survey of costume and its application to stage costume design and construction.

Dunn

THE 3335 (STM 2945) Scenic Design I (3)

Problems in concept and composition, examined through the development of ground plans, elevations, construction drawings, and model-making. Emphasis placed upon designing for proscenium, open, and arena-type stages.

Prerequisite: THE 2300 (STM 2925)

Harper

THE 3345 (STM 3945) Lighting Design (3)

An introductory course covering the historical, theoretical, and practical aspects of stage light design from early Greek theatre to the present. Design theory and application are stressed.

Prerequisite: THE 2300 (STM 2925).

Harper

THE 3360 (STM 3960) Advanced Technical Theatre Production (3)

An advanced course in traditional and contemporary solutions to technical production problems. Additional expenses of approximately \$25.00 may be incurred by the student.

Prerequisite: THE 2300 (STM 2925).

Harper

THE 3820 (STM 3955) Children's Theatre on Tour (3)

A contemporary play for children will be chosen, staged and toured to local schools, orphanages or children's hospitals. Students will either act in, design or stage manage the production. May be repeated once for credit.

Prerequisites: THE 2300, 3240 (STM 2925, 3940) or permission of instructor.

Rhoades

THE 3830 (STM 3958) Kean Players on Tour (3)

An intensive student experience in touring classic or contemporary plays to high school, adult, and senior citizen groups. May be repeated once for credit.

Prerequisites: THE 2100 or 2300 (STM 2960 or 2925) or permission of instructor.

Rhoades

THE 3840 Summer Theatre Workshop (6)

An intensive student experience in the organization and performance of a two-show summer stock season.

Prerequisite: THE 2100 or permission of instructor and audition/interview.

THE 3890 (STM 3939) Dramatics Workshop for Children (3)

Theories and techniques of creative dramatics with young people. Students plan and lead workshops with local children.

Prerequisites: THE 2100 or 3210 (STM 2960 or 3925) or permission of instructor.

THE 3975,3976,3977 (STM 3975, 3976, 3977) Theatre Practicum: Independent Study (1,2,3)

An individualized course focusing on a specific aspect of production. Emphasis is placed on practical application of technical or performance skills in an actual production.

Approximately 45 hours supervised work required for each credit.

Prerequisites: Permission of speech/theatre/media coordinator, depending on nature of project, THE 2100, 2300 or 3925 (STM 2925, 2960 or 3925).

THE 4160 (STM 4960) Acting for Television (3)

The skills of television acting with practical, on-camera experiences.

Prerequisites: THE 2100, 3130 (STM 2960); juniors or seniors level only.

Murphy

THE 4170 (STM 4920) Readers' Theatre (3)

The group approach to the oral interpretation of literature.

Prerequisite: Interview with instructor.

Dunn

THE 4210 (STM 4925) Directing II (3)

Artistic and technical problems in directing the classical, the period, the avant-garde and experimental play.

Prerequisites: Comm 1400, THE 3210 (STM 1900 and 3925).

Murphy

THE 4240 (STM 4940) History of the Theatre (3)

Theatrical production from early primitive rituals down to today's theatre. Emphasis placed on directors, actors and theorists. Field trips to theatrical productions (approximate cost \$30.00).

Murphy

THE 4250 (STM 4950) Seminar in Theatre Administration (3)

A problem-centered seminar dealing with contemporary theatre administration.

Prerequisites: Comm 1400, THE 2100, THE 2200 (STM 1900, 2925, and 2960).

THE 4801-4 (STM 4401-4) Advanced Theatre Laboratory I-IV (½,½,½,½)

Practical laboratory with production experiences provided in all areas of theatre. Students receive grade of pass or fail.

THE 4850 (STM 4930) Acting as a Profession (3)

Study of the professional New York theatre emphasizing the audition and the process of beginning a career.

Prerequisites: THE 2100, 3130 (STM 2960, 3930) or permission of instructor.

THE 4860 (STM 4945) Contemporary London Theatre (3)

A survey of the development of British theatre and contemporary London theatre. Initial seminar discussions and lectures given at Kean College of New Jersey; experiences in London, England included.

Prerequisite: Interview with the instructor.

Murphy, Dunn, Rhoades

Academic Degrees, Programs

B.A. in Biology, *Preprofessional Option*

B.A. in Biology, *Teacher Certification Option*

B.A. in Chemistry, *General Option*

B.A. in Chemistry, *Preprofessional Option*

B.S. in Chemistry, *Expanded Option*

B.A. in Chemistry-Physics

B.A. in Chemistry-Physics, *Teacher Certification Option*

B.S. in Computer Science, *Information Processing Option*

B.S. in Computer Science, *Technology Option*

B.A. in Earth Science, *General Option*

B.A. in Earth Science, *Geology Option*

B.A. in Earth Science, *Meteorology Option*

B.A. in Earth Science, *Teacher Certification Option*

B.A. in Mathematical Sciences

B.A. in Mathematical Sciences, *Teacher Certification Option*

HEALTH PROFESSIONS

B.S. in Medical Record Administration

B.S. in Medical Technology

B.S. in Medical Technology, *Cytotechnology Option*

B.S. in Medical Technology, *Histotechnology Option*

B.S. in Nursing

B.S. in Occupational Therapy

B.S. in Physical Therapy

SCHOOL OF NATURAL SCIENCES, NURSING AND MATHEMATICS**Departments, Faculty**

MEDICAL RECORD ADMINISTRATION

Faculty: Carrington, Sheffield (Chairperson)

MEDICAL TECHNOLOGY

Coordinator: Osborne

NURSING

Faculty: Barber, Fitzsimons (Chairperson), Howard, Neville, Salmond, Warren

BIOLOGICAL SCIENCES

Faculty: Bardell, Butler, Hayat, Kmetz (Chairperson), James, Linden, Mahoney, Mancarella, Osborne, Reid, Rosenthal, Schuhmacher, A. Smith, Virkar

CHEMISTRY-PHYSICS

Faculty: Bailey, Blount, Criasia (Chairperson), Dorn, Getzin, Kampa, Leeds, Lees, Struyk, Vitale, Zarrilli

OCCUPATIONAL THERAPY

Faculty: Glasser, Kramer (Chairperson), Stern

GEOLOGY AND METEOROLOGY

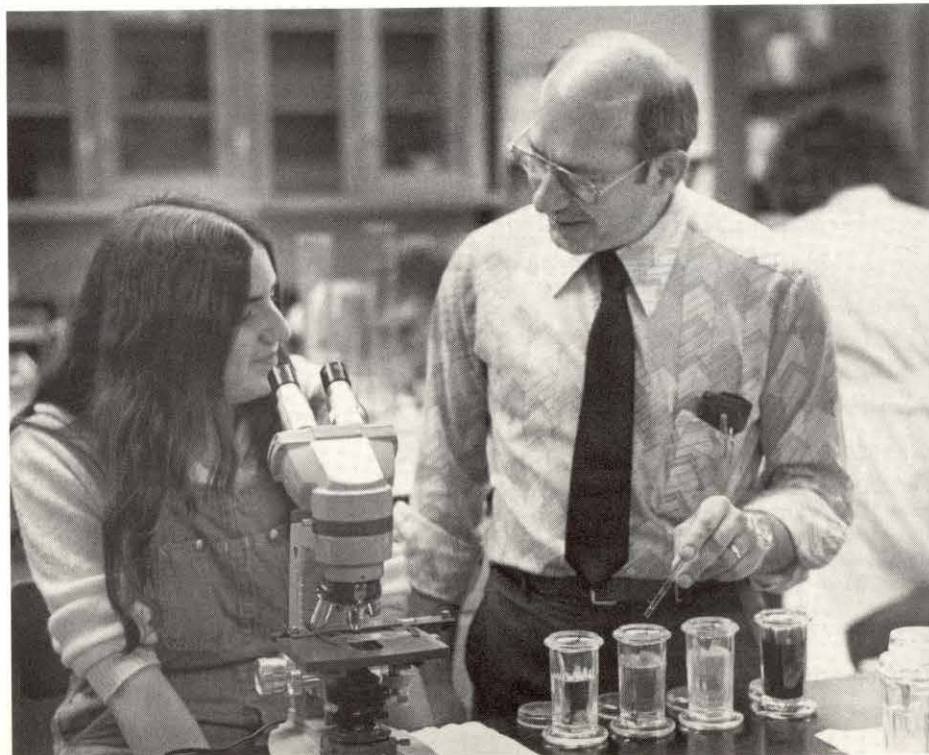
Faculty: Hall, Krall, Kroll, Metz, Meyerson (Chairperson), Murphy, Rockman, Zois

PHYSICAL THERAPY

Faculty: Gans-Rosenberg, Helhoski, Merians (Program Director), Riedinger

MATHEMATICS AND COMPUTER SCIENCE

Faculty: Abeles, Arnow, Azhar, Benner, Bernstein, Butcher, Cinque, Deavours, Giegerich, Goldberg (Chairperson), Gordon, Hahn, Hothersall, Krantz, Lehmann, Lipson, Malbrock, Marchand, Rabinowitz, Rebecchi, Santomauro, Watkins, Wittenberg, Woubneh, Zoll



**B.A. Degree
Option: Preprofessional**

Chairperson: Dr. John M. Kmetz
C123 Ext. 2013

The preprofessional program in biology is designed to prepare the student for graduate study in various fields of biology, medicine, dentistry, chiropractic medicine, veterinary medicine and for positions in industry related to the biological sciences. The student should consult with his/her preprofessional advisor to select appropriate electives for the respective area of interest.

B.A. Degree

ID 1001	Freshman Seminar	1
GENERAL EDUCATION 52-53		
CORE REQUIREMENTS 19		
Eng 1020	Composition	3
GE 1100	Emergence of the Modern World	3
GE 1200	Intellectual and Cultural Traditions	3
GE 2020	Inquiry and Research	3
Eng 2203	Landmarks of World Literature	3
Che 1083	Chemistry I	4

BREADTH REQUIREMENTS 33-34

Humanities 12
Select from at least three of the following five areas:

- **English (2000 level literature or drama) or Communications and Theatre
- Foreign Languages
- †Fine Arts or Art History
- †Music
- Philosophy or Religion

Social and Behavioral Sciences 12
(courses must be selected from at least three disciplines)

- Economics or Geography
- History
- Political Science
- Psychology
- Sociology or Anthropology

Biological and Physical Sciences 4
Che 1084 Chemistry II

Mathematical Sciences 3
Mat 1052 College Algebra and Trigonometry

Health and Physical Education 2-3
Health Education
Physical Education

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement

†Excluding teaching methods courses

MAJOR REQUIREMENTS 53

REQUIRED COURSES IN BIOLOGY 24

Bio 1000	Principles of Biology	4
Bio 2200	Cell Biology	4
Bio 2500	Principles of Botany	4
Bio 3414	The Invertebrates—Form and Function or	
Bio 3425	The Vertebrates—Form and Function	4
Bio 3614	Principles of Ecology	4
Bio 3704	Principles of Genetics	3
Bio 4905	Seminar in Biology I	1

MAJOR ELECTIVES 8

8 s.h. taken at the 3000-4000 level, selected with departmental advisement

SUPPORTING COURSES IN RELATED DISCIPLINES 21

Che 3181	Organic Chemistry Lecture I	3
Che 3182	Organic Chemistry Lecture II	3
Che 3183	Organic Chemistry Lab. I	2
Che 3184	Organic Chemistry Lab. II	2
Mat 2411	Calculus I	3
Phy 2091	General Physics I	4
Phy 2092	General Physics II	4

FREE ELECTIVES 17-18

TOTAL 124

**B.A. Degree
Option: Teacher Certification**

ID 1001	Freshman Seminar	1
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GENERAL EDUCATION 63

CORE REQUIREMENTS 19

Eng 1020	Composition	3
GE 1100	Emergence of the Modern World	3
GE 1200	Intellectual and Cultural Traditions	3
GE 2020	Inquiry and Research	3
Eng 2203	Landmarks of World Literature	3
Che 1083	Chemistry I	4

BREADTH REQUIREMENTS 43

*English/Humanities (from at least 3 disciplines) 9		
STM 1900	Speech	3
*Social/Behavioral Sciences (from at least 3 disciplines) 9		
Psy 1000	General Psychology	3
Soc 1000	Social Life and Society or	
Ant 1800	Cultural Anthropology	3

Select one course from:
Economics or Geography
History
Political Science

*Physical/Biological Sciences 4
Che 1084 Chemistry II

*Mathematical Sciences (not including computer science) 3

Mat 1052 College Algebra and Trigonometry

Health and Physical Education 4
ID 1225 Issues/Values in Contemporary Health

Physical Education

Additional General Education Requirements 14

Phy 2091 Physics I

Phy 2092 Physics II

Mat 2411 Calculus I

Elective from any of the above (*) areas

MAJOR REQUIREMENTS 36

Bio 1000	Principles of Biology	4
Bio 2200	Cell Biology	4
Bio 2500	Principles of Botany	4
Bio 3414	Invertebrates or	
Bio 3425	Vertebrates	4
Bio 3614	Principles of Ecology	4
Bio 3704	Principles of Genetics	3
Bio 4905	Seminar in Biology	1

MAJOR ELECTIVES 8

at 3000-4000 level in Biology
Che 2180 Principles of Organic Chemistry

PROFESSIONAL EDUCATION 30

FIELD EXPERIENCE 15

ICA 2801	Introductory Field Experience K-12	3
ICA 3803	Junior Field Experience K-12	2
ICA 4802	Professional Internship: Secondary Education	10

EDUCATION CORE 9

ED 3401	Language Arts/Reading K-12	3
ED 3000	Curriculum, Evaluation and Learner	3
ED 4000	Teacher and Classroom	3

SPECIALTY 3

ICA 3xxx Science K-12

EDUCATION ELECTIVE 3

ICA 4xxx	Computers and A-V Aids or	
ICA 4xxx	Bilingual/ESL: Curriculum and Instruction or	
ICA 4xxx	Humanistic and Humane Education	3

TOTAL 129

Biology Courses

GENERAL

Bio 1000 Principles of Biology (4)
The course introduces the student to the nature of living forms, their interdependencies, and their adjustments to their physical environment. The fundamentals of structure and function dealt with in such primary processes as respiration, digestion, circulation, excretion, the control systems, reproduction, heredity and variation of biological form through time. (3 hr. lec./2 hr. lab.)

Bio 2001 Social Implications of Biology (3)
Consideration of the problems generated by the old and new discoveries in biology for man and society; biological factors of race and races and their social implications; the impact of overpopulation on man, society and environment. *Biology majors may not receive credit for this course.*

Bio 2001 Social Implications of Biology (3)
Prerequisite: Bio 1000 or permission of instructor.

Bio 3000 Marine Biology (4)
The interrelations of marine plants and animals with their environment. Topics include: primary production, symbiosis, predation, energy flow, and zonation. Effects of salinity, temperature, light, dissolved oxygen, tides and wave action studied. One weekend field trip required. (3 hr. lec./3 hr. lab.)

Equivalent given summers at N.J. Marine Sciences Consortium field stations.
Prerequisites: Che 1084 or equivalent; eight credits in biology or permission of instructor.
Schuhmacher, Virkar

Bio 3005 Evolution (3)
A study of the processes which lead to the formation of new species of animals and plants.
Prerequisites: Bio 1000; Bio 3704 is strongly recommended.

MOLECULAR

Bio 4105 Essentials of Biochemistry (4)
An introduction to the chemistry of biologically important compounds and their relationship to the metabolic activity of living cells. Laboratory activities utilize the methods and techniques currently used in biochemical research. (3 hr. lec./3hr. lab.)
Prerequisites: One semester of organic chemistry and Bio 2200, or permission of instructor.
Mancarella

CELLULAR

Bio 2200 Cell Biology (4)
A study of the cell as the unit of structure and function of organisms. Emphasis is placed on molecular organization, form and function of cell organelles and cell differentiation. (3 hr. lec./3 hr. lab.)
Prerequisite: Bio 1000 or permission of instructor.
Hayat, Kmetz

Bio 3260 Histology (4)

A laboratory oriented course dealing with the microscopic and ultrastructural anatomy of mammalian tissues and organs, with emphasis on relating structure to function. (3 hr. lec./3 hr. lab.)
Prerequisites: Bio 2200 and one of the following: Bio 2402, 3403 or 3425, or permission of instructor.
Kmetz

Bio 4200 Preparatory Techniques for Electron Microscopy (4)

Biochemical concepts governing the preparation of biological specimens for electron microscopy. Details of the chemistry of the interaction between various reagents and cellular substances. The laboratory covers the preparation of a wide variety of biological specimens and the study of ultrastructure and enzymatic activity.
Prerequisites: Eight hours in biology, Che 2180, and permission of instructor.
Hayat

Bio 4225 Cell Physiology (4)

Biochemical and electron micrographic studies of mammalian tissue subcellular organization by separation and analysis of cell molecules and organelles, and determination of their structure and function. (3 hr. lec./3 hr. lab.)
Prerequisites: Bio 2200 and Che 2180 or 3181 or permission of instructor.
Smith

Bio 4245 Radiation Biology (4)

A study of the fundamentals of radiation biology and the effects of ionizing radiations on macromolecules, the cell, the systems and the organism.
Prerequisites: Bio 3403-3404 and 4105 or permission of instructor.
Smith

Bio 4250 Mammalian Endocrinology (4)

An introduction to the endocrine system and the chemistry and biological functions of hormones. Laboratory activities involve techniques in endocrine research (3 hr. lec./3 hr. lab.)
Prerequisites: Four biology courses and Che 2180 or permission of instructor.
Rosenthal

MICROBIOLOGY

Bio 3305 Principles of Microbiology (4)

A study of microorganisms with emphasis on bacteria. Morphology, physiology and metabolism, ecology, taxonomy and methods of culture and identification of some common microorganisms. (3 hr. lec./3 hr. lab.)
Prerequisite: Bio 2200 or permission of instructor.
Bardell, Osborne

Bio 4310 Virology (4)

An introduction to animal, plant and bacterial viruses and their interaction with the host at the cellular and organismal level. The laboratory includes methods for the detection, identification, quantitation, and propagation of viruses; and techniques for studying the effect of physical and chemical agents on viruses, and the effect of viruses on cell structure and function.

Prerequisites: Bio 2200, 3305 and Che 2180, and permission of instructor.
Bardell

Bio 4315 Immunology (4)

Fundamental consideration of humoral and cellular immunity including the nature and properties of antigens and antibodies, antigen-antibody interactions, structure and biosynthesis of immunoglobulins and immune responses. Consideration also given to plant immunity. (3 hr. lec./3 hr. lab.)
Prerequisites: Bio 3305, and one semester of organic chemistry.
Bardell

Bio 4325 Applied Microbiology (3)

A study of the importance of microorganisms in food production and preservation, industry, disease and public health. (2 hr. lec./3 hr. lab.)
Prerequisite: Bio 3305 or permission of instructor.
Osborne

Bio 4350 Microbial Ecology and Geomicrobiology (3)

Examination of the distribution and activities of microorganisms in the environment. Emphasis on laboratory and field methods and relation of microorganisms to human activities. (2 hr. lec./3 hr. lab.)
Prerequisite: Bio 3305 or permission of the instructor.
Osborne

Bio 4365 Marine Procarvates (2)

Offered summers at N.J. Marine Sciences Consortium field stations. Morphology, cytology, ecology and taxonomy of marine bacteria and blue-green algae. Emphasis will be placed on organisms found in New Jersey waters. Prerequisites: Bio 2500, 3000, 3305, or permission of instructor.

Bio 4366 Marine Diatoms and Dinoflagellates (2)

Offered summers at N.J. Marine Sciences Consortium field stations. Morphology, cytology and taxonomy of marine diatoms and dinoflagellates. Emphasis will be placed on organisms found in New Jersey waters. Prerequisites: Bio 2500, 3000, or permission of instructor.

Bio 4391,2,3,4 Cooperative Education in Microbiology (1-4)

Practical off-campus laboratory experience in microbiology. Student may work part or full time by arrangement with cooperating laboratory and attends classes on campus. Prerequisites: Bio 3305, junior standing and permission of instructor.

Osborne

ORGANISMS—ANIMALS

Bio 2402 Human Physiology and Anatomy (4)

A study of the physiology of body processes and related anatomical and histological studies. Consideration given to structure and function of organ systems with emphasis on the physiological processes. (3 hr. lec./3 hr. lab.) Credit not given for both Bio 2402 and 2409.

Prerequisite: Bio 1000 or permission of instructor.

Bio 2405 Introduction to Human Physiology (3)

A non-laboratory course on selected topics in modern physiology, which will be covered in group discussions and lectures. Emphasis in the latter portion of course on individual written and oral reports in an area of pathology of particular interest for the students. Not open to Biology majors or to students required to take Bio 2402, 2409, 3403 and 3404.

Prerequisite: Bio 1000 or permission of instructor.

Bio 2409 Essentials of Human Physiology and Anatomy (4)

Integrated study of human physiology and related anatomy. Skeletal, muscular, nervous, cardiovascular and respiratory systems emphasized to provide basic background for physical therapy, occupational therapy programs and medical record administration. Credit will not be granted for both Bio 2409 and 2402 or Bio 2409 and 2405.

Prerequisites: Bio 1000 and Che 1032 or permission of instructor.

Mancarella

Bio 3403-3404 Anatomy and Physiology I & II (4,4)

Designed for preprofessional students in biology and medical technology. Courses integrate gross and microscopic structure of the human body systems with their function. Laboratories synchronized with lecture-discussion materials and include studies with prosected models.

Bio 3403 Preparatory biochemical, cellular and histological units studied leading to understanding of osteology and arthrology, muscle and nervous systems. (3 hr. lec./3 hr. lab.)

Bio 3404 Continuation of 3403. Study of cardiovascular, digestive, respiratory, renal, endocrine and reproductive systems. (3 hr. lec./3 hr. lab.)

Credit not given for both Bio 2402, 2409 and 3403-3404.

Prerequisites: Bio 1000 and Che 2180 or 3181 or permission of instructor. Bio 3403 prerequisite for Bio 3404.

Smith

Bio 3405 Gross Anatomy (4)

In-depth study of gross and functional anatomy utilizing dissection of mammalian organs and human prosected models. Open to occupational therapy majors and students in the athletic training collateral program. Not open to biology majors.

Prerequisite: Bio 2402 or 2409 or permission of instructor.

Butler

Bio 3406 Neuroscience (4)

Study of the excitable tissues beginning at the cellular level and leading to an integration of the morphological and physiological divisions of the nervous system.

Prerequisite: Bio 2409 or 3403 or permission of instructor.

Butler

Bio 3414 The Invertebrates—Form and Function (4)

A study of the evolution of form and function in the major invertebrate groups. Principles of morphology, physiology and embryology with special reference to the invertebrate phyla. (3 hr. lec./3 hr. lab.)

Prerequisite: Bio 2200 or permission of instructor.

Virkar

Bio 3420 Parasitology (4)

Introduction to animal parasites and parasitism; emphasis on morphology, distribution, life cycles and effects on host of protozoan, helminth and arthropod parasites. (3 hr. lec./3 hr. lab.)

Prerequisite: Bio 2200 or permission of instructor.

Virkar

Bio 3425 The Vertebrates—Form and Function (4)

A study of the evolution of the vertebrates using the principles of comparative morphology, physiology and embryology. Autotutorial instruction. (two 3 hr. periods.) Prerequisite: Bio 2200 or permission of instructor.

James

Bio 3435 Animal Behavior (4)

The biology of vertebrate and invertebrate behavior. Emphasis on the biology of social behavior and organization. Laboratory work will include observation of animals in natural or free-ranging environments, the use of cameras, videotapes and tape-recorders to document behavior. (3 hr. lec./3 hr. lab.) Prerequisite: Bio 1000 or permission of instructor.

Bio 3450 Biological Aspects of Aging (3)

A study of the biology of aging from biochemical, cellular, and physiological viewpoints. Emphasis on age-associated functional and structural changes of the organ systems.

Prerequisite: Bio 1000 or permission of instructor.

Bio 3465 Biology and Ecology of Birds (3)

Emphasis on the biological uniqueness of birds and the behavioral, physiological and ecological relationships of birds to their environment. Laboratory work, with several field trips, includes identification of New Jersey birds. (2 hr. lec./3 hr. lab.)

Prerequisite: Bio 3425 or permission of instructor.

Mahoney

Bio 4410 Pathology (3)

Etiology of disease processes and their manifestations as signs, symptoms, clinical and pathological findings. Topics include cellular reactions to injury, inflammatory reactions, thrombosis, embolism, infarction, metabolic and deficiency diseases, general concepts of neoplastic disease and others.

Prerequisites: Bio 3403 and 3305 or permission of instructor.

Smith

Bio 4415 Ichthyology (4)

Offered summers at N.J. Marine Sciences Consortium field stations. The biology of the major groups of fishes, including fish systematics, anatomy, physiology, reproduction, evolution, adaptations, genetics, ecology and zoogeography.

Prerequisite: Bio 3425.

Bio 4420 Seashore Entomology (2)

Offered summers at N.J. Marine Sciences Consortium field stations. Ecological studies of the insect fauna of the intertidal zone, coastal sand dunes, and salt marsh.

Prerequisite: Bio 3414 or permission of instructor.

Bio 4430 Birds of the Seashore (2)

Offered summers at N.J. Marine Sciences Consortium field stations. Field identification of birds of the ocean, salt marsh, sand dunes and adjacent land areas. Discussion of behavior and ecology.

Prerequisite: Bio 3465 or permission of instructor.

Bio 4455 Comparative and Experimental Embryology (4)

A study of developmental processes in animals combining descriptive, theoretical and experimental approaches.

Prerequisites: Bio 3425 or 3414 and all chemistry required of the biology major or permission of instructor.

Bio 4460 Marine Invertebrate Zoology: Protozoa—Amoeboid and Sporozoa (1)

Offered at N.J. Marine Sciences Consortium field stations. Systematics, ecology, range, morphology, development, physiology and importance of amoeboid and sporozoan protozoa. Emphasis on the systematics and ecology of fauna native to New Jersey.

Prerequisite: Bio 3414 or permission of department chairperson.

Bio 4461 Marine Invertebrate Zoology: Protozoa—Ciliated (1)

Offered at N.J. Marine Sciences Consortium field stations. Systematics, ecology, range, morphology, development, physiology and importance of ciliated protozoa. Emphasis on the systematics and ecology of fauna native to New Jersey.

Prerequisite: Bio 3414 or permission of department chairperson.

Bio 4462 Marine Invertebrate Zoology: Flagellated Protozoa and Porifera (1)

Offered at N.J. Marine Sciences Consortium field stations. Systematics, ecology, range, morphology, development, physiology and importance of flagellated protozoa and porifera. Emphasis on the systematics and ecology of fauna native to New Jersey.

Prerequisite: Bio 3414 or permission of department chairperson.

Bio 4463 Marine Invertebrate Zoology: Coelenterata and Ctenophora (1)

Offered at N.J. Marine Sciences Consortium field stations. Systematics, ecology, range, morphology, development, physiology and importance of coelenterata and ctenophora. Emphasis on the systematics and ecology of fauna native to New Jersey.

Prerequisite: Bio 3414 or permission of department chairperson.

Bio 4464 Marine Invertebrate Zoology: The Worm Phyla (1)

Offered at N.J. Marine Sciences Consortium field stations. Systematics, ecology, range, morphology, development, physiology and importance of Platyhelminthes, Nemertinea, pseudocoelomates and Annelida. Emphasis on

the systematics and ecology of fauna native to New Jersey.

Prerequisite: Bio 3414 or permission of department chairperson.

Bio 4465 Marine Invertebrate Zoology: Mollusca (1)

Offered At N.J. Marine Sciences Consortium field stations. Systematics, ecology, range, morphology, development, physiology and importance of Mollusca. Emphasis on the systematics and ecology of fauna native to New Jersey.

Prerequisite: Bio 3414 or permission of department chairperson.

Bio 4466 Marine Invertebrate Zoology: Arthropoda (1)

Offered at N.J. Marine Sciences Consortium field stations. Systematics, ecology, range, morphology, development, physiology and importance of Arthropoda. Emphasis on the systematics and ecology of fauna native to New Jersey.

Prerequisite: Bio 3414 or permission of department chairperson.

Bio 4467 Marine Invertebrate Zoology: Bryozoa, Echinodermata and Protochordata (1)

Offered at N.J. Marine Sciences Consortium field stations. Systematics, ecology, range, morphology, development, physiology and importance of Bryozoa, Echinodermata and Protochordata. Emphasis on the systematics and ecology of fauna native to New Jersey.

Prerequisite: Bio 3414 or permission of department chairperson.

Bio 4470 Invertebrate Physiology (4)

Offered summers at N.J. Marine Sciences Consortium field stations. A study of the

diversity of patterns of physiological adaptation displayed by the different invertebrate groups. A comparative study using a wide and representative variety of organisms with emphasis on marine and estuarine forms. Students taking this course may not receive credit for Bio 4475.

Prerequisites: Bio 3414, Che 1084 and Phy 2092; or equivalent, or permission of instructor.

Bio 4475 General and Comparative Physiology (4)

A study of the general physiological principles underlying fundamental life processes, and a comparative study of the manifestations of these processes in the different groups of animals. Treatment of subject matter will be at the cellular as well as the organismic level. (3 hr. lec./3 hr. lab.)

Prerequisites: Bio 3414 or 3425 and all chemistry and physics required by the biology major, or permission of instructor.

Virkar

ORGANISMS—PLANT

Bio 1500 The Ingenious Plant Kingdom (3)

Introductory lectures and demonstrations selected to highlight aspects of plants, plant responses, and plant care of interest and use to non-biologists and biologists. The treatment will be scientifically based but developed for interest and pleasure. Several laboratory and field experiences will be included.

This course can only be used as a free elective.

Reid



Bio 2500 Principles of Botany (4)

A study of the structure, metabolism, development, reproduction, and evolution of plants. (3 hr. lec./3 hr. lab.)

Prerequisite: Bio 1000 or equivalent or permission of the instructor.

Reid, Schuhmacher

Bio 3513 Morphology and Evolution of the Plant Kingdom (4)

A study of the structural, reproductive, and evolutionary aspects of the plant kingdom. (3 hr. lec./3 hr. lab.)

Prerequisite: Bio 2500 or permission of instructor.

Schuhmacher

Bio 3535 Field Botany (3)

Principles of field identification of local flora with emphasis on use and construction of keys. Two all day Saturday field trips.

Prerequisite: Bio 2500 or 2601 or permission of instructor.

Schuhmacher

Bio 3555 Plants and Civilization (3)

Terrestrial plant communities of the world and their relationships to man and his economic development. (2 hr. lec./3 hr. lab.)

Prerequisite: Eight hours of biology.

Bio 4565 Marine Botany**I—Euglenophyta, Chlorophyta and Phaeophyta (2)**

Offered at N.J. Marine Sciences Consortium field stations. Detailed consideration of the functional morphology and evolution of marine algae. Analysis of ecological and physiological adaptations of Euglenoids, Green and Brown Algae. Laboratory and field work designed to encourage individual investigations.

Prerequisites: Eight hours of biology including Bio 2500 or permission of the instructor. Bio 2650 or 3000 recommended.

Bio 4566 Marine Botany II—Rhodophyta and Marine Fungi (2)

Offered at the N.J. Marine Sciences Consortium field stations. Detailed consideration of the functional morphology and evolution of marine algae and fungi. Analysis of physiological and ecological adaptations of red algae and marine fungi. Laboratory and field work designed to encourage individual investigations.

Prerequisites: Eight hours of biology including Bio 2500 or permission of instructor. Bio 2650 or 3000 recommended.

Bio 4570 Plants of the Dunes and Marshes (2)

Offered summers at N.J. Marine Sciences Consortium field stations. Field and laboratory study of the diversity, adaptations and the ecological role of plants inhabiting sand dunes and marshes of the coastal zone.

Prerequisites: Eight hours of biology including one semester of botany, or permission of the instructor. A course in ecology is recommended.

Bio 4575 Plant Physiology (4)

A study of physiological mechanisms involved in the germination, growth, development and reproduction of green plants, including water relations, carbohydrate metabolism, translocation, photosynthesis, mineral nutrition, growth regulators, and growth and development. (3 hr. lec./3 hr. lab.)

Prerequisites: Bio 2200 and Bio 2500.

Reid

COMMUNITY—ECOLOGY

Bio 2650 Introduction to Marine Biology (4)

Offered summers at N.J. Marine Sciences Consortium field stations. A field and laboratory oriented course covering the characteristics of marine plants and animals; instruction and experience in collecting and identifying examples of local marine flora and fauna. Open to all students but may not be applied toward the 32 credit major requirement in biology.

Prerequisite: Bio 1000.

Bio 3601, 3602 Environment, Ecology and Man (4/3)

Analysis of the interaction of humans with their environment. Basic principles of ecology, pollution, radiation, endangered species and human population pressures. This course may be taken with laboratory for 4 s.h. or without laboratory for 3 s.h. *Biology majors may not receive credits for this course.*

Prerequisite: Bio 1000 or permission of instructor.

Bio 3614 Principles of Ecology (4)

A study of factors affecting the distribution and abundance of organisms. Basic ecology examined at the organismal, population and ecosystem levels. Effects of human activity on the environment introduced. (3 hr. lec./3 hr. lab.)

Prerequisite: Bio 1000 or permission of instructor.

Mahoney

Bio 3635 Principles of Limnology (3)

A study of the biotic and abiotic factors affecting organisms occupying fresh water environments. Field trips to aquatic habitats. Prerequisite: Bio 1000, one semester of chemistry, or permission of instructor.

Bio 4615 Applied Ecology (4)

Introduction to a variety of ecological problems and examination of environmental problems and management dealt with by biologists in government and industry. Wildlife and habitat management, pesticide ecology and water pollution biology. Laboratory work centers on biologist's role in gathering data and preparing environmental impact statements. (3 hr. lec./3 hr. lab.)

Prerequisite: Bio 3614 or equivalent.

Mahoney

Bio 4691,2,3,4 Cooperative Education in Ecology (1-4)

Off-campus work experience in ecology combined with on-campus classes. Students may work part or full time by arrangement with employer.

Prerequisites: Bio 3614, junior standing and permission of instructor.

Mahoney

GENETICS

Bio 3704 Principles of Genetics (3)

A modern approach to understanding the nature and functioning of hereditary material in living organisms. Content includes the biochemistry of genetic material, the physical basis of inheritance, as well as the mode of expression of genetic material in individuals and populations.

Prerequisite: Bio 2200 or permission of instructor.

Linden

Bio 4700 Molecular Genetics (4)

Molecular biology of the gene with an emphasis on current topics related to recombinant DNA and genetic engineering. Laboratory activities include methods and instrumentation used in recombinant DNA studies. (3 hr. lec./3 hr. lab.)

Prerequisites: Bio 3704 and Bio 4105 or permission of the instructor.

Mancarella

TECHNIQUES AND OTHERS

Bio 3815 Microtechniques (4)

Experience in the preparation of biological material for microscopic examination; fixing, embedding, sectioning, mounting, staining; preparation of whole amounts of small specimens. (Two 3 hr. lec./lab. periods: many procedures require the student's presence at times in addition to scheduled class hours.)

Prerequisites: One of the following: Bio 2200, 2402, or 3403; Che 1032 or 1084; or permission of instructor.

Kmetz

Bio 3820 Basic Tissue Culture (4)

Fundamentals of animal and plant tissue culture. Laboratory exercises include methods of establishing and maintaining primary tissue cultures and the culture of established cell lines. (3 hr. lec./3 hr. lab.)

Prerequisites: 16 credits of Biology including Bio 2200 or permission of the instructor.

Bio 4825 An Introduction to the Theories and Practice of Diagnostic Radiology (4)

Studies include fundamentals of X-ray physics, monitoring, protection, medical radiographic techniques, exposure and processing, special procedures, nuclear medicine, ultrasonics, computerized axial tomography, therapy and diagnostics. Designed for preparation for graduate studies in health delivery systems. Laboratory shall be with an accredited affiliated hospital (3 hr. lec./3 hr. lab.)

Prerequisites: Bio 3403, 3404 and Phy 2091, 2092 or their equivalent.

Smith

Bio 4835 Biostatistics (4)

Basic statistical techniques useful in scientific research including probability, frequency distributions, statistical inference, and applications of chi square, analysis of variance, and regression. Laboratory problems and computer utilization supplement lecture material. (3 hr. lec./3 hr. lab.)

Prerequisites: Bio 1000 and Mat 1052 or permission of instructor.

RESEARCH AND SEMINAR

Bio 4905 Seminar in Biology (1)

A critical study of current topics in biology utilizing the original literature. The student prepares and presents a paper to the seminar group. Following the presentation, the speaker serves as moderator in a discussion of the subject. May be repeated for credit.

Prerequisite: Eight hours in biology.

Bio 4911,2,3,4 Special Topics in Biology (1-4)

Class work designed to provide an opportunity to study special topics in biology which are not studied in regular courses. Topics to be announced by the department. One semester hour of credit given for each 15 hours of class work.

Prerequisite: 16 semester hours of biology.

Bio 4955 Introduction to Biological Research (3)

The philosophy, aims and methods of biological research are developed through lectures, discussions and the execution of a research project.

Prerequisite: Permission of instructor.

Bio 4961,2,3 Independent Research in Biology (1-3)

Research problems in biology outlines and supervised by a faculty member. Open to senior biology majors and Dean's list juniors. May be repeated for credit.

Prerequisite: Approval of department chairperson.



B.A. Degree Option: General

Chairperson: Dr. Ronald Criasia
C220 Ext. 2497

This program is designed to prepare the student for graduate study in the various fields of chemistry and for positions in related industries.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 52-53

CORE REQUIREMENTS 19

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
Phy 2095 Physics I 4

BREADTH REQUIREMENTS 33-34

Humanities 12

Select from at least three areas:

**English (2000 level literature or drama) or Communications and Theatre

Foreign Languages
†Fine Arts or Art History
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

(courses must be selected from at least three disciplines)

Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4

Phy 2096 Physics II 4

Mathematical Sciences 3

#Mat 1052 College Algebra and Trigonometry 3

Health and Physical Education 2-3

Health Education
Physical Education

**Only one course may be used from English and

Communications and Theatre toward the Humanities Requirement

†Excluding teaching methods courses

COGNATE COURSES 13

##Mat 2411 Calculus I 3
Mat 2412 Calculus II 3
Mat 3451 Calculus III 3
Phy 2098 General Physics III 4

MAJOR REQUIREMENTS 42

Che 1083 General Chemistry I 4
Che 1084 General Chemistry II 4
Che 2283 Quantitative Analysis 4
Che 2491 Inorganic Chemistry 3
Che 3181 Organic Chemistry Lecture I 3
Che 3182 Organic Chemistry Lecture II 3
Che 3183 Organic Chemistry Lab I 2
Che 3184 Organic Chemistry Lab II 2
Che 3284 Instrumental Analysis 4
Che 3381 Physical Chemistry Lecture I 3
Che 3382 Physical Chemistry Lecture II 3
Che 3383 Physical Chemistry Lab I 2
Che 3384 Physical Chemistry Lab II 2
Che 4481 Advanced Inorganic Chemistry 3

FREE ELECTIVES 15-16

TOTAL 124

#Students who have completed the equivalent of this course in high school may enter Mat 2411 directly. In that case, Mat 2411 will be counted as a General Education requirement, and the student may take another three credits in free electives.

##Not required if an equivalent course has been completed at the high school level. In that case, the student may enter Mat 2412 directly and take an additional free elective course.

B.A. Degree Option: Preprofessional

The following program is designed for students planning to apply to medical or dental schools. Since many medical schools prefer a core of courses in the humanities, students are advised to consult the catalogs of medical schools to which they will apply and to select courses with departmental advisement which will insure meeting entrance requirements.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 52-53

CORE REQUIREMENTS 19

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
Bio 1000 Principles of Biology 4

BREADTH REQUIREMENTS 33-34

Humanities 12

Select from at least three of the following five areas:

**English (2000 level literature or drama) or Communications and Theatre

Foreign Languages
†Fine Arts or Art History
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

(courses must be selected from at least three disciplines)

Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4

Bio 2200 Cell Biology 4

Mathematical Sciences 3

#Mat 1052 College Algebra and Trigonometry 3

Health and Physical Education 2-3

Health Education
Physical Education

**Only one course may be used from English and

Communications and Theatre toward the Humanities Requirement

†Excluding teaching methods courses

COGNATE COURSES 9

##Mat 2411 Calculus I 3
Mat 2412 Calculus II 3
Mat 3451 Calculus III 3

MAJOR REQUIREMENTS 45

COURSES IN CHEMISTRY 29

Che 1083 General Chemistry I 4
Che 1084 General Chemistry II 4
Che 2283 Quantitative Analysis 4
Che 3181 Organic Chemistry Lecture I 3
Che 3182 Organic Chemistry Lecture II 3
Che 3183 Organic Chemistry Lab I 2
Che 3184 Organic Chemistry Lab II 2
Che 3284 Instrumental Analysis 4
Che 3381 Physical Chemistry Lecture I 3

SUPPORTING COURSES IN RELATED DISCIPLINES 16

Phy 2095 Physics I 4
Phy 2096 Physics II 4
Phy 2098 General Physics III 4
Bio 4105 Essentials of Biochemistry 4

FREE ELECTIVES 16-17

TOTAL 124

#Students who have completed the equivalent of this course in high school may enter Mat 2411 directly. In that case, Mat 2411 will be counted as a General Education requirement, and the student may take another three credits in free electives.

##Not required if an equivalent course has been completed at the high school level. In that case, the student may enter Mat 2412 directly and take an additional free elective course.

B.S. Degree Option: Expanded (ACS Certified)

For students who plan to enter professional careers immediately after graduation or who plan to undertake graduate study, the American Chemical Society (ACS) requires a curriculum for professional training that includes a series of advanced courses. The curriculum for this option is based upon the ACS guidelines. Students completing this program are certified by the ACS and may become members of the ACS immediately upon graduation. Students desiring to complete the expanded option should consult the department chairperson.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 52-53

CORE REQUIREMENTS 19

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
Phy 2095 Physics I 4

BREADTH REQUIREMENTS 33-34

Humanities 12

Select courses from at least three areas of the following five areas:

**English (2000 level literature or drama) or Communications and Theatre

Foreign Languages
†Fine Arts or Art History
†Music
Philosophy or Religion

Social and Behavioral Sciences 12

(courses must be selected from at least three disciplines)

Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4

Phy 2096 Physics II 4

Mathematical Sciences 3

#Mat 1052 College Algebra and Trigonometry 3

Health and Physical Education 2-3

Health Education
Physical Education

**Only one course may be used from English and

Communications and Theatre toward the humanities requirement

†Excluding teaching methods courses



COGNATE COURSES 13

##Mat 2411 Calculus I 3
Mat 2412 Calculus II 3
Mat 3451 Calculus III 3
Phy 2098 General Physics III 4

MAJOR REQUIREMENTS 51

Che 1083 General Chemistry I 4
Che 1084 General Chemistry II 4
Che 2283 Quantitative Analysis 4
Che 2491 Inorganic Chemistry 3
Che 3181 Organic Chemistry Lecture I 3
Che 3182 Organic Chemistry Lecture II 3
Che 3183 Organic Chemistry Lab I 2
Che 3184 Organic Chemistry Lab II 2
Che 3284 Instrumental Analysis 4
Che 3381 Physical Chemistry Lecture I 3
Che 3382 Physical Chemistry Lecture II 3
Che 3383 Physical Chemistry Lab I 2

FREE ELECTIVES 10-11

TOTAL 128

#Students who have completed the equivalent of this course in high school may enter Mat 2411 directly. In that case, Mat 2411 will be counted as a General Education requirement, and the student may take another three credits in free electives.

##Not required if an equivalent course has been completed at the high school level. In that case, the student may enter Mat 2412 directly and take an additional free elective.

Che 3384 Physical Chemistry Lab II 2
Che 4481 Advanced Inorganic Chemistry 3
4000 level Chemistry lab course 3
Two 4000 level lecture courses in Chemistry, Physics, Math, or Earth Science 6

This program is designed for students who wish to obtain a strong background in Physics in order to pursue graduate studies and to prepare them for careers in related fields.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 52-53

CORE REQUIREMENTS 19

Eng 1020 Composition 3
 GE 1100 Emergence of the Modern World 3
 GE 1200 Intellectual and Cultural Traditions 3
 GE 2020 Inquiry and Research 3
 Eng 2203 Landmarks of World Literature 3
 Che 1083 Chemistry I 4

BREADTH REQUIREMENTS 33-34

Humanities 12
 Select courses from at least three of the following five areas:
 **English (2000 level literature or drama) or Communications and Theatre
 Foreign Languages
 †Fine Arts or Art History
 †Music
 Philosophy or Religion

Social and Behavioral Sciences 12
 (courses must be selected from at least three disciplines)

Economics or Geography
 History
 Political Science
 Psychology
 Sociology or Anthropology

Biological and Physical Sciences 4
 Che 1084 Chemistry I 4

Mathematical Sciences 3
 #Mat 1052 College Algebra and Trigonometry 3

Health and Physical Education 2-3
 Health Education
 Physical Education

***Only one course may be used from English and Communications and Theatre toward the Humanities Requirement*
 †Excluding teaching methods courses

COGNATE COURSES 9

##Mat 2411 Calculus I 3
 Mat 2412 Calculus II 3
 Mat 3451 Calculus III 3

MAJOR REQUIREMENTS 40

REQUIRED COURSES 32

Phy 2095-2096 Physics I & II 8
 Phy 2098 General Physics III 4
 Che 3381-3382 Physical Chemistry I & II 6
 Che 3383 Physical Chemistry Laboratory and Recitation I 2
 Phy 3191 Mechanics 4
 Phy 3392 Magnetism and Electricity 4
 Phy 4592 Modern Physics 4

MAJOR ELECTIVES 8

Select 8 s.h. of upper division courses in Chemistry or Physics

FREE ELECTIVES 21-22

TOTAL 124

#Students who have completed the equivalent of this course in high school may enter Mat 2411 directly. In that case, Mat 2411 will be counted as a General Education requirement, and the student may take another three credits in free electives.
##Not required if an equivalent course has been completed at the high school level. In that case, the student may enter Mat 2412 directly and take an additional three credits in free electives.

**B.A. Degree
Option: Teacher
Certification**

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 57

CORE REQUIREMENTS 19

Eng 1020 Composition 3
 GE 1100 Emergence of Modern World 3
 GE 1200 Intellectual & Cultural Traditions 3
 GE 2020 Inquiry & Research 3
 Eng 2203 World Literature 3
 Che 1083 Chemistry I 4

BREADTH REQUIREMENTS 41

**English/Humanities (from at least 3 disciplines) 9*
 Comm 1400 Speech 3
**Social/Behavioral Sciences (from at least 3 disciplines) 9*
 Psy 1000 General Psychology 3
 Psy 2110 Adolescence Psychology 3
 Soc 1000 Social Life & Society, or Ant 1800 Cultural Anthropology 3
 Select *one* course from:
 Economics or Geography
 History
 Political Science

**Physical/Biological Sciences 4*
 Che 1084 Chemistry II 4

**Mathematical Sciences (not including computer science) 3*
 Mat 1052 College Algebra & Trigonometry 3

Health & Physical Education 4
 ID 1225 Issues/Values Contemporary Health 3

One of the following:
 PEd 1101 Beginning Modern Dance 1
 PEd 1103 Beginning Jazz Dance
 PEd 1151 Folk & Square Dance

Additional General Education Requirements 9
 Mat 2411 Calculus I 3
 Mat 2412 Calculus II 3
 Mat 3451 Calculus III 3
 Psy 2110 Psychology of Adolescence

MAJOR REQUIREMENTS 40

Che 3381 Physical Chemistry I 3
 Che 3382 Physical Chemistry II 3
 Che 3383 Physical Chemistry Laboratory and Recitation I 2
 Phy 2095 Physics I 4
 Phy 2096 Physics II 4
 Phy 2098 General Physics III 4
 Phy 3191 Mechanics 4
 Phy 3392 Magnetism & Electricity 4
 Phy 4592 Modern Physics 4

Major electives selected from upper division courses in Chemistry & Physics

PROFESSIONAL EDUCATION 30

FIELD EXPERIENCE 15

ICA 2801 Introduction Field Experience K-12 3
 ICA 3803 Junior Field Experience K-12 2
 ICA 4802 Professional Internship: Secondary Education 10

EDUCATION CORE 9

ED 3401 Language Arts/Reading K-12 3
 ED 3000 Curriculum, Evaluation & Learner 3
 ED 4000 Teacher & Classroom 3

SPECIALTY 3

ICA 3xxx Science K-12 3

EDUCATION ELECTIVE 3

ICA 4xxx Computers & A-V Aids, or ICA 4xxx Bilingual/ESL: Curriculum & Instruction, or ICA 4xxx Humanistic & Humane Ed. 3

TOTAL 131

Chemistry Courses

GENERAL

Che 1000 Principles of Chemistry (4)

A one-semester terminal course in the structure of matter, the laws that describe its transformations, and the theories that attempt to explain them. Involves symbols, formulas, equations, and computations in the study of chemical change, acids, bases, salts, solutions, and organic compounds. This course may not be submitted as a prerequisite for advanced chemistry courses or to meet the chemistry requirements of a liberal arts science major. (3 hr. lec./2 hr. lab.)

Che 1001 Principles of Chemistry: Lecture (3)

Duplicates the non-laboratory portion of Che 1000. A non-laboratory course restricted to non-matriculated students wishing to transfer the credits to institutions not requiring laboratory experience. Students meet with Che 1000 sections and are responsible for the same examinations and non-laboratory assignments.

Che 1010 Preparatory Chemistry or Foundations of Chemistry (4)

Basic introduction to elementary chemical principles, language, calculations, and techniques. Modular approach stresses mastery of concepts. May not be used for credit toward graduation by chemistry majors. (3 hr. lec./3 hr. lab.)

Che 1031 Fundamentals of General Chemistry (4)

Required for students majoring in programs in all health professions (except medical technology). Fundamental concepts of general chemistry are related to biological function. Topics include: Basic stoichiometry, atomic structure and bonding, acid-base equilibria, solutions, oxidation-reduction. (3 hr. lec./3 hr. lab.)

Che 1032 Fundamentals of Organic and Biochemistry (4)

A continuation of Che 1031. Organic chemistry and biochemistry introduced in order that metabolic cycles and body chemistry may be considered in depth. (3 hr. lec./3 hr. lab.) Prerequisite: Che 1031.

Che 1083 Chemistry I (4)

A thorough discussion of the fundamental principles of chemistry such as atomic structure, bonding, solutions, chemical equilibrium, oxidation, reduction, and descriptive chemistry. Mathematical relationships and problem-solving are stressed. It is advisable that the student have competence in elementary algebra. (3 hr. lec./3 hr. lab.) Prerequisite: Mat 1052 or equivalent or permission of instructor.

Che 1084 Chemistry II (4)

A continuation of Che 1083 which is prerequisite. (3 hr. lec./3 hr. lab.)

ORGANIC

Che 2180 Principles of Organic Chemistry (4)

A terminal one semester course dealing with the principles involved in the elucidation of the structure of organic compounds and the nature of the reactions encountered in aliphatic and aromatic chemistry. Examples of the common functional groups. Industrial and medical applications. (3 hr. lec./3 hr. lab.) Prerequisites: Che 1083-1084 or permission of the instructor.

Kampa

Che 2181 Principles of Organic Chemistry: Lecture (3)

Duplicates the non-laboratory portion of Che 2180. A non-laboratory course restricted to non-matriculated students wishing to transfer credits to institutions not requiring the laboratory. Students meet with Che 2180 sections and are responsible for the same examinations and non-laboratory assignments. Prerequisites: Che 1083-1084 or permission of instructor.

Che 3181 Organic Chemistry Lecture I (3)

A first course in organic chemistry. The nature and reactions of organic compounds are studied via a functional group organization. Atomic and molecular orbital theory; aliphatic, aromatic, alicyclic; reaction mechanisms; resonance; stereoisomerism; conformational analysis; and free radicals. (3 hr. lec.) Prerequisites: Che 1083-1084 at grade "C" or better.

Corequisites: Che 3183 or permission of instructor.

Leeds, Vitale, Zarrilli

Che 3182 Organic Chemistry Lecture II (3)

A continuation of Che 3181. Prerequisites: Che 3181 and 3183 or 3185 or permission of instructor. Corequisite: Che 3184.

Leeds, Vitale, Zarrilli

Che 3183 Organic Chemistry Laboratory and Recitation I (2)

Reactions of organic compounds. Substances representative of the major classes of compounds prepared, purified, and verified. A literature research required. Approaches to problem-solving discussed. (4 hr. lab./1hr. lec.) Corequisite: Che 3181 or permission of the instructor.

Vitale, Zarrilli

Che 3184 Organic Chemistry Laboratory and Recitation II (2)

A continuation of Che 3183. The student completes the course designing a procedure in the preparation of an organic intermediate. (4 hr. lab./1 hr. lec.) Corequisite: Che 3182 or permission of the instructor.

Vitale, Zarrilli

Che 4150 Spectrometric Identification of Organic Compounds (3)

Determination of the structure of organic compounds by analysis on infrared, ultraviolet, nuclear magnetic resonance and mass spectra. Use of published spectra of "unknowns." Prerequisites: Che 3182, 3382 or permission of instructor.

Che 4181 Organic Chemistry Lecture III (3)

A continuation in depth of the study of organic compounds and syntheses from a mechanistic approach. Prerequisite: Che 3182.

Che 4182 Advanced Organic Preparations (3)

A laboratory course designed to give the student a broader background in the synthesis of organic compounds. (1 hr. lec./6 hr. lab.) Prerequisite: Che 3184.

Che 4183 Introduction to Physical Organic Chemistry (3)

The application of physical chemical principles to the study of organic compounds. An introduction to conformational analysis, molecular orbital theory and resonance concepts. Prerequisites: Che 3182 and 3382.

ANALYTICAL

Che 2283 Quantitative Analysis (4)

The theory, calculations, and techniques of gravimetric, titrimetric and photometric methods of analysis. (2 hr. lec./6 hr. lab.) Prerequisite: Che 1084 or equivalent with a minimum grade of C.

Criasia

Che 3284 Instrumental Methods of Chemical Analysis (4)

General applications of modern instruments to the detection, identification and estimation of chemical elements and compounds. Laboratory exercises in the use of a variety of instruments. (3 hr. lec./3 hr. lab.) Prerequisites: Che 2283, Mat 2411, Phy 2098 or permission of instructor.

Criasia

Che 4285 Chemical Separation Methods (3)

Provides background in modern chemical separation methods. Theory, instrumentation and application of distillation, selective complexation, solvent extraction and various chromatographic methods. Emphasis on high performance, thin layer; liquid and gas chromatographic techniques. Experience with sophisticated chromatographic instruments. (3 hr. lec./lab.) Prerequisites: Che 3284, 3382 or permission of instructor.

Criasia

Che 4291 X-Ray and SEM Analytical Methods (3)

Theory, instrumentation and application of X-ray diffraction, X-ray fluorescence (wave length and energy detection), scanning electron microscopy and other related techniques to a variety of non-biological chemical systems. (2 hr. lec./4 hr. lab.)
Prerequisite: Che 3284.
Corequisite: Che 3382 or permission of instructor.

PHYSICAL

Che 3381 Physical Chemistry Lecture I (3)

Basic theories behind the behavior of matter discussed in great detail for deeper understanding of thermodynamics, kinetics, solutions, states of matter, chemical equilibrium and other topics. (3 hr. lec.)
Prerequisites: Che 1084 at grade "C" or better, Phy 2096 and Mat 3451 or permission of instructor.
Getzin, Lees

Che 3382 Physical Chemistry Lecture II (3)

A continuation of Che 3381 which is prerequisite. (3 hr. lec.)
Getzin, Lees

Che 3383 Physical Chemistry Laboratory and Recitation I (2)

Laboratory experience to illustrate theoretical concepts of physical chemistry through experimental measurement. Experience with a wide range of sophisticated chemical equipment. Recitation for integration of problem solving and lecture and laboratory applications. (4 hr. lab./1 hr. recitation)
Prerequisite: Che 2283.
Corequisite: Che 3381 or permission of instructor.
Lees

Che 3384 Physical Chemistry Laboratory and Recitation II (2)

Continuation of Che 3383 with increased emphasis on spectroscopic methods for obtaining various kinetic, thermodynamic and structural information about chemical compounds and systems. (4 hr. lab./1 hr. recitation)
Prerequisite: Che 3383.
Corequisite: Che 3382 or permission of instructor.
Lees

Che 3500 Chemistry-Physics Cooperative Education Internship (1-3)

Selected majors in Chemistry and Chemistry-Physics test theories learned in the classroom with on-the-job experience in career related areas. Assignments and placements are arranged by the department in cooperation with the Office of Cooperative Education. Seminars, student reports and term papers required. Credits earned cannot be used to fulfill the major or cognate requirements. Application to the Coop Internship must be

made during advanced registration.
Prerequisites: Che 1083-4, Che 2283, Che 3181, Che 3183, good academic standing, junior or senior status and permission of the department cooperative education committee.

Che 4381 Physical Chemistry III—Chemical Thermodynamics (3)

An advanced treatment of the laws of thermodynamics, and rigorous application to problems of chemical interest including heats of reaction, spontaneity of chemical reactions and phase changes. (3 hr. lec.)
Prerequisites: Che 3382 and Mat 3452 or permission of instructor.
Getzin, Lees

Che 4382 Physical Chemistry IV—Quantum Chemistry (3)

Development of the mathematical and physical theory of Quantum Mechanics and application to the structure and properties of atoms and molecules. The Schroedinger Equation, Variation Theory and Perturbation Theory. (3 hr. lec.)
Prerequisites: Che 3382 and Mat 3452 or permission of instructor.
Getzin, Lees

INORGANIC

Che 2491 Inorganic Chemistry (3)

Descriptive chemistry of the Main Group elements, transition metals and rare earth metals. Emphasis on the chemical and physical properties of the elements. Discussion of periodic law, basics of nuclear chemistry and natural occurrence and industrial uses of the elements and their compounds. (3 hr. lec.)
Prerequisite: Math 2411; "C" or better in Chem 1084; or permission of the instructor.

Che 4481 Advanced Inorganic Chemistry (3)

Periodicity and stereochemistry of the Main Group Elements and comparative group properties. Stereochemistry and coordination chemistry of transition metals. Discussion of the theories of bonding in transition metal complexes and the Main Group elements. Nonaqueous solvents and reaction mechanisms in inorganic chemistry. (3 hr. lec.)
Prerequisite: Che 3284, Che 2491, 3381, 3182, or permission of instructor.
Corequisite: Che 3382 or permission of instructor.
Luther

Che 4483 Inorganic Chemistry Laboratory I (2)

Modern methods of synthesizing inorganic and organometallic compounds including electrolytic, high temperature and vacuum-line preparations. Study of the prepared compounds using a variety of techniques including spectroscopic, chromatographic and electroanalytical. (6 hr. lab.)
Prerequisite or corequisite: Che 4481.
Luther

BIOCHEMISTRY

Che 4510 Special Topics in Biochemistry (4)

Protein characterization, enzyme kinetics, action and regulation, oxygen transporters, biological oxidations, drug metabolism and drug-receptor interactions with an emphasis on energy transformation in living cells. (3 hr. lec./4 hr. lab.)
Prerequisite: Bio 4105 or permission of instructor.
Corequisite: Che 3381.
Kampa

SEMINARS AND INDEPENDENT STUDY

A maximum of 12 credits of chemistry research (Che 3901-4 and Che 4905-6) may be taken. Only 6 credits may be applied towards the 124 credits required for graduation.

Che 3901-4 Independent Chemistry Research I-IV (1-2)

Research problems in chemistry investigated under direction of a faculty member. Students completing two semesters of independent study under the same project director must submit a written or oral report to the departmental research committee. May be taken 4 times for credit, 1-2 credits per semester.
Prerequisites: 8 credits in chemistry plus 12 credits in 2000 level science or mathematics courses, sponsoring faculty member and approval of department chairperson.

Che 4905-6 Senior Honors Research I & II (3,3)

Research problems in chemistry investigated under the direction of a faculty member. A progress report must be submitted to the faculty sponsor before the end of each semester. An oral report to be made before the departmental research committee at end of second semester. Seniors wishing to qualify for honors with their chemistry degree must also submit a thesis or publishable report to the departmental research committee before completing second term.
Prerequisites: Che 3381, 3383, a sponsoring faculty member, and approval of department chairperson. Che 4905 is prerequisite to 4906.

Che 4953 Seminar I (2)

The student is asked to pursue a problem of current interest, prepares and presents a paper to a seminar group. Following the presentation, the speaker serves as moderator in a discussion of the subject.

Che 4954 Seminar II (2)

A continuation of Che 4953. Students emphasizing a chemistry specialization may elect Bio 4105 and Phy 4491.

Physics Courses

GENERAL

Phy 1000 Principles of Contemporary Physics (4)

A one-semester survey of important principles of physics with applications to a variety of disciplines in modern technological society. Designed for non-science majors. (3 hr. lec./3 hr. lab.)

Phy 1001 Principles of Contemporary Physics (3)

Duplicates the non-laboratory portion of Phy 1000. Designed for non-science majors.

Phy 2030 Physics of Sound (4)

The study of sound with applications to music and speech. Basic physical concepts, the nature and transmission of sound waves, standing waves and resonance, auditorium and room acoustics, the ear and hearing. Relation of physical phenomena to physiological response, musical intervals, scales and tuning. Musical instruments, the human voice, electronic recording and reproduction. Not to be taken by science and health related majors. (3 hr. lec./3 hr. lab.)

Prerequisite: Phy 2091 or Phy 2095.

Blount

Phy 2081, 2082, 2083 Physics Lecture I, II & III (3,3,3)

Duplicates the non-laboratory portions of Phy 2091, 2092 and 2098 respectively. Non-laboratory courses restricted to non-matriculated students wishing to transfer credits to institutions not requiring laboratory. Students meet with Phy 2091, 2092, 2098 and are responsible for all non-laboratory assignments of those courses.
Prerequisites: For Phy 2081—Mat 1052-1053, its equivalent or permission of instructor. For Phy 2082 and 2083—Phy 2081 or 2091 or permission of instructor.

Phy 2091 General Physics I (4)

Mechanics, heat sound. Phy 2091 and 2092 is a sequence designed to give a broad quantitative understanding of classical physics without the use of calculus. Ability in geometry, algebra and trigonometry is required. Students may not receive credit for both Phy 2091 and 2095. (3 hr. lec./3 hr. lab.)
Prerequisites: Mat 1052 or equivalent, or permission of instructor.

Phy 2092 General Physics II (4)

Continuation of the general physics sequence to cover the topics of light, electricity, magnetism and atomic physics. Students may not receive credit for both Phy 2092 and 2096. (3 hr. lec./3 hr. lab.)
Prerequisite: Phy 2091.

Phy 2095 Physics I (4)

Mechanics, heat and sound. The sequence 2095, 2096 is for science majors and other students with concurrent or previous calculus training. Students may not receive credit for both 2095 and 2091. (3 hr. lec./3 hr. lab.)
Prerequisite: Mat 2411 or permission of instructor.

Phy 2096 Physics II (4)

Light, optics, electricity, magnetism and atomic physics. Students may not receive credit for both 2096 and 2092. (3 hr. lec./3 hr. lab.)
Prerequisite: Phy 2095, Mat 2412 or permission of instructor.

Phy 2098 General Physics III (4)

Modern physics: topics include electricity, atomic and nuclear structure, quantum phenomena, radiation, X-rays, lasers and relativity. (3 hr. lec./3 hr. lab.)
Prerequisite: Phy 2092 or 2096.

MECHANICS

Phy 3191 Mechanics (4)

A rigorous approach to the problem of the statics and dynamics of particles and rigid bodies. (3 hr. lec./3 hr. lab.)
Prerequisites: Phy 2095-2096 and Mat 2411-2412.

Phy 3195 Fluid Mechanics (3)

An introductory lecture course in the physics and applications of incompressible and compressible fluids, and of fluid power, dealing with the transmission, control, and storage of energy by means of a pressured fluid in a closed system.
Prerequisites: Phy 2095-2096 or permission of instructor.

OPTICS

Phy 3294 Optics (4)

An intermediate course designed for qualified students who desire an extensive knowledge of geometrical and physical optics and who seek a rigorous and comprehensive treatment of optics. (3 hr. lec./3 hr. lab.)
Prerequisites: Phy 2095-2096 or permission of instructor.

Bailey

ELECTRICITY—MAGNETISM

Phy 3392 Magnetism and Electricity (4)

Theory of electrostatics, electromagnetics, d.c. and a.c. electrical and magnetic circuit analysis, electromagnetic radiation. Maxwell's equation. (3 hr. lec./3 hr. lab.)
Prerequisites: Phy 2095-2096 and Math 2411-2412.
Struyk

Phy 3393 Electronics (4)

Designed to provide the student with a background in the theory and application of analog and digital electronics circuits and solid state devices. Laboratory work directed toward the study and understanding of electronic circuits. (3 hr. lec./3 hr. lab.)
Prerequisites: Phy 2095-2096 and Math 2411-2412.

THERMODYNAMICS

Phy 4491 Thermodynamics and Heat (4)

A detailed study of thermometry, calorimetry and transfer, and heat processes. Classical approach to thermodynamics and kinetic

theory. (3 hr. lec./3 hr. lab.)
Prerequisites: Phy 2095-2096 or permission of the instructor.

Blount

MODERN PHYSICS

Phy 4592 Modern Physics (4)

A rigorous survey of atomic and nuclear physics, early experimentation, incompatibility of experimental findings and classical theory, and quantum and wave mechanics approaches to understanding modern physics. (3 hr. lec./3 hr. lab.)

Prerequisites: Phy 2095-2096 or permission of the instructor.

Struyk

Phy 4594 Quantum Mechanics (3)

This lecture course is an introduction to the physical and mathematical formulation of quantum mechanics. After a brief historical development, topics considered are the Schroedinger Equation and its application to problems involving the free particle, potential barriers, the linear harmonic oscillator, central force motion, and the hydrogen atom. Perturbation methods are introduced.
Prerequisites: Phy 3191 and 4592, and Mat 3544 or permission of the instructor.

Struyk

Phy 4595 Solid State Physics (3)

An introductory lecture course dealing with the phenomenological and theoretical aspects of solid state physics. Areas considered in depth include symmetry, crystal structure and X-ray analysis of crystals followed by a detailed study of the thermal, optical, magnetic and dielectric properties of solids.
Prerequisite: Phy 4592 or permission of the instructor.

Bailey

RADIATION

Phy 3600 Radiation Physics (3)

Basic experimental and theoretical information relating to the production of x-rays and their interaction with matter presented with emphasis on their use in Diagnostic Radiology. Related topics of study include radiation measuring apparatus, patient dosimetry, the physical aspects of radiological procedures, and an introduction to radiation protection.
Prerequisite: Phy 2092 or 2098 or permission of the instructor.

SEMINARS AND INDEPENDENT STUDY

Phy 4953 Physics Seminar I (2)

Student pursues a problem of current interest. Preparation and presentation of paper to a seminar group. Following the presentation, the speaker serves as moderator in a discussion of the subject.

Phy 4954 Physics Seminar II (2)

A continuation of Phy 4953.

Coordinator: Prof. Dennis Santomauro
CSS Ext. 2666

The courses of instruction in computer science are designed to provide for a major program with various emphasis so that a student may select a background for the options of Information Processing and Technology.

**B.S. Degree
Option: Information Processing**

Information processing, related to business, economics and/or management science.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

- Eng 1020 Composition 3
- GE 1100 Emergence of the Modern World 3
- GE 1200 Intellectual and Cultural Traditions 3
- GE 2020 Inquiry and Research 3
- Eng 2203 Landmarks of World Literature 3
- GE 2400 Science and Technology in the Modern World * 3

BREADTH REQUIREMENTS 33-34

- Humanities 12
Select from at least three of the following five areas:
**English (2000 level literature or drama) or Communications and Theatre
Foreign Languages
†Fine Arts or Art History
†Music
Philosophy or Religion

- Social and Behavioral Sciences 12
(courses must be selected from at least three disciplines)
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

- Biological and Physical Sciences 4
Astronomy Geology
Biology Meteorology
Chemistry Physics

- Mathematical Sciences 3
††CpS 1031 Comp. Arithmetic Algebra 3

- Health and Physical Education 2-3
Health Education
Physical Education

*A Science course may be substituted for this Core Course
**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

COGNATE COURSES 12

- #Mat 1052 College Algebra and Trigonometry 3
- MgS2030 Business Organization & Management 3
- MgS3310 Management of Corporate Finance I 3
- Acc 2200 Principles of Accounting I 3

MAJOR REQUIREMENTS 54

CORE REQUIREMENTS 15

- CpS 2341 Computer Organization & Programming Language 3
- CpS 2342 Dynamic Programming Techniques 3
- CpS 2390 Computer Assembly Language 3
- CpS 2440 Data Structures 3
- CpS 3250 Computer Operating Systems 3

CONCENTRATION REQUIREMENTS 15

- CpS 2351 Business Orientation Programming Technology I 3
- CpS 2352 Business Orientation Programming Technology II 3
- CpS 3962 Topics in Business Programming and System Design 3
- CpS 4740 Data Base Management Systems 3
- CpS 4760 Large-Scale Informational Processing Systems 3

MAJOR ELECTIVES 9

Three additional courses in Computer Science, at the 2000 or above level selected with approval of departmental advisor.

SUPPORTING COURSES IN RELATED DISCIPLINES 15

- Mat 2026 Statistical Decision Theory 3
- Mat 2110 Discrete Structures 3
- Mat 2411 Calculus I 3
- Mat 2995 Matrix & Linear Algebra 3
- Select one course from among the following three:
Acc 2210 Principles of Accounting II 3
MgS3410 Basic Marketing 3
MgS3040 Management Information Systems 3

FREE ELECTIVES 5-6

TOTAL 124

††Students who have had prior programming experience may enter CpS 2341 directly. In that case, Mat 2411 will be counted as a General Education requirement, and the student may take another three credits in free electives.
#Students who have completed the equivalent of this course in high school may enter Mat 2411 directly. These students may substitute another free elective course for the cognate requirement.

**B.S. Degree
Option: Technology**

Technology related to physics, electronics and/or mathematics with investigations related to computer architecture; mathematics with computer applications; graduate studies in computer science.

B.S. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

- Eng 1020 Composition 3
- GE 1100 Emergence of the Modern World 3
- GE 1200 Intellectual and Cultural Traditions 3
- GE 2020 Inquiry and Research 3
- Eng 2203 Landmarks of World Literature 3
- GE 2400 Science and Technology in the Modern World 3

BREADTH REQUIREMENTS 33-34

- Humanities 12
Select courses from at least three of the following five areas:
**English (2000 level literature or drama) or Communications and Theatre
Foreign Languages
†Fine Arts, Art History
†Music
Philosophy or Religion

- Social and Behavioral Sciences 12
(courses must be selected from at least three disciplines)
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

- Biology and Physical Sciences 4
Phy 2091 General Physics 4
- Mathematical Sciences 3
††Cps 1031 Computer Arithmetic Algorithms 3

- Health and Physical Education 2-3
Health Education
Physical Education

**Only one course may be used from English and Communications/Theatre toward the humanities requirement
†Excluding teaching methods courses

COGNATE COURSES 11

- #Mat 1052 College Algebra & Trigonometry 3
- T 2501 Circuit Analysis I 4
- T 2502 Circuit Analysis II 4

MAJOR REQUIREMENTS 54

CORE REQUIREMENTS 15

- CpS 2341 Computer Organization & Programming Language 3
- CpS 2342 Dynamic Programming Techniques 3
- CpS 2390 Computer Assembler Language 3
- CpS 2440 Data Structures 3
- CpS 3250 Computer Operating Systems 3

CONCENTRATION REQUIREMENTS 15

- CpS 3310 Computer Programming Languages 3
- CpS 4130 Data Communication Systems 3
- CpS 4150 Computer Architecture 3
- CpS 4200 Systems Programming 3
- CpS 4301 Software Engineering 3

MAJOR ELECTIVES 9

Three Additional courses in Computer Science. Selected with approval of departmental advisor from the following list:

- CpS 3440 Advanced Algorithms and Complexity Theory
- CpS 3465 Problem Analysis and Solution
- CpS 3498 Computer Security and Information Theory
- CpS 4220 Compiler Construction
- CpS 4501 Automata and Formal Language Theory
- CpS 4740 Database Management Systems
- CpS 4801 Artificial Intelligence

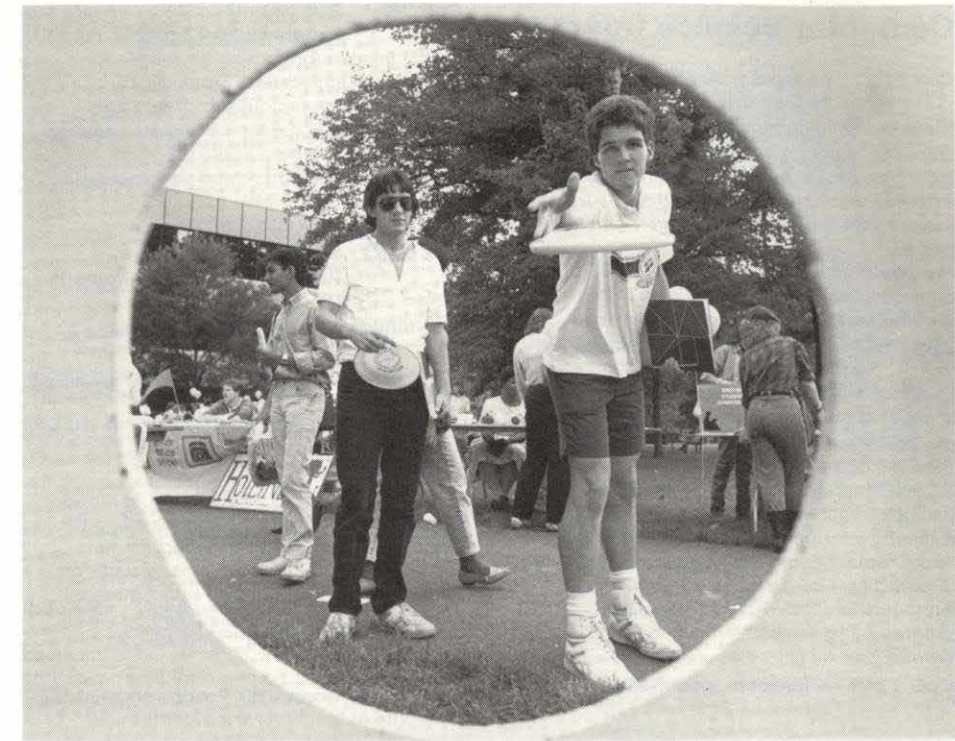
SUPPORTING COURSES 24

- T 4505 Digital Circuit Concepts 3
- T 4509 Microprocessor Theory & Application 3
- Mat 2026 Statistical Decision Making 3
- Mat 2110 Discrete Structures 3
- Mat 2411 Calculus I 3
- Mat 2412 Calculus II 3
- Two courses from among those listed below: 6
Mat 2995 Mat 3155 Mat 3225 Mat 3247
Mat 3248 Mat 3455 Mat 3544 Mat 3570
Mat 3940 Mat 4404 Mat 4545 Mat 4800

FREE ELECTIVES 5-6

TOTAL 132

††Students who have had prior programming experience may enter CpS 2341 directly. In that case, Mat 2411 will be counted as a General Education requirement, and the student may take another three credits in free electives.
#Students who have completed the equivalent of this course in high school may enter Mat 2411 directly. These students may substitute another free elective course for the cognate requirement.



NOTE CONCERNING COURSE NUMBERS IN COMPUTER SCIENCE

The numbers for all courses in computer science recently have been changed. In this Catalog, the new numbers appear for all courses. A list showing the new numbers and the former numbers is provided below.

New Number	Title	Former Number
CpS 1031	Computer Arithmetic Algorithms	CpS 1931
CpS 1032	Electronic Data Processing	CpS 1932
CpS 2341	Computer Organization and Programming	CpS 1941
CpS 1248	Computer Based Business Systems	CpS 1948
CpS 1958	Computer Based Health Systems	CpS 1958
CpS 2351	Business Oriented Programming Technology I	CpS 2931
CpS 2352	Business Oriented Programming Technology II	CpS 2932
CpS 2342	Dynamic Programming Techniques	CpS 2942
CpS 2390	Computer Assembly Language	CpS 2990
CpS 2382	Computer Programming I	CpS 2993
CpS 2384	Computer Programming II	CpS 3994
CpS 2440	Data Structures	CpS 4940
CpS 3100	Digital Computer Circuitry Principles	CpS 3900
CpS 3250	Computer Operating Systems	CpS 4950
CpS 3310	Computer Programming Language	CpS 4910
CpS 3391	Advanced Assembly Language Programming	CpS 4991
CpS 3465	Problem Analysis & Solutions	CpS 4965
CpS 3498	Computer Security & Information Theory	CpS 3998
CpS 3962	Topics in Business Programming and System Design	CpS 3962
CpS 4130	Data Communication System	CpS 4930
CpS 4200	Elements of Systems Programming	CpS 4900
CpS 4220	Compiler Construction	CpS 4920
CpS 4760	Large-Scale Information Processing Systems	CpS 4960
CpS 4980,	Special Topics	CpS 4980
81, 82		

Computer Science Courses**CpS 1031 Computer Arithmetic Algorithms (3)**

Historical development of computers, computer components, flow charting logic, algorithm design and analysis, programming, software and hardware in an integrated system. *Not for credit in Computer Science major.*

Prerequisites: Completion of Mat 0151 or the equivalent and all other developmental requirements.

CpS 1032 Principles and Procedures of Information Processing Using Microcomputers (3)

A study of the microcomputer and its role in the development and organization of data in files and databases for information generation. Course emphasis is on the selection and proper use of microcomputer application packages to fulfill the information needs of business and support management problem solutions. Not intended for Computer Science majors. *Prerequisites: CpS 1031 or computer programming experience and advisement. Cinque, Deavours*

CpS 1248 Microcomputer Based Business Systems (3)

Programming and implementation of microcomputer based business systems with examples drawn from manufacturing, management information, marketing and accounting. Applications via remote and local computing facilities. Not intended for Computer Science Major. *Prerequisite: Computer Science 1031 or the equivalent. Arnaw*

CpS 1958 Computer-Based Health Systems (3)

The application of business computer systems and information processing techniques to the allied health professions and in the setting of health care facilities. *Not offered for credit to Computer Science majors. Credit will not be granted for both CpS 1248 and CpS 1958. Prerequisites: CpS 1031 and acceptance into MRA program, or permission of the coordinator.*

CpS 2341 Computer Organization and Programming (3)

Fundamental computing concepts and processes; use, development, analysis and style of algorithms involving a high level programming language; structured programming concepts. *Prerequisites: Computer programming experience and advisement or CpS 1031.*

CpS 2342 Dynamic Programming Techniques (3)

Abstract data types, including components, domains and transforms. Transformational and data abstraction. Applications to computer structures, computer programs and non-standard types. *Prerequisite: CpS 2341.*

CpS 2351 Business Oriented Programming Techniques I (3)

Higher level programming languages for commercial application. Emphasis on programming techniques and language structure. Additional topics: systems analysis, design and implementation, program definition, development and documentation. *Prerequisite: CpS 2342. Arnaw, Bernstein, Cinque*

CpS 2352 Business Oriented Programming Techniques II (3)

A continued development of the topics discussed in CpS 2351. File organization, retrieval and updating techniques and multifile processing are emphasized. Applications in a systems environment on direct access storage devices. *Prerequisite: CpS 2351. Arnaw, Bernstein, Cinque*

CpS 2373 Scientific Programming (3)

Emphasis on analyzing and programming scientifically oriented problems. Structured programming concepts and techniques employed with various compilers. *Prerequisites: CpS 2342 and Mat 2411. Giegerich, Lipson*

CpS 2383 Computer Programming I (3)

Concepts of functions and algorithms in writing and key-punching programs processed on an electronic digital computer. Flow-charting; single-loop and nested loop processes; arithmetic processes, fixed-point, and floating-point arithmetic and non-numeric values; iteration and approximations; and non-numeric repetitive processes as applied to numerous types of elementary mathematical problems. *Prerequisites: CpS 1031 and Mat 2411. Giegerich, Lipson*

CpS 2384 Computer Programming II (3)

Double precision, complex and logical values, predefined and written subroutines, n-dimensional arrays, subprograms, numeric, logical alphameric, literal and blank data, mixed mode, indexing, and optimized programs used in intricate mathematical problems and non-mathematical problems. *Prerequisite: CpS 2383. Giegerich, Lipson*

CpS 2390 Computer Assembly Language (3)

Fundamental principles of assembly language; basic computer architecture; addressing; machine instruction set; iteration; indexing; elementary program design; subroutines and macros. *Prerequisite: CpS 2342 or 2384 or permission of instructor. Santomauro*

CpS 2440 Data Structures (3)

Representation of external and internal data to a computer: stacks, lists, queues, strings, tree structures, storage systems of arrays, sorting, symbol tables, and applications that illustrate

computer flow of information in solving problems. *Prerequisite: CpS 2342. Gordon, Lipson, Malbrock, Santomauro*

CpS 3100 Digital Circuitry Principles (4)

Lecture and laboratory course emphasizing the theory and application of circuits, electronic devices as logic elements and the arrangement of integrated circuits in digital computer systems. *Prerequisite: Phy 3392, or IS 2502 or permission of instructor. Cokewood, Jahn*

CpS 3250 Computer Operating Systems (3)

An introduction to basic computer elements and logic design techniques employed in computer systems organization. *Prerequisite: CpS 2390. Abeles, Deavours, Gordon, Rebecchi*

CpS 3310 Computer Programming Languages (3)

A study of characteristics of programming languages and classifications: machine, procedure-oriented, numerical, scientific, business data processing, string and list grammars, multipurpose, control and basic compiler methods. *Prerequisite: CpS 2390. Lipson, Zoll*

CpS 3391 Advanced Assembler Language Programming (3)

Assembly language instructions for multiple address and multiple register computers: indexing, bit manipulation, fixed and floating point arithmetic on two address machine, logical instruction repertoire, data structures at the machine level, core dumps and program debugging, subroutine and macro construction. *Prerequisite: CpS 2390 or permission of the instructor. Santomauro*

CpS 3440 Advanced Algorithms and Complexity Theory (3)

Algorithmic analysis. Measures of complexity. Best case, worst case, and average behavior. Algorithms involving sorting, graphs, networks, and number theory. NP-Completeness. *Prerequisites: Completion of Computer Science Core, Mat 2110 and Mat 2412.*

CpS 3465 Problem Analysis and Solutions (3)

Identification and analysis of scientific, business and/or research oriented problems. Sequential organization of computer oriented algorithms for efficient procedures involving minimization of computer time. *Prerequisite: CpS 2440. Benner*

CpS 3498 Computer Security and Information Theory (3)

Information and coding, measurement and transmission of information, redundancy, noise, data bank security in government and industry, computer network weaknesses, data encryption. *Prerequisite: CpS 2342 or 2384. Deavours*

CpS 3962 Topics in Business Programming and Systems Design (3)

Development of Computer-Based Accounting Systems; emphasis on design, testing and implementation of such systems. Topics will include programming and debugging techniques, storage media, file organization and system utilities. *Prerequisites: Acc 2200 and CpS 2352, or permission of instructor. Arnaw, Bernstein*

CpS 4130 Data Communication Systems (3)

Data communication terminology and concepts; identification of hardware and software components; networking; survey and usage of protocols; security. *Prerequisite: CpS 3250.*

CpS 4150 Computer Architecture (3)

Computer architecture and organization from the register level through control level to system level. *Prerequisite: completion of the CpS core requirements required for Technology Option in CpS Major. Elective for other options/major. Abeles, Marchand, Rebecchi*

CpS 4200 Systems Programming (3)

Module development of modern system functions and extensions. Topics include: multi-tasking, windowing, large address spaces, micro-to-mainframe operating systems such as UNIX and PC-DOS. *Prerequisite: CpS 3250. Deavours, Wittenberg, Zoll*

CpS 4220 Compiler Construction (3)

Techniques in analysis of a source language and the generation of an object code, construction aspects of a compiler, as well as programming applications to compiler design. *Prerequisite: CpS 4200. Rebecchi, Santomauro*

CpS 4301 Software Engineering I (3)

The study of Software Engineering methodologies for the development of quality, cost effective, schedule-meeting software. *Prerequisites: CpS 2440, CpS 3250. Rebecchi*

CpS 4501 Formal Language and Automata Theory (3)

The study of the concepts and theory of Formal Language and the relationship to automata; types of grammars; Turing machine. *Prerequisites: CpS 3310, Mat 2110. Santomauro*

CpS 4740 Database Management Systems (3)

Design, implementation and administration of data base management systems. Their benefits and use in organizations. *Prerequisite: CpS 2352, CpS 2440 or permission of instructor. Bernstein*

CpS 4760 Large-Scale Information Processing Systems (3)

Data communication systems and networks; computer centers, information retrieval, real-time and time-sharing; procedures, programs, testing, documentation, and operation of components in integrated systems. *Prerequisite: CpS 3250. Cinque*

CpS 4801 Artificial Intelligence (3)

Representation of knowledge; reasoning models; language learning. *Prerequisites: Completion of CpS Core requirements or permission of instructor. Zoll*

CpS 4980, 4981, 4982 Special Topics in Computer Science (3)

Research study of areas in computer science influenced by contemporary developments as well as interests and needs of students majoring in computer science. A maximum of nine semester hours may be taken in this area towards major electives. *Prerequisite: Permission of instructor.*

CpS 4999 Cooperative Education in Computer Science (3)

Practical field experience providing resources other than those within the college environment. These credits cannot be used

towards the 39 credits of course work required for computer science majors.

Prerequisites: Minimum 15 hours in computer science selected from CpS 2351, 2390, 3100 and 2341, 2342, 2352, 2440, 3250; minimum 3.00 GPA in major; minimum 2.75 cumulative GPA; approval of advisory committee.

Arnaw, Cinque, Santomauro

COURSES FOR NON-MAJORS**CpS 3090 Personal Computing (3)**

Introduction to small computer systems for home and office. Topics include: BASIC language programming, microprocessor fundamentals, assemblers, machine language programming, file capabilities, dedicated applications, game design, graphics, current equipment availability. Hands on experience. *Prerequisite: Prior computer background not required. Junior or senior status or permission of instructor.*

CpS 3092 Introduction to Microcomputer Applications (3)

Introduction and survey of microcomputer systems including manufacture, system structure, software and applications. *Prerequisite: CpS 3090.*



Chairperson: Dr. A. Lee Meyerson
C323A Ext. 2064

Our programs are designed to prepare the student for graduate study in various areas of geology, meteorology, oceanography, and environmental science as well as for positions in industries related to the earth sciences. Excellent collateral studies in geoscience technology, environmental studies and marine sciences may be elected with the Earth Science major.

**B.A. Degree
Option: General**

The following program is designed for students wishing a broad background in the earth sciences. This option covers the spectrum of earth science with emphasis on subjects which are environmentally important.

ID 1001 Freshman Seminar	1
GENERAL EDUCATION 52-53	
CORE REQUIREMENTS 19	
Eng 1020 Composition	3
GE 1100 Emergence of the Modern World	3
GE 1200 Intellectual and Cultural Traditions	3
GE 2020 Inquiry and Research	3
Eng 2203 Landmarks of World Literature	3
Che 1083 Chemistry I or	
Phy 2091 General Physics I	4

BREADTH REQUIREMENTS 33-34

Humanities 12

Select courses from at least three of the following five areas:

- **English (2000 level literature or drama) or Communications and Theatre
- Foreign Languages
- †Fine Arts or Art History
- †Music
- Philosophy or Religion

Social and Behavioral Sciences 12

(courses must be selected from at least three disciplines)

- Economics or Geography
- History
- Political Science
- Psychology
- Sociology or Anthropology

Biological and Physical Sciences 4

- Che 1084 Chemistry II or
- Phy 2092 General Physics II

Mathematical Sciences 3

- Mat 1052 College Algebra & Trigonometry

Health and Physical Education 2-3

- Health Education
- Physical Education

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

COGNATE COURSES 3

- One of the following courses:
Mat 1053, Mat 2411, or Mat 2412

MAJOR REQUIREMENTS 31

REQUIRED COURSES

Ast 1100 Introduction to Astronomy	4
Geo 1200 Introduction to Geology	4
Met 1300 Introduction to Meteorology	4
Met 2300 Climatology	3
Geo 3266 Hydrology	4
Oce 3453 Introduction to Oceanography	4
ES 4953-4954 Earth Science Seminar I & II or	
ES 4963-4964 Honors Research Seminar in Earth Science I & II	4
One of the following courses:	4
Geo 3261, Geo 3263 Geo 3264, Geo 3265	

FREE ELECTIVES 36-37

TOTAL 124

#Students whose mathematical background includes the equivalent of Mat 1052 may substitute Mat 1053 or Mat 2411 to fulfill this requirement. These students then may take an additional three credits of free electives rather than a cognate course.

**B.A. Degree
Option: Geology**

This program is for students who plan to become professional geologists. The curriculum meets the requirements of the American Institute of Professional Geologists and prepares students for both immediate employment and graduate study.

ID 1001 Freshman Seminar	1
GENERAL EDUCATION 52-53	
CORE REQUIREMENTS 19	
Eng 1020 Composition	3
GE 1100 Emergence of the Modern World	3
GE 1200 Intellectual and Cultural Traditions	3
GE 2020 Inquiry and Research	3
Eng 2203 Landmarks of World Literature	3
Phy 2091 General Physics I	4

BREADTH REQUIREMENTS 33-34

Humanities 12

Select courses from at least three of the following five areas:

- **English (2000 level literature or drama) or Communications and Theatre
- Foreign Languages
- †Fine Arts or Art History
- †Music
- Philosophy or Religion

Social and Behavioral Sciences 12
(courses must be selected from at least three disciplines)

- Economics or Geography
- History
- Political Science
- Psychology
- Sociology or Anthropology

Biological and Physical Sciences 4
Phy 2092 Physics II

Mathematical Sciences 3
#Mat 1052 College Algebra and Trigonometry

Health and Physical Education 2-3
Health Education
Physical Education

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

COGNATE COURSES 11

- Che 1083-1084 Chemistry I & II
- ##Mat 2411 Calculus I

MAJOR REQUIREMENTS 44

SUPPORTING COURSES 4

- Ast 1100 Introduction to Astronomy or
- Met 1300 Introduction to Meteorology

REQUIRED COURSES 28

Geo 1200 Introduction to Geology	4
Geo 3261 Mineralogy	4
Geo 3263 Structural Geology	4
Geo 3264 Invertebrate Paleontology	4
Geo 3281 Field Geology	2
Geo 4252 Field Geology II	2
Geo 4265 Petrology	4
ES 4953-4954 Earth Science Seminar I & II or	
ES 4963-4964 Honors Research Seminar in Earth Science I & II	4

MAJOR ELECTIVES 12

Courses selected with departmental advisement

FREE ELECTIVES 15-16

TOTAL 124

#Students who have completed the equivalent of this course in high school may enter Mat 2411 directly. In that case, Mat 2411 will be counted as a General Education requirement, and the student may take another three credits in free electives.

##Students who substitute Mat 2411 for Mat 1052 in the General Education requirements may fulfill the cognate requirements with 8 credits.

**B.A. Degree
Option: Meteorology**

This program is for students who plan to become professional meteorologists. The curriculum meets the requirements of the National Weather Service for professional meteorologists and prepares students for both immediate employment and graduate study.

ID 1001 Freshman Seminar	1
GENERAL EDUCATION 52-53	
CORE REQUIREMENTS 19	
Eng 1020 Composition	3
GE 1100 Emergence of the Modern World	3
GE 1200 Intellectual and Cultural Traditions	3
GE 2020 Inquiry and Research	3
Eng 2203 Landmarks of World Literature	3
Phy 2091 General Physics I	4

BREADTH REQUIREMENTS 33-34

Humanities 12

Select courses from at least three of the following five areas:

- **English (2000 level literature or drama) or Communications and Theatre
- Foreign Languages
- †Fine Arts or Art History
- †Music
- Philosophy or Religion

Social and Behavioral Sciences 12

(courses must be selected from at least three disciplines)

- Economics or Geography
- History
- Political Science
- Psychology
- Sociology or Anthropology

Biological and Physical Sciences 4
Phy 2092 General Physics II

Mathematical Sciences 3
#Mat 1052 College Algebra and Trigonometry

Health and Physical Education 2-3

- Health Education
- Physical Education

**Only one course may be used from English and Communications and Theatre toward the Humanities Requirement
†Excluding teaching methods courses

COGNATE COURSES 12

- ##Mat 2411 Calculus I
- Mat 2412 Calculus II
- Two courses in Computer Science selected with departmental advisement

MAJOR REQUIREMENTS 44

SUPPORTING COURSE 4

- Ast 1100 Introduction to Astronomy or
- Geo 1200 Introduction to Geology

REQUIRED MAJOR COURSES 30

Met 1300 Introduction to Meteorology	4
Met 3370 Atmospheric Dynamics	4
Met 3371 Atmospheric Thermodynamics	4
Met 3372 Physical Meteorology	3
Met 4351 Synoptic Meteorology I	4
Met 4352 Synoptic Meteorology II	4
Met 4370 Advanced Atmospheric Dynamics	3
ES 4953-4954 Earth Science Seminar I & II or	
ES 4963-4964 Honors Research Seminar in Earth Science I & II	4

MAJOR ELECTIVES 10

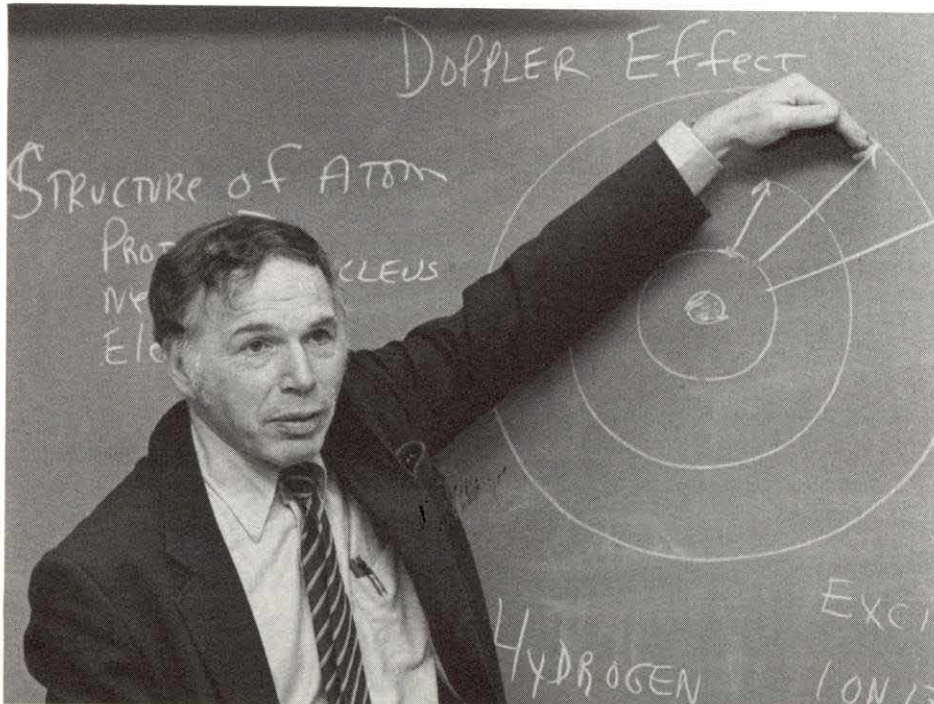
Courses selected with departmental advisement from offerings in meteorology, oceanography, and hydrology

FREE ELECTIVES 14-15

TOTAL 124

#Students who have completed the equivalent of this course in high school may enter Mat 2411 directly. In that case, Mat 2411 will be counted as a General Education requirement, and the student may take another three credits in free electives.

##Students who take Mat 2411 as a General Education requirement may fulfill the Cognate requirements with 9 credits.



B.A. Degree Option: Teacher Certification

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 65

CORE REQUIREMENTS 19

Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
Che 1083 Chemistry I 4

BREADTH REQUIREMENTS 46

**English/Humanities* (from at least 3 disciplines) 9
Comm 1400 Speech 3
**Social/Behavioral Sciences* (from at least 3 disciplines) 9
Psy 1000 General Psychology 3
Soc 1000 Social Life & Society, or Ant 1800 Cultural Anthropology 3
Select *one* course from:
Economics or Geography
History
Political Science
**Physical/Biological Sciences* 4
Che 1084 Chemistry II 4
**Mathematical Sciences* (not including computer science) 3
Mat 1052 College Algebra & Trigonometry 3

Health and Physical Education 4

ID 1225 Issues/Values Contemporary Health 3

One of the following:

PEd 1101 Beginning Modern Dance 1
PEd 1103 Beginning Jazz Dance 1
PEd 1151 Folk & Square Dance 1

Additional General Education Requirements 17

Psy 2110 Psychology of Adolescence 3
Bio 1000 Principles of Biology 4
Phy 2091 Physics I 4
Elective from any of the above (*) areas 3

One of the following:

Mat 1053 Analytical Geometry 3
Mat 2411 Calculus I 3
Mat 2412 Calculus II 3

MAJOR REQUIREMENTS 32

Ast 1100 Introduction to Astronomy 4
Geo 1200 Introduction to Geology 4
Met 1300 Introduction to Meteorology 4
Met 2300 Climatology 3
Geo 3266 Hydrology 4
Oce 3453 Introduction to Oceanography 4

One of the following:

Geo 3261 Mineralogy 4
Geo 3263 Structural Geology 4
Geo 3264 Invert. Paleontology 4
Geo 3265 Geomorphology 4

On of the following:

Es 4953 -4954 Earth Science Seminar I & II or
Es 4963 -4964 Honors Research Seminar in Earth Science I & II 4

PROFESSIONAL EDUCATION:

ED 3401 Language Arts/Reading K-12 3
ED 3000 Curriculum, Evaluation & Learner 3
ED 4000 Teacher & Classroom 3
ICA 3xxx Science K-12 3
ICA 4xxx Computers & A-V Aids, or ICA 4xxx Bilingual/ESL: Curriculum and Instruction, or ICA 4xxx Humanistic & Humane Education 3
ICA 2801 Introductory Field Experiences K-12 3
ICA 3803 Junior Field Experience K-12 2
ICA 4802 Professional Internship: Secondary Education 10

TOTAL 128

Astronomy Courses

Ast 1100 Introduction to Astronomy (4)

A study of heavenly bodies, solar systems and the sidereal universe, with emphasis on the nature of astronomical investigations. (3 hr. lec./3 hr. lab.)

Ast 3168 Practical Astronomy (3)

Methods of determining, describing and using the positions and apparent motions of celestial bodies. Topics include fundamental position determination, time systems and standards, celestial navigation, the calendar, and related astronomical instrumentation.

Prerequisites: Ast 1100 and Mat 2412 or permission of the instructor.

Ast 3171 The Solar System (3)

Planets, moons, and other members of the solar system; techniques and results of planetary investigations; theories of planetary origin, efforts to detect other planetary systems, the search for extraterrestrial life. Prerequisites: Ast 1100 or permission of instructor.

Ast 3172 Stellar Astronomy (3)

A study of stellar distances and motions, stellar brightness, binary and variable stars, stellar spectra, star clusters, stellar evolution and galactic structure. Prerequisites: Ast 1100, Mat 2412, Phy 2092 previously or concurrently or permission of the instructor.

Ast 4181 Astrophysics (3)

Study of atomic structure and spectra, behavior of a gas under conditions of astrophysical interest, general equations of stellar structure, properties of radiation, the radiative transfer equation and formation of the stellar spectra. Prerequisites: Mat 4403 and Phy 2092.

Geology Courses

Geol 1200 Introduction to Geology (4)

A study of the processes at work upon and within the earth in terms of their impact upon the preservation of the record of the history of the earth. *Credit for graduation will not be granted for both Geol 1010 and Geol 1200.* (3 hr. lec./3 hr. lab.)

Geol 1201 Geologic Hazards (3)

An investigation of those geologic phenomena that are hazards to man's use of the land, such as earthquakes, volcanic eruptions, flooding and beach erosion. Consideration given to the normal operation of geologic activity and to the accelerated activity caused by man's interaction with the environment. Intended for non-majors. May be taken without Geol 1202 but if Geol 1202 is also taken, both must be taken concurrently. *Students who receive credit for Geol 1200 do not also receive credit for 1201 and 1202.*

Rockman

Geol 1202 Geologic Hazards Laboratory (1)

Must be taken concurrently with Geol 1202. Rockman

Geol 1205 Mineral and Fossil Fuel Resources (3)

Minerals and fossil fuels, supplies and their use. Past use and future trends in light of depletion, recycling and technological advances. *Does not fulfill major requirements.* Krall

Geol 1210 Geology of the National Parks (3)

An in-depth study of the depositional, tectonic and erosional processes that have produced the unique geological regions designated as National Parks by the Congress of the United States. *Does not fulfill major requirements.* Krall

Geol 2262 Geology and the Environment (3)

Examination of the problems associated with man's urban pattern of civilization and resultant interactions with the geologic environment. Prerequisite: Geol 1200 or permission of the instructor.

Rockman

Geol 2263 Geology and the Environment Lab (1)

Must be taken concurrently with Geol 2262. Rockman

Geol 3261 Mineralogy (4)

An introductory study of minerals; their morphology, internal structure, origin, occurrence, and properties. (3 hr. lec./3 hr. lab.) Prerequisites: Geol 1200 and Che 1083-1084, or permission of the instructor.

Kroll

Geol 3263 Structural Geology (4)

A study of the architecture of the rock materials of the earth, including a description of geologic structure in terms of origin, principles and mechanics of crustal deformation. (3 hr. lec./3 hr. lab.) Prerequisite: Geol 1200 or permission of the instructor.

Kroll

Geol 3264 Invertebrate Paleontology (4)

A study of the classification, relationships, and evolutionary history of fossils. Emphasis is placed on paleoecological relationships. (3 hr. lec./3 hr. lab.)

Prerequisite: Geol 1200 or permission of the instructor.

Metz

Geol 3265 Geomorphology (4)

Analysis of the various land forms of the earth's surface in terms of their nature, origin, and evolution. The influence of the different geologic and climatic environments upon the development of land form. Map interpretation. (3 hr. lec./3 hr. lab.)

Prerequisite: Geol 1200 or permission of the instructor.

Rockman

Geol 3266 Hydrology (4)

The distribution and movement of water with emphasis given to surface waters, their relations to the fluvial aspects of geomorphology and to the impact of man on the hydrologic cycle. (3 hr. lec./3 hr. lab.) Prerequisites: Geol 1200 or Met 1300 or permission of instructor.

Rockman

Geol 3269 Astrogeology (4)

The geologic environments of the moon and the planets examined with emphasis on the nature of the lunar surface. Consideration given to pertinent terrestrial environments and phenomena and to the related aspects of meteoritics. (3 hr. lec./3 hr. lab.) Prerequisites: Ast 1100 or Geol 1200 or permission of instructor.

Rockman

Geol 3281 Field Geology (2)

Field practice in the methods of geological mapping including the use of pace, compass, and clinometer surveys, the plane table and alidade, and aerial photographs. Prerequisite: Geol 1200 or permission of the instructor.

Metz

Geol 4252 Field Geology II (2)

Field conference and studies of one or more selected areas with written reports and maps. Additional expenses may be incurred. Prerequisites: Geol 3261, 3263, 4266 (may be taken concurrently), or permission of the instructor.

Metz

Geol 4256 Glacial and Pleistocene Geology (3)

Analysis of the distribution, movement, and deposits of modern glaciers used to interpret glacial features formed during the Pleistocene glacial epoch. Theories concerning the cause or causes of continental glaciation. Prerequisite: Geol 1200 or permission of the instructor.

Kroll

Geol 4263 Optical Mineralogy (4)

Mineral identification through the use of the petrographic microscope by immersion and thin-section methods. (3 hr. lec./3 hr. lab.) Prerequisite: Geol 3261 or permission of the instructor.

Kroll

Geol 4265 Petrology (4)

A study of the petrologic processes at work upon and within the crust of the earth which produce and modify rock bodies. (3 hr. lec./3 hr. lab.) Prerequisite: Geol 3261 or permission of the instructor.

Kroll

Geol 4266 Stratigraphy (4)

Origin, composition, distribution and correlation of stratified rock. (3 hr. lec./3 hr. lab.) Prerequisite: Twelve hours of geology or permission of the instructor.

Metz

Geol 4268 Topographic Map Interpretation (3)

Description and interpretation of selected topographic maps chosen to illustrate variety of landforms of the United States and the influence of structure, process and time on landform development. (1 hr. lec./6 hr. lab.) Prerequisite: Geol 3265 (may be taken concurrently) or permission of instructor.

Rockman

Geol 4917 Geoscience Technology (4)

Development of the specific skills used in geoscience technology; rock thin sectioning; diffraction; preparation of visual aids for geoscience teaching. Prerequisites: Geol 3261, IS 1500 and 2500. Corequisite: Geol 4263.

Kroll



Meteorology Courses

Met 1300 Introduction to Meteorology (4)

A non-mathematical study of the atmosphere, including meteorological instruments, the general circulation of the atmosphere, fronts and air masses, cyclones, hurricanes, and the upper atmosphere. Atmospheric phenomena discussed in terms of structure and prediction. (3 hr. lec./3 hr. lab.)

Met 2300 Climatology (3)

Global distribution of the principal climatic elements with emphasis on the physical causes of climate. Theories regarding climatic change. (Same as Geog 2300).

Prerequisite: Met 1300 or permission of the instructor.

Met 2301 Climatology Laboratory (1)

Techniques in handling climatological data. (Same as Geog 2301).

Corequisite: Met 2300 or permission of the instructor.

Met 2310 General Meteorology (4)

An overview of meteorology with emphasis on the dynamic aspects of atmospheric behavior. Topics include air masses, fronts, cyclones and anticyclones, winds, theoretical basis for weather forecasting, and mathematical techniques. (3 hr. lec./3 hr. lab.)

Prerequisite: Met 1300 or permission of instructor.

Prerequisite or corequisite: Mat 2412 or permission of instructor.

C. Murphy

Met 2350 Aviation Meteorology (3)

A study and analysis of mid-latitude meteorology in the Northern Hemisphere with an emphasis on those phenomena affecting aircraft operation.

Prerequisite: Met 1300 or permission of instructor.

Met 2360 Weather Analysis (3)

Familiarization with daily weather data which come in on facsimile and teletype; plotting and analyzing of weather maps; weather map discussion; weather forecasting; daily weather observations. (2 hr. lec./3 hr. lab.)

Prerequisite: Met 1300.

Zois

Met 3360 Air Pollution (3)

An introduction to the problem of air pollution as seen from a meteorological viewpoint.

Prerequisite: Met 1300 or permission of instructor.

C. Murphy

Met 3369 Planetary Atmospheres (4)

The earth's atmosphere as a planetary environment and the origin, evolution and current state of our knowledge of the atmospheres of the other planets and their prospects for harboring life. (3 hr. lec./3 hr. lab.)

Prerequisites: Ast 1100 or Met 1300 and Mat 1052.

Met 3370 Atmospheric Dynamics (4)

A mathematical formulation of the physical laws which govern weather processes and atmospheric motion. (3 hr. lec./3 hr. lab.)

Prerequisites: Met 1300, Phy 2092, Mat 2412 or permission of instructor.

Zois

Met 3371 Atmospheric Thermodynamics (4)

The application of thermodynamic principles to the atmosphere with particular emphasis on the thermodynamics of moist air. Related topics such as hydrostatic equilibrium, altimetry and atmospheric convection treated. (3 hr. lec./3 hr. lab.)

Prerequisites: Met 1300, Phy 2092, Mat 2412 or permission of instructor.

C. Murphy

Met 3372 Physical Meteorology (3)

Qualitative and quantitative description of the non-dynamic meteorological phenomena including the production of precipitation, rainbows, halos, lightning, particle pollution and the earth's radiation balance. The interaction of light, radar, sound and shock waves with the atmosphere. Use of these phenomena in remote sensing.

Prerequisites: Mat 2412, Met 1300, Phy 2092 or permission of instructor.

C. Murphy

Met 3380 Meteorological Instrumentation (3)

Familiarization with the various instruments used to monitor the atmosphere; principles of operation, how to take readings with each instrument, instrument maintenance and repair. Students required to take instrument readings. (3 hr. lec./3 hr. lab.)

Prerequisites: Met 1300 and Mat 1052.

C. Murphy

Met 4301-2 Meteorology Cooperative Education I & II (3,3)

A practical field experience. Student assigned to an organization involved in meteorological activity such as federal and state government, industry, media, etc. Cooperative employers matched with student's area of interest within field of meteorology. Working hours flexible. Credits earned count as free electives. No more than 40 s.h. in ES can be applied to the 124 s.h. required for the degree.

Prerequisite: Explicit written permission of the instructor.

Zois

Met 4351-2 Synoptic Meteorology I & II (4,4)

Understanding the processes which govern the weather; practical application of the predictive equations through use of weather maps; in depth analysis of N.M.C. facsimile charts; extensive plotting and analysis of synoptic charts stressing the three dimensional nature of weather systems; weather forecasting and briefing. (2 hr. lec./6 hr. lab.)

Prerequisites: Met 3370 and 3371 or permission of instructor. Met 4351 is prerequisite to 4352.

Zois

Met 4370 Advanced Atmospheric Dynamics (3)

Circulation, vorticity, and divergence theorems, theory of Rossby Waves, pressure coordinates, turbulence and diffusion, energy conversions, numerical weather prediction, the general circulation.

Prerequisites: Met 3370 and 3371 or permission of the instructor.

Zois

Oceanography Courses

Ocean 3453 Introduction to Oceanography (4)

A survey of modern oceanography and its methods including characteristics of sea water, theories of ocean currents and, in general, applications of sciences to the study of the oceans. (3 hr. lec./3 hr. lab.)

Prerequisites: Two of the following: Bio 1000, Phy 2091, Che 1083, Geol 1200 or Met 1300 or permission of instructor.

Meyerson

Ocean 4454 Marine Geology (4)

Introduction to the geology of the oceans, including tectonics, geochemistry, shoreline processes, stratigraphy, sedimentology, and related subjects. (3 hr. lec./3 hr. lab.)

Prerequisite: Ocean 3453 or permission of instructor.

Meyerson

Ocean 4455 Chemical Oceanography (4)

Also offered at the New Jersey Marine Science Consortium field station. Study of the properties and interactions of chemical substances present in the marine environment, including their reactions at the air-sea and sea-bottom interfaces. (3 hr. lec./3 hr. lab.)

Prerequisite: Ocean 3453 or permission of instructor.

Meyerson

Ocean 4470 Physical Oceanography (4)

Also offered at the New Jersey Marine Sciences Consortium field station. Detailed study of the physical aspects of the oceans including ocean currents, radiation, air-sea interaction, theories of the ocean circulation, geostrophic computations, vorticity. (3 hr. lec./3 hr. lab.)

Prerequisite: Ocean 3453 or permission of instructor.

Zois

Earth Science Courses

SPECIAL TOPICS AND SEMINARS

ES 2910 Maps, Stars, and Navigation (3)

Map reading, determining position and following routes on the Earth's surface, the use of the magnetic compass, time systems, and selected topographic, atmospheric, and celestial phenomena; planetarium sessions and some outdoor work included.

Rockman

ES 4901-4902 Special Topics in Earth Science (3,3)

Intensive study of specific topics of an advanced nature in the earth sciences. Subject of a semester's work varies.

Prerequisite: Permission of the instructor.

ES 4953 Earth Science Seminar I (2)

The student is asked to pursue a problem of current interest. The student prepares and presents a paper to a seminar group. Following the presentation, the speaker serves as moderator in a discussion of the subjects.

ES 4954 Earth Science Seminar II (2)

A continuation of ES 4953.

Honors Program

The Honors Program in Earth and Planetary Environments had been developed for the twofold purposes of recognition of superior achievement and the encouragement of meaningful original research by senior majors. In order to be eligible for admission to the honors program, the student must have maintained a grade-point average of 3.0 in all courses through the end of the junior year as well as a grade-point average of 3.0 in all earth science courses through the end of the junior year.

ES 4963, 4964 Honors Research Seminar in Earth Science I & II (2,2)

Individuals research of an original nature under the supervision of a research sponsor. Results of the work to be presented as a seminar. May be taken in place of but not in addition to ES 4953, 4954.

Prerequisites: Earth Science majors, of senior standing, with a grade point average of 3.0 overall as well as in Earth Science courses admitted upon written nomination by a departmental research sponsor and written recommendation by one other departmental faculty member.

INTERDISCIPLINARY COURSES

The following are found in the Interdisciplinary Courses. (See Index.)

ID 3101-3102 Seminar in Environmental Studies I & II

ID 4101-4102 Seminar in Environmental Studies I & II



Kean College offers an array of professional programs in allied health and health care. Students with an interest in any of these programs should consult the appropriate program coordinator or the Coordinator of Allied Health Advisement in the Office of Academic Advisement, Career Planning and Placement.

PREPROFESSIONAL MEDICAL PROGRAMS

Premedical and Predental Although admissions requirements are not uniform among schools of medicine and dentistry, the following two programs include the courses required for entrance by most medical and dental schools: Department of Biological Sciences—B.A. in Biology (Preprofessional); Department of Chemistry-Physics—B.A. in Chemistry (Preprofessional). Other major programs may be selected if electives are chosen to fulfill the requirements of the medical or dental school(s) to which the student plans to apply. Entering or transfer students interested in medical or dental school should consult a member of the Pre-Medical Advisory Committee for advisement. Names of committee members may be secured from the department offices of either Biological Sciences or Chemistry-Physics.

Other Preprofessional Medical Programs Students with an interest in veterinary medicine, optometry, pharmacy, or other preprofessional medical programs should consult a member of the Pre-Medical Advisory Committee.

ALLIED HEALTH PROFESSIONS

Baccalaureate programs are offered in medical technology, with options in cytotechnology and histotechnology; medical record administration; occupational therapy; and physical therapy (the latter a joint program with the University of Medicine and Dentistry of New Jersey—School of Health Related Professions). All of the programs mentioned above can accommodate entering freshmen and transfer students from two or four-year institutions. The first two (preprofessional) years include general education requirements and basic courses in the sciences, mathematics and social sciences. The final two (professional) years include a sequence of courses and related clinical experiences in the professional area and advanced coursework in supporting

disciplines. The curriculum of each program has been designed to enable the graduate to meet the requirements for eligibility for national or state certification. Each program has been accredited by the relevant professional association. After completing the preprofessional requirements, students must apply for admission to the professional phase of the

program. The number of students admitted to each program is limited by the availability of clinical placements, and the admissions process is selective. Students are advised to plan their coursework during the preprofessional two years in such a way that alternate majors are possible should they choose not to continue or should they not be admitted to the program of their choice.



Chairperson: Prof. Nancy Sheffield
W402B Ext. 3010

The Medical Record Administrator is a member of the health care team and is the professional responsible for management of health information systems consistent with medical, administrative, ethical, and legal requirements. The Medical Record Administration program is accredited by the Committee on Allied Health, Education and Accreditation (CAHEA) in cooperation with the Council on Education of the American Medical Record Association (COE-AMRA). Upon satisfactory completion of course requirements, the graduate is eligible to apply to write the national registry examination. A passing grade on the examination establishes the graduate as a Registered Record Administrator (RRA). For entering freshmen, the program involves two years of preprofessional coursework and two professional years. The professional component includes both didactic and clinical experiences. Transfer students (including Accredited Record Technicians) who meet all prerequisites may apply for admission directly to the professional phase. The program admits both undergraduate and post-baccalaureate students. The undergraduates must have completed all the preprofessional coursework including program prerequisites and post-baccalaureate candidates must complete prerequisites for admission to the program. A certificate of completion is awarded to post-baccalaureate students who complete the program.

Admissions Requirements Please see page 14 of this Catalog. In addition to the general requirements, the MRA program requires:

1. Usually, completion of all preprofessional requirements with a grade of "C" or above.
2. Junior standing (completion of 56 semester hours).
3. An overall grade point average of 2.5 on a 4.0 scale.
4. Submission of a formal application to the Medical Record Administration Program by 31 March immediately preceding the intended Fall Semester enrollment.
5. Three letters of recommendation submitted at the time of application.
6. Transcripts of all previous courses. Students who have attended a foreign college or university are required to submit an official English Translation of the academic credits.
7. A completed physical examination which includes current immunizations. The physical examination must be performed within three months immediately prior to enrollment in MRA 3612.

Admissions and Program Procedures The Medical Record Administration application form, letters of recommendation, and transcripts for student admission to the program must be submitted by 31 March immediately preceding the intended fall semester enrollment. The class will be selected by 15 May. Transportation to clinical sites is the responsibility of the student. The courses in the professional years are taught in sequence. To continue in the professional curriculum, a student must earn a grade of C or above in each course. No MRA course may be repeated more than once.

B.S. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 54-55

CORE REQUIREMENTS 19

Eng 1020 Composition 3
 GE 1100 Emergence of the Modern World 3
 GE 1200 Intellectual and Cultural Traditions 3
 GE 2020 Inquiry and Research 3
 Eng 2203 Landmarks of World Literature 3
 Bio 1000 Principles of Biology 4

BREADTH REQUIREMENTS 35-36

Humanities 9
 Comm 1400 Speech Communication 3
 Select two courses from the disciplines listed below.
 Both courses may not be from the same discipline.
 Foreign Languages
 †Fine Arts and Art History
 †Music
 Philosophy or Religion

Social and Behavioral Sciences 9

Psy 1000 General Psychology 3
 Eco 1021 Principles of Economics II 3
 One course selected from among the disciplines listed below:
 History
 Political Science
 Sociology or Anthropology
Biological and Physical Sciences 4
 Bio 2409 Essentials of Human Physiology & Anatomy 4

Mathematical Sciences 3
 Mat 1052 College Algebra and Trigonometry 3
Health and Physical Education 2-3
General Education Electives 8
 Che 1031 Fundamentals of General Chemistry 4
 Che 1032 Fundamentals of Organic and Biochemistry 4

†Excluding teaching methods courses

MAJOR REQUIREMENTS 65

COURSES IN MEDICAL RECORD ADMINISTRATION 47

MRA 2013 Medical Terminology 3
 MRA 3012 Introduction to Health Care 2
 MRA 3112 Special Health Records 2
 MRA 3114 Develop & Retention of Medical Records 4
 MRA 3212 Health Statistics 2
 MRA 3314 Classifications, Indexes, & Registries 4
 MRA 3413 Fundamentals of Medical Science I 3
 MRA 3423 Fundamentals of Medical Science II 3
 MRA 3612 Directed Practice I 2
 MRA 4113 Legal Aspects of Medical Records 3
 MRA 4312 Quality Assurance 2
 MRA 4511 Organization and Management of Medical Record Department I 2
 MRA 4512 In-Service Education in MRD 2
 MRA 4513 Organization and Management of Medical Record Department II 3
 MRA 4522 Medical Record Administration Research 2
 MRA 4523 Medical Record Administration Seminar 2
 MRA 4612 Directed Practice II 2
 MRA 4614 Management Affiliation 4

SUPPORTING COURSES IN RELATED DISCIPLINES 21

Mat 1016 Statistics 3
 CpS 1031 Computer Arithmetic Algorithms 3
 CpS 1958 Health Information Systems 3
 MgS 2031 Health Care Organization and Management 3
 MgS 3030 Personnel Management 3
 Eng 3090 Business, Professional, and Technical Writing 3

FREE ELECTIVES 10-11

TOTAL 132

Medical Record Administration Courses

MRA 2013 Medical Terminology (3)
Word formation, derivations, and meanings of medical terms related to medical specialties, health services, and health related fields with applications in the transcription of medical reports. (2 hr. lec./2 hr. lab.)
Corequisite: Bio 2409 or permission of instructor.

MRA 3012 Introduction to Health Care (2)

Introduction to health care in the United States with an in-depth study of the organization and responsibilities of the medical staff in various types of health care facilities. Introduces the personnel in health care with specific emphasis on the profession of Medical Record Administration.

Prerequisite: Acceptance into the Medical Record Administration Program.

MRA 3112 Special Health Records (2)

A study of various types of non-hospital health facilities with an emphasis on their record-keeping systems. (1 hr. lec./2 hr. lab.)
Prerequisite: MRA 3114.

MRA 3114 Development and Retention of Medical Records (4)

A comprehensive study of the development and content of a medical record, the technical evaluation and completion, and the retention and storage of the record. (2 hr. lec./4 hr. lab.)
Prerequisite: Acceptance into MRA program.

MRA 3212 Health Statistics (2)

A comprehensive study of the principles of statistics applied to health data. Includes vital and other health statistics. (1 hr. lec./2 hr. lab.)
Prerequisites: Mat 1016 and acceptance into MRA program.

MRA 3314 Classifications, Indexes & Registries (4)

A study of the systems of classifications of diseases and operations of various medical and health organizations. (2 hr. lec./4 hr. lab.)
Prerequisite: MRA 3114.

MRA 3413 Fundamentals of Medical Science I (3)

An in-depth study of disease processes which affect the human body with applications to the operation of a medical information system.
Prerequisites: Bio 2409, Che 1032, and MRA 2013.

MRA 3423 Fundamentals of Medical Science II (3)

Continuation of MRA 3413 with emphasis on diseases of individual organs.
Prerequisite: MRA 3413.

MRA 3612 Directed Practice I (2)

Supervised learning experiences in medical record departments chosen according to the standards of the American Medical Record Association. (0 hr. lec./8 hr. lab.)
Prerequisite: MRA 3314.

MRA 4113 Legal Aspects of Medical Records (3)

A study of the importance of medical records as legal documents. Includes the legal aspects of hospital and medical staff organization, release of information and legal actions requiring evidence from medical records.
Prerequisite: MRA 3114.

MRA 4312 Quality Assurance (2)

The study of methods for the evaluation of the quality of patient care. (1 hr. lec./2 hr. lab.)
Prerequisite: MRA 3314.

MRA 4511 Organization and Management of Medical Record Department I (2)

An application of the principles of management to medical record administration.
Prerequisite: MRA 3612.

MRA 4512 In-Service Education in Medical Record Department (2)

An identification of the functions of the medical record administrator for planning, conducting, and evaluating in-service education at the department level. (1 hr. lec./2 hr. lab.)
Prerequisite: MRA 4612.

MRA 4513 Organization and Management of Medical Record Department II (3)

An application of the principles of management to medical record administration.
Prerequisites: MRA 4612, MRA 4511.

MRA 4522 Medical Record Administration Research (2)

Introduction to independent research. Includes a research project within the medical record profession.
Corequisite: MRA 4612.

MRA 4523 Medical Record Administration Seminar (3)

An exploration of effective methods of identifying and solving specific types of problems encountered in the administration of medical record services. Prerequisite: MRA 4612.

MRA 4612 Directed Practice II (2)

Supervised learning experiences in non-hospital health care facilities. (0 hr. lec./8 hr. lab.)
Prerequisite: MRA 3612.

MRA 4614 Management Affiliation (4)

Supervised learning experience with the registered record administration department head of an affiliated health care facility to gain experience in medical record department management. (0 hr. lec./8 hr. lab.)
Prerequisites: MRA 4513, 4612.

Coordinator: Dr. Frank H. Osborne
C132 Ext. 2474

B.S. Degree Option: General

Students who successfully complete this program are eligible for national certification in medical technology. The program is affiliated with the Barnert Memorial Hospital Center, Cooper Hospital/University Medical Center, Jersey Shore Medical Center, Monmouth Medical Center, Morristown Memorial Hospital, Orange Memorial Hospital Unit of the Hospital Center at Orange, St. Joseph's Hospital and Medical Center, Mountainside Hospital, St. Peter's Medical Center, Somerset Medical Center, and The Valley Hospital. The medical technologist is a professional member of the health care team who participates in diagnosis of disease through the use of sophisticated instruments and techniques and trains other laboratory workers. Medical technologists are needed to fill positions in hospitals, clinics and research laboratories.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 54-55

CORE REQUIREMENTS 19
Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
Phy 2091 General Physics I 4

BREADTH REQUIREMENTS 35-36

Humanities 9
Select from three of the following five areas:
English (2000 level literature or drama) or Communications and Theatre
Foreign Languages
†Fine Arts or Art History
†Music
Philosophy or Religion

Social and Behavioral Sciences 9
(courses must be selected from at least three disciplines)

Psy 1000 General Psychology 3
Soc 1000 Social Life & Society 3
One course in one of the following disciplines: 3
Economics, Geography
History, Political Science

Biological and Physical Sciences 4
Phy 2092 General Physics II 4

Mathematical Sciences 3
Mat 1052 College Algebra and Trigonometry 3

Health and Physical Education 2-3
General Education Electives 8
Che 1083 Chemistry I 4
Che 1084 Chemistry II 4

†Excluding teaching methods courses

MAJOR REQUIREMENTS 62

Bio 1000 Principles of Biology 4
Che 2180 Principles of Organic Chemistry 4
Bio 2200 Cell Biology 4
Che 2283 Quantitative Analysis 4
Bio 3305 Principles of Microbiology 4
Bio 3403-3404 Anatomy and Physiology I & II 8
Bio 4105 Essentials of Biochemistry 4
ID 4877-4878 Medical Technology Clinical Preceptorship I & II 30

FREE ELECTIVES 6-7

TOTAL 124

B.S. Degree Option: Cytotechnology

The option in cytotechnology leads to both a Bachelor of Science degree and eligibility for national certification in cytotechnology. Cytotechnologists are trained to scan slides of cells from body surfaces and body fluids to detect abnormalities; e.g. cancer, and to report their findings to physicians. Students attend a cytotechnology educational program for clinical training. The hospital selects the students for training.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 54-55

CORE REQUIREMENTS 19
Eng 1020 Composition 3
GE 1100 Emergence of the Modern World 3
GE 1200 Intellectual and Cultural Traditions 3
GE 2020 Inquiry and Research 3
Eng 2203 Landmarks of World Literature 3
Phy 2091 General Physics I 4

BREADTH REQUIREMENTS 35-36

Humanities 9
Select from three of the following five areas:
English (2000 level literature or drama) or Communications and Theatre
Foreign Languages
†Fine Arts or Art History
†Music
Philosophy or Religion

Social and Behavioral Sciences 9
(courses must be selected from at least three disciplines)
Psy 1000 General Psychology 3
Soc 1000 Social Life & Society 3
One course in one of the following disciplines: 3
Economics, Geography
History, Political Science

Biological and Physical Sciences 4
Phy 2092 General Physics II 4

Mathematical Sciences 3
Mat 1052 College Algebra and Trigonometry 3

Health and Physical Education 2-3
General Education Electives 8
Che 1083 Chemistry I 4
Che 1084 Chemistry II 4

†Excluding teaching methods courses

MAJOR REQUIREMENTS 65

Bio 1000 Principles of Biology 4
Che 2180 Principles of Organic Chemistry 4
Bio 2200 Cell Biology 4
Bio 3260 Histology 4
Bio 3305 Principles of Microbiology 4
Bio 3403-3404 Anatomy and Physiology I & II 8
Bio 3704 Principles of Genetics 3
Bio 4105 Essentials of Biochemistry 4
ID 4879-4880 Cytotechnology Clinical Preceptorship I & II 30

FREE ELECTIVES 3-4

TOTAL 124

**B.S. Degree
Option: Histotechnology**

The option in histotechnology leads to both a Bachelor of Science degree and eligibility for national certification in histotechnology. Histotechnologists are trained to process body tissue sections and prepare them for examination by a pathologist. Students attend a histotechnology educational program for clinical training. The hospital selects the students for training.

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 54-55

CORE REQUIREMENTS 19

Eng 1020 Composition 3
 GE 1100 Emergence of the Modern World 3
 GE 1200 Intellectual and Cultural Traditions 3
 GE 2020 Inquiry and Research 3
 Eng 2203 Landmarks of World Literature 3
 Phy 2091 General Physics I 4

BREADTH REQUIREMENTS 35-36

Humanities 9
 Select from three of the following five areas:
 English (2000 level literature or drama) or Communications and Theatre
 Foreign Languages
 †Fine Arts or Art History
 †Music
 Philosophy or Religion

Social and Behavioral Sciences 9
 (courses must be selected from at least three disciplines)

Psy 1000 General Psychology 3
 Soc 1000 Social Life & Society 3
 One course in one of the following disciplines:
 Economics, Geography, History, Political Science

Biological and Physical Sciences 4

Phy 2092 General Physics II 4

Mathematical Sciences 3

Mat 1052 College Algebra and Trigonometry 3

Health and Physical Education 2-3

General Education Electives 8

Che 1083 Chemistry I 4
 Che 1084 Chemistry II 4

†Excluding teaching methods courses

MAJOR REQUIREMENTS 66

Bio 1000 Principles of Biology 4
 Che 2180 Principles of Organic Chemistry 4
 Bio 2200 Cell Biology 4
 Bio 3260 Histology 4
 Bio 3305 Principles of Microbiology 4
 Bio 3403-3404 Anatomy and Physiology I & II 8
 Bio 3815 Microtechniques 4
 Bio 4105 Essentials of Biochemistry 4
 ID 4881-4882 Histotechnology Clinical Preceptorship I & II 30

FREE ELECTIVES 2-3

TOTAL 124

**Medical Technology
Clinical Preceptorships**

ID 4877-4878 Medical Technology Clinical Preceptorship I & II (15,15)

Course offered at an affiliated medical technology program. Clinical preceptorship in medical technology for a period of one year. Instruction and clinical practice in clinical biochemistry, medical microbiology, clinical microscopy, hematology, immunohematology, immunoserology, management, records, instrumentation, radioisotopes, ethics and others.

Prerequisites: Declared major in medical technology, acceptance by an affiliated MT program and consultation with the MT coordinator.

ID 4879-4880 Cytotechnology Clinical Preceptorship I & II (15,15)

Course offered at an approved cytotechnology program. Clinical preceptorship in cytotechnology for a period of one year. Instruction and clinical practice in exfoliative cytology. Training in the microscopic study of normal and abnormal cells from body secretions and fluids, preparation and staining of cell smears, cytology of body organs, interpretation of stained cell smears for detection of malignant cells.

Prerequisites: Declared major in medical technology; cytotechnology option; acceptance by an approved cytotechnology program; and consultation with the MT coordinator.

ID 4881-4882 Histotechnology Clinical Preceptorship I & II (15,15)

Course offered at an approved histotechnology program. Clinical preceptorship in histotechnology for a period of one year. Instruction and clinical practice in the processing of body tissue sections by fixation, dehydration, embedding, sectioning, mounting and staining. Other special topics studied. Prerequisites: Declared major in medical technology; histotechnology option; acceptance by an approved histotechnology program; and consultation with the MT coordinator.

This is an upper division program open only to registered nurses. Admission is through a departmental admission process and is competitive.

The B.S.N. in Nursing prepares registered nurses to enter professional practice and to assume new and changing roles as nursing professionals in clinical settings based in a wide range of diverse community and private agencies. The upper division curriculum includes advanced course work in nursing theory, clinical practice and related disciplines. The program accommodates the special needs of the nurse in full-time practice. The upper division course work may be completed in two years of full-time study or up to six years on a part-time basis.

*Chairperson: Dr. Virginia M. Fitzsimons
K-3 Ext. 2608*

The upper division nursing major is open only to registered nurses. Admission is through a departmental admission process and is competitive.

The B.S.N. in Nursing prepares registered nurses to enter professional practice and to assume new and changing roles as nursing professionals in clinical settings based in a wide range of diverse community and private agencies. The upper division curriculum includes advanced course work in nursing theory, clinical practice and related disciplines. The program accommodates the special needs of the nurse in full-time practice. The upper division course work may be completed in two years of full-time study or up to six years on a part-time basis.

Degree Requirements: *The degree requirements for the Bachelor of Science in Nursing follow. Prerequisites for admission are indicated with an asterisk (*). These prerequisites, which include specified courses in the biological and social sciences and twenty-two credits in nursing and two credits in health education to be granted after successful completion of a validation examination, constitute the only coursework which must be completed prior to admission. Transcripts of registered nurses accepted for the program are evaluated and credit toward the degree is granted for courses already completed in accordance with the policies of Kean College for the transfer of credit.*

B.S.N. Degree

GENERAL EDUCATION 52-55

CORE REQUIREMENTS 19

Eng 1020 Composition 3
 GE 1100 Emergence of the Modern World 3
 GE 1200 Intellectual and Cultural Traditions 3
 GE 2020 Inquiry and Research 3
 Eng 2203 Landmarks of World Literature 3
 *Che 1032 Fundamentals of Organic and Biochemistry 4

BREADTH REQUIREMENTS 33-36

Humanities 9
 Phi 1100 Philosophy 3
 Select two courses from the following areas. Both courses may not be from the same area.
 English (2000 level literature or drama) or Communications and Theatre
 Foreign Languages
 Fine Arts or Art History
 Music

Social and Behavioral Sciences 9

*One course in General Psychology 3
 *One course in General Sociology 3
 One course selected from among the disciplines listed below: 3
 Anthropology
 Political Science
 Geography
 Economics
 History

Biological and Physical Sciences 4

*Che 1031 Fundamentals of General Chemistry 4

Mathematical Sciences 3

Mat 1016 Statistics 3

Health and Physical Education 2-3

General Education Requirements 6-8
 *Two courses in Anatomy and Physiology 6-8

MAJOR REQUIREMENTS 72-73

*Microbiology 3-4
 Phy 1001 Principles of Contemporary Physics 3
 Soc 2100 Sociology of the Family 3
 Psy 3110 Life Span Developmental Psychology 3
 MgS3030 Personnel Management 3
 Phi 3314 Moral Problems in Medicine and Health Care 3
 Psy 3630 Social Psychology 3
 HEd 3635 Introduction to Public Health 3

**LOWER DIVISION NURSING
BY VALIDATION 22**

Nur 3000 Conceptual Models for Professional Practice in Nursing 3
 Nur 3100 Professional Nursing Practice with the Well Family 5
 Nur 3300 Issues in Professional Practice 3
 Nur 3900 Research in Nursing 3
 Nur 4000 Professional Nursing Practice with the Family in Crisis 5
 Nur 4100 Professional Nursing Practice in Chronic Health Problems 5
 Nur 4900 Independent Practicum in Nursing 2

FREE ELECTIVES 5-8

TOTAL 132

Nursing Courses

Nurs 3000 Conceptual Models for Professional Practice in Nursing (3)

Discussion of evolution of nursing theory with reference to selected works of major theorists. Classroom implementation of a conceptual model for nursing practice with focus on nursing process as a recurring component in all nursing models. Prerequisites: Acceptance into the Nursing Program or permission of the chairperson.

Nurs 3100 Professional Nursing Practice with the Well Family (5)

Continued study of nursing models and application of relevant theories in clinical practice of the nursing process to assist essentially well families to maintain and promote health. Focus on expanding knowledge and skills requisite to comprehensive nursing assessment of the family as the basis for planning, implementing and evaluating nursing interventions in clinical experience. Attention to concepts of health, holism, and to maturational crises as well phenomena. Prerequisite: Nurs 3000.

Pre- or corequisite: Phy 1001.

Nurs 3300 Issues in Professional Practice (3)

In-depth analysis of contemporary issues in nursing capitalizing on student knowledge and experience. Dialogical and dialectical approaches facilitate development of critical thinking skills and active participation in guiding outcomes of current issues. Prerequisite: Acceptance into the nursing program or permission of chairperson.

OT 3610 Activity Group Process (3)
Comprehensive study of the concepts and principles of activity groups as applied in the practice of occupational therapy. Focus on role and function of occupational therapist in promoting, influencing or enhancing psychosocial function or remediating dysfunction in a group context. Development of basic skills in evaluation and implementation of activity groups. Development of personal and professional awareness in an interactional context. Lecture, laboratory and field experiences.
Prerequisites: OT 3410, 3302 and permission of program coordinator.
Stern

OT 4301 Basic Orthotics, Prosthetics and Adaptive Equipment (1)
Principles and biomechanical considerations using splints, prostheses and adaptive equipment; studying materials/component parts and training in their use; fabrication of splints and adaptive equipment. Lecture and laboratory.
Prerequisites: OT 3211, 3411.
Corequisite: OT 4921.

OT 4510 Supervision and Administration in Health Care Settings (2)
Principles of supervision and administration as

applied in health care settings. Administrative roles and responsibilities, including that of supervisor are explored with emphasis on problem solving.
Prerequisites: OT 3410, 3411 and permission of program coordinator.

OT 4610 Introduction to Research for Occupational Therapy (2)
Concepts and methodologies of scientific research as related to occupational therapy. Relationship to clinical practice will be stressed. (Students will propose and implement a mini-research study.)
Prerequisites: OT 3410, 3411, Psy 3200.
Kramer

OT 4920 Seminar in Occupational Therapy I: Psychosocial Dysfunction (6)
Concepts, principles and objectives of occupational therapy as applied in the treatment of psychosocial dysfunction. Development of basic skills in observation, interviewing, evaluation, therapeutic relationships and program planning with client/patient. Clerkship experience requires placement in approved setting for eight hours per week.
Prerequisites: OT 3210, 3410, 3610 and permission of program coordinator.
Stern

OT 4921 Seminar in Occupational Therapy II: Physical Dysfunction (6)

Concepts, principles and objectives of occupational therapy as applied in the treatment of patients/clients with physical dysfunction. Evaluation, treatment planning, and treatment implementation. Clerkship requires placement in approved setting for eight hours per week.
Prerequisites: OT 3211, 3411; Bio 3406 and permission of program coordinator.

OT 4922 Seminar in Occupational Therapy III: Developmental Dysfunction (4)

Concepts, principles and objectives of occupational therapy as applied in the treatment of patients/clients with developmental dysfunction. Evaluation, treatment planning and treatment implementation. Independent research project required.
Prerequisites: OT 3211, 3411; Bio 3406 and permission of program coordinator.
Kramer

OT 4930 Advanced Fieldwork Seminar: Psychosocial Dysfunction (3)

A three month full-time placement in a psychosocial dysfunction affiliation center selected according to American Occupational Therapy Association guidelines. Practical laboratory, lectures, supervision, and group sessions. Completion of OT 4930 and 4931 required to take A.O.T.A. registry examination.
Prerequisites: OT 4920 and permission of program coordinator.
Garbarini

OT 4931 Advanced Fieldwork Seminar: Physical Dysfunction (3)

A three month full-time placement in a physical dysfunction affiliation center selected according to American Occupational Therapy Association guidelines. Practical laboratory, lectures, supervision, and group sessions. Completion of OT 4930 and 4931 required to take A.O.T.A. registry examination.
Prerequisites: OT 4921 and permission of program coordinator.
Garbarini

OT 4933, 4934, 4935 Advanced Fieldwork Experience (1,2,3)

A full-time placement for one, two or three months in a fieldwork setting selected according to American Occupational Therapy Association guidelines. Clinical experience in one or more of the following areas: administration, burns, cardiac rehabilitation, children's psychiatry, developmental dysfunction, gerontology and hand rehabilitation. Scheduling determined on individual basis. Course may not be counted toward degree requirements.
Prerequisites: OT 4930 or 4931 and permission of program coordinator.
Garbarini

*Program Director: Alma Merians
W307 Ext. 2227*

Physical Therapy encompasses the study, treatment and prevention of neuromusculoskeletal dysfunctions that may occur as a result of birth, disease, injury, aging or other alterations in a person's capacity to move his/her body. The physical therapist, upon referral of a physician, after assessment of dysfunction, plans, executes and evaluates treatment programs for individuals with conditions known to respond to physical therapy methodologies. The P.T. program at Kean College is offered jointly with the University of Medicine and Dentistry of New Jersey—School of Health Related Professions. Students who successfully complete all requirements receive a Bachelor of Science degree from Kean College and a certificate from UMDNJ-SHRP. Graduates are expected to demonstrate the competencies essential for entry level physical therapy practitioners as designated by the American Physical Therapy Association which has accredited the program.

Admission to the Professional Phase Each year 32 full-time students are selected to enter the professional phase of the program. Criteria for applications review by the program's committee on admissions and academic performance include:
Overall cumulative grade point average (GPA) of at least 2.5; grade of at least "C" in all required English composition prerequisites and 3.0 GPA in science and mathematics courses; evidence of direct knowledge of and/or experience in P.T. practice; evidence of extracurricular and/or work experience that demonstrates interpersonal skills. Those accepted as majors must successfully complete all pre-professional courses by the end of the spring semester prior to the September entering date. Deadline for application for each fall class is the preceding January for all students. Applicants should contact the physical therapy department for specific dates.

Professional Phase Courses are taught at Kean College, UMDNJ, and selected clinical facilities. Attendance is required. Further information on standards of performance, transportation to and from class, laboratory and clinical learning experiences, additional expenses, etc. are available in the Office of Physical Therapy, Kean College of New Jersey, Willis Hall, 307C.

B.S. Degree

ID	1001	Freshman Seminar	1
GENERAL EDUCATION 54			
CORE REQUIREMENTS 19			
Eng	1020	Composition	3
GE	1100	Emergence of the Modern World	3
GE	1200	Intellectual and Cultural Traditions	3
GE	2020	Inquiry and Research	3
Eng	2203	Landmarks of World Literature	3
Che	1031	Fundamentals of General Chemistry	4

BREADTH REQUIREMENTS 35

Humanities 9
Courses must be selected from three disciplines:
English or Communications/Theatre
†Fine Arts or Art History
†Foreign Languages
Music
Philosophy or Religion

Social and Behavioral Sciences 9
(courses must be selected from at least three disciplines)
Economics or Geography
History
Political Science
Psychology
Sociology or Anthropology

Biological and Physical Sciences 4
Che 1032 Fundamentals of Organic and Biochemistry

Mathematical Sciences 3
#Mat 1052 College Algebra and Trigonometry

Health and Physical Education 3
PEd 3510 Physiology of Exercise

General Education Electives 7
Bio 1000 Principles of Biology
One course in the mathematical sciences, selected from among those listed below:
Mat 1016, CpS 1031, Mat 2411, Mat 2412

†Excluding teaching methods courses.

COGNATE COURSES 12

Bio	2409	Essentials of Human Physiology and Anatomy	4
Phy	2091-2092	General Physics I and II	8

MAJOR REQUIREMENTS 61

ID	2100	Dynamics of Health and Society I	3
ID	4120	Dynamics of Health and Society II	3
ID	4210	Advanced Independent Study	3
Bio	3406	Neuroscience	4
PT	3000	Dynamics of Physical Therapy Praxis I	5
PT	3001	Dynamics of Physical Therapy Praxis II	6
PT	4002	Dynamics of Physical Therapy Praxis III	4
PT	4003	Dynamics of Physical Therapy Praxis IV	6
PT	3500	Clinical Medicine I	3
PT	3501	Clinical Medicine II	3
PT	3900	Human Gross Anatomy for Physical Therapists	6
PT	4600	Clinical Investigation in Physical Therapy Praxis	3
PT	4705	Innovations in Physical Therapy Praxis	3
PT	4710	Scientific Assessment of Human Motion	3
PT	4800	Physical Therapy Seminar	3
PT	4900	Directed Study for Physical Therapists	3

FREE ELECTIVES 4

#Students whose mathematical background includes the equivalent of Mat 1052 may enter Mat 2411 directly.

TOTAL 132



Physical Therapy Courses

ID 2100 (3)

An exploration and analysis of micro health related issues within the context of a changing society; focus on selected topics relating to health, health care, and delivery of health services from a variety of perspectives; including ethics, history, literature, human relations, cultural orientations, and policy. Prerequisite: Acceptance into Physical Therapy Program.

ID 4120 (3)

An exploration and analysis of macro health related issues of importance to the advanced health professions student. Focus on broad issues common to the role of health professionals in society. Prerequisite: ID 2100.

ID 4210 (3)

A self-directed inquiry into a selected topical area related to health, health care, or health services, consistent with the student's professional interests. Prerequisite: ID 2100 and ID 4120.



Chairperson: Dr. Dorothy Goldberg
C232 Ext. 2105

A major in the mathematical sciences is designed to fulfill several objectives: to develop mathematical reasoning through problem solving; to investigate the mathematical theory which facilitates an understanding of mathematical applications; to provide background for careers in applied mathematics and computer science or teaching of secondary school mathematics; to prepare for graduate studies in the mathematical sciences. These are achieved, with departmental advisement, through the appropriate selection of electives.

B.A. Degree

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 51-52

CORE REQUIREMENTS 18

Eng 1020 Composition 3
 GE 1100 Emergence of the Modern World 3
 GE 1200 Intellectual and Cultural Traditions 3
 GE 2020 Inquiry and Research 3
 Eng 2203 Landmarks of World Literature 3
 *GE 2400 Science and Technology in the Modern World 3

**A science course may be substituted for this core course.*

BREADTH REQUIREMENTS 33-34

Humanities 12
 Select courses from at least three of the following five areas:

- **English (2000 level literature or drama) or Communications and Theatre
- Foreign Languages
- †Fine Arts or Art History
- †Music
- Philosophy or Religion

Social and Behavioral Sciences 12
 (courses must be selected from at least three disciplines)

- Economics or Geography
- History
- Political Science
- Psychology
- Sociology or Anthropology

Biological and Physical Sciences 4
 Astronomy Meteorology
 Biology Oceanography
 Chemistry Physics
 Geology

Mathematical Sciences 3
 #Mat 1052 College Algebra & Trigonometry

Health and Physical Education 2-3
 Health Education
 Physical Education

***Only one course may be used from English and Communications and Theatre toward the humanities requirement
 †Excluding teaching methods courses*

COGNATE COURSES 9

#CpS 1031 Computer Arithmetic Algorithms 3
 Two additional courses to be selected with departmental advisement from computer science, physics, electronics, economics, or management science 6

MAJOR REQUIREMENTS 42

REQUIRED COURSES 24

Mat 2110 Discrete Structures 3
 Mat 2411 Calculus I 3
 Mat 2412 Calculus II 3
 Mat 2995 Matrix and Linear Algebra 3
 Mat 3451 Calculus III 3
 Mat 3452 Calculus IV 3
 Mat 3455 Differential Equations 3
 Mat 3544 Probability & Mathematical Statistics 3

MAJOR ELECTIVES 12

Four courses at the 3000-4000 level to be selected with departmental advisement

SUPPORTING COURSES IN COMPUTER SCIENCES 6

CpS 2341 Computer Org. and Programming Languages 3
 CpS 2342 Dynamic Programming Techniques 3

FREE ELECTIVES 20-21

TOTAL 124

#Students who have completed the equivalent of this course in high school may enter Mat 2411 directly. In that case, Mat 2411 will be counted as a General Education requirement, and the student may take another three credits in free electives.

***Students who have had prior programming experience may enter CpS 2341 directly. These students may substitute another free elective for the cognate requirement.*

**B.A. Degree
 Option: Teacher
 Certification**

FRESHMAN REQUIREMENT 1

ID 1001 Freshman Seminar 1

GENERAL EDUCATION 62

CORE REQUIREMENTS 18

Eng 1020 Composition 3
 GE 1100 Emergence of the Modern World 3
 GE 1200 Intellectual and Cultural Traditions 3
 GE 2020 Inquiry and Research 3
 Eng 2203 Landmarks of World Literature 3
 GE 2400 Science & Technology in the Modern World 3

BREADTH REQUIREMENTS 44

Humanities 9
 Comm 1400 Speech Communication 3
 (Select two courses from the areas below. Both courses may not be in the same area.)
 †Fine Arts or Art History 3
 Foreign Language 3
 †Music 3
 Philosophy or Religion 3

Social and Behavioral Sciences 9
 Psy 1000 General Psychology 3
 Soc 1000 Social Life and Society or
 Ant 1800 Cultural Anthropology 3

Select one course from:
 Economics or Geography
 History
 Political Science

Biological and Physical Sciences 4
 Phy 2095 Physics I 4

Mathematical Sciences 3
 #Mat 1052 College Algebra & Trigonometry 3

Health and Physical Education: 4
 ID 1225 Issues Values Contemporary Health 3

PEd 1101 Beginning Modern Dance or
 PEd 1103 Beginning Jazz Dance or
 PEd 1151 Folk and Square Dance 1

Additional General Education Courses: 15

#CpS 1031 Computer Arithmetic Algorithms 3
 CpS 2341 Computer Org. & Programming Language 3
 CpS 2342 Dynamic Programming Technology 3
 Mat 3342 Euclidean & Non Euclidean Geometry 3
 Psy 2110 Adolescent Psychology

MAJOR REQUIREMENTS: 39

REQUIRED COURSES: 24 s.h.

Mat 2110 Discrete Structures 3
 Mat 2411 Calculus I 3
 Mat 2412 Calculus II 3
 Mat 2995 Matrix & Linear Algebra 3
 Mat 3451 Calculus III 3
 Mat 3453 Calculus IV 3
 Mat 3544 Probability & Mathematical Statistics 3
 Mat 3455 Differential Equations 3

Major Electives 9

(Selected with Departmental Advisement at the 3000-4000 level)

Supporting Courses in Related Disciplines 6
2 additional courses to be selected from among computer science, physics, electronics, economics, or management science

PROFESSIONAL EDUCATION 30

FIELD EXPERIENCE 15	
ICA 2801 Introduction Field Experience K-12	3
ICA 3803 Junior Field Experience K-12	2
ICA 4802 Professional Internship: Secondary Education	10

EDUCATION CORE	
ED 3401 Language Arts/Reading K-12	3
ED 3000 Curriculum, Instruction, Evaluation & Learner	3
ED 4000 Teacher & Classroom	3

SPECIALTY	
ICA 3xxx Mathematics K-12	3

EDUCATION ELECTIVE	
ICA 4xxx Computers & A-V Aids, or	
ICA 4xxx Bilingual/ESL: Curriculum & Instruction, or	
ICA 4xxx Humanistic & Humane Education	3

TOTAL 132

Minor

Students desiring a minor in mathematics may fulfill the requirements of a minimum of 18 semester hours, 12 semester hours of which must be at the 2000 level or above. Only Mat 1052 and 1053 may be included on the 1000 level.

Mathematics Courses

DEVELOPMENTAL COURSES

Degree credit not granted for these courses.

Mat 0143 Introduction to Mathematics (NC)

A developmental mathematics course which introduces the student to a variety of topics such as the calculator, elementary number theory, basic algebra, geometric measurement, descriptive statistics, and the computer. Prerequisite: Permission of department chairperson.

Mat 0150 Introductory Algebra (NC)

A developmental mathematics course which includes the operations with real numbers, simple polynomial expressions, exponents and radical expressions, solution of simple first

degree equations and inequalities. Required of all students identified by the New Jersey State College Basic Skills Placement Test as being deficient in mathematics skills.

Mat 0151 Fundamentals of College Algebra (NC)

Review of elementary algebra, exponents, radicals, logarithms. Introduction to functions with strong emphasis on solution and graphing of linear equations, inequalities and quadratic functions. Required as a prerequisite to Mat 1052 if student placed low on Mathematics Placement Test.

Prerequisites: 1-2 years of High School algebra or the equivalent and permission of department chairperson.

ELEMENTARY MATHEMATICS

Mat 1010 Foundations of Mathematics (3)

Sets and set operations, logic, number base systems and elementary group theory. A general education course designed for the non-science major. *Credit will not be granted for both Mat 1010 and Mat 1011 nor for both Mat 1010 and Mat 1014.*

Prerequisite: Fulfillment of developmental mathematics requirements.

Mat 1013 Finite Mathematics with Applications (3)

Sets, counting, probability, matrices, linear programming and theory of games. Practical applications of mathematics to the behavioral, managerial and life sciences are emphasized. For non-mathematics majors.

Mat 1016 Statistics (3)

Descriptive and inferential statistics: graphic treatment of data, characteristics of distributions, statistical models, correlation, regression, estimation and hypothesis testing, nonparametric techniques. Computer facilities utilized.

Mat 1052 College Algebra and Trigonometry (3)

Systems of equations and inequalities solved by using the axioms of the Real Number system, matrices and determinants, and elementary theory of equations. Properties of the complex numbers, mathematical induction, and the binomial theorem. Algebraic, logarithmic, exponential and trigonometric functions with emphasis on trigonometric identities and trigonometric analysis. Prerequisites: Two years of secondary school algebra and one year of secondary school geometry or equivalent.

Mat 1053 Analytic Geometry (3)

Study of algebraic representations of points, lines and conic sections; transformations, polar coordinates, parametric representations, solid analytic geometry. Prerequisite: Mat 1052 or 3½ years of high school mathematics.

LOGIC AND FOUNDATIONS

Mat 2110 Discrete Structures (3)

Sets, relations, Boolean algebra, groups,

monoids, machines. Applications to computing.

Prerequisite: Mat 1052.

Mat 3120 Combinatorics (3)

Sets, counting, permutations and combinations, generating functions, recurrence relations, graphs and their coloring, circuits, trees, and searching. Applications to computing and operations research. Prerequisite: Mat 2110.

Mat 3155 Mathematical Logic (3)

Simple and compound statements. Understanding tools of logic. Statement calculus and predicate calculus, their applications. Prerequisite: Mat 2412 or permission of instructor.

ALGEBRA

Mat 2995 Matrix and Linear Algebra (3)

Basic operations with matrices, eigenvalue problems, combinatorial mathematics, systems of linear equations, linear transforms and vector spaces. Computer applications in linear programming, economics and sciences. Prerequisites: Mat 2411, CpS 1031, or the equivalent. Credit will not be given for both Mat 2995 and CpS 2995.

Mat 3225 Computational Methods in Matrix and Linear Algebra II (3)

Continuation of topics discussed in Mat 2995. Additional topics: inner product spaces, canonical forms, derivatives in higher dimension, systems of differential equations, spectral theory, and their applications in science and economics. Prerequisites: Mat 2412, Mat 2995.

Abeles

Mat 3247 Abstract Algebra I (3)

Elementary group theory: subgroups, cyclic and permutation groups, direct products, Lagrange's Theorem, normal subgroups and quotient groups, homomorphisms and isomorphisms, the Sylow Theorems. Prerequisite: Mat 2110 or permission of instructor.

Butcher, Goldberg

Mat 3248 Abstract Algebra II (3)

Rings, integral domains, fields, ideals and quotient rings, rings of polynomials, homomorphisms, extension field and vector spaces. Prerequisite: Mat 3247 or permission of instructor.

Butcher, Goldberg

GEOMETRY

Mat 3342 Euclidean and Non-Euclidean Geometry (3)

Euclidean geometry, the parallel postulate, Hilbert's axioms, Saccheri-Legendre theorem, non-Euclidean geometries. *Credit for graduation will not be granted for both Mat 2341 and Mat 3342.*

Prerequisite: Mat 2110 or permission of the instructor.

ANALYSIS

Mat 2400 Calculus for Business and Economics (3)

Single variable differential and integral calculus. Algebraic, exponential and logarithmic functions, derivatives, integrals. Applications of calculus to economics and managerial science. May not be substituted for Mat 2411, 2412 sequence.

Prerequisite: Permission of MSMSA Program Coordinator and Mathematics 1052 or the equivalent.

Mat 2411 Calculus I (3)

Functions, limits, and continuity, derivatives and differentials of algebraic functions, tangents and normals to curves, maxima and minima problems, applications. Applications oriented sections offered for those interested in physical and biological sciences or social and management sciences.

Prerequisite: Mat 1052 or equivalent or permission of instructor.

Mat 2412 Calculus II (3)

Differentiation of transcendental functions, integration of algebraic and transcendental functions, curvilinear areas, rectification of arcs, volumes, applications, introduction to differential equations. Applications oriented sections offered for those interested in physical and biological sciences or the social and management sciences.

Prerequisite: Mat 2411 or permission of the instructor.

Mat 3451 Calculus III (3)

Multidimensional calculus: vector algebra, partial differentiation, grad, div, and curl operations.

Prerequisite: Mat 2412 or permission of the instructor.

Hothersall, Krantz

Mat 3452 Calculus IV (3)

Multiple integrals, line, surface and volume integrals, infinite sequences and series, convergence tests. Taylor series, asymptotic series, numeric methods with series, indeterminate forms, differential equations. Prerequisite: Mat 3451 or permission of the instructor.

Hothersall, Krantz

Mat 3455 Differential Equations (3)

First order equations, linear equations, numerical methods, Laplace Transforms and systems of equations. Emphasis on applications of differential equations to the solution of scientific problems from such areas as physical science, biology, economics, psychology and social science. Prerequisite: Mat 2412 or permission of the instructor.

Krantz

Mat 3940 Numerical Analysis (3)

Solution of equations and systems of equations, analysis of errors in numerical methods, numerical differentiation and integration, approximation, interpolation, solutions of differential equations. Prerequisites: Mat 2412 and a college course

in computer science. Credit will not be granted for both Mat 3940 and Mat 3942.

Mat 4451 Advanced Calculus I (3)

Fundamental concepts of calculus. Functions of one variable, sequences, limits, continuity, differentiation and integration. Prerequisite or corequisite: Mat 3452 or permission of instructor.

Malbrock

Mat 4452 Advanced Calculus II (3)

Functions of several variables, partial differentiation, transformations, power series, uniform convergence, line and surface integrals, and vector analysis, including standard theorems and applications. Prerequisite: Mat 3452 or permission of the instructor.

Malbrock

Mat 4465 Complex Variables (3)

Complex numbers, analytic functions, elementary functions and transformations, complex integration, power series, residues, poles, conformal mapping, and applications. Prerequisite or corequisite: Mat 3452 or permission of the instructor.

Malbrock

PROBABILITY AND STATISTICS

Mat 2026 Statistical Decision Theory (3)

An introduction to statistical concepts and methods and their effective application to real-world problems. The construction and evaluation of decision rules as a basis for decision-making. Computer facilities utilized. Prerequisite: Two years of high school algebra or Mat 1052.

Mat 2036 Non-Parametric Statistics (3)

Models and statistical distributions. One, two, and k-sample techniques. Goodness of fit tests. Correlation and regression. Robustness.

Mat 3511 Games and Gambling (3)

Games of chance, combinatorics, probability and game theory. Standard and unusual games are played and then subjected to rational analysis in the face of uncertainty. Historical anecdotes. Role of games in artificial intelligence. Utilization of campus computing equipment.

Prerequisite: A course in statistics or computer science.

Mat 3544 Probability and Mathematical Statistics (3)

Sample spaces, random variables and their probability laws, sequences and series for random variables, limit theorems, mathematical expectations, the study of the important distributions such as binomial, Poisson, normal, estimation, hypothesis testing. Applications of chi-square, student's t and F distributions. Prerequisite: Mat 2412.

Mat 3570 Multivariate Analysis (3)

Primarily a second course in statistics with emphasis upon an interdisciplinary approach to modern techniques of multivariate analysis of data. Applications from psychology, sociology, economics, etc. Multiple regression analysis; path analysis; factor analysis, and discriminant

analysis. Individual projects considered and computer facilities utilized.

Prerequisite: One course in statistics.

Mat 4545 Applications of Mathematical Statistics (3)

Applications of mathematical statistics to decision making, economics, quality control, psychology, and the natural sciences. Linear statistical models, designing experiments in the analysis of enumerative data, regression and variance analysis, goodness of fit tests, randomized block design, nonparametric statistics, factor analysis.

Prerequisite: Mat 3544.

Mat 4999 Work-Study Cooperative Education in Mathematics/Statistics (3)

The cooperative education program allows a student to earn academic credit while gaining valuable job experience by working in industry in an area related to his or her major. All co-op jobs must be approved by a faculty committee after consultation between a faculty coordinator and a job supervisor. Students must complete approximately 120 hours on the job during a regular semester or summer session and fulfill all requirements of the job supervisor and faculty coordinator. Prerequisite: Completion of minimum of 15 semester hours in mathematics/computer science including CpS 1031, Ma 3452, Ma 2110, Ma 4545. Minimum grade point average of 3.0 in major and 2.75 overall. Approval of faculty committee.

NUMBER THEORY

Mat 3624 Number Theory (3)

Properties of the integers: divisibility, primes, theory of congruence, Diophantine equations, number theoretic functions—with a historical study of important problems. Prerequisite or corequisite: Mat 3451.

Goldberg

APPLICATIONS

Mat 3815 Cryptography and Cryptanalysis (3)

Historical comments, monoalphabetic substitution, homophonic substitution, periodic polyalphabetic, columnar transposition, polyalphabetic transposition, digraphic substitution, running, autokey and other aperiodic ciphers, paracryptology, cipher machines, sympathetic inks: includes access to material of historical interest, campus computing facilities and ink lab. *Deavours*

Mat 3891 History of Mathematics (3)

Evolution of the major concepts and processes associated with elementary mathematics from arithmetic through calculus. Attention to number, algebra, early Greek geometry, analytic geometry, "famous problems," and the work and lives of great mathematicians. Prerequisite: Mat 2412.

Goldberg

Mat 4404 Introduction to Applied Mathematics (3)

Study of power series solution to differential equations, Bessel functions, Legendre polynomials, partial differential equations, boundary value problems, Fourier series and integrals, the Sturm-Liouville problem and the Gamma and Beta functions.

Prerequisite: Mat 3455 or permission of instructor.

Krantz

Mat 4800 Elements of Graph Theory (3)

Basic concepts and characteristics of special graphs, trees, networks, fundamental numbers and interdisciplinary applications.

Prerequisite: CpS 2995 or permission of instructor.

Mat 4805 Mathematical Modelling for the Life, Physical and Social Sciences (3)

Techniques of mathematical model construction. An approach for translating real-world phenomena and problems into the language of mathematics. Models from biology, ecology, economics, psychology, physics and sociology. Utilization of computer facilities.

Prerequisite: Mat 3544 or permission of instructor.

Mat 4809 Special Topics in Mathematics (3)

Research study of areas in mathematics influenced by contemporary developments as well as interests and needs of students majoring in mathematics. The subject of a semester's work varies, and course may be taken for credit more than once.

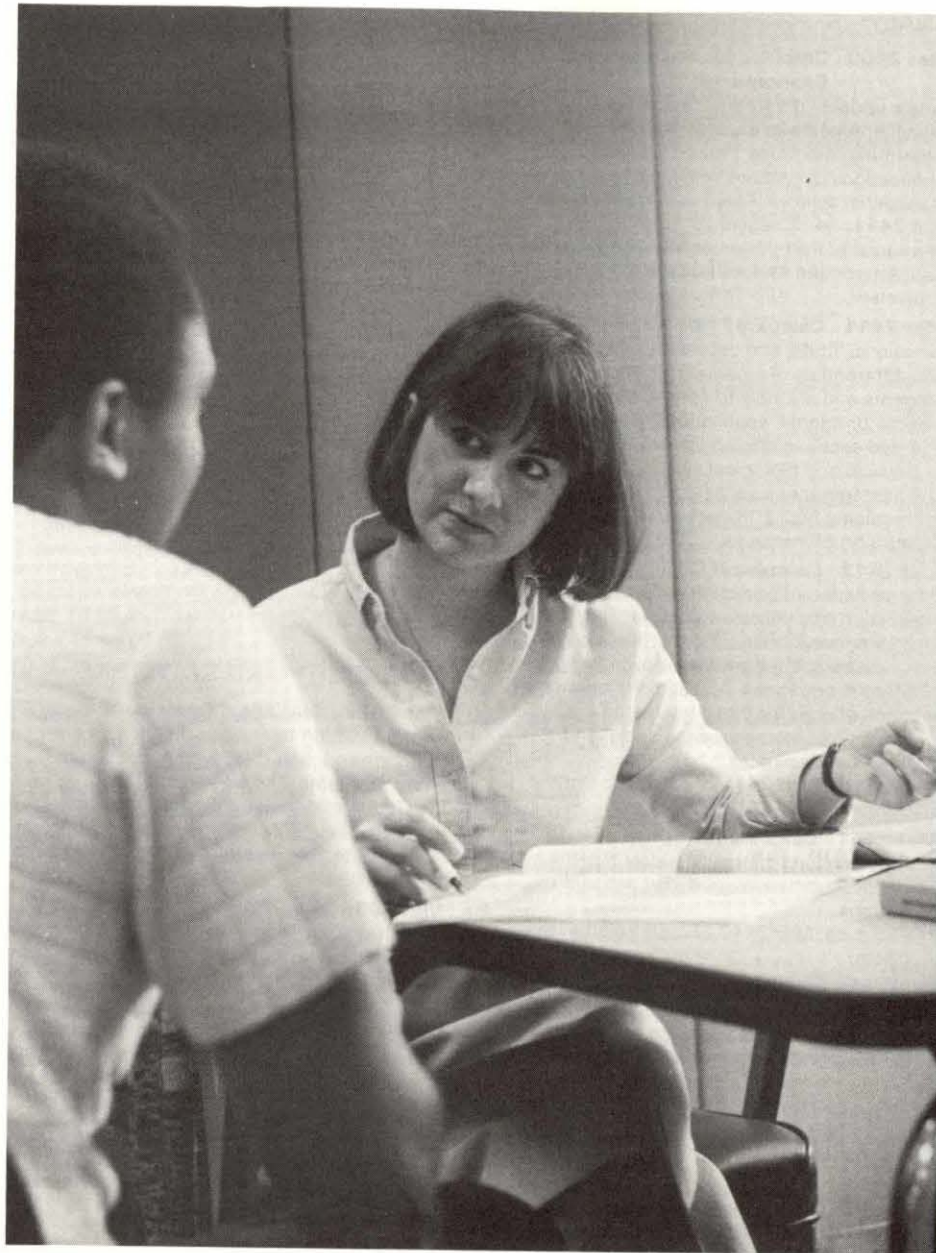
Prerequisite: Permission of the instructor.

Mat 4815 Advanced Cryptanalysis (3)

Related algebraic, probabilistic, and statistical concepts, N-gram distributions, Chi, Phi, and Kappa tests, entropy and redundancy, index of coincidence, unicity point theory, isomorphisms; applications to polyalphabetic, multiplex systems, Hagelian and Hebern type cryptographs, characteristics of computer cryptology, data encryption.

Prerequisite: Mat 3815 or equivalent or permission of instructor.

Deavours



Interdisciplinary Courses

ALLIED HEALTH PROFESSIONS

ID 1050 Orientation to Allied Health Professions (3)

Overview of the health care delivery system in the United States emphasizing the interrelationships among health care personnel and patients.

EDUCATION AND HUMAN SERVICES

ID 1200 Introduction to Motor Learning (3)

Identifies factors affecting learning and performance; theories of motivation; development and learning as they pertain to the teaching of motor skills; motor skill development in relation to open and closed skills at the learner's stage of acquisition.

ID 1220 Introduction to the Human Services for Social Workers in Early Childhood Settings—Level I (3)

A course for social service workers in early childhood settings.

ID 1225 Critical Issues and Values of Contemporary Health (3)

Contemporary health issues and health-related problems and exploration of selected resources/strategies designed to advance individual, familial, and community health.

ID 2200 Teacher, School and Society (3)

Introduction to the practice of teaching, the profession of teacher, and the functioning and the functions of schools.

ID 2220 Introduction to the Human Services for Social Workers in Early Childhood Settings—Level II (3)

A skill-development course for social service personnel working with families and children in early childhood settings.

Prerequisite: ID 1220.

ID 2252 Introduction to Psychology of the Handicapped

An examination of attitudes towards people with disabilities. An understanding of the characteristics of "handicap" and the concept of individual differences. Role playing, simulations, case studies and field experiences. Techniques for relating to persons who happen to be disabled.

ID 3200 The Family as Educator (3)

Exploration of the ways members of families educate each other and the outcomes of these efforts. Emphasis on the development of skills for observing, recording, and analyzing family educational interactions.

Prerequisite: SOC 1000, 2100

ID 3201 Educational Psychology (3)

Aspects of psychology which apply to teaching tests and measurements, thinking, and motivation. Analysis of the learning process, its theoretical foundation and its application.

Prerequisite: PSY 1000 or PSY 2100, 2110, 3110, 3120, 3130.

ID 3202 Understanding Parenthood

To help potential parents, parents of young children and those working with parents extend their parenting understandings and skills.

Prerequisite: Psy 2100.

ID 3204 Foundations of Reading: Theory and Process (3)

Theory and process applicable to learning to read and reading to learn. Major focus is on developing relevant skills, understandings and competencies in the developmental nature of the reading process. Emphasis is placed on readiness for learning to read, decoding and comprehension.

ID 3251 Foundations of Bilingual Education (3)

Examination of the history, legislation and concepts of bilingual education throughout the nation and neighboring countries.

ID 3801 Educational Psychology (3)

An analysis of learning theory and its application. Considers cognition, motivation, tests and measurements.

Prerequisite: A course in general psychology.

ID 4051 Art for the Exceptional Child (3)

Application of theories of art, special education and related disciplines within educational settings for the exceptional child.

Prerequisite: Undergraduate degree in one of the following: art, special education, psychology or equivalent as determined by instructor.

ID 4200 Developing Competencies in Interdisciplinary Teamwork in the Human Services (3)

Training in the development of competencies to assure effective functioning as a member of an interdisciplinary team in the human services. The interdependent contributions of several relevant disciplines to enhance client service and professional growth.

Prerequisites: Permission of relevant department chairperson. Concurrent registration in a practicum, student teaching or field work placement.

ID 4201 Group Dynamics (3)

Principles of group function including types of groups, group structure, communication, leadership, membership, methods of studying groups, and techniques of working in groups and with groups. Designed for students who wish to study group processes as related to work in education, recreation, and other fields. Attendance is required.

Prerequisite: A course in psychology.

ID 4203 Foundation in Content Reading: Theory and Process (3)

Theory and process applicable to reading among adolescents. Major focus is on developing relevant skills, understanding and competencies in the developmental nature of the reading process.

ID 4205 Evaluation in Physical Education (3)

Approaches to testing and evaluation, basic statistical concepts, the construction of skills and knowledge tests, and evaluation in the affective domain.

ID 4220 Adult Protective Services (3)

An investigation into selected issues dealing with the vulnerable adult and the frail and older adult. Examines the emergence of this heterogeneous population as an individual, family and community problem and provides the beginning skills for understanding the individual's needs and rights based on the framework of adult protective services as a philosophy and as a social service.

Prerequisite: SW 2900 or HEd 3325 or permission of instructor.

ID 4240 Understanding Family and Community Involvement in Education (3)

For pre-service teachers and teachers in nurseries, pre-school and infant care centers, kindergarten, and primary grades to develop the knowledge, attitudes, and techniques necessary for building productive relationships with parents and community.

ID 4250 School & Society: Cultural, Minority & Urban Perspectives (3)

Provides a theoretical and historical base for understanding educational needs found in multicultural school environments. Focuses on urban schools where policy issues related to school district size and economic stress factors pose special challenges. Activities include readings, films, field experience, simulations, lectures and discussions.

Prerequisites: Sophomore Field Experience.

ID 4251 Bilingual Child: Language and Culture (3)

Examination of the experiential background, the cultural heritage and the resultant attitude of the bilingual-bicultural child. Study of sociolinguistics, including the development of a vocabulary of idiomatic expressions in Spanish designed to facilitate the prospective bilingual teacher's communication with Spanish-speaking children, parents, and communities.

ID 4252 Bilingual Child: Problems of Adjustment to American Society (3)

Examination and analysis of the multiple and varied types of adjustments the bilingual-bicultural child makes in the process of adapting to American schools and society.

ID 4253 Orientation in Psychological Testing (3)

Overview of clinical tests and other assessment techniques used in special education. Introduction to construction and validation of instruments. Practice in the administration of supervised tests to provide familiarity with the behavior of handicapped individuals in test situations.

Prerequisites: Spe 2051.

ID 4279 Teaching Seminar and Practicum (6)

Twenty to thirty days of supervised teaching and seminar on school policies, organization and curriculum and on student population.

ENVIRONMENTAL STUDIES

ID 3101-3102 Seminar in Environmental Studies I & II (1,1)

Correlation of the concepts and approaches of the concerned disciplines, the natural sciences, political science, economics, sociology and others, to environmental problems. 3101 is prerequisite to 3102.

ID 4101-4102 Seminar in Environmental Studies III & IV (1,1)

A problem oriented seminar in environmental studies in which solutions to a current environmental problem will be proposed after research and analysis. 4101 is prerequisite to 4102.

Prerequisite: ID 3102.

HUMANITIES

ID 2051 Arts and Crafts in Therapeutic Recreation (3)

An introduction to the development of arts and crafts programs for therapeutic recreation settings. Includes concepts relating to the design and delivery of recreation program activities which enhance the creative abilities of disabled persons and promote their growth and development.

ID 3010 Philosophy in Literature (3)

A collaborative interdisciplinary course in the English and Philosophy Departments whose aim is to analyze works of literature in terms of philosophical issues: identity, human nature, creativity, meaning, the limits of life, freedom and God.

Prerequisite: Junior standing or permission of instructor.

ID 3100 Greek and Roman Mythology (3)

A study of the myths of the Greeks and Romans with emphasis on historical origins, functions and means of expression and transmission.

Prerequisite: Junior standing or permission of instructor.

ID 3312 Technology and Human Destiny (3)

An analysis of the consequences and problems involved in the development of modern technology; the impact of technology on modern culture.

Prerequisite: Junior standing or permission of instructor.

ID 3315 Ethics and Public Policy (3)

Examination of basic moral and philosophical theories which function as guidelines in the development and evaluation of public policies. Special attention is given to formulating policies in the areas of welfare, family planning, health distribution and national defense.

Prerequisite: One course in philosophy and one course in public administration or political science or permission of instructor.

Prerequisite: Junior standing or permission of instructor.

D'Souza

ID 3600 The Romance of Words (3)

Designed to excite students' interest in the understanding of and enthusiasm of words, their origin, development and use. Course conducted in English. Not for credit in a foreign language major. Not acceptable for language requirement in the English Department or as a departmental elective of English majors. Prerequisite: Junior standing or permission of instructor.

ID 3660 Continental and American Realism (1850-1900) (3)

An examination of the aesthetic theories and practices of Flaubert, Zola, Turgenev, Verga, Howells and James.

Prerequisite: Junior standing or permission of instructor.

J. Bauer

ID 3700 Survival of Classical Mythology in Art (3)

Survey of Greco-Roman myths and their transformations in art from antiquity through the Renaissance.

Prerequisite: ID 3100 or permission of instructor.

Lord

ID 3810 Economics of Collective Bargaining (Private Sector) (3)

The economic nature of the collective bargaining system in the United States and the parties who have a vital interest in the operation of the system. Deals with formal organizations designed to represent the interest of employers, workers and the general public and presents historical background on the unions and collective bargaining.

Prerequisite: Eco 3800 or permission of instructor.

ID 3900 Interdisciplinary Seminar on Futurism (3)

Emphasis placed upon integrating a wide variety of approaches and a number of disciplines focused on problems and prospects of the future. Each student pursues an appropriate project, the results of which may be expressed through a paper, film, recording or the use of other suitable media, for presentation to the seminar. Areas of special concern: computer technology and its application to learning and planning; current brain research; social change; biological breakthrough; ecological planning.

Prerequisite: Junior standing or permission of instructor.

Didsbury

ID 4001 Myth and Symbolism in Pre-Hispanic Mexico (3)

Examination of the myths, spiritual concepts and symbolism of the peoples that developed the great civilizations of Pre-Columbian Mexico.

Prerequisite: Junior status or permission of instructor.

ID 4002 Egyptian Mythology (3)

An examination of the Egyptian mythological concepts and systems.

Prerequisite: Junior standing or permission of instructor.

Socarras

ID 4100 China During the Age of Confucius (3)

Ancient China from late neolithic early imperial times with special emphasis on the Eastern Chou period (770-221 B.C.) An interdisciplinary approach to the history, geography, art, written tradition and archaeology of China in this early period of its development.

Prerequisite: Junior status or permission of instructor.

ID 4200 The Victorian Age, 1837-1901 (3)

An interdisciplinary approach to the history, art, constitutional developments, philosophical thought and scientific advances of the Victorian period.

Prerequisite: Junior status or permission of instructor.

ID 4850 Interrelating the Arts (3)

Interrelationships of form and content in the expressive arts, studied through personal involvement in the visual arts, dance, music and drama.

Prerequisite: Two courses in the areas of art, music, dance or drama.

ID 4900 Adventures in Ideas (3)

An interdisciplinary approach to understanding significant and novel ideas, problems and insights of contemporary planetary civilization. The "adventures interrelate and/or extend beyond the generally established academic and scientific areas of specialization.

Encouraged and guided by outstanding thinkers and creators, participants engage in adventures in mind, heart, eye and ear; adventures in space and time; adventures in the past, present and the future."

Prerequisite: Senior standing or permission of instructor.

MARKETING/COMMUNICATIONS

ID 4500 Seminar in American Business Issues (3)

Exposition and critical analysis of controversial issues currently facing the American business system. Opposing viewpoints on topics such as inflation, profits, business ethics, government regulation, and energy policy examined. Advocacy lectures by guest speakers. Prerequisites: 3.0 G.P.A., at least junior standing; 12 credits from among economics, management science, political science and/or public administration and permission of instructor.

An interdisciplinary collateral program may be taken to complement or augment a major program of the College. Each draws on the faculties of various departments within the four schools of the college.

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SCHOOL OF EDUCATION

Collateral Program: Adult Fitness in Business and Industry

The number of fitness programs in business and industry has increased over the past few years and has opened new areas for employment of physical education majors. The following program is for students interested in working in such programs.

TOTAL 27

MgS 2030	Business Organization and Management	3
Psy 3120	Adult Psychology	
PEd 3500	Care and Prevention of Athletic Injuries	3
PEd 3510	Physiology of Exercise	
HEd 3600	Nutrition	3
HEd 4231	First Aid Instructor Course	3
PEd 4625	Organization and Administration of Adult Fitness Programs	3
PEd 4626	Prescriptive Exercise Programming	3
PEd 4627	Internship in Adult Fitness	3

Collateral Program: Athletic Coaching

Coaches in public schools must be certified teachers. Coaching competency is developed through completion of all of the following courses. Contact the department for further advisement.

TOTAL 28

REQUIRED COURSES

Bio 2402	Human Anatomy and Physiology	4
ID 1200	Introduction to Motor Learning	3
PEd 2300	Scientific Principles of Coaching	3
PEd 2500	Introduction to Biomechanics	3
PEd 3500	Care and Prevention of Athletic Injuries	3

PEd 3505	Kinesiology	3
PEd 3510	Physiology of Exercise	3
PEd 4620	Administration of High School Athletics	3

ELECTIVES 3-6

Select from the following group:

PEd 3305	Coaching and Officiating of Swimming	
PEd 3310	Coaching and Officiating of Baseball	
PEd 3315	Coaching and Officiating of Basketball	
PEd 3320	Coaching and Officiating of Field Hockey	
PEd 3325	Coaching and Officiating of Football	
PEd 3330	Coaching and Administration of Tennis Competition	
PEd 3340	Coaching and Officiating of Volleyball	
PEd 3350	Coaching and Officiating of Soccer	

Collateral Program: Athletic Training

Students can prepare for the National Athletic Trainers' Certification examination by taking all of the following courses. See the department for advisement.

REQUIRED COURSES 45

Bio 2402	Principles of Human Anatomy	4
Bio 3405	Gross Anatomy	4
PEd 2500	Introduction to Biomechanics	3
PEd 3500	Care and Prevention of Athletic Injuries	3
PEd 3501	Advanced Athletic Training	3
PEd 3502	Clinical Experiences in Athletic Training I	3
PEd 3503	Clinical Experiences in Athletic Training II	3
PEd 3504	Therapeutic Modalities in Athletic Training	3
PEd 3505	Kinesiology	3
PEd 3510	Physiology of Exercise	3
PEd 4600	Adapted Physical Education	3
HEd 3600	Nutrition	3
Psy 1000	General Psychology	3
Psy 2100	Child Psychology	3
Psy 2110	Psychology of Adolescence	
Psy 3630	Social Psychology	
Psy 4360	Physiological Psychology	
<i>Select one of the following:</i>		
ID 1225	Contemporary Issues in Health	2 or 3
HEd 3537	School and Community Health Programs	3
HEd 4650	Community Health Counseling	2
		3

COLLATERAL PROGRAMS

Collateral Program: Developmental Disabilities

Coordinator: A. Shapiro

This interdisciplinary collateral program has been designed to prepare students with the knowledge and skills necessary to work in the growing network of programs for the developmentally disabled. Students are prepared to function in a variety of direct service roles or as a beginning manager.

The program is appropriate for majors in special education, speech, hearing, early childhood education, social work, psychology and other allied majors. Also eligible for those seeking continuing professional education.

REQUIRED COURSES 21-22

ID 2252	Introduction to Psychology of the Handicapped	3
SpE 2157	Introduction to the Severly/Multiply Handicapped	3
Bio 2402	Human Physiology and Anatomy*	4
ED 3610	Child Advocacy: Implications for Helping Practitioners	3
Psy 3110	Life Span Psychology	3
ID 4200	Developing Competencies in Interdisciplinary Teamwork	3
SpE ----	Field Study in Developmental Disabilities**	

**Certain majors have similar coursework within their programs and may substitute an equivalent course with advisement.*

***Course in development.*

**Social work students are required to take supervised field-work courses and with advisement of both departments may substitute an equivalent course for this requirement.*

Collateral Program: Family Studies

Coordinator: M. Kelly

The Family Studies program is open to students majoring in Early Childhood Education, Special Education, Psychology, Sociology or Social Work. Students in other majors are admitted by permission of the Department of Early Childhood and Family Studies. The program is designed to develop the understanding and skills which will enable individuals to fulfill their roles as family life educators in school, community and agency settings.

TOTAL 24

REQUIRED COURSES 15

EC 3610	Child Advocacy: Implications for Helping Practitioners	3
ID 3200	The Family as Educator	3
EC 4325	Practicum: Educational Implications for Serving Families	6
Soc 2100	Sociology of the Family	3

Electives selected with departmental advisement 9

Collateral Program: Bilingual Education

Coordinator: V. Ortiz

This program is offered to students interested in teaching children whose native language is other than English. It is usually taken in conjunction with a teacher education major and provides eligibility for a bilingual-multicultural endorsement on the teaching certificate. The senior student teaching experience is in a bilingual-cultural setting which must be specified when the student teaching assignment is requested.

Students must plan their program to insure dual language proficiency. Before being certified, the candidate will have to pass the Language Proficiency Test in both languages of instruction. This test is administered by the Center for Bilingual Education. A series of language courses is prescribed, if necessary, including the following: For native speakers of English Sp 2101-2102; Intermediate Spanish I and II; and Sp 1300 Advanced Spanish Composition or Sp 3105 Advanced Spanish Conversation.

For native speakers of Spanish, English 1000-1001 English as a Second Language I and II and Eng 1002-1003 Writing in English I and II and/or Eng 1004 Conversational English, Eng 1005 English Pronunciation, Eng 1006 Intensive Writing.

TOTAL 24

REQUIRED COURSES 18

ID 3251	Foundations of Bilingual Education	3
ID 4251	Bilingual Child: Language and Culture	3
ID 4252	Bilingual Child: Problems of Adjustment to American Society	3
ICA 3410	Teaching Techniques for Bilingual-Bicultural Schools	3
ICA 3420	Theory and Practice of Teaching English as a Second Language I	3
ICA 4410	Language and Reading Skills in Bilingual-Bicultural Schools	3

ELECTIVES 6

Two of the following selected with advisement:

CS 3410	Sociolinguistics and Reading	3
EdP 3802	Educational Psychology of the Disadvantaged Urban Child	3
Eng 3101	Introduction to Linguistics	3
Eng 3105	Language, Meaning and Human Behavior	3
ID 4250	School & Society: Cultural Minority & Urban Perspectives	3
His 4383	History of the Caribbean World	3
Soc 2300	Racial and Cultural Minorities	3
Soc 2310	Sociology of Poverty	3
Sp 3240	Development of Puerto Rican Culture	3
Sp 4420	Twentieth Century Spanish-American Poetry	3
Sp 4425	Essay in Spanish-American Literature	3

Collateral Program: Gerontology

Coordinator: Dr. Patricia Goodman

This interdisciplinary program in Gerontology can be taken as a concentration in addition to an academic major or as a program of additional professional training for qualified students. A certificate is awarded upon successful completion of the program which is administered through the Department of Early Childhood and Family Studies. Those who wish to enroll in a program of continuing professional education may be admitted at the beginning of each semester. The program enables the practitioner to enhance skills and knowledge for career ladder placement and prepares students for beginning level positions in the senior citizen service delivery system. A Certificate in Gerontology is awarded at the completion of the following 24 hr. program.

TOTAL 24

REQUIRED COURSES 15

Gero3700	Basic Concepts and Issues in Gerontology	3
Psy 3130	Psychology of Aging	3
Soc 4350	Sociology of Aging	3
Bio 3450	Biological Aspects of Aging	3
Gero4750	Practicum in Gerontology	3

ELECTIVES 9

Three courses selected with advisement from the following:

EdP 4801	Group Dynamics	3
HEd 3725	Death in Perspective	3
Gero4700	Seminar in Issues of Gerontology	3
Gero4775	Close Encounters of the Institutional Kind: Gerontology Field Experience	3

HEd 4725	Human Sexuality in the Later Years	3
ID 4900	Adult Protective Services	3
Psy 3110	Life Span Developmental Psychology	3
Rec 3720	Recreation and the Aged	3
Rec 4300	Recreation for Special Populations	3
Gero3760	Aging and the Family	3
Gero3780	Seminar in Issues in Retirement	3
ID 4901	Adult Protective Services	3
FA 4921	Art Media and Gerontology Special Topics in Gerontology (planned)	3

Collateral Program: Training and Development

Coordinator: M. Hart

The program in Training and Development is for individuals who would like to be or already are involved in the orientation of new employees, upgrading of skills, updating of information, retraining, or supervisory development in the industrial-business sector. Students learn to design appropriate training and development programs, to communicate effectively and to utilize multi-media methods of instruction for adults.

TOTAL 21

REQUIRED COURSES 12

EdP 3803	Educational Psychology of the Adult Learner	3
EdP 4901	Programs and Strategies in Training and Development	3
Comm 1400	Speech Communication or	
Comm 2405	Public Speaking	3
LM 4700	Audio-Visual Media of Instruction	3

ELECTIVES 9

To complete requirements—students select three courses from below according to personal interest:

MgS 3030	Personnel Management	3
PA 3020	Public Personnel Administration	3
Psy 3400	Organizational Behavior	3
Psy 3340	Psychology of Women	3
LM 4701	Planning and Producing Audio-Visual Materials	3
ID 4201	Group Dynamics	3
Psy 4420	Industrial/Organizational Psychology	3
Eng 3090	Business, Professional and Technical Writing	3
Soc 3200	Work and Careers: A Sociological Approach	3
Comm 3520	Organizational Communication	3

SCHOOL OF LIBERAL ARTS

Collateral Program: Africana Studies (Formerly Afro-American Studies)

Coordinator: Barbara Wheeler-Hall

This program, which is currently being revised by a campus-wide advisory committee, is open to all students interested in an interdisciplinary approach to the experiences of African peoples throughout the world. New courses are being developed which will focus an Afrocentric perspective upon the economies, history, culture, education, politics, philosophies, aspirations and achievements of peoples of African descent in Africa, the Americas, the Caribbean and elsewhere.

In the meantime the program can be taken in conjunction with a major academic curriculum, and interested students should contact The Office Of Africana Studies (J-302; X 2375) for advisement.

TOTAL 18

Select six credits from each group Humanities 6

AH 3781	Afro-American Art	
AH 3780	History of African Art	
Eng 3200	Afro-American Literature	
Eng 3700	Afro-American Women Writers	
Mus 2230	African Music Tradition	

Behavioral and Social Sciences 6

Ant 2801	Afro-American Culture I	
Ant 2902	Afro-American Culture II	
Eco 2900	Economics of Poverty	
His 2500	Survey of African Pre-History and History	

His 2510	Political History of Africa in the 20th Century	
His 3305	History of the Black American to 1900	
His 3306	20th Century Black History	

PS 2400	Introduction to International Politics	
PS 3160	Ethnic Politics	
PS 3360	Southern African Politics	
Soc 2230	American Ethnic and Racial Groups	

Soc 3150	Urban Sociology	
Soc 3350	Social Inequality	
EC 2900	Multicultural Education in Early Childhood Settings	
EC 4210	Multicultural Education in Early Childhood Years	

Electives 6

Ant 1800	Cultural Anthropology	
ICA 4021	Education in a Pluralistic Society	
ICA 4023	Comparative Education	

ICA 4024	Education in the Non-Western World	
ID 4250	School and Society: Cultural, Minority and Urban Perspectives	
His 4368	The Civil War and Reconstruction	
His 4384	The Emergence of Brazil	
Mus 2220	Music in World Culture	
Mus 2879	Jazz Ensemble	
PS 2130	American Political Issues: South Africa	
PS 2300	Introduction to Comparative Politics	
PS 3310	Comparative Non-Western Government	
PA 3210	Urbanization in Developing Countries	
Ped 1103	Beginning Jazz Dance	
Ped 2101	Intermediate Jazz Dance	
Phi 3313	Justice and Human Rights	
Rel 1700	Introduction to Comparative Religion	
Soc 1000	Social Life and Society: Introduction to Sociology	
Soc 4401	Social Change	
Eng 5150	Origins, Structures and Uses of Black English (Instructor's permission required for undergrads)	

Collateral Program: Classical Studies

Coordinator: M. Lewis

This program is designed to provide the student with a coherent view of the Classical World and its influence in the development of Western Civilization and to provide a strong background for students wishing to continue their education at the graduate levels.

TOTAL 21

REQUIRED COURSES 9

Eng 3300	Ancient Greek and Roman Literature in Translation or Eng 3603 Honors Course in Greek and Roman Literature	3
His 3110	Greek Civilization	3
His 3120	Roman Civilization	3

ELECTIVES 12

four courses selected with advisement from the following:

AH 3700	Greek and Roman Art	
His 1050	Origins of Political and Social Values	
His 2120	World Archaeology	
His 3120	The Ancient City	
His 4110	The Roman Revolution	
His 4120	Archaeology	
His 4150	Athens in the Age of Pericles	
ID 3100	Greek and Roman Mythology	
Phi 2200	Ancient Philosophy	
PS 3200	Classical Political Theory	

Collateral Program: Urban Studies

Coordinator: H. Furer

This program is conceived on broad interdisciplinary lines in order to provide comprehensive preparation for those interested in the study of American urban life. It may be taken in conjunction with any major academic curriculum and includes a one semester field experience internship in a city agency. Most of the courses offered in the program have prerequisites. It is advisable, therefore, that prerequisite courses be taken with fulfilling general education requirements.

TOTAL 24

REQUIRED COURSES 9

His 4361	History of the American City	3
His 4991	Field Work and Seminar in Urban Studies	6

ELECTIVES 15

to be selected with advisement for appropriateness to the student's major

Collateral Program: Judaic Studies

Coordinator: J. Preil

TOTAL 24

REQUIRED COURSES 9

three courses selected from the following:

Heb 1101-1102	Elementary Hebrew I & II or Heb 2101-2102 Intermediate Hebrew I & II	6
FL 3300	Masterpieces of Hebrew Literature or FL 3305 Masterpieces of Hebrew Literature II	3
FL 3310	Hebrew Culture I or FL 3315 Hebrew Culture II	3
His 3860	Jewish History I or His 3861 Jewish History II	3
His 3862	Modern Israel	3
PS 3418	The Arab-Israeli Conflict	3
Soc 3370	Sociology of the American Jewish Community	3
FL 3325	Holocaust Literature or ICA 40410 Teaching the Holocaust	3

ELECTIVES 12

selected from upper division (3000 and 4000 level) courses with advisement

REQUIRED COURSE 3

ID --- Seminar in Judaic Studies* 3

*Course in development

Collateral Program: Women's Studies

Coordinator: S. Strauss

The program is designed to examine the basic assumptions and preconceptions society has made with respect to women and to explore alternatives to traditional roles and values.

TOTAL 24

REQUIRED COURSES 12

HEd 3160 Health Perspectives for Women 3
His 4840 Women in History 3
His 4841 Women in the Modern Age 3
Psy 3340 Psychology of Women 3

ELECTIVES 12

four courses selected with advisement for appropriateness to the major academic curriculum

Collateral: Program for the Study of the Future

Coordinator: H. Didsbury Jr.

In broad outline, a program for the study of the future is based upon at least two major principles: an examination of the historical matrix which produced modern industrial civilization; recognition of the need to develop a sensitivity for anticipating consequences resulting from the expansion and sophistication of what has been variously termed "industrial civilization" or "the technological society."

The spirit which animates such a program is the conviction that an effort must be made to go beyond a command of mere knowledge and the ability to manipulate concepts and strive for the development of intuition and creative insight which ultimately finds fruition in concrete action. The emphasis throughout is upon flexibility and novelty. The transdisciplinary character and professional expertise of the program is strengthened by the resources of an advisory council comprised of distinguished leaders in the academic, scientific, professional and business fields.

The program for the Study of the Future is designed to make it possible for students to acquaint themselves with the latest and most authoritative thought on the prospects before humanity on the threshold of the 21st century. All students electing the collateral should be interviewed before formal admission into the program.

TOTAL 21

REQUIRED COURSES 9

His 4882 The Modern Scientific and Technological Impact on Culture 3
His 4870 Planning for Tomorrow Today: Alternative Futures 3
ID 3900 Interdisciplinary Seminar on Futurism 3

ELECTIVES 12

four courses from the following:

CpS 1931 Computer Arithmetic Algorithms
Eco 2100 Economic Development
EPS 4020 Philosophical Perspectives of Education in a Pluralistic Society
Geo 2020 Conservation of Natural Resources
HEd 3325 Basic Concepts and Issues of Gerontology
MgS3130 Forecasting Techniques in Business and Economics
MgS4100 Operations Research
Phi 3308 Values in Conflict
PS 4600 Honors Seminar in Criminal Justice
Psy 3630 Social Psychology
Psy 4420 Industrial Psychology
PA 3000 Public Management
PA 3370 Administrative Issues in Energy
Soc 4401 Social Change
Eng 3090 Business, Professional and Technical Writing

Collateral Program: Pre-Law

Coordinator: M. Israel

The following program is particularly recommended for students majoring in English, history, philosophy, psychology, political science or sociology who are interested in acquiring the background appropriate for entrance into law school. The collateral is also open to students in other majors.

Certain courses should be taken with the General Education requirements of the major, as follows:

Humanities Cluster:
Comm 1400 Speech
Eng 2000 Writing About Literature
Phi 1100 Philosophy

Sciences and Mathematics Cluster:

Mat 1052 College Algebra and Trigonometry

Social/Behavioral Sciences and History Cluster:

Eco 1020 Principles of Economics I
His 1050 Origins of Political and Social Values: Judeo-Christian-Classical Fusion
Psy 1000 General Psychology
Soc 1000 Social Life and Society

TOTAL 27

REQUIRED COURSES 12

CS 3450 Analytic and Critical Reading 3
One course in Statistics 3
Phi 3307 Philosophy of Law 3
Acc 2200 Principles of Accounting I 3

ELECTIVES 15

select one course from each of the following 5 categories or substitute in each as recommended by the departments:

ENGLISH-COMMUNICATIONS AND THEATRE
Comm 2405, Comm 2425
HISTORY
His 1061, 2303, 2304, 4321
PHILOSOPHY
Phi 2300, 2500, 3300, 3307, 3309, 3313
POLITICAL SCIENCE
PS 2100, 2600, 3130, 3150, 3151, 3250, 3680, 3685
PSYCHOLOGY
Psy 4390, 3630
SOCIOLOGY
Soc 3050, 4051, 3350, 4401

SCHOOL OF NATURAL SCIENCES, NURSING, AND MATHEMATICS

Collateral Program: Environmental Studies

Coordinator: J. Mahoney

This program provides interdisciplinary background for students who would enter any field of industry, education or government in which environmental concerns arise. Of the total credits, 22 may be taken within the general education requirements. Other courses may be used to meet major requirements or electives.

TOTAL 50-56

REQUIRED COURSES 40-46

Bio 1000 Principles of Biology 4
Bio 3601 Environment, Ecology and Man or Bio 3614 Principles of Ecology 3/4
Eco 1020-1021 Principles of Economics I & II 6
Met 1300 Introduction to Meteorology 4
ID 3101-3102 Seminar in Environmental Studies I & II 2
ID 4101-4102 Seminar in Environmental Studies III & IV 2
Phi 3303 Energy, Environment and Alternative Technology 3
PS 1010-1020 Introduction to Politics I & II 6
Soc 1000 Social Life and Society 3
One of the following: (3/4 sh)
Geo 1010 The Earth, The Environment of Man 3
Geo 2010 Geography of Man 3
Geol 1200 Introduction to Geology 4
One of the following: (4/8 sh)
Che 1000 Principles of Chemistry 4
Che 1083-1084 Chemistry I & II 8
Phy 1000 Principles of Contemporary Physics 4
Phy 2091-2092 General Physics I & II 8
Electives 10
to be selected from courses outside the student's major, with advisement

Collateral Program: Geoscience Technology

The program in Geoscience Technology prepares students in the sophisticated techniques required for support positions in geoscience research. It can only be taken in conjunction with the major in earth science. It is recommended that the student use free electives to pursue areas in industrial technology in which he or she is interested or shows exceptional ability.

TOTAL 41

REQUIRED COURSES 41

Geol 3261 Mineralogy 4
Geol 3263 Structural Geology 4
Geol 3264 Invertebrate Paleontology 4
Geol 4263 Optical Mineralogy 4
Geol 4917 Geoscience Technology 4
IS 1200 Elements of Drafting 3
IS 2201 Technical Drafting 3
IS 1300 Elements of Woodworking 3
IS 1400 Elements of Metalworking 3
IS 1500 Elements of Electronics 3
IS 2500 General Electricity and Electronics 3
IS 3603 Black and White Photographic Reproduction 3

Collateral Program: Marine Sciences

A student must be enrolled as a major in biology, chemistry or earth science in order to take the collateral program in Marine Sciences.

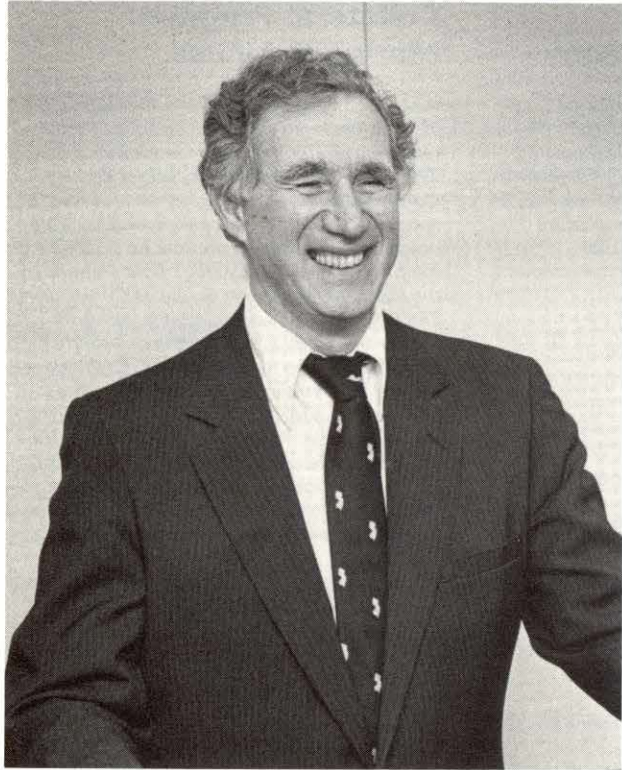
The New Jersey Marine Sciences Consortium Kean College of New Jersey, in cooperation with other colleges in the State, presents a program in the marine sciences at the Seaville and Sandy Hook field stations of the New Jersey Marine Sciences Consortium. The Consortium was founded in 1969 to further the study of the marine environment in New Jersey. The Consortium has maintained several field stations, the latest and largest is at Seaville on the site of the former Palermo Air Force base. The field station enables the Consortium to offer courses, sponsor student and faculty research and provide a site for meetings, symposia, workshops and field work. Residence, dining and recreation facilities are available. Students may avail themselves of the summer course by registering through the member colleges following the regular summer school registration procedure. Courses vary each year; therefore, students are asked to consult the Consortium summer bulletin. Descriptions of courses are found in this catalog in the offerings of the Biology and Geology and Meteorology departments. For more information, contact A. Lee Meyerson, Geology and Meteorology Department or F.H. Osborne, Biology Department.

TOTAL 28

REQUIRED COURSES 20

Ocean 3453 Introduction to Oceanography 4
Bio 3000 Marine Biology 4
Ocean 4470 Physical Oceanography 4
Ocean 4455 Chemical Oceanography 4
Ocean 4454 Marine Geology 4
Electives 9
minimum of two advanced courses selected from the appropriate interest group:
MARINE BIOLOGY
Bio *4470, 3414, 3425, *4415, 4455, *3565, 3815
MARINE GEOLOGY
Geol 3263, 3264, 4263, 4265, 4266, ES 4953-4954, ES 4963-4964
OCEANOGRAPHY
Che 2283, 3284, 3381-3382; Met 3370; Psy 4491, 4592

*Taught at the Consortium Field Station only.



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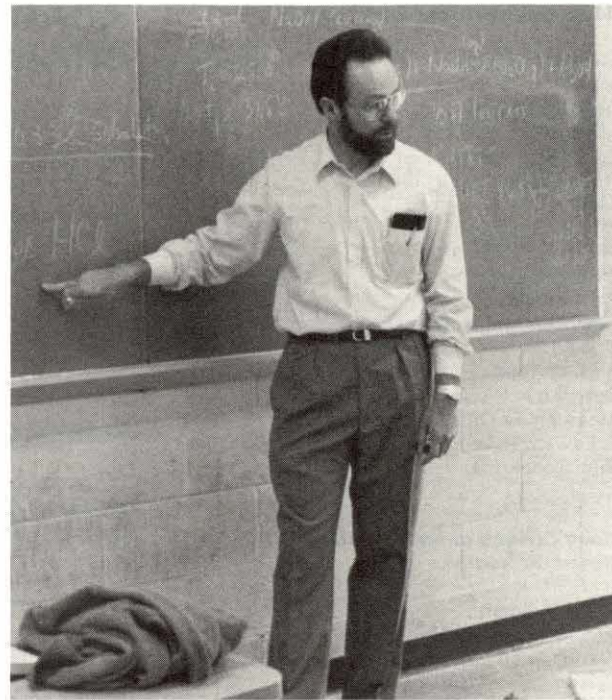
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1988-89 Academic Year

1988 FALL SEMESTER

First Day of Fall Term	Tuesday, September 6
Thanksgiving Recess Begins	Thursday, November 24
Classes Resume	Monday, November 28
Last Day of Fall Term	Friday, December 23

1989 SPRING SEMESTER

First Day of Spring Term	Tuesday, January 17
Spring Recess Begins	Monday, March 20
Classes Resume	Monday, March 27
Last Day of Spring Term	Friday, May 19

1989 COMMENCEMENT

Commencement	Thursday, May 25
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1989 PRE-SESSION (M-R)

Pre-Session Classes Begin	Tuesday, May 30
Pre-Session Classes End	Thursday, June 22

1989 SUMMER SESSION

Summer Session Classes Begin	Monday, June 26
Independence Day Holiday	Tuesday, July 4
Classes Resume	Wednesday, July 5
Summer Session Classes End	Thursday, August 3

Faculty Meetings: September 1 & 2
Freshman Orientation: September 1
Winter Travel: December 26-January 15

*Subject to change

1989-90 Academic Year

1989 FALL SEMESTER

First Day of Fall Term	Thursday, September 7
Thanksgiving Recess Begins	Thursday, November 23
Classes Resume	Monday, November 27
Last Day of Fall Term	Friday, December 22

1990 SPRING SEMESTER

First Day of Spring Term	Tuesday, January 16
President's Day	Monday, February 19
Spring Recess Begins	Monday, April 9
Classes Resume	Monday, April 16
Last Day of Spring Term	Friday, May 18

1990 COMMENCEMENT

Commencement	Thursday, May 24
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1990 PRE-SESSION (M-R)

Pre-Session Classes Begin	Tuesday, May 29
Pre-Session Classes End	Thursday, June 21

1990 SUMMER SESSION

Summer Session Classes Begin	Monday, June 25
Independence Day Holiday	Wednesday, July 4
Classes Resume	Thursday, July 5
Summer Session Classes End	Thursday, August 2

Faculty Meetings: September 5 & 6
Freshman Orientation: September 5
Winter Travel: December 26-January 14

DIRECTIONS TO THE CAMPUS

From US ROUTE 22:

EASTBOUND: Drive under Parkway, turn right onto Route 82 East. Continue toward Elizabeth. Campus is within 2 miles.

WESTBOUND: Drive under Parkway, keep right and follow signs to Elizabeth. Turn right on Morris Avenue.

From GARDEN STATE PARKWAY:

NORTHBOUND: Leave Parkway at Exit 140 onto Route 22 East. Turn right onto Route 82 East.

SOUTHBOUND: Leave Parkway at Exit 140-A onto Route 22 West. Turn right onto Route 82 East towards Elizabeth.

From US ROUTES 1-9:

NORTHBOUND: Enter Elizabeth and turn left at Bayway intersection onto Route 439 West (Elmora Avenue). Continue to Morris Avenue (Route 82). Campus is on the left.

SOUTHBOUND: Entering Elizabeth follow signs for Local Traffic (extreme right). Follow signs to North Avenue. Turn right onto North Avenue (Route 439) and continue to Route 82 (Morris Avenue). Turn right. Campus is on left.

From NEW JERSEY TURNPIKE:

Leave Turnpike at Exit 13A (Elizabeth). Follow North Avenue West sign onto Route 439 which intersects with Route 82 (Morris Avenue) at College. Make right onto Morris Avenue. College is on left.

Leave Turnpike at Exit 13 (Elizabeth). Follow signs for Route 439. Continue across Route 1-9 at Bayway intersection onto Almora Avenue (Route 439). Continue to Route 82 (Morris Avenue). Campus is on left.

Leave Turnpike at Exit 14 for Route 1-9 South. Entering Elizabeth follow signs for Local Traffic (extreme right). Follow signs to North Avenue. Turn right. Campus is on the left.

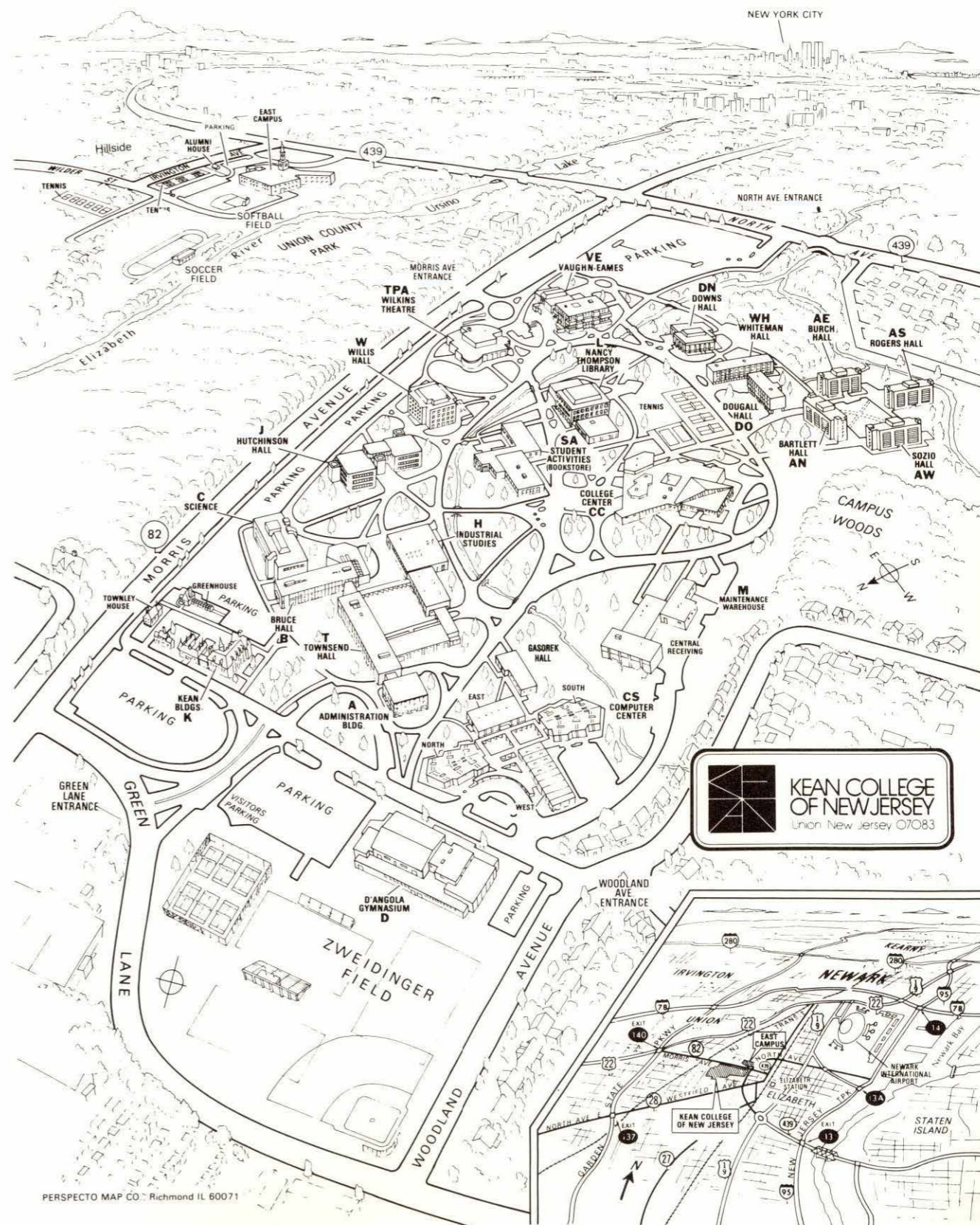
By TRAIN:

The station at Elizabeth is 2 miles from Campus by bus or taxi. NJ Transit North Jersey Coast Liner and NJ Transit Northeast Corridor trains stop there.

By BUS:

NJ Transit #8 between Elizabeth and Springfield passes the Campus on Morris Avenue.

NJ Transit #143 between Plainfield and Port Authority Bus Terminal, New York, stops at Salem Road and Morris Avenue.



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