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# UNDERGRADUATE CATALOG 1984-86



KEAN COLLEGE  
OF NEW JERSEY

Kean College of New Jersey  
Union, New Jersey 07083  
*Equal Opportunity/Affirmative Action  
Institution*

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# **Kean College of New Jersey Undergraduate Catalog 1984-1986**



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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 viable choices in post-college employment, education and professional 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 of academic resources and personnel strengths.

Kean College was founded in 1855 in the city of Newark and was devoted then and for the next century to the development of education leaders. 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.

Thirteen 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 results from the capacity of the College to honor and promote traditional areas of study while innovating in and expanding those programs which address emerging societal needs, for instance, in the health professions, administrative sciences and human and social services. There are forty-eight academic degree programs on the graduate and undergraduate levels which students may pursue on full-time or part-time bases.

Kean College is committed to affirmative action in its admissions and employment practices. Further, the College encourages participation of handicapped persons and provides support systems to facilitate their access to life 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.

## Accreditation

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 baccalaureate programs are individually accredited by national professional organizations. Where appropriate such information is included in the program's description.

## The Campus

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. Vehicular traffic is restricted to the perimeter of the campus. Only walkways and footbridges traverse the broad interior mall. A total environment has been created within 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. Parking on-campus for visitors and commuting faculty and students is provided.

Between the campuses is Liberty Hall, 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 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.

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 Studies 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 offices and meeting rooms.

Student Activities Building—The Jane Plenty Book Store, Health Services, Counseling Center, lounges and offices.

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, Institute of Child Study 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.

Science Building—Class 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—Office 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 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, offices, meeting rooms, and 600-seat auditorium.

Alumni House—East Campus—offices and meeting rooms.

## Graduate Studies

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

A separate catalog, published for the Division and available on request, contains all information on graduate admissions and fees and describes in detail the program and options in the following areas:

Audiology and Communication Sciences

Behavioral Science

Early Childhood Education

Educational Administration

Educational Psychology

Elementary Education with Advanced Specialization, including:

Bilingual/Bicultural Education

Teaching English as a Second Language

Fine Arts Education

Industrial Studies

Learning Disabilities Teacher Consultant

Liberal Studies

Mathematics Education

Public Administration

Reading Specialist

School Psychology

Special Education

Speech Pathology

Student Personnel Services

Teacher of Reading

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 15-hour work week and a waiver of tuition and all fees for 18 to 24 credits for an academic year.

## Post Baccalaureate Major Program

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, speech correction, and school social worker.

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 of the basis of work experience.

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

## Exceptional Educational Opportunities Program

Educationally underprepared 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.

## English as a Second Language Program

The commitment of Kean College to students whose native language is not English is reflected in the English as a Second Language (ESL) Program. The program is designed to help these students achieve a degree of competency in English that will enable them to complete a baccalaureate degree program. Although the majority of ESL students are Spanish-speaking, students from all parts of the world who speak a number of different languages are served by the program.

Procedures governing the ESL Program are described in the section on Academic Standards and Procedures. Courses in the ESL Program appear in the English Department offerings.

## Spanish-Speaking Program

Kean College offers a unique four-year baccalaureate degree program designed for native speakers of Spanish. The Spanish-Speaking

Program enables these students to attend classes taught in their native language during the freshman and sophomore years. The ESL Program described above provides the necessary background and training in English to enable these students to enter regular classes of the college by no later than the junior year of study.

## International Studies

Kean College offers overseas studies program to eligible matriculated students in cooperation with the New Jersey State College Council for International Programs of the American Association of State Colleges and Universities.

Students studying abroad in programs sponsored by the College are instructed by English-speaking faculty members of the host institution. The study abroad program is the equivalent of a semester's work. Upon successful completion of the program, students are awarded 15-16 credits which may be applied to fulfill general education, major or elective requirements. Since participants are Kean College students, they are entitled to all forms of financial assistance.

The College also offers a variety of travel-study opportunities during the midyear study period in January and during the summer session. Applications and further information on College semester abroad and travel-study programs are available from the coordinator of International Studies in the special programs office.

## Cooperative Education

Cooperative Education is an instructional process of off-campus activity which recognizes the importance of experiential learning. Students, so enrolled, may earn academic credit for completion of course requirements and learning objectives while on approved work experience relating to their major programs of study. Through a coordinated effort between a public or private enterprise and an academic department of the College, job placement is provided, the supervision for which is shared by both the employer and a faculty member. Work and compensation arrangements vary with each position. Cooperative Education courses are found in this catalog under the offerings of specific academic departments. Participation is restricted to approved undergraduate junior or senior majors of the academic department that sponsors the course.

## External Education

External Education is designed to make college education available to mature students whose family or work responsibilities make it difficult to commute to campus for weekly classes. Courses within the established curriculum of the College are adapted for individualized instruction through home study. Full academic credit is granted to the student upon completion of each course. Course requirements and instructional materials are designed by each professor to suit the subject matter.

## Summer Studies

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.

## Special Programs

The following programs have been established to respond to particular needs of community, business and industry, professional groups and governmental agencies, as well as the needs of individuals.

**Adult Advisory Services** provides vocational and educational counseling, vocational testing, resume consultations and resource information about education and employment. Workshops and conferences are offered in response to these and other community 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. EPIC candidates are permitted to enter as pre-matriculated students and may complete thirty credits before applying for matriculated status. Initial advisement and counseling geared to the specific needs of the adult population are available. Orientation sessions are held each semester.

**Center for Continuing Professional Education** Programs are developed 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 (CEUs).

**Center for Corporate Education** was established to help business and industry meet their needs in any 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.

**Community Services** The Office of Community Services serves as a 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. One of these is the Center for Senior Citizens which provides cultural and social programs and tuition-free registration in Kean College courses for older adults (age 65 and older).

## Library Services

The Nancy Thompson Library is a comprehensive learning center holding more than 265,000 volumes including bound periodicals and

1,500 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 125 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.

Books and materials not available in the College collections may be borrowed from other resources through a cooperative interlibrary loan system. In addition, the holdings of all institutions belonging to the Consortium of East Jersey, of which the College is a founding member, are available to members of the Kean community through special borrowing privileges.

## 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 are supportive of 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 5,000 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 to accommodate listening and viewing activities.

## 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. Class for students with communication handicaps are offered on a contractual basis with area school districts. These classes also are used as practicum settings for several teacher education programs.



## Office of 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) 527-2505.

This policy is in compliance with federal regulations issues 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.

## Consortium of East Jersey

The Consortium of East Jersey is a cooperative arrangement of three institutions of higher education—Kean College of New Jersey, Seton Hall University and Union County College.

Its major objective is to provide greater service through the sharing of the combined resources of its members, all of which are situated within about 20 miles of each other making joint use of facilities feasible.

Under the auspices of the Consortium students may register for courses offered by member schools and make use of the holdings of all three libraries. Exchange of faculty, joint course sponsorship, and coordinated scheduling of student activities are other cooperative activities supported by the Consortium.

**Cross Registration** Regularly enrolled full-time undergraduate students of Kean College may register for credit in selected courses offered by other Consortium schools during regular fall and spring semesters without additional tuition charge. Details and applications are available in the Office of Academic and Career Planning and Placement at Kean College.

**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. Some ROTC courses are offered on the Kean College campus. Details are available in the Office of Academic and Career Planning and Placement at Kean.

**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 in Aerospace Studies Option (U.S. Air Force ROTC). Details are available in the Office of Academic and Career Planning and Placement at Kean.

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# Student Activities and Services

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, the neighboring Student Services Building, and Downs Hall 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 the three student governments, student publications, the Little Theatre, the College Snack Bar Cafeteria, an Information Center, various offices of student groups and the candy store.

The Student Activities Building houses the Bookstore, Health Services, The Office of Special Student Services, Campus Bank, Counseling Center, 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.

## Office of Special Student Services

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

## 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 comprise 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 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.

## Clubs and 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 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.

**The Night Owl** A monthly newspaper, *the Night Owl* serves as the voice of evening students.

**Grub Street Writer** A yearly literary review that brings together the creative prose, poetry and art work of Kean students.

**Memorabilia** The yearbook, *Memorabilia* presents a gallery of graduating seniors together with the faculty and administration of the College. In addition it provides a retrospective in words and pictures of the outstanding events of the year.

## Student Activities

The Office of Student Activities located in the College Center building serves as the developer, coordinator, and clearing house for the cultural 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 Program

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 comprised of students, staff and faculty. The Cultural Arts Program Board is responsible for scheduling major national and international dance and drama events such as *American Ballet II*, *National Theatre of the Deaf* and *The Pirates of Penzance*. Bus Trips to museums, Broadway plays, 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 were Alex Haley, Gene Rodenberry, and Maya Angelou. Classical artists who have appeared were *Pinocha String Quartet*, and *The Arden Trio*.

Pop concerts are brought to Kean by the student coordinated College Center Board. Among the featured performers who have graced Kean's stage were Angela Bofil, Marshall Tucker, Pat Methany.

Kean Dance Theatre and Speech Theatre Media sponsor student productions each semester.

## 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 pool, 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.

## Athletics

Kean College sponsors 16 varsity sports in intercollegiate competition. It retains Division III membership in the National Collegiate Athletic Association, Eastern College Athletic Conference, New Jersey State Athletic Conference for men and the Jersey Athletic Conference for women.

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

Further information concerning athletics at Kean and opportunity to participate may be obtained from the Director of Athletics.

## Intramural-Recreational Sports

The Department of Intramural-Recreational Sports offers a comprehensive leisure services program including: (1) intramural sports, (2) sports clubs, (3) informal recreation, and (4) special events. 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) gymnasium, (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 in the Office of the Department of Intramural-Recreational Sports. 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 throughout the campus.

## 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 Office of Special Student Services provides voluntary and confidential counseling for international and handicapped students.

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

## Health Services

The College Health Service, located in the Student Activities (Bookstore) Building, provides first aid and emergency treatment; short-term medical and psychiatric treatment; psychiatric consultation; health information and referral; allergy immunizations for resident students; medical counseling for a variety of health problems; leaves of absence for medical reasons; intercollegiate sports clearance; vision and hearing screening at students' request.

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 nominal fee prior to each semester. The Health Services information about student health insurance. See "Student Health Insurance" in the Fees and Expenses 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.

## Housing

**College Apartments** Kean College's mid-rise 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 service 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 Freshman. 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 governing 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.

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

### **Career Planning and Placement**

The Office of Career Planning and Placement 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 on-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 office maintains a comprehensive folder of personal data and references which, with the permission of the student or alumnus, is sent to all interested employers.

### **Financial Aid**

Detailed information on scholarships, grants, loans and part-time employment opportunities may be found in the Financial Aid section of the catalog.

### **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 is offered from 4:40 p.m. to 8:00 p.m. for children 3-10 years of age. Supervision, creative recreation and homework help are provided Monday through Thursday.

Students majoring in Early Childhood Education 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.

# **Academic Standards and Procedures**

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.

## 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 required course in any program completed at a grade lower than "C" will be counted toward the fulfillment of that requirement. Any course initially completed at a grade of "D" and repeated according to this policy does not earn duplicate credit toward overall degree requirements.

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 by a review committee upon written request by the student to the appropriate school dean.

A 2.0 cumulative grade point average is required for graduation.

## General Education Requirements

Students who plan to make early application for a particular major should consult the program description given under the appropriate department in order to be sure that specific General Education requirements, if any, are satisfied. Semester hours required for each cluster are designated as minimum requirements. When the minimum is exceeded, the balance will be considered elective credit. In selecting courses to fulfill these requirements, students are advised to read course descriptions carefully and to determine whether listed prerequisites, if any, have been met.

36 s.h.

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### Required Course

Eng 1010 Composition

(May be waived by examination. Students must satisfy this requirement with earned credit at the level of "C" or better.)

3

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### Courses Within Clusters

33

#### I HUMANITIES

12

*Select from at least three of the five areas:*

English (2000 level and above, selected from  
Literature, Drama, \*Speech/Theatre/Media)

†Fine Arts

Foreign Languages (1000 level or above)

†Music

Philosophy

#### II SCIENCES AND MATHEMATICS

7

*Select from any of the four areas:*

Biological Sciences

Chemistry and Physics

Earth and Planetary Environments

Mathematics and Computer Science

#### ‡III SOCIAL AND BEHAVIORAL SCIENCES

AND HISTORY

12

*Select from at least three of the five areas:*

Economics and Geography

History

Political Science

Psychology

Sociology

#### IV HEALTH DISCIPLINES

2

*Select from either area:*

†Health Education

†Physical Education

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\*STM 1900 Speech, although a 1000 level course, may be counted toward fulfillment of the general education sequence in those major programs that include it as a required course.

†Exclusive of teaching methods courses

‡Exclusive of accounting, management science, public administration and social work courses unless required by a specific major program.

# General Education Requirements Teacher Education Majors

53 s.h.

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## CORE REQUIREMENTS

18

Eng 1010 Composition	3
**ID---- Emergence of Modern World <i>or</i> His 1062 From Western to World Civilization	3
**ID---- Intellectual and Cultural Traditions	3
**ID---- Inquiry and Research	3
**ID---- World Literature <i>or</i> one literature course in English department	3
**ID---- Science and Technology in the Modern World	3

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## BREADTH REQUIREMENTS

35

### \*HUMANITIES

9

*Select from three areas:*

English, Speech/Theatre/Media; Fine Arts;  
Art History; Foreign Languages;  
Music; Philosophy

STM 1900 Speech 3

\*If the coherent sequence is in one of the above disciplines, 6 of the 9 humanities credits may be taken in that discipline.

### \*II SOCIAL AND BEHAVIORAL SCIENCES

9

*Select from three areas:*

Economics; Geography; History;  
Political Science; Psychology;  
Sociology; Anthropology

\*If the coherent sequence is in one of the above disciplines, 6 of the 9 social and behavioral sciences credits may be taken in that discipline.

### III BIOLOGICAL AND PHYSICAL SCIENCES

4

Astronomy; Biology; Chemistry;  
Geology; Meteorology; Physics

### IV MATHEMATICS

3

### V HEALTH AND PHYSICAL EDUCATION

4

Hed 1125 Contemporary Issues in Health 3  
One course in physical education 1

### VI ELECTIVES OR ADDITIONAL COGNATES

6

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\*\*course in development



## 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 the 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 Office of Academic and Career Planning and Placement 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 freshman are advised in the Office of Academic and Career Planning and Placement 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 are encouraged to apply for admission as soon as possible, as non-matriculated students cannot earn a degree from Kean College.

## 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 Office of Academic Planning, no more than two courses may be taken.

**Mid-Year Study Period** No more than one course may be taken.

## 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

## 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 Office of Academic Advisement 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. Such transfers are considered to have satisfied all General Education requirements. 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 3- 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 advance 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 Office of Academic and Career Planning and Placement 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 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.

The results of the basic skills examinations are used to determine students' academic abilities and, where necessary, to identify those developmental courses which students need to take to assure that they have the necessary competency in communication and mathematics to do college-level work. Registration for developmental courses is limited primarily to matriculated and pre-matriculated students.

## Developmental Program

The developmental program is designed to assist undergraduates requiring extra work in the basic skills areas of writing, reading and mathematics. All entering freshmen who are enrolling as full-time or part-time matriculated or pre-matriculated students are required by the State Board of Higher Education policy to sit for the New Jersey College Basic Skills Placement Test at the beginning of their college program. Freshmen transfers who have not already taken the NJCBSPT also are required to complete it before initial registration at Kean.

### Registration for and Completion of Developmental Coursework

Registration for appropriate developmental coursework is mandatory in the initial semester for those students whose test results indicate a need for instruction in one or more areas of basic skills. Developmental coursework is graded on a pass ("P") or fail ("U") basis. Students who receive a grade of "U" in a developmental course required on entry must repeat that course in the next semester; a developmental course required on entry must be completed successfully within one year of the student's first registration in that course. All required developmental coursework must be completed by the conclusion of the sophomore year.

**Credit Policy** No academic credit toward graduation requirements is earned for developmental coursework. Institutional credit, however, is granted as a basis for determination of student classification and financial aid awards.

**Course Load** Students required to take developmental courses shall not be permitted to enroll for more than 16 credits per semester, including developmental courses taken for institutional credit, until the developmental coursework is successfully completed.

## English as a Second Language (ESL) Program

The ESL Program offers up to four semesters of sequenced instruction in English language skills for students of limited English proficiency who are not yet able to take college work taught in English. Upon entering the College, these students are tested for English proficiency and placed at the appropriate level in the ESL sequence. Thereafter, students demonstrating appropriate levels of proficiency through challenge examinations may be exempted from one or more courses by the ESL coordinator.

**Credit Policy** The ESL Program includes courses with "ESL" and "Eng" designations. Those courses with an ESL designation and a

zero as the first digit in the course number (e.g. ESL 0100) earn institutional credit but do not fulfill baccalaureate degree requirements. Those courses with an Eng designation (e.g. Eng 1300) earn credit towards the degree.

In order to complete the ESL Program the student must earn a grade of "Pass" (P) in Eng 1300 and a grade of "C" or better in Eng 1400. Successful completion of these two courses fulfills the General Education English composition requirement.

## 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.

In cases where a course number has been changed from the previous catalog, the old course number is indicated in brackets; e.g. FA 1200 (1100).

## Class Attendance

Freshmen are required to attend all classes.

Sophomores, juniors and seniors are encouraged to attend classes and are obligated to meet their responsibilities according to the written course requirements provided by all instructors at the beginning of the semester.

Attendance is mandatory for all students in seminar laboratory and studio courses; in 1000 level English classes; in 1000-2000 level foreign language courses and composition and conversation courses in foreign languages; and in all developmental courses.

While attendance alone cannot be used as a criterion for academic evaluation in any course, the instructor has the prerogative to assign a grade for missed work, to count or discount late work, and to give or decline to give opportunities for making up work missed because of absence.

The instructor can use the quality of class participation in determining students' grades if class participation has been stated as a requirement of the course at the beginning of the term.

When in the opinion of the instructor a student's excessive absences are jeopardizing academic standing in the course, the instructor, where possible, will notify the student. It is the student's responsibility to arrange a meeting with the instructor to review the situation.

If, because of personal illness, a death in the family, or an emergency, a student will have an extended absence (5 consecutive school days or more), the Office of the Vice President for Student Affairs should be alerted. The student's instructors will receive official notification from this office.

Observance of a religious holiday is an excused absence from class. In the event that a student is not present for a scheduled examination or other pre-arranged assignment because of observance of a religious holiday, the student shall agree with the professor upon an alternate date for completion of the assignment at a time that is convenient for both.

## 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 members 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)

### *Departmental Honor Societies*

Alpha Delta Mu—Social Work

Alpha Kappa Delta—Sociology

Alpha Kappa Psi—Management Science

Beta Beta Beta—Biological Sciences

Epsilon Pi Tau—Industrial Arts and Vocational Education

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

## 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 Advanced Studies, may be applied toward a master's degree in one of the graduate programs offered by Kean College.

## 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

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

## 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 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.

## 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.

## Teacher Education Programs

Many academic programs at Kean lead to N.J. teaching certificates. The list of certificates follows. Where certificate and program title differ from each other, the academic program appears in parentheses:

Biological Science; Physical Science (Chemistry/Physics); English; Foreign Language (French, 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; Music; Teacher of the Handicapped; Speech Correctionist (Speech and Hearing); Deaf or Hard of Hearing (Deaf Education).

### 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 point average of 2.5 or better.

Demonstrated competency in oral English communication (minimum grade of "C" in STM 1900 or its equivalent or formal exemption).

Demonstrated competency in written English as evidenced by a minimum grade of "C" in Eng 1010.

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 Tests or satisfactory completion of required developmental courses in writing, reading and mathematics.

**Speech Competency:** All students entering the School of Education will be screened at the Speech Clinic for proficiency in oral communication.

## 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 freshman who began on or after September 1, 1983 and on transfer students who will begin on or after September 1, 1985.

## 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.

## 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.

Letter grades are not awarded to students who go on leave of absence after a semester has begun. Leave of absence, therefore, has no effect on computation of the cumulative grade-point average.

The above provisions apply to full-time students in good standing. Good standing is defined as follows: Cumulative grade-point average at completion of semester prior to request for leave of absence has met minimum academic requirements of the College; All financial and other obligations to the College have been met in full; No disciplinary probation is in effect.

**Re-entry** A leave of absence provides for re-entry into the College without the need to apply for readmission. Students re-entering the College from leave of absence are responsible for registering for a course of study during the regularly scheduled registration periods provided by the Registrar's Office. Students on leave of absence who plan to resume study at the College must notify the Registrar of their intent to return no later than two weeks prior to the beginning of regular registration. Upon re-entry the student is guided by current curricular requirements.

## Withdrawal from a Course

Students who wish to withdraw from a course must do so in writing or complete a form in the Registrar's Office. Students who withdraw from a course during the first third of the semester receive a grade of "W"; students who withdraw from a course no later than one week past mid-semester will receive a grade of "WD". Neither withdrawal grade is counted in the cumulative grade-point average.

Any student who does not officially withdraw on or before the published withdrawal date will be given a letter grade that reflects his or her achievement in the course.

## Withdrawal from the College

Matriculated students wishing to withdraw from the College should complete appropriate forms in the Registrar's Office.

Students withdrawing before completion of a semester may do so no later than one week past mid-semester so that instructors may assign withdrawal grades. These grades are not counted as part of the cumulative grade-point average. Students withdrawing at any time later than one week past mid-semester are subject to the regular system of earned grades.

## Readmission to the College after Official Withdrawal

Students in good academic standing who have officially withdrawn from the College by completing the appropriate form at the Office of the Registrar are guaranteed re-entry upon completion of an application, so long as appropriate filing deadlines are met.

Officially 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 Office of Admissions.

## Readmission to the College for Other Returning Students

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

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 Academic and Career Planning and Placement who serves as the designee of the School Dean in matters of academic appeal. After receipt of a recommendation from the director of Academic and Career Planning and Placement, 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 Academic and Career Planning and Placement, 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 submits a request. Request forms for degree applications are included in the fall and spring semester course bulletins published and distributed prior to registration.

The applications 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 February and August for students who complete their degree requirements during the fall semester or the summer session. February and August candidates may participate in the formal June 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 Dean of Academic Administrative Services.

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# **Academic Programs**

The Academic Programs section is arranged in the following sequence:

#### BIOLOGICAL SCIENCES

B.A. in Biology—*Options: Preprofessional; General*  
Minor in Biology

#### CHEMISTRY-PHYSICS

B.A. in Chemistry—*Option: Preprofessional*  
B.S. in Chemistry—*Expanded Option (ACS Certified)*  
B.A. in Chemistry-Physics

#### COMMUNICATION SCIENCES

Collateral Program: Reading

#### EARLY CHILDHOOD EDUCATION

B.A. in Early Childhood Education—*Academic Clusters: English; Psychology; Sociology and Anthropology*

#### EARTH AND PLANETARY ENVIRONMENTS

B.A. in Earth Science—*Options: General; Geology; Meteorology*

#### ECONOMICS, GEOGRAPHY AND MANAGEMENT SCIENCE

B.A. in Economics  
Minor in Economics  
B.S. in Accounting  
B.S. in Management Science  
Minor in Management Science

#### EDUCATIONAL ARTS AND SYSTEMS

B.A. in Elementary Education—*Options: Alternative and Corrections Education; Bilingual*  
Collateral Program: Instruction in Subject Areas, K-12

#### EDUCATIONAL POLICY SCIENCES

#### ENGLISH

B.A. in English—*Options: Writing; Comparative Literature; Speech/Theatre/Media*  
Minor in English with Options in Literature, Writing and Linguistics  
Minor in Speech and Theatre Arts

#### FINE ARTS

B.A. Studio Major—*Options: Artist Craftsperson; Interior Design; Visual Communications*  
B.A. in Art History  
Minor in Fine Arts

#### FOREIGN LANGUAGES, LITERATURES AND CULTURES

B.A. in French  
B.A. in Spanish

#### HEALTH AND RECREATION

B.A. in Urban and Outdoor Recreation  
Minor in Urban and Outdoor Recreation  
Minor in Health Education

#### HEALTH PROFESSIONS

B.S. in Medical Record Administration  
B.S. in Medical Technology—*Options: Cytotechnology; Histotechnology*  
B.S. in Occupational Therapy  
B.S. in Physical Therapy

#### HISTORY

B.A. in History  
Minor in History

#### INTERDISCIPLINARY COLLATERAL PROGRAMS

Afro-American Studies

#### Bilingual Education

Career Education for the Handicapped  
Classical Studies  
Developmental Disabilities  
Environmental Studies  
Family Studies  
Study of the Future  
Geoscience Technology  
Gerontology  
Judaic Studies  
Marine Studies  
Pre-Law  
Urban Studies  
Women's Studies

#### MATHEMATICS

B.A. in Mathematical Sciences  
Minor in Mathematics  
B.S. in Computer Science—*Options: Data Processing; Technology*  
Minor in Computer Science—*Options: Data Processing; Technology*

#### MUSIC

B.A. in Music  
Minor in Music  
B.A. in Music Education

#### NURSING

Bachelor of Science in Nursing

#### PHILOSOPHY AND RELIGION

B.A. in Philosophy and Religion  
Minor in Philosophy and Religion

#### PHYSICAL EDUCATION

B.A. in Physical Education  
B.A. in Health and Physical Education  
Collateral Program: Athletic Coaching  
Collateral Program: Athletic Training  
Collateral Program: Adult Fitness in Business and Industry

#### POLITICAL SCIENCE

B.A. in Political Science—*Option: Criminal Justice*  
B.A. in Public Administration—*Option: Criminal Justice*  
Minor in Political Science  
Minor in Public Administration

#### PSYCHOLOGY

B.A. in Psychology  
Minor in Psychology

#### SOCIOLOGY, ANTHROPOLOGY AND SOCIAL WORK

B.A. in Sociology  
Minor in Sociology  
Bachelor of Social Work

#### SPECIAL EDUCATION AND INDIVIDUALIZED SERVICES

B.A. in Special Education: Teacher of the Handicapped  
B.A. in Speech and Hearing—*Options: Speech Correction; Deaf Education*

#### TECHNOLOGY (INDUSTRIAL STUDIES)

B.A. in Industrial Education  
B.S. in Industrial Technology  
Minor in Industrial Technology

Faculty: Bardell, Boly, Hayat, Hennings, Kmetz, Lake, Linden, Madison, Mahoney, Mancarella, Osborne (Chairperson), Reid, Rosenthal, Schuhmacher, A. Smith, Virkar, D. Ward

**B.A. in Biology**  
**Option: Preprofessional\***

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.

In addition to the major, a collateral program in marine sciences or environmental studies may be elected. These programs appear under Interdisciplinary Collateral Programs (see Index).

124 s.h.

**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36

**Required Cognate Courses** (7 s.h.)

*Sciences and Mathematics Cluster:*

One mathematics course	3
Che 1083 Chemistry I	4

**ADDITIONAL COGNATE COURSES** 19/25

*To be taken during freshman and sophomore years:*

Mat 2411 Calculus I	3
Phy 2091-2092 General Physics I & II	8
Che 1084 Chemistry II	4
Che 2180 Principles of Organic Chemistry or Che 3181-3182 with corequisite laboratory Che 3183-3184 or 3185-3186	4/10

**MAJOR REQUIREMENTS** 32

**Required Courses** (24 s.h.)

Bio 1000 Principles of Biology	4
Bio 2200 Cell Biology	4
<i>(The above should be taken during the freshman year)</i>	
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	1

**Major Electives** (8 s.h.) at the 3000-4000 level, selected with departmental advisement

**FREE ELECTIVES** (see page 28) 37/31

\*Major in Medical Technology Students majoring in the Preprofessional Biology Option may apply for the program in Medical Technology if they have met the prerequisites as outlined in that program (see Interdisciplinary Major Programs).

**B.A. in Biology**  
**Option: General**

The following program, when taken with the Collateral Program: Instruction in Subject Areas, meets the standards for state approval of teacher education in biology for secondary schools and provides the necessary subject matter in biology and related sciences. The program is also appropriate for those who wish to enter other fields which do not require graduate study.

In addition to the major, a collateral program in marine sciences or environmental studies may be elected. These programs appear under Interdisciplinary Collateral Programs (see Index).

124 s.h.

**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36

**Required Cognate Courses** (7 s.h.)

*Sciences and Mathematics Cluster:*

Che 1083 Chemistry I	4
<i>One of the following:</i>	
Mat 1016 Descriptive Statistics	3
Mat 1052 College Algebra and Trigonometry	
Mat 1053 Analytic Geometry	
Mat 2411 Calculus I	
Mat 2412 Calculus II	

**ADDITIONAL COGNATE COURSES** 11/17

*To be taken during the freshman and sophomore years:*

One additional math course from above list	3
Che 1084 Chemistry II	4
Che 2180 Principles of Organic Chemistry or Che 3181-3182 with corequisite laboratory Che 3183-3184 or 3185-3186	4/10

**MAJOR REQUIREMENTS** 32

**Required Courses** (24 s.h.)

Bio 1000 Principles of Biology	4
Bio 2200 Cell Biology	4
<i>(The above should be taken during the freshman year)</i>	
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	1

**Major Electives** (8 s.h.) at the 3000-4000 level, selected with departmental advisement

**FREE ELECTIVES** (see page 28) 45/39

## Minor in Biology

One semester of chemistry or its equivalent should be taken as pre-requisite to the program.

	18 s.h.	
<b>Required Courses</b>		8
Bio 1000 Principles of Biology	4	
Bio 2200 Cell Biology	4	
<b>Electives ten credits in biology, including at least 7 credits at the 3000-4000 level, selected with approval of departmental advisor</b>		10

## 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, and heredity and variation of biological form through time. (3 hr. lec./2 hr. lab.)

#### Bio 2001 Social Implications of Biology (3)

Linden

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.*

Prerequisite: Bio 1000 or permission of instructor.

#### Bio 3000 Marine Biology (4)

Schuhmacher, Virkar

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.

#### 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)

Mancarella

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./3 hr. lab.)

Prerequisites: One semester of organic chemistry and Bio 2200, or permission of instructor.

### CELLULAR

#### Bio 2200 Cell Biology (4)

Hayat, Kmetz

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.

#### Bio 3260 Histology (4)

Kmetz

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.

#### Bio 4200 Preparatory Techniques for Electron Microscopy (4)

Hayat

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.

#### Bio 4225 Cell Physiology (4)

Smith

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.

#### Bio 4245 Radiation Biology (4)

Smith

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.

#### Bio 4250 Mammalian Endocrinology (4)

Rosenthal

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.

### MICROBIOLOGY

#### Bio 3305 Principles of Microbiology (4)

Bardell, Osborne

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.

#### Bio 4310 Virology (4)

Bardell

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.

#### Bio 4315 Immunology (4)

Bardell

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.

#### Bio 4325 Applied Microbiology (3)

Osborne

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.

**Bio 4350 Microbial Ecology and Geomicrobiology (3)** Osborne  
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.)  
Prerequisites: Bio 3305 or permission of the instructor.

**Bio 4365 Marine Prokaryotes (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)** Osborne  
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.

#### 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)** Lake, Mancarella  
Integrated study of human physiology and related anatomy. Skeletal, muscular, nervous, cardiovascular and respiratory systems emphasized to provide basic background for physical therapy and occupational therapy programs. *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.

**Bio 3403-3404 Anatomy and Physiology I & II (4,4)** Smith  
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 projected 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.

**Bio 3405 Gross Anatomy (4)** Lake  
In-depth study of gross and functional anatomy utilizing dissection of mammalian organs and human projected 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.

**Bio 3406 Neuroscience (4)** Lake  
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.

**Bio 3414 The Invertebrates—Form and Function (4)** Virkar  
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.

**Bio 3420 Parasitology (4)** Virkar  
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.

**Bio 3425 The Vertebrates—Form and Function (4)** Madison  
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.

**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)** Boly  
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)** Mahoney  
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.

**Bio 4410 Pathology (3)** Smith  
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.

**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)**

Madison

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 Sporozoan (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)**

Virkar

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.

**ORGANISMS—PLANT****Bio 1500 The Ingenious Plant Kingdom (3)**

Reid

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.*

**Bio 2500 Principles of Botany (4)**

Reid, Schuhmacher

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.

**Bio 3513 Morphology and Evolution of the Plant Kingdom (4)**

Schuhmacher

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.

**Bio 3535 Field Botany (3)**

Schuhmacher

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.

**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)**

Reid

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.

**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)**

Mahoney

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.

**Bio 3635 Principles of Limnology (3)**

Hennings

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)**

Mahoney

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.

**Bio 4691,2,3,4 Cooperative Education in Ecology (1-4)**

Mahoney

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.

**GENETICS****Bio 3704 Principles of Genetics (3)**

Linden

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.

## TECHNIQUES AND OTHERS

### **Bio 3815 Microtechniques (4)**

Kmetz

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.

### **Bio 4825 An Introduction to the Theories and Practice of Diagnostic Radiology (4)**

Smith

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.

### **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.

Prerequisites: 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 outlined 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.



Faculty: Bailey, Blount, Criasia, Dorn, Getzin, Kampa, Leeds, Lees, Luther (Chairperson), Silano, Struyk, Vitale, Wieck

### B.A. in Chemistry

This program is designed to prepare the student for graduate study in the various fields of chemistry, for teaching and for positions in related industries. Students who desire certification to teach chemistry should elect the Collateral Program: Instruction in Subject Areas.

124 s.h.

<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	36
<b>Required Cognate Courses</b> (7 s.h.)	
<i>Sciences and Mathematics Cluster:</i>	
Mat 2411 Calculus I	3
Phy 2095 Physics I	4
<b>ADDITIONAL COGNATE COURSES</b>	11
Mat 2412 Calculus II	3
Phy 2096 Physics II	4
Phy 2098 General Physics III	4
<b>MAJOR REQUIREMENTS</b>	35
Che 1083-1084 General Chemistry I & II	8
Che 3181-3182 Organic Chemistry Lecture I & II	6
Che 3183-3184 Organic Chemistry Laboratory I & II	4
Che 2283 Quantitative Analysis	4
Che 3381-3382 Physical Chemistry I & II	6
Che 3383-3384 Physical Chemistry Laboratory & Recitation I & II	4
Che 4481 Inorganic Chemistry I	3
<b>FREE ELECTIVES</b> (see page 28)	42

### B.A. in Chemistry 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.

124 s.h.

<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	36
<b>Required Cognate Courses</b> (7 s.h.)	
<i>Sciences and Mathematics Cluster:</i>	
Bio 1000 Principles of Biology	4
Mat 2411 Calculus I	3
<b>ADDITIONAL COGNATE COURSES</b>	19
Bio 2200 Cell Biology	4
Mat 2412 Calculus II	3
Phy 2095-2096 Physics I & II	8
Phy 2098 General Physics III	4
<b>MAJOR REQUIREMENTS</b>	33
Che 1083-1084 General Chemistry	8
Che 3181-3182 Organic Chemistry Lecture I & II	6
Che 3183-3184 Organic Chemistry Laboratory I & II	4
Che 3381 Physical Chemistry I	3
Che 2283 Quantitative Analysis	4
Che 3284 Instrumental Analysis	4
Bio 4105 Biochemistry	4
<b>FREE ELECTIVES</b> (see page 28)	36

**Interdisciplinary Major in Medical Technology** Students majoring in the Professional Chemistry Option may apply for the program in Medical Technology if they have met the prerequisites as outlined in that program. (See Health Professions).

**B.S. in Chemistry****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.

124 s.h.

**GENERAL EDUCATION REQUIREMENTS (see page 26)** 36**Required Cognate Courses (7 s.h.)***Sciences and Mathematics Cluster:*

Mat 2411 Calculus I	3
Phy 2095 General Physics I	4

**ADDITIONAL COGNATE COURSES** 11

Mat 2412 Calculus II	3
Phy 2096 Physics II	4
Phy 2098 General Physics III	4

**MAJOR REQUIREMENTS** 47

Che 1083-1084 General Chemistry I & II	8
Che 3181-3182 Organic Chemistry Lecture I & II	6
Che 3183-3184 Organic Chemistry Laboratory I & II	4
Che 2283 Quantitative Analysis	4
Che 3284 Instrumental Analysis	4
Che 3381-3382 Physical Chemistry Lecture I & II	6
Che 3383-3384 Physical Chemistry Laboratory and Recitation I & II	4
Che 4481 Inorganic Chemistry I	3
One 4000 level laboratory course in chemistry	2
Two 4000 level lecture courses in chemistry, earth science, mathematics or physics, selected with departmental advisement	6

**FREE-ELECTIVES (see page 28)** 30**B.A. in Chemistry-Physics**

124 s.h.

**GENERAL EDUCATION REQUIREMENTS (see page 26)** 36**Required Cognate Courses (7 s.h.)***Sciences and Mathematics Cluster:*

Che 1083 Chemistry I	4
Mat 2411 Calculus I	3

**ADDITIONAL COGNATE COURSES** 7

Che 1084 Chemistry II	4
Mat 2412 Calculus II	3

**MAJOR REQUIREMENTS** 40**Required Courses (32 s.h.)**

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 Elective (8 s.h.) selected from upper division courses in chemistry and physics****FREE ELECTIVES (see page 28)** 41

It is recommended that students planning a chemistry-physics major take Che 1083-1084 and Mat 2411 in the freshman year and complete Phy 2095-2096 and Mat 2412 by the end of the sophomore year.

**Collateral Program: Instruction in Subject Areas, K-12** Students who desire New Jersey teacher certification along with the above major elect the Instruction in Subject Areas collateral and must contact the Department of Education Arts and Systems for admissions and advisement.

## 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 the physical therapy and occupational therapy majors. 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.) Corequisite: 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)

Kampa

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.

#### 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 3150 Spectrometric Identification of Organic Compounds (3)

Determination of 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 3181 Organic Chemistry Lecture I (3)

Vitale

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.

#### Che 3182 Organic Chemistry Lecture II (3)

Vitale

A continuation of Che 3181.

Prerequisites: Che 3181 and 3183 or 3185 or permission of instructor.

Corequisite: Che 3184.

#### Che 3183 Organic Chemistry Laboratory and Recitation I (2)

Vitale

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.

#### Che 3184 Organic Chemistry Laboratory and Recitation II (2)

Vitale

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.

#### 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)

Criasia, Wieck

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.

#### Che 3284 Instrumental Methods of Chemical Analysis (4)

Criasia, Wieck

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.

#### 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.

**Che 4291 X-Ray and SEM Analytical Methods (3)**

Luther

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)**

Getzin, Lees

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.

**Che 3382 Physical Chemistry Lecture II (3)**

Getzin, Lees

A continuation of Che 3381 which is prerequisite. (3 hr. lec.)

**Che 3383 Physical Chemistry Laboratory and Recitation I (2)**

Lees, Luther

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.

**Che 3384 Physical Chemistry Laboratory and Recitation II (2)**

Lees, Luther

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.

**Che 4381 Physical Chemistry III—Chemical Thermodynamics (3)**

Lees

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.

**Che 4382 Physical Chemistry IV—Quantum Chemistry (3)**

Lees

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.

**INORGANIC****Che 4481 Inorganic Chemistry I (3)**

Luther

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 or permission of instructor.

Corequisite: Che 3382 or permission of instructor.

**Che 4483 Inorganic Chemistry Laboratory I (2)**

Luther

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.

**BIOCHEMISTRY****Che 4510 Special Topics in Biochemistry (4)**

Kampa

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.

**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)**

Staff

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)**

Staff

Duplicates the non-laboratory portion of Phy 1000. Designed for non-science majors.

**Phy 2030 Physics of Sound (4)**

Blount

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.

**Phy 2081, 2082, 2083 Physics Lecture I, II & III (3,3,3)**

Staff

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)**

Staff

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 and 1053 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)**

Staff

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.)

Corequisite: 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. Corequisite: Mat 2412 or permission of instructor.

**Phy 2098 General Physics III (4)**

Staff

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 2091 or 2095.

**MECHANICS****Phy 3191 Mechanics (4)**

Blount, Silano

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 or permission of the instructor.

**Phy 3195 Fluid Mechanics (3)**

Blount

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)**

Bailey

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.

**ELECTRICITY—MAGNETISM****Phy 3392 Magnetism and Electricity (4)**

Silano, Struyk

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 or permission of instructor.

**Phy 3393 Electronics (4)**

Silano

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 or permission of instructor.

**THERMODYNAMICS****Phy. 4491 Thermodynamics and Heat (4)**

Blount

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.

**MODERN PHYSICS****Phy 4592 Modern Physics (4)**

Struyk

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.

**Phy 4594 Quantum Mechanics (3)**

Struyk

This lecture course is an introduction to the physical and mathematical formulation of quantum mechanics. After a brief historical development, topics considered are the Schrodinger 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 4403 or permission of the instructor.

**Phy 4595 Solid State Physics (3)**

Bailey

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.

**RADIATION****Phy 3600 Radiation Physics (3)**

Staff

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)**

Staff

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.

Faculty: Andrews, Carmichael, Farber, Lemke, Mazurkiewicz (Chairperson), Putnam, Schuman, Schwartz, Walter, Welle

The Department of Communication Sciences, a composite of programs in reading and library/educational media, focuses on the improvement of the learning process and instruction through the study and utilization of print and non-print resources.

Two undergraduate teacher certification endorsements are currently offered by the department: associate educational media specialist and teacher of reading.

## B.A. in Library/Media: Associate Educational Media Specialist

Students who complete the library/media program will be certified as associate educational media specialists for service in libraries, media and instructional resource centers. In addition graduates may teach the elementary grades K-8. This program is not available to freshmen or sophomore students as of September, 1984.

128 s.h.

### GENERAL EDUCATION REQUIREMENTS (see page 26) 36

#### Required Courses (33 s.h.)

##### Humanities Cluster:

STM 1900 Speech	3
One course in music or art	3
One course in English (2000 level or above)	3
One course in philosophy or a foreign language	3

##### Science and Mathematics Cluster:

One course in science	4
One course in mathematics or computer science	3

##### Social/Behavioral Sciences and History Cluster:

Psy 1000 General Psychology or Psy 1001 Individualized General Psychology	3
Psy 2100 Child Psychology or Psy 2110 Adolescent Psychology	3
His 1062 From Western to World Civilization	3

##### Select one course in one of the following areas:

economics, geography, political science, sociology	3
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##### Health Disciplines Cluster:

One course in health education	2
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### ADDITIONAL COGNATE COURSES 9

#### Three of the following:

CpS 1931 Computer Arithmetic Algorithms
Eng 2500 Children's Literature
Eng 2505 Literature for the Adolescent

FA 3270 Photography
FA 3600 Filmmaking I
FA 3601 Filmmaking II
ID 4900 Adventures in Ideas
STM 2970 Nature and Experience of Communication
STM 2975 Introduction to Mass Media
STM 3915 Oral Interpretation of Children's Literature

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### MAJOR REQUIREMENTS

#### Library/Media Requirements (30 s.h.)

LM 3000 Introduction to School Media Services	3
LM 3010 Information Retrieval and Reference Sources	3
LM 3020 Subject Approach to Multi-Media Services	3
LM 3030 Organization and Arrangement of Multi-Media Collections	3
LM 3900 Classroom/Media Center Field Experience	3
LM 4000 Management and Administration of the Modern Library/Media Center	3
LM 4010 Media Selection for Children and Young People	3
LM 4700 Audio-Visual Media of Instruction	3
LM 4701 Planning and Producing Audio-Visual Materials or IS 4106 Construction and Use of Audio-Visual Media	3
LM 4900 Library/Media Center Senior Practicum	3

#### Professional Education Requirements (41 s.h.)

CS 3400 The Teaching of Reading in the Elementary School	3
CS 4400 Advanced Reading Techniques: Elementary Level or CS 4406 Advanced Reading Techniques: Secondary Level	3
EAS 3105 The Teaching-Learning Process	3
EAS 3106 Workshop in Elementary Curriculum Content	6
EAS 3110 English in the Elementary School	3
EAS 4101 Seminar in Teaching Strategies and Problems	3
EAS 4900 Student Teaching	8
EdP 3801 Educational Psychology	3
FA 3910 Art in Education or Mus 2310 Elementary School Music Education	3
HEd 3506 Health Education in the Elementary School	1½
PEd 3615 Physical Education in Elementary School	1½
One from EPS 4010, 4020, 4030, 4040, 4050, 4070	3

### FREE ELECTIVES (see page 28) 12

## Collateral Program: Reading

The Teacher of Reading certificate is a K-12 endorsement which is received in conjunction with initial teacher education certification. Students are required to complete the reading collateral program in addition to their teacher education major. Application for admission to the program can be made only in the junior year.

Required Courses	27 s.h.
CS 3400 The Teaching of Reading in the Elementary School	3
CS 4400 Advanced Reading Techniques: Elementary Level	3
CS 4401 The Linguistic Approach to Reading	3
CS 4402 Reading Disabilities	3
CS 4404 Practicum in Reading	3
CS 4406 Advanced Reading Techniques: Secondary Level	3
EAS 3711 Children's Literature in Education or LM 4010 Book Selection for Children and Young People	3
<b>Electives two courses selected with departmental advisement.</b>	<b>6</b>

## 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 2900 Field Experiences in Multicultural Educational and Library/Media Settings (3)**  
An observational and analytical study of teaching and learning in multicultural urban and suburban education classroom and library/media center settings including 10 full days of visits to various educational settings. Required of all library/media students before admission to major.

**LM 3000 Introduction to School Media Services (3)** Schwartz  
The role of the school media center: its growth and development as an integral part of the education process; its current function as an instructional materials center with collections of both print and non-print materials. Investigation of rationale and functions, stressing the leadership role of the media specialist.  
Corequisites: EAS 3105, LM 3010, LM 3900, and LM 4700 should be taken concurrently by full-time library/media specialist majors.

**LM 3010 Information Retrieval and Reference Sources (3)**  
Acquaintance with and use of basic information and reference sources for print and non-print media; dictionaries, encyclopedias, yearbooks, almanacs, atlases, gazetteers, biographical fact books, periodical indices, and non-print catalogs and directories. Emphasis on selection, evaluation, collection building and development of an information search technique.  
Corequisites: EAS 3105, LM 3000, LM 3900 and LM 4700 should be taken concurrently by full-time library/media specialist majors.

### LM 3020 Subject Approach to Multi-Media Services (3)

Emphasis on the information and knowledge found in curricular areas. Analysis of print and non-print media and the further development of the information search technique in support of instructional development, and construction of multi-media bibliographies.  
Prerequisite: LM 3010.

### LM 3030 Organization and Arrangement of Print and Non-Print Collection (3)

Schwartz  
Classification and cataloging of library/media materials. Considers alternative methods of instruction, accessioning, processing, and storage of a variety of media forms. Emphasis on terminology, construction of catalogs (card and book), and inventory/audit control.

### LM 3060 Business Information Sources for Management Science (3)

Survey of existing business information sources, examination of specialized collections in libraries, and analysis and application of such information to business and industry.

### LM 4000 Management and Administration of the Modern Library/Media Center (3)

Schwartz  
Organization and operation of both the services and instructional design consultation in the learning process, and curriculum development.  
Corequisites: EAS 4900 and LM 4900 must be taken concurrently by full-time library/media specialist majors.

### LM 4010 Media Selection for Children and Young People (3)

Schwartz  
Techniques in selection and evaluation of both print and non-print items of many types. Major emphasis upon individual acquaintance with a broad cross-section of materials through extensive critical reading, listening, and viewing. Knowledge of general and specific selection aids, in understanding of physical format and assessing potential use. Practice in the art of storytelling, book talks and multi-media presentations.

### LM 4040 Library Science Practicum in the Field (3)

The student will gain experience one day or two half-days a week in the field, observing and participating in the activities and operations of a library/media center at the elementary, junior and secondary level.  
Prerequisites: LM 3010, 3030 and 4010.

### 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)

Merlo  
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)** Schwartz  
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.  
Prerequisite: LM 4700.

**LM 4710 Media Center Practicum (3)**  
Supervised by a media specialist, students assist in the organization and administration of the Kean College media center. Experience in the selection and/or production of instructional materials provided.  
Prerequisite: LM 4700.

#### FIELD EXPERIENCE

**LM 3900 Classroom/Media Center Field Experience (3)** Schwartz  
Experience in the field, observing and participating in the basic activities and operations of an elementary classroom and a library/media center.  
Corequisites: EAS 3105, LM 3000, 3010 and 4700 must be taken concurrently by full-time library/media majors.

**LM 4900 Library/Media Center Senior Practicum (3)** Schwartz  
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.  
Corequisites: EAS 4900 and LM 4000.

## Communication Sciences Courses

### DEVELOPMENTAL COURSES

*Degree credit not granted for these courses. See page 32.*

**CS 0410 Study Skills Laboratory (NC)**  
Practical study techniques, adapted to individual learning styles, demonstrated and utilized to improve learning strategies. One hour per week required in the Study Skills Center.

**CS 0411, 0412, 0413 Reading Improvement (3 per course)**  
A sequence of three courses 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 sequence. Laboratory requirement. Sequence of 0411, 0412, 0413 is not expected to be repeated. *Credit hours not applicable for degree requirements.* Required for freshmen not meeting basic skills competency test level.

Prerequisites: CS 0410 for CS 0411 and/or competency level; CS 0411 for CS 0412; CS 0412 for CS 0413.

### 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 3400 Experiences in the Teaching of Reading in the Elementary School (3)**  
A detailed study of a productive reading program from its beginning through the eighth grade in a variety of cultural settings. Emphasis is on materials, methods, research results and program trends.

**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 4401 Linguistic Approaches to the Teaching of Reading (3)** Farber  
Designed to develop an understanding of reading as part of the total language spectrum, and as an information-seeking process. Attention focused on the application of psycholinguistic theory to reading instruction and materials for diverse populations.

**CS 4402 Reading Disabilities (3)** Andrews, Welle  
Diagnostic and remedial procedures for teacher use in working more effectively with remedial readers (in a culturally diverse world).

**CS 4403 Foundations in Content Reading: Secondary Level (3)**  
The reading curriculum in grades 7 through 12. Reading in the content areas, critical reading, methods, and the organization of a developmental reading program.

**CS 4404 Practicum in Reading (3)** Andrews, Welle  
Student interns engage in field experiences with diverse populations in cooperation with an identified specialist in a school approved by the department, in the Reading and Study Skills Center or in other centers such as the New Jersey Manpower Training Center. Seminar sessions scheduled.

**CS 4405 Reading in Early Childhood Education (3)** Carmichael  
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.

**CS 4406 Advanced Reading Techniques: Secondary Level (3)**  
Reading in content areas with emphasis on study skill development, the development of specific comprehension skills, and the uses of innovative materials and techniques.  
Prerequisite: CS 4400 or 4403.

**CS 4407 Sex Roles in Reading Materials for Youth, Nursery-12 (3)** Carmichael  
Course evaluates sex role stereotyping in trade and text books for students, pre-school through grade 12.

**CS 4410 Sociolinguistics and Reading (3)** Farber  
A study of regional and social variation in American English; an analysis of non-standard dialects and major factors of linguistic divergence causing reading difficulties.  
Prerequisite: CS 3400 or permission of instructor.

**CS 4430 Sex Roles in British Reading Materials, K-12 (3)** Carmichael  
Course evaluates sex role stereotyping in trade and text books for K-12 students in Great Britain as well as classroom practices in England as they relate to sex role stereotyping.



**CS 4490 Reading in Society (3)**

Farber  
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.

**CS 4580 Plain Language in Consumer Documents (3)**

Farber  
Examination of legal and bureaucratic language and studies of text comprehension as they apply to the design and revision of consumer documents in accordance with Plain Language Legislation.

## EARLY CHILDHOOD EDUCATION

Faculty: Allen, Dorsey-Gaines, Dumais, Handler, Kelly, Knight (Chairperson), Mahan, Peters, Searson

### B.A. in Early Childhood Education

The Early Childhood program helps students to develop understandings, skills and attitudes necessary to function creatively and productively in urban and suburban day care, pre-school and kindergarten/primary classes. This includes selected professional courses and concurrent extended field experience and student teaching in both the junior and senior years. Working with families is emphasized. A 2.5 cumulative grade point average (GPA) is required for admission into the program.

The professional semester courses are taken as a block.

Junior Professional Semester: EC 3110, 3200 and 3400.

Senior Professional Semester: EC 4100, 4400, and 4500.

Students who complete this approved program qualify for the Teacher of Nurse School and Teacher of Elementary Education instructional certificates.

Freshman entering the college after Sept. 1, 1983 must complete the program as it appears in this catalog. Community College graduates entering the college after Sept. 1, 1985 must complete the program as it appears in this catalog.

## B.A. in Early Childhood Education: English Academic Cluster

129 s.h.

### GENERAL EDUCATION REQUIREMENTS

32

#### Core Requirement

Eng 1010 English Composition 3

#### Breadth Requirements

\*English/Humanities 9

STM 1900 Speech

Music: Performing Area

Fine Arts: Performing Area

\*Social/Behavioral Sciences 9

Psy 1000 General Psychology

Soc 1000 Social Life and Society

\*Physical and Biological Sciences 4

\*Mathematical Sciences (not including computer science) 3

Health and Physical Education 4

HEd 1125 Contemporary Issues in Health

One course in physical education

### ADDITIONAL REQUIRED COGNATES

21

\*\*ID ---- Intellectual and Cultural Traditions 3

\*\*ID ---- Emergence of Modern World or  
His 1062 From Western to World  
Civilization 3\*\*ID ---- World Literature or a literature  
course in English department 3

\*\*ID ---- Inquiry and Research 3

\*\*ID ---- Science and Technology in the  
Modern World 3

Psy 2100 Child Psychology 3

STM 4940 History of the Theatre 3

### BEHAVIORAL/SOCIAL SCIENCES

18

Overlap with General Education 6

EdP 3801 Educational Psychology 3

EPS 2000 Teacher, School and Society 3

EC 3800 The Family as Educator 3

SpE 2052 Introduction to Psychology of the  
Handicapped 3

\*\*course in development

### ACADEMIC SEQUENCE

30

Overlap with General Education 12

Eng 2019 Creative Writing 3

Eng 2100 Introduction to Linguistics 3

Eng 3500 Poetry or Eng 3506 Modern British  
and American Poetry or Eng 3507  
Contemporary British and American Poetry 3STM 3915 Oral Interpretation of Children's  
Literature or any English literature  
course under period, figure or genre 3

STM 3980 Creative Drama 3

STM 2905 Public Speaking 3

### PROFESSIONAL EDUCATION

46

EC 2900 Sophomore Field Experience 3

EC 3210 Language Arts in Early Childhood 6

EC 3200 Child Development and the Early  
Childhood Curriculum I 6

EC 3400 Junior Student Teaching 4

EC 4200 Child Development and the Early  
Childhood Curriculum II 6

EC 4400 Senior Student Teaching 12

CS 4400 Advanced Reading Techniques 3

EC 3100 Exploring Books 3

EC 4240 Parents and Community in Early  
Childhood Settings 3

\*\*course in development

B.A. in Early Childhood Education:  
Psychology Academic Cluster

	133 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>32</b>
<b>Core Requirements</b>	3
Eng 1010 English Composition	
<b>Breadth Requirements</b>	
* <i>English/Humanities</i>	9
STM 1900 Speech	
Music: Performing Area	
Fine Arts: Performing Area	
* <i>Social/Behavioral Sciences</i>	9
Psy 1000 General Psychology	
Soc 1000 Social Life and Society	
* <i>Physical and Biological Sciences</i>	4
* <i>Mathematical Sciences</i> (not including computer science)	3
<i>Health and Physical Education</i>	4
HEd 1125 Contemporary Issues in Health	
One course in physical education	
<b>ADDITIONAL REQUIRED COGNATES</b>	<b>21</b>
**ID ---- Intellectual and Cultural Traditions	3
**ID ---- Emergence of Modern World or His 1062 From Western to World Civilization	3
**ID ---- World Literature or a literature course in English department	3
**ID ---- Inquiry and Research	3
**ID ---- Science and Technology in the Modern World	3
Psy 2100 Child Psychology	3
Psy 3310 Theories of Learning	3
<b>BEHAVIORAL/SOCIAL SCIENCES</b> (see English Academic Cluster)	<b>18</b>
<b>ACADEMIC SEQUENCE</b>	<b>34</b>
Overlap with General Education	12
Psy 3200 Psychological Statistics	3
Psy 3220 Theories of Personality	3
Psy 4200 Tests and Measurements	3
Psy 4230 Experimental Psychology	4
Psy 4940 Seminar: Issues in Contemporary Psychology	3
<b>Electives two of the following:</b>	<b>6</b>
Psy 3360; 3540; 3630; 4400	
<b>PROFESSIONAL EDUCATION</b> (see English Academic Cluster)	<b>46</b>

\*\*course in development

B.A. in Early Childhood Education: Sociology  
and Anthropology Academic Cluster

	129 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>32</b>
<b>Core Requirement</b>	3
Eng 1010 English Composition	
<b>Breadth Requirements</b>	
* <i>English/Humanities</i>	9
STM 1900	
Music: Performing Area	
Fine Arts: Performing Area	
* <i>Social/Behavioral Sciences</i>	9
Psy 1000 General Psychology	
Soc 1000 Social Life and Society	
Ant 1800 Cultural Anthropology	
* <i>Physical and Biological Sciences</i>	4
* <i>Mathematical Sciences</i> (not including computer science)	3
<i>Health and Physical Education</i>	4
HEd 1125 Contemporary Issues in Health	
One course in physical education	
<b>ADDITIONAL REQUIRED COGNATES</b>	<b>21</b>
**ID ---- Intellectual and Cultural Traditions	3
**ID ---- Emergence of Modern World or His 1062 From Western to World Civilization	3
**ID ---- World Literature or a literature course in English department	3
**ID ---- Inquiry and Research	3
**ID ---- Science and Technology in the Modern World	3
Psy 2100 Child Psychology	3
Soc 2100 Sociology of the Family	3
<b>BEHAVIORAL/SOCIAL SCIENCES</b> (see English Academic Cluster)	<b>18</b>
<b>ACADEMIC SEQUENCE</b>	<b>30</b>
Overlap with General Education	12
Soc 3151 The Community	3
Soc 4401 Social Change	3
Soc 2300 American Ethnic and Racial Groups	3
Soc 3150 Urban Sociology	3
Soc 2052 Methods of Social Research	3
Soc 3350 Social Inquiries in America	3
<b>PROFESSIONAL EDUCATION</b> (see English Academic Cluster)	<b>46</b>

\*\*course in development

## 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 multi-cultural urban and suburban early childhood settings; includes 10 full days of guided visits to early childhood settings.

Prerequisites: Eng 1010 and STM 1900.

### LANGUAGE

#### **EC 3100 Exploring Books with Young Children (3)**

Allen, Handler, Peters

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.

#### **EC 3110 Language Arts in Early Childhood Education (6)**

Allen

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.

#### **EC 4100 Creative Techniques for Oral Language Development (3)**

Dumais

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.

### CURRICULUM AND METHODS

#### **EC 1200 Introduction to Early Childhood Education (3)**

Dorsey-Gaines

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.

#### **EC 3200 Child Development and the Early Childhood Curriculum I (6)**

Dorsey-Gaines, Mahan

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.

#### **EC 3210 Working with the Infant and Toddler in a Child Care Setting (3)**

Handler

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.

#### **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 II (6)**

Knight

Emphasis on program for the primary grades. Various curricular approaches used in different school systems studied. Functional learning experiences for children of different ages, maturity levels and abilities in the primary grades explored by the students. Integration of subject areas i.e. science, mathematics, social science, language arts, crafts, art, music and physical education shown. Students helped to understand the parents' and child's point of view and to know specific techniques and materials for reporting to parents.

Prerequisite: EC 3200.

#### **EC 4210 Multicultural Education in the Early Childhood Years (3)**

Allen, Dorsey-Gaines

Designed to prepare preservice and inservice professional working with young children to create educational environments which promote multicultural understandings.

#### **EC 4240 Working with Parents and Community in Early Childhood Settings (3)**

Handler, Kelly

Designed to enable preservice teachers and teachers in nurseries, day and infant care centers, kindergarten and primary grades to develop the knowledge, attitudes and techniques necessary for building productive relationships with parents and community.

### STUDENT TEACHING

#### **EC 3400 Student Teaching in Early Childhood Education I (4)**

Staff

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 (12)**

Staff

Assignment to first, second or third grade during the senior year.

Prerequisites: EC 3400 and 4200.

### SEMINARS AND INDEPENDENT STUDY

#### **EC 4500 Seminar in Early Childhood Education (3)**

Knight, Peters

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 a professional with children, colleagues, administrators, parents and community in a multicultural world.

#### **EC 4510 Independent Study in Early Childhood Education (3)**

Staff

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 3600 Understanding Parenthood (3)**

Handler, Kelly, Mahan

To help potential parents, parents of young children and those working with parents extend their parenting understandings and skills.

Prerequisite: Psy 2100.

**EC 3610 Child Advocacy: Implications for Helping Practitioners (3)**

Handler, Kelly, Mahan

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.

**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 3800 The Family as Educator (3)**

Kelly, Mahan

Exploration of the ways family members educate each other and the outcomes of these efforts. Emphasis on the development of skills for education in the home setting and the broader educational community.  
Prerequisite: Soc 2100.

**EC 4325 Practicum: Educational Implications for Serving Families (5)**

Kelly, Mahan

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.)

**EARTH AND PLANETARY ENVIRONMENTS**

Faculty: Hall, Krall, Kroll, Metz, Meyerson (Chairperson), Murphy, Rockman, Zois

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. Students who desire certification to teach should elect the Collateral Program: Instruction in Subject Areas, K-12.

Excellent collateral studies in geoscience technology, environmental studies and marine sciences may be elected with the Earth Science major. These programs may be found in the Interdisciplinary Collateral Programs section.

**B.A. in Earth Science: General Option**

124 s.h.

**GENERAL EDUCATION REQUIREMENTS (see page 26)** 36**Required Cognate Courses (7 s.h.)***Sciences and Mathematics Cluster:*

Che 1083 Chemistry I or Phy 2091 General  
Physics 4

*One of the following:* 3

Mat 1052 College Algebra and Trigonometry; Mat  
1053 Analytic Geometry; Mat 2411 Calculus I;  
Mat 2412 Calculus II

Additional courses in biology, chemistry,  
mathematics and physics recommended

**ADDITIONAL COGNATE COURSES** 7

Che 1084 Chemistry II or Phy 2092 Physics II 4  
One additional mathematics course from above list 3

**MAJOR REQUIREMENTS** 31**Required Courses (31 s.h.)**

Ast 1100 Astronomy 4  
Geol 1200 Introduction to Geology 4  
Met 1300 Introduction to Meteorology 4  
Met 2300 Climatology 3  
Geol 3266 Hydrology 4  
Ocean 3453 Oceanography 4  
*One of the following:* 4

Geol 3261 Mineralogy; Geol 3263 Structural  
Geology; Geol 3264 Invertebrate Paleontology;  
Geol 3265 Geomorphology

*One of the following:* 4

ES 4953-4954 Earth Science Seminar I & II or ES  
4963-4964 Honors Research Seminar in Earth  
Science I & II

**FREE ELECTIVES (see page 28)** 50

## B.A. in Earth Science: Geology Option

124 s.h.

**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36**Required Cognate Courses** (7 s.h.)*One of the following:*

Ast 1100 Introduction to Astronomy or

Met 1300 Introduction to Meteorology

*One of the following:*

Mat 1052 College Algebra and Trigonometry;

Mat 1053 Analytic Geometry; Mat 2411

Calculus I; Mat 2412 Calculus II

**ADDITIONAL COGNATE COURSES**

Che 1083 Chemistry I

Che 1084 Chemistry II

One additional mathematics course from above list

**MAJOR REQUIREMENTS****Required Courses** (24 s.h.)

Geol 1200 Introduction to Geology

Geol 3261 Mineralogy

Geol 3263 Structural Geology

Geol 3264 Invertebrate Paleontology

Geol 3265 Geomorphology

*One of the following:*

ES 4953 &amp; 4954 Earth Science Seminar I &amp; II or

ES 4963 &amp; 4964 Honors Research Seminar

in Earth Science I &amp; II

**Major Electives** (6 s.h.)*selected only with departmental approval***FREE ELECTIVES** (see page 28)

Additional courses in biology, chemistry, mathematics or physics recommended.

**Collateral Program: Instruction in Subject Areas, K-12** Regardless of which option is taken, students must have Bio 1000 Principles of Biology, Che 1083 and 1084 General Chemistry, Phy 2091 and 2092 General Physics, Ast 1100 Introduction to Astronomy, Geol 1200 Introduction to Geology and Met 1300 Introduction to Meteorology. Students must contact the Department of Educational Arts and Systems for admission and advisement.

## B.A. in Earth Science: Meteorology Option

124 s.h.

**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36**Required Cognate Courses** (7 s.h.)

Mat 2411 Calculus

*One of the following:*

Ast 1100 Introduction to Astronomy or Geol 1200

Introduction to Geology

**ADDITIONAL COGNATE COURSES**

Phy 2091-2092 General Physics I &amp; II

Mat 2412 Calculus II

**MAJOR REQUIREMENTS****Required Courses** (24 s.h.)

Met 1300 Introduction to Meteorology

Met 3370 Atmospheric Dynamics

Met 3371 Atmospheric Thermodynamics

Met 4351 Synoptic Meteorology I

Met 4352 Synoptic Meteorology II

*One of the following:*

ES 4953-4954 Earth Science Seminar I &amp; II

or ES 4963-4964 Honors Research Seminar in

Earth Science I &amp; II

**Major Electives** (6 s.h.)*selected only with departmental approval***FREE ELECTIVES** (see page 28)

Additional courses in biology, chemistry, mathematics or physics recommended.

## Astronomy Courses

**Ast 1100 (ES 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 (ES 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 (ES 3171) Solar System Astronomy (3)**

The characteristics of the individual objects and systems of objects that together comprise our solar system; theories of the origin of our planetary system. Prerequisites: Mat 2412, Phy 2092 previously or concurrently, Ast 1100 or permission of instructor.

**Ast 3172 (ES 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 (ES 4181) Astrophysics (3)**

A study of the processes 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 (ES 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 Geo 1010 and Geol 1200. (3 hr. lec./3 hr. lab.)*

**Geol 1201 (ES 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.*

**Geol 1202 (ES 1202) Geologic Hazards Laboratory (1)**

Must be taken concurrently with Geol 1201.

**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.*

**Geol 1210 (ES 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.*

**Geol 2262 (ES 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.

**Geol 2263 (ES 2263) Geology and the Environment Lab (1)**

Must be taken concurrently with Geol 2262.

**Geol 3261 (ES 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.

**Geol 3263 (ES 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.

**Geol 3264 (ES 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.

**Geol 3265 (ES 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.)

Prerequisites: Geol 1200 or permission of the instructor.

**Geol 3266 (ES 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.

**Geol 3269 (ES 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.

**Geol 3281 (ES 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.

**Geol 4252 (ES 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.

**Geol 4256 (ES 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.

**Geol 4263 (ES 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.

**Geol 4265 (ES 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.

**Geol 4266 (ES 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.

**Geol 4268 (ES 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.

**Geol 4917 (ES 4917) Geoscience Technology (4)**

Development of the specific skills used in geoscience technology; rock thin sectioning; mineral staining; photomicrography of rock thin sections; theory and practice of X-ray diffraction; preparation of visual aids for geoscience teaching.

Prerequisites: Geol 3261, IS 1500 and 2500.

Corequisite: Geol 4263.

## Meteorology Courses

### Met 1300 (ES 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 (ES 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 (ES 2301) Climatology Laboratory (1)

Techniques in handling climatological data. (Same as Geog 2301).

Corequisite: Met 2300 or permission of the instructor.

### Met 2310 (ES 2310) General Meteorology (4)

C. Murphy

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.

### Met 2350 (ES 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 (ES 2360) Weather Analysis (3)

Zois

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.

### Met 3360 (ES 3360) Air Pollution (3)

C. Murphy

An introduction to the problem of air pollution as seen from a meteorological viewpoint.

Prerequisite: Met 1300 or permission of the instructor.

### Met 3369 (ES 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 (ES 3370) Atmospheric Dynamics (4)

Zois

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.

### Met 3371 (ES 3371) Atmospheric Thermodynamics (4)

C. Murphy

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 convention treated. (3 hr. lec./3 hr. lab.)

Prerequisites: Met 1300, Phy 2092, Mat 2412 or permission of instructor.

### Met 3372 (ES 3372) Physical Meteorology (3)

C. Murphy

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.

Prerequisite: Mat 2412, Met 1300, Phy 2092 or permission of instructor.

### Met 3380 (ES 3380) Meteorological Instrumentation (3)

C. Murphy

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./lab.)

Prerequisites: Met 1300 and Mat 1052.

### Met 4301-2 (ES 4301-2) Meteorology Cooperative Education I & II (3,3)

Zois

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.

### Met 4351-2 (ES 4351-2) Synoptic Meteorology I & II (4, 4)

Zois

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.

### Met 4370 (ES 4370) Advanced Atmospheric Dynamics (3)

Zois

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.

## Oceanography Courses

### Ocean 3453 (ES 3453) Introduction to Oceanography (4)

Meyerson

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, or Geol 1200, Met 1300 or permission of instructor.

### Ocean 4454 (ES 4454) Marine Geology (4)

Meyerson

Introduction to the geology of the oceans, including tectonics, geochemistry, shoreline processes, stratigraphy, sedimentology, and related subjects. (3 hr. lec./3 hr. lab.)

Prerequisites: Ocean 3453 or permission of instructor.

### Ocean 4455 (EC 4455) Chemical Oceanography (4)

Meyerson

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.)

Prerequisites: Ocean 3453 or permission of instructor.

### Ocean 4470 (ES 4470) Physical Oceanography (4)

Zois

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 oceanic circulation, geostrophic computations, vorticity. (3 hr. lec./3 hr. lab.)

Prerequisite: Ocean 3453 or permission of instructor.



## Earth Science Courses

### SPECIAL TOPICS AND SEMINARS

#### **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 has 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)**

Individual 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 III & IV**

## ECONOMICS, GEOGRAPHY AND MANAGEMENT SCIENCE

Faculty: Battista, Bornstein, Capone, Carlsen, Crawford, Elakman, Engelberg, Ettinger, Fenster, Finch, Freimark, Fulop (Chairperson), Helliwell, Herskovitz, Hiraoka, Johnson, Kelland, Kempey, Kim, Lampert, Mariscal, Nwana, Parker, Schader, Schumacher, Stern, Weber

### B.A. in Economics

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.

124 s.h.

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**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36

**Required Cognate Courses** (6 s.h.)

*Social/Behavioral Sciences and History Cluster:*

Eco 1020-1021 Principles of Economics I & II 6

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**MAJOR REQUIREMENTS** 30

**Required Courses** (12 s.h.)

MgS 2120 Business Statistics 3

Eco 3020 Intermediate Macroeconomics 3

Eco 3021 Intermediate Microeconomics 3

Eco 3300 Money and Banking 3

**Department Electives** (18 s.h.) *from departmental offerings; at least 12 hours on 3000 and 4000 levels.*

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**FREE ELECTIVES** (see page 28) 58

**Collateral Program: Instruction in Subject Areas, K-12** Students who desire New Jersey teacher certification along with the above major elect the Instruction in Subject Areas collateral and must contact the Department of Educational Arts and Systems for admissions and advisement.

### Minor in Economics

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

## B.S. in Accounting

Successful completion of this program enables the graduate to sit for the Certified Public Accountant examination. There is a wide range of career choices open to a well-qualified accountant, including auditor, consultant, researcher, teacher, general practitioner or corporate executive.

124 s.h.

### GENERAL EDUCATION REQUIREMENTS (see page 26) 36

### ADDITIONAL COGNATE COURSES 12

*CpS 1931 Computer Arithmetic Algorithms	3
*CpS 1932 Principles and Procedures of Electronic Data Processing	3
*Eco 1020-1021 Principles of Economics I & II	6

### MAJOR REQUIREMENTS 57

#### Required Courses (45 s.h.)

MgS 2110 Quantitative Methods in Management Science	3
MgS 2120 Business Statistics	3
*Acc 2200 Principles of Accounting I	3
*Acc 2210 Principles of Accounting II	3
MgS 3310 Management of Corporate Finance I	3
MgS 3051 Business Law I	3
MgS 3052 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 MgS 3311 Management of Corporate Finance II	3
Eng 3090 Business Professional and Technical Writing	3

Major Electives (12 s.h.) may be selected with departmental advisement

### FREE ELECTIVES (No MgS or Acc courses) (see page 28) 19

\*A 3.0 G.P.A. in these courses is required for admission into accounting major. A minimum of B in Accounting I & II is required.

## B.S. in Management Science

124 s.h.

### GENERAL EDUCATION REQUIREMENTS (see page 26) 36

#### Required Cognate Courses (12 s.h.)

##### Science and Mathematics Cluster:

CpS 1931 Computer Arithmetic Algorithms	3
CpS 1932 Principles and Procedures of Electronic Data Processing	3

##### Social/Behavioral Sciences and History Cluster:

Eco 1020-1021 Principles of Economics I & II	6
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### MAJOR REQUIREMENTS 30

#### Required Courses (12 s.h.)

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

#### Departmental Electives (18 s.h.) selected generally or as a concentration as follows:

##### 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 I	3
Acc 3240 Cost Accounting	3
Acc 4230 Auditing I	3

##### FINANCE

MgS 3311 Management of Corporate Finance II	3
<i>Five of the following:</i>	15

Eco 3300 Money and Banking

MgS 3300 Personal Finance

MgS 3320 Preparation and Analysis of Financial Statements

MgS 3350 International Business Finance

MgS 4300 Investments

MgS 4310 Money and Capital Markets

##### MANAGEMENT

MgS 2030 Business Organization and Management	3
MgS 4050 The Strategic Management Process	3
<i>Four of the following:</i>	12

MgS 3013 Small Business Management

MgS 3030 Personnel Management

MgS 3035 Management of Multinational Corporations

MgS 3040 Management Information Systems

MgS 3050 Management Strategies

MgS 4010 Production Management

<b>MARKETING</b>	
MgS 3410 Basic Marketing	3
<i>Five of the following:</i>	15
MgS 3420 The Retail Marketing Process	
MgS 3425 Retail Buying and Merchandise Management	
MgS 3430 Essentials of Advertising	
MgS 3431 Advertising Campaigns	3
MgS 3435 Sales Management	
MgS 3440 Fashion Merchandizing	
MgS 3450 Industrial Marketing	
MgS 3451 Consumer Marketing	3
MgS 3460 Marketing Management	
MgS 3470 International Marketing	3
MgS 4410 Introduction to Marketing Research	
MgS 4420 Transportation and Physical Distribution	
<b>QUANTITATIVE METHODS AND OPERATIONS RESEARCH</b>	
MgS 3120 Advanced Statistical Methods in Management Science	3
MgS 3130 Forecasting Techniques in Business and Economics	3
MgS 4010 Production Management	3
MgS 4100 Operations Research	3
Eco 4200 Introduction to Econometrics	3
One additional course selected with advisement	3
<b>GENERAL MANAGEMENT SCIENCE</b>	
<i>Six courses (18 s.h.) selected from the above concentrations, with departmental advisement.</i>	

**FREE ELECTIVES** (see page 28) 58

### Minor in Management Science

18 s.h.

#### Required Courses (12 s.h.)

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 s.h.)

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

## 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.

#### **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.

#### **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.

#### **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.

#### **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.

## QUANTITATIVE METHODS

**Eco 3200 Introduction to Quantitative Methods in Economics (3)** Fulop  
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.

**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)** Finch, Kempey  
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.

**Eco 3320 Public Finance (3)** Kempey  
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.

**Eco 4300 Monetary and Fiscal Policy (3)** Kempey  
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)** Kim  
Principles of international trade, international finance and exchange. Introduction to the major international organizations.  
Prerequisites: Eco 1020-1021 or permission of instructor.

**Eco 4420 Advanced International Economics (3)** Kim  
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.

**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)** Finch, Lampert  
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.

**Eco 3610 Industrial Organization and Public Policy (3)** Lampert  
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.

**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)** Kim  
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.

**Eco 3801 Labor Economics II** Kim  
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.

**Eco 3840 Population Economics (3)** Fulop  
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.

## WELFARE, HEALTH, CONSUMER, URBAN, REGIONAL

**Eco 2900 The Economics of Poverty (3)** Finch  
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)** Kim  
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 3930 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 Geol 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.

**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)**

Kelland

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.

**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.

**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.

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

Kelland

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.

**Geo 3920 Geography of Latin America (3)**

Kelland

The physical geography and human adaptation in Middle South America.

Prerequisite: Six hours in geography or permission of instructor.

**Geo 3950 The Geography of New Jersey (3)**

Kelland

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.

**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)**

Capone, Elakman, Schader

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.

**Acc 3220 Intermediate Accounting II (3)**

Capone, Carlsen, Elakman

Continuation of Acc 3210 which is prerequisite.

**Acc 3230 Federal Income Taxes I (3)**

Bornstein, Elakman, Schader

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.

**Acc 3231 Federal Income Taxes II (3)**

Bornstein, Elakman, Schader

Continuation of Federal Income Taxes I.

Prerequisite: Acc 3230.

**Acc 3240 Cost Accounting (3)**

Elakman

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.

**Acc 3261 Computer Augmented Accounting (3)**

Engleberg

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 1931.

**Acc 3280 Government and Fund Accounting (3)**

Schader

Fund Accounting preparation and analysis of financial statements for government, schools, hospitals and other not-for-profit organizations.

Prerequisite: Acc 2200.

**Acc 4210 Advanced Accounting (3)**

Bornstein, Schader

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.

**Acc 4220 Practical Accounting Procedures (3)**

Bornstein

Prepares the student to function effectively within an accounting environment, using the actual forms, accounting practices and procedures.

Prerequisite: Acc 3210.

**Acc 4225 Accounting Theory (3)** Schader  
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.

**Acc 4230 Auditing I (3)** Carlsen, Schader  
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.

**Acc 4240 Auditing II (3)** Carlsen  
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.

**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.

## 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*).

**MgS 2070 (3070) Real Estate Transactions (3)** Battista  
The principles, practices and laws concerning real estate.

**MgS 3051 Business Law I (3)** Capone, Herskovitz  
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.

**MgS 3052 Business Law II (3)** Capone  
The basic legal principles that apply to the areas of personal property, sales, security devices, commercial paper, estates and bankruptcy.  
Prerequisite: MgS 3051.

### MANAGEMENT

**MgS 2030 Business Organization and Management (3)** Battista, Parker  
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.

**MgS 3013 Small Business Management**  
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 3030 Personnel Management (3)** Parker  
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.

**MgS 3035 Management of Multinational Corporations (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)** Fenster  
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 1931, Acc 2200 and MgS 2030.

**MgS 4010 Production Management (3)** Hiraoka  
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 queuing theory.  
Prerequisites: MgS 2110 and 2120.

**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 (MgS 3050) The Strategic Management Process (3)** Parker  
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. (*credit will not be given for both MgS 3050 and 4050*).  
Prerequisites: MgS 2030 and senior status or permission of instructor.

### 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.

**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.

**MgS 3120 Advanced Statistical Methods in Management Science (3)** Fulop  
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.

**MgS 3130 Forecasting Techniques in Business and Economics (3)** Fulop  
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.

**MgS 4100 Operations Research (3)** Hiraoka  
Quantitative modeling for decision-making and operations research. Linear programming techniques; decision-theory and theory of games.

Prerequisite: MgS 2110 or 2120.

**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.

**MgS 3310 Management of Corporate Finance I (3)** Ettinger  
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.

**MgS 3311 Management of Corporate Finance II (3)** Ettinger  
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.

**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.

**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.

**MgS 4300 Investments (3)** Engelberg  
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.

**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.

## 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)** Helliwell  
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.

**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)** Battista, Helliwell  
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.

**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.

Prerequisites: A basic introductory marketing course: MgS 3410.

**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.

Stern

**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.

Herskovitz, Stern

**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.

**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.

Freimark

**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.)*

**ID 4545 Marketing Communication Workshop (3)****EDUCATIONAL ARTS AND SYSTEMS**

Faculty: Amick, Arnold, Baldassini, Banich, Esposito, Foskey, Froude, Hennings, Herrick, Kavett, Kolodiy, Lozano, Nichols, Orfan, Ortiz, Preil, Schuhmann, Snyder, Weiger (Chairperson)

**B.A. in Elementary Education**

This program prepares students for effective teaching through a planned sequence of courses in educational psychology and philosophy, curriculum content, instructional methodology and field experience for teaching practice. Additionally, students select a second major or coherent sequence of courses in an academic area to meet professional needs. Students completing the program are eligible for a N.J. teacher certificate in Elementary Education, grades K-8. Students are required to complete EAS 2900 Introductory Field Experiences in Elementary Schools prior to acceptance into the Elementary Education program.

A 2.5 cumulative grade point average is required for acceptance into the program, as well as a "C" or better in STM 1900 and Eng 1010.



		128 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b>		32
<b>Core Requirement</b>		
Eng 1010 English Composition	3	
<b>Breadth Requirements</b>		
<i>*English/Humanities</i>		
STM 1900 Speech	9	
Art course		
Music course		
<i>*Social/Behavioral Sciences</i>		
Psy 1000 General Psychology	9	
Psy 2100 Child Psychology		
Soc 1000 Social Life and Society: Introduction to Sociology or Ant 1800 Cultural Anthropology		
<i>*Physical and Biological Sciences</i>		
<i>*Mathematical Sciences (not including computer science)</i>		
Health and Physical Education	4	
HEd 1125 Contemporary Issues in Health		
One course in physical education		
<b>ADDITIONAL REQUIRED COGNATES</b>		21
**ID ---- Intellectual and Cultural Traditions	3	
**ID ---- Emergence of Modern World or His 1062 From Western to World Civilization	3	
**ID ---- World Literature or a literature course in English department	3	
**ID ---- Inquiry and Research	3	
**ID ---- Science and Technology in the Modern World	3	
<b>Electives two courses from any of the above* areas</b>	6	
<b>BEHAVIORAL/SOCIAL SCIENCES</b>		18
Overlap with General Education	9	
EdP 3801 Educational Psychology	3	
EPS 2000 Teacher, School and Society	3	
SpE 2052 Introduction to Psychology of the Handicapped	3	
<b>ACADEMIC SEQUENCE</b>		30
Overlap with General Education	12	
A second major as outlined in the catalog or a coherent sequence of courses inclusive of study at the 2000-4000 level in a subject area to meet professional needs, with departmental advisement	18	

<b>PROFESSIONAL EDUCATION</b>		41
EAS 2900 Introductory Field Experiences in Elementary Schools	3	
EAS 3900 Field Experiences in the Elementary School	2	
EAS 3110 Experiences in Language Arts in the Elementary School	3	
**CS 3400 Experiences in The Teaching of Reading in the Elementary School	3	
EAS 3120 Experiences in Mathematics in the Elementary School	3	
EAS 3130 Experiences in Science in the Elementary School	3	
EAS 3140 Experiences in Social Studies in the Elementary School	3	
EAS 4910 Professional Internship in Elementary Teaching and Curriculum	12	
CS 4400 Advanced Reading Techniques	3	
<b>Electives select 6 s.h. from the following:</b> HEd 3506 Health Education in the Elementary School (1½); PEd 3615 Physical Education in the Elementary School (1½); FA 3910 Art in Education (3); Mus 2310 Elementary School Music (3)	6	
<b>FREE ELECTIVES (see page 28)</b>		7

\*\*course in development

**B.A. in Elementary Education:**  
**Option: Alternative and Corrections Education**  
**Academic Sequence: Political Science**

131 s.h.

**GENERAL EDUCATION REQUIREMENTS**

32

**Core Requirement**

Eng 1010 English Composition 3

**Breadth Requirements****\*English/Humanities** 9

STM 1900 Speech

Art course

Music course

**\*Social/Behavioral Sciences** 9

Psy 1000 General Psychology

PS 3650 Juvenile Justice

Soc 1000 Social Life and Society:

Introduction to Sociology

**\*Physical and Biological Sciences** 4**\*Mathematical Sciences** (not including  
computer science) 3**Health and Physical Education** 4

HEd 1125 Contemporary Issues in Health

One course in physical education

**ADDITIONAL REQUIRED COGNATES**

21

**\*\*ID ---- Intellectual and Cultural Traditions** 3**\*\*ID ---- Emergence of Modern World or  
His 1062 From Western to World  
Civilization** 3**\*\*ID ---- World Literature or a literature  
course in English department** 3**\*\*ID ---- Inquiry and Research** 3**\*\*ID ---- Science and Technology in the Modern  
World** 3

One course in public administration 3

One course in political science at 3000-4000  
level 3**BEHAVIORAL/SOCIAL SCIENCES**

18

Overlap with General Education 3

Psy 2110 Psychology of Adolescence 3

EdP 3801 Educational Psychology 3

EPS 2000 Teacher, School and Society 3

EAS 3150 Foundations of Bilingual Education 3

SpE 2052 Introduction to Psychology of the  
Handicapped 3**ACADEMIC SEQUENCE**

30

Overlap with General Education 6

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

Four political science courses at 3000-4000  
level 12**PROFESSIONAL EDUCATION**

39

EAS 2902 Introductory Field Experiences  
in Alternative/Corrections Settings 3

SpE 2156 Emotional Disabilities 3

EAS 3901 Field Experiences in Alternative/  
Corrections Settings 2EAS 3101 Curriculum and Methodology for  
Alternative Educational Settings 3EAS 3107 Experiences in Elementary Curriculum  
Content 4EAS 3111 Teaching Literature and Basic English  
Skills in Alternative Educational Settings 3EAS 3120 Experiences in Mathematics in the  
Elementary School 3**\*\*CS 3400 Experiences in the Teaching of  
Reading in the Elementary School** 3EAS 4930 Professional Internship in  
Alternative/Corrections Teaching &  
Curriculum 12

CS 4400 Advanced Reading Techniques 3

**\*\*course in development**

B.A. in Elementary Education:  
Option Alternative and Corrections Education  
Academic Sequence: Sociology

128 s.h.

**GENERAL EDUCATION REQUIREMENTS**

32

**Core Requirement**

Eng 1010 English Composition

**Breadth Requirements**

\*English/Humanities

STM 1900 Speech

Art course

Music course

\*Social/Behavioral Sciences

Psy 1000 General Psychology

PS 3650 Juvenile Justice

Soc 1000 Social Life and Society:

Introduction to Sociology

\*Physical and Biological Sciences

\*Mathematical Sciences (not including

computer science)

*Health and Physical Education*

HEd 1125 Contemporary Issues in Health

One course in physical education

**ADDITIONAL REQUIRED COGNATES**

21

\*\*ID ---- Intellectual and Cultural Traditions

\*\*ID ---- Emergence of Modern World or His

1062 From Western to World Civilization

\*\*ID ---- World Literature or a literature

course in English department

\*\*ID ---- Inquiry and Research

\*\*ID ---- Science and Technology in the Modern

World

*Two courses in sociology at the 3000-4000**level***BEHAVIORAL/SOCIAL SCIENCES**

18

Overlap with General Education

Psy 2110 Psychology of Adolescence

EdP 3801 Educational Psychology

EPS 2000 Teacher, School and Society

EAS 3150 Foundations of Bilingual Education

SpE 2052 Introduction to Psychology of the

Handicapped

**ACADEMIC SEQUENCE**

30

Overlap with General Education

Soc 2050 Social Statistics

Soc 2052 Methods of Social Research

Soc 3050 Development of Social Theory

*Four courses in sociology at the**3000-4000 level***PROFESSIONAL EDUCATION**

39

EAS 2902 Introductory Field Experiences  
in Alternative/Corrections Settings

SpE 2156 Emotional Disabilities

EAS 3901 Field Experiences in Alternative/  
Corrections SettingsEAS 3101 Curriculum and Methodology for  
Alternative Educational SettingsEAS 3107 Experiences in Elementary  
Curriculum ContentEAS 3111 Experiences in Teaching Literature  
and Basic English Skills in Alternative  
Educational SettingsEAS 3120 Experiences in Mathematics in the  
Elementary School\*\*CS 3400 Experiences in The Teaching of  
Reading in the Elementary SchoolEAS 4930 Professional Internship in  
Alternative/Corrections Teaching  
and Curriculum

CS 4400 Advanced Reading Techniques

\*\*course in development

**B.A. in Elementary Education: Bilingual Option**

	130 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>32</b>
<b>Core Requirement</b>	<b>3</b>
Eng 1010 English Composition	
* <i>English/Humanities</i>	9
STM 1900 Speech	
Art course	
Music course	
* <i>Social/Behavioral Sciences</i> (from at least 2 disciplines)	9
Psy 1000 General Psychology	
Psy 2100 Child Psychology	
One other course	
* <i>Physical and Biological Sciences</i>	4
* <i>Mathematical Sciences</i> (not including computer science)	3
<i>Health and Physical Education</i>	4
HEd 1125 Contemporary Issues in Health	
One course in physical education	
<b>ADDITIONAL REQUIRED COGNATES</b>	<b>21</b>
(see elementary education required cognates)	
<b>BEHAVIORAL/SOCIAL SCIENCES</b>	<b>21</b>
Overlap with General Education	6
EdP 3801 Educational Psychology	3
EPS 2000 Teacher, School and Society	3
EAS 3150 Foundations of Bilingual Education	3
EAS 4150 Bilingual Child: Language and Culture	3
EAS 4151 Bilingual Child: Problems of Adjustment to American Society	3
<b>ACADEMIC SEQUENCE</b>	<b>30</b>
Overlap with General Education	9
A second major as outlined in the catalog or a coherent sequence of courses inclusive of study at the 3000-4000 level in a subject area to meet professional needs, with departmental advisement	21
<b>PROFESSIONAL EDUCATION</b>	<b>41</b>
EAS 2900 Introductory Field Experiences in Elementary Schools	3
EAS 3900 Field Experiences in the Elementary School	2
EAS 3110 Experiences in Language Arts in the Elementary School	3

**CS 3400 Experiences in The Teaching of Reading in the Elementary School	3
EAS 3120 Experiences in Mathematics in the Elementary School	3
EAS 3130 Experiences in Science in the Elementary School	3
EAS 3140 Experiences in Social Studies in the Elementary School	3
EAS 4910 Professional Internship in Elementary Teaching and Curriculum	12
EAS 4152 Language and Reading Skills in a Bilingual Setting	3
EAS 3151 Teaching Techniques for Bilingual-Bicultural Schools	3
EAS 3710 Teaching English as a Second Language	3

\*\*course in development

**Collateral Program: Instruction in Subject Areas, K-12**

This program is intended for students preparing to teach specialized programs in middle or secondary schools. It can only be taken in conjunction with an appropriate academic major: biology, earth science, economics, English, French, history, mathematics, physical science, political science, sociology and Spanish. Students are required to complete EAS 2901 Field Experiences in Subject Areas Instruction K-12 prior to acceptance into the program. A 2.5 cumulative grade point average (G.P.A.) is required for acceptance into the program, as well as "C" or better in STM 1900 and Eng 1010.

In general, a degree program which includes the instruction in subject areas collateral program is structured as follows:

	128-136 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>32</b>
See coordinator of instruction in subject areas, K-12 for specific requirements.	
<b>ADDITIONAL REQUIRED COGNATES</b>	<b>21-23</b>
See coordinator of instruction in subject areas, K-12 for specific requirements.	

<b>BEHAVIORAL/SOCIAL SCIENCES</b>	15
Overlap with General Education	9
EdP 3801 Educational Psychology	3
EPS 2000 Teacher, School and Society	3
<i>For Instruction in Subject Areas, French or Spanish only:</i>	
EPS 4050 School and Society: Cultural, Minority and Urban Perspectives <i>or</i> EAS 3150 Foundations of Bilingual Education	3
<b>ACADEMIC SEQUENCE</b>	minimum 30
See coordinator of instruction in subject areas, K-12 for specific requirements.	
<b>PROFESSIONAL EDUCATION</b>	27
EAS 2901 Introductory Field Experiences in Subject Area Instruction K-12	3
**CS 34-- Reading in Content Areas I	2
**CS 44-- Reading in Content Areas II	2
<i>One of the following:</i>	5
EAS 3510 Introduction to English Education: Direct Field Observation	
EAS 3520 Introduction to Mathematics Education: Direct Field Observation	
EAS 3530 Introduction to Science Education: Direct Field Observation	
EAS 3540 Introduction to Social Studies Education: Direct Field Observation	
EAS 3550 Introduction to Foreign Language Education: Direct Field Observation	
<b>Professional Semester (15 s.h.)</b>	
EAS 4920 Professional Internship K-12	12
<i>One of the following:</i>	3
EAS 4510 English Curriculum and Methodology	
EAS 4520 Mathematics Curriculum and Methodology	
EAS 4530 Science Curriculum and Methodology	
EAS 4540 Social Studies Curriculum and Methodology	
EAS 4550 Foreign Language Curriculum and Methodology	
<b>FREE ELECTIVES (see page 28)</b>	0-12

\*\*course in development

## Courses

### FOUNDATIONS

#### EAS 1000 Introduction to Elementary Education (1)

A sampling of some components of the elementary education program, including a field observation.

Prerequisites: Completion of junior year of high school and a "B" average.

### ELEMENTARY CURRICULUM AND METHODS

#### EAS 3100 Elementary Curriculum and Methodology (3)

Snyder

Elementary school objectives, practices, curriculum patterns and planning techniques. Corequisites: EAS 3100, 3110, 3130, 3140, 3900 and CS 3400 must be taken concurrently by full-time elementary education majors. *Not open to freshmen students entering after 9/83.*

#### EAS 3101 Experiences in Curriculum and Methodology for Alternative/Educational Settings (3)

Amick

Examination of curricular patterns in correctional settings and in alternative schools. Emphasis on teaching basic survival skills.

Corequisites: EAS 3106, 3111 and 3901. (Also EAS 3107 for freshmen entering after 9/83).

#### EAS 3105 The Teaching-Learning Process (3)

Role of teacher and learner in relation to classroom climate, teaching strategies and evaluation. (Limited to library/media majors). Credit not given for both EAS 3100 and 3105.

#### EAS 3106 Workshop in Elementary Curriculum Content (6)

Froude, Kavett

Content and methodologies for elementary school instruction in mathematics, science and social studies. Students may be required to take 3120, 3130 or 3140 if competency in each area is not demonstrated. (Limited to library/media majors and Alternative/Corrections majors).

#### EAS 3110 Experiences in Teaching Language Arts in the Elementary School (3)

Hennings, Ortiz, Weiger

Study of the teaching of literature, linguistics, written expressions, cursive and manuscript writing, listening, and speaking with some attention to ways of integrating music into the elementary program.

Corequisites: EAS 3900, 3120, 3130, 3140 and CS 3400 should be taken concurrently by full-time elementary majors. (Freshmen entering prior to 9/83 take EAS 3100 in place of 3200).

#### EAS 3111 Teaching Literature and Basic English Skills in Alternative Educational Settings (3)

Herrick, Ortiz, Weiger

Methods of teaching elementary children and youth in correctional and alternative schools literature and basic English skills.

Corequisites: EAS 3101, 3106, 3901. (Also EAS 3107 for freshmen entering after 9/83).

#### EAS 3120 Experiences in Mathematics in the Elementary School (3)

Kavett, Kolodiy, Orfan

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 1011, 1012, 1014, or 1016 and demonstrated competence in arithmetic.

#### EAS 3121 Geometry in Elementary School Mathematics (3)

Kavett, Orfan

Examination of the role of geometry in the elementary school mathematics program through an experiential and reflective approach. Active participation in exploratory classroom experiences familiarize students with basic geometric concepts and their application to contemporary mathematics problems.

**EAS 3125 Computers in Education (3)** Kolodiy, Orfan  
Introductory experience in using the computer, learning computer languages appropriate in educational settings, learning computer applications in educational settings, and examination of educational hardware and software.

**EAS 3130 Experiences in Science in the Elementary School (3)** Arnold, Froude  
A study of science content and teaching methodology including student planning, development and presentation of instructional methods and media.  
Corequisites: EAS 3110, 3120, 3130, 3140, 3900, and CS 3400 must be taken concurrently by full-time elementary education majors. (Freshmen entering prior to 9/83 take EAS 3100 in place of 3200).

**EAS 3132 Field Science for Elementary School Teachers (3)** Arnold  
Consideration is given to natural resources, both physical and biological, as applied to elementary school science instruction.

**EAS 3140 Experiences in Social Studies in the Elementary School (3)** Banich, Esposito, Froude  
Study of the objectives of elementary school social science, planning techniques, teaching materials, innovative programs and evaluation, emphasizing interdisciplinary approach.

**EAS 3150 Introduction to Bilingual Education (3)** Baldassini, Ortiz, Schuhmann  
Analysis of concept of bilingualism; study of objectives, curriculum, methods, materials and existing programs in bilingual education. Observation in bilingual classrooms.

**EAS 3151 Teaching Techniques for Bilingual-Bicultural Schools (3)** Baldassini, Lozano, Ortiz  
Examination and evaluation of alternative pedagogical methods and techniques for use in teaching content areas to bilingual-bicultural students in a multicultural-multiethnic environment.

**EAS 4101 Seminar in Teaching Strategies and Problems (3)** Amick, Banich, Snyder  
Problems and practices relative to a preservice teacher's professional development and teaching. Students will use category systems to analyze segments of teaching, will work with verbal and nonverbal teaching strategies, will design instructional sequences, and project solutions to problems encountered in teaching. Must be taken the same semester as EAS 4900 or 4910.  
Prerequisites: Senior status and EAS 3100. (Not open to students entering after 9/83).

**EAS 4102 Seminar in Teaching in Alternative Educational Settings (3)** Amick  
Study of teaching strategies for effecting cognitive and affective development of students.  
Prerequisites: Senior status and EAS 3101. (Not open to students entering after 9/83).

**EAS 4150 Bilingual Child: Language and Culture (3)** Baldassini, Ortiz  
Examination of experiential background, cultural heritage and resultant mental set of the bilingual-bicultural child. Study in socio-linguistics, including 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.

**EAS 4151 Bilingual Child: Problems of Adjustment to American Society (3)** Baldassini, Ortiz  
Examination and analysis of the multiple and varied types of adjustments that the bilingual-bicultural child is called upon to make in the process of adapting to American schools and society.

**EAS 4152 Learning and Reading Skills in Bilingual-Bicultural Schools (3)** Lozano, Ortiz  
Techniques of helping bilingual-bicultural students develop language and reading skills in two languages.  
Prerequisite: CS 3400.

## INDEPENDENT STUDY

**EAS 4202 Independent Study in Educational Arts and Systems (1-6)**  
Intensive study in area of elementary and/or secondary education, 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.*

**EAS 3510 Introduction to English Education: Direct Field Observation (5)** Herrick, Weiger  
Overview of values, objectives and current patterns of K-12 English instruction. Development of teaching skills through microteaching. Directed observations in multicultural public school settings.  
Prerequisite: EAS 2901.

**EAS 3520 Introduction to Mathematics Education: Direct Field Observation (5)** Kavett, Orfan  
Overview of values, objectives and curriculum patterns of K-12 mathematics instruction. Development of teaching skills through microteaching. Directed observations in multicultural public school settings.  
Prerequisite: EAS 2901.

**EAS 3530 Introduction to Science Education: Direct Field Observation (5)** Arnold, Kolodiy  
Overview of values, objectives and curriculum patterns of K-12 science instruction. Development of teaching skills through microteaching. Directed observations in multicultural public school settings.  
Prerequisite: EAS 2901.

**EAS 3540 Introduction to Social Studies Education: Direct Field Observation (5)** Froude  
Overview of values, objectives and curriculum patterns of K-12 social studies instruction. Introduction to social studies methodology through videotaped microteaching. Field experience in multicultural setting.  
Prerequisite: EAS 2901.

**EAS 3550 Introduction to Foreign Language Education: Direct Field Observation** Gnarra, Schuhmann  
Overview of values, objectives and curriculum patterns of K-12 foreign language instruction. Development of teaching skills through microteaching. Directed observations in multicultural public school settings.  
Prerequisite: EAS 2901.

**EAS 4510 (4511) English Curriculum and Methods (3)** Herrick, Weiger  
Application of a philosophy and process of English to curriculum development; an overview of modern English curriculum K-12. The production of instructional materials to be utilized in the classroom.  
Prerequisites: EAS 3510.

**EAS 4520 (4522) Mathematics Curriculum and Methodology (3)** Kavett  
Application of philosophy and process of mathematics to curriculum development: overview of modern mathematics curriculum (K-12). Production of instructional materials to be utilized in the classroom.  
Prerequisite: EAS 3520.

**EAS 4530 (4531) Science Curriculum and Methodology (3)** Arnold, Kolodiy  
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.  
Prerequisite: EAS 3530.

**EAS 4540 (4541) Social Studies Curriculum and Methodology (3)** Froude  
Application of philosophy and process of social studies to curriculum development: overview of modern social studies curriculum (K-12). Production of instructional materials to be utilized in the classroom.  
Prerequisite: EAS 3540.

**EAS 4550 (4551) Foreign Language Curriculum and Methodology (3)** Edreira, Schuhmann  
Application of foreign language curriculum in grades K-12. Techniques of planning for instruction and evaluation.  
Prerequisite: EAS 3550.

### K-12 CURRICULUM AND METHODS

**EAS 3710 Teaching English as a Second Language (3)** Baldassini, Lozano, Ortiz  
Analysis of the problems involved in English instruction where English is a second language. Ethnic and linguistic backgrounds of children for whom English is a second language.

**EAS 3711 Children's Literature in Education (3)** Hennings, Lozano, Weiger  
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.

**EAS 3712 Theory and Practice of Teaching English as a Second Language I (3)** Lozano  
Introduction to the linguistics method, materials and techniques of teaching English as a second language.

**EAS 3713 Theory and Practice of Teaching English as a Second Language II (3)** Ortiz  
Analysis of the problems, methodologies, techniques and materials used in teaching English as a second language.

**EAS 3741 Teaching Ethnic Studies (3)** Esposito  
Study of multi-cultural education highlighting experiences and contributions of ethnic groups in the evolution of American society. Emphasis on teaching techniques and curriculum development for ethnic studies.

**EAS 4700 Experimental Patterns in Education (3)** Banich, Herrick  
Innovations and issues in curriculum, instruction and learning theory.

**EAS 4742 Teaching the Holocaust (3)** Preil  
Implications of the holocaust for teaching the consequences of prejudice and racism. Emphasis on methods of teaching the holocaust to students.

### FIELD EXPERIENCE

**EAS 2900 Introductory Field Experiences in Elementary Schools (3)**  
Observational and analytical study of teaching and learning in urban and suburban elementary schools that includes 10 full days of guided visits to elementary schools. *Of EAS 2900, 2901, 2902, students may take only course for credit.*  
Prerequisites: Eng 1010 and STM 1900.

**EAS 2901 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 10 full days of guided visits to schools K-12. *Of EAS 2900, 2901, 2902, students may take only course for credit.*  
Prerequisites: Eng 1010 and STM 1900.

**EAS 2902 Introductory Field Experiences in Alternative/Correctional Settings (3)**  
An observational and analytical study of teaching and learning in both alternative/correctional settings and elementary schools that includes 10 full days of guided visits. *Of EAS 2900, 2901, 2902, students may take only course for credit.*  
Prerequisites: Eng 1010 and STM 1900.

**EAS 3900 Field Experiences in the Elementary School (1)**  
A three-week period to be spent in observing and participating in an elementary classroom. Course must be taken by elementary education majors concurrently with EAS 3100, 3110, 3130, 3140 and CS 3400. *(For students entering after 9/83, 3120 replaces 3100 and two credits are awarded for this course).*

**EAS 3901 Field Experiences in Alternative Educational Settings (3)**  
Field experience in observing and teaching for six weeks in an elementary school and eight weeks in an alternative/correctional setting, two days a week. *(For students entering after 9/83, two credits are awarded for this course).*  
Corequisites: EAS 3101, 3107 and 3111.

**EAS 4900 Student Teaching (8)**  
Full-time unpaid teaching experience for eight weeks in a public school under the direction of a college supervisor and cooperating teacher.  
Prerequisite: Successful completion of EAS 3100, 3110, 3130, 3140, 3900, and CS 3400.  
Pre or Corequisite: Successful completion of EAS 4101.  
*Not open to incoming freshmen effective 9/83.*

**EAS 4910 Professional Internship (Full Semester Student Teaching) (12)**  
A full semester, full-time unpaid teaching experience in selected teaching centers or placements. Students electing this field experience shall also elect accompanying course work taught on site in elementary centers and on campus for subject area placements.  
Prerequisites: Acceptance into the elementary education program and successful completion of EAS 3110, 3120, 3130, 3140, 3900 and CS 3400. *Students who entered prior to 9/83 receive 10 credits for this course.*

**EAS 4920 Professional Internship for Subject Area Teachers, K-12 (12)**  
A full semester, full-time supervised teaching experience in English, foreign language, mathematics, science, or social studies. Includes problems-oriented seminars by college supervisors in field locations. *Students who entered prior to 9/83 receive 10 credits for this course.*  
Prerequisite: EAS 3510, 3520, 3530, 3540 or 3550.  
Corequisite: EAS 4510, 4520, 4530, 4540, 4550.

**EAS 4950 Field Experiences in a Bilingual/Bicultural Setting (3)**  
Individual 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.

Faculty: Allen, Chasnoff, Franklin, Granger, Hancock, Healy, Lorusso, Muniz, Tehie (Chairperson), Welch, Williams, Willis

The Department of Educational Policy Sciences is concerned with the structure and function of schools and other institutions and forces which educate and lead society. On the undergraduate level its courses deal mainly with the philosophical and sociological background of education and with the construction and implementation of educational policies adequate for contemporary society. They seek to integrate the academic disciplines into an instrument for viewing and analyzing education and its relationships to society. The department strives to engage students in a process aimed at enabling each to reassess, extend and systematize his or her own thinking. This is accomplished through contact with and critical analysis of the ideas of others, whether teachers, students or writers, and through vital involvement with the social realities affecting education. In teaching, the department is particularly concerned with the way students learn, which it considers to be at least as important as what they learn.

## Courses

### GENERAL AND INTRODUCTORY

**EPS 2000 Teacher, School and Society (Introduction to Education) (3)**

Franklin, Healy

Introduction to the practice of teaching, the profession of teacher, and to the functioning and the functions of schools. *Required of students entering after 9/84.*

**EPS 4050 School and Society: Cultural, Minority and Urban Education Perspectives (Urban Education) (3)**

Willis

Course provides a theoretical and historical base for understanding educational needs found in multicultural school environments. Includes focus on urban schools where policy issues related to school district size and economic stress factors pose special challenge. Course content increases student knowledge of relevant theories of teaching and learning. Activities draw upon readings, films, field experience, simulations, lectures and discussions. *Required of students entering after 9/84.*

Prerequisite: Sophomore Field Experience.

### FOUNDATIONS

**EPS 3000 Education and Community Institution: S.C.A.T.E. (3)**

Welch, Willis

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.*

**EPS 3002 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.

**EPS 4010 Historical Perspectives in American Education (3)**

Franklin

Examination of the impact of humanistic thought and cultural pluralism in the formation of educational policy.

**EPS 4020 Philosophical Perspectives of Education in a Pluralistic Society (3)**

Healy, Tehie, Welch

Examination of the educational implications of life and work in a culturally diverse society.

**EPS 4030 Education and Social Change (3)**

Franklin, Welch

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.

**EPS 4040 Comparative Education (3)**

Williams

Selected issues in education in cross-national perspective with particular attention to England and the Soviet Union. Multicultural aspects in their historic, socio-economic and political setting.

**EPS 4060 Education in the Non-Western World (3)**

Williams

An analysis of the role of education as an agent of social, economic, and political development in the non-western world. An appraisal of the impact of UNESCO and American programs of technical assistance, developing education and human resources, on the national development of these countries.

**EPS 4070 Social Psychological Issues and the American Teacher (3)**

Allen

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.

**EPS 4080 School and Society in the Soviet Union (3)**

Williams

The role played by cultural and educational forces in the Soviet drive for world power, Russian and Soviet history, economics, philosophy and art, as well as the lives of selected individuals, are studied in order to understand the formal and informal processes of education.



# ENGLISH

Faculty: Banks, Bauer, Brilliant, De Fanti, Dolkey, Evans, Fyne, Hacke, Haselton, Huberman (Chairperson), Kafka, Katz, Kennedy, King, Krueger, McCullough, O'Day, Okin, Reicker, Scotto, Shaffer-Koros, Suiter, Thomason, Weinstein

Speech/Theatre/Media: Dunn, Harper, Kerner, D. Lumsden, G. Lumsden, Murphy, Remmers, Trzesinski

## B.A. in English

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. in English: Writing Option

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.

124 s.h.

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**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36

**REQUIRED RELATED COURSE** 3

STM 1900 Speech Communication

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**MAJOR REQUIREMENTS** 30

**Required Courses** (15 s.h.)

Eng 2205 British Literature I *or*\* Eng 2206  
British Literature II

Eng 2220 American Literature to 1860 *or*\* Eng 2221  
American Literature 1860-1914

Eng 2215 Shakespeare Survey

Eng 3350 Contemporary Literature

Eng 4800 Senior English Seminar *or*\*\* Eng 4600  
Senior Honors Seminar

(\*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 s.h.) **Standard** *must include one language course selected with advisement and courses from at least two of the following groups: figures, genre, period.*

**Major Electives** (15 s.h.) **Writing Option** *must include one language course selected with advisement and 12 s.h. in writing courses, with at least half at the 3000-4000 level.*

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**FREE ELECTIVES** (see page 28) 55

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**Collateral Program in Secondary Education: Instruction in Subject Areas K-12** Students who desire New Jersey teacher certification along with the above major elect the Instruction in Subject Areas Collateral and must contact the Department of Educational Arts and Systems for admissions and advisement.

## Minor in English

Students may select one of four emphases to develop their general understanding of literature, writing and/or linguistics, or to enhance academic or professional skills based in another major.

18 s.h.

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### Required Courses

Eng 2000 Writing about Literature	3	6
One English course outside of concentration, selected with advisement	3	

**Electives** *four courses selected with advisement from departmental offerings, at least two on the 3000-4000 level, to complete one of the following concentrations:* 12

General  
Literature  
Writing  
Linguistics

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## B.A. in English

### Option: Comparative Literature

The Option in Comparative Literature comprises a selected sequence of courses in literature and language taken in both the Department of English and the Department of Foreign Languages, Literatures, and Cultures, leading to the degree of Bachelor of Arts in English, with a Comparative Literature concentration.

124 s.h.

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**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36

### Required Cognate Courses (9 s.h.)

#### Humanities Cluster:

Eng 2200 World Literature	3
Two courses in a foreign language at the 2000 level and above.	6

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**ADDITIONAL COGNATE COURSE** 3

Eng 2240 Introduction to Comparative Literature

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**MAJOR REQUIREMENTS** 30

### Required Courses (21 s.h.)

Eng 4550 Theory and Criticism: The Literature about Literature	3
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*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 s.h.) *Three courses from the English or Foreign Languages departments with a maximum of six hours in Literature in Translation.*

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**FREE ELECTIVES** (see page 28) 55

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**B.A. in English**  
**Option: Speech/Theatre/Media**

124 s.h.

**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36

**Required Cognate Courses** (6 s.h.)

*Humanities Cluster:*

Eng 2215 Shakespeare Survey	3
STM 1900 Speech	3

**ADDITIONAL COGNATE COURSES** 12

Two courses in literature for the theatre 6

Two courses in twentieth century literature, writing, language or poetry 6

**MAJOR REQUIREMENTS** 30

**Required Courses** (12 s.h.)

*One of the following:* 3

- STM 2920 Introduction to the Theatre
- STM 2970 Nature and Experience of Communication
- STM 2975 Introduction to Mass Media
- STM 4940 History of the Theatre

*Out of the following four pairs, one course in each of three pairs:* 9

- STM 2905 Public Speaking I or STM 2960 Acting I
- STM 3900 Voice and Speech or STM 3920 Theatre Speech and Scene Studies
- STM 2925 Technical Theatre Production or STM 3950 Art of Persuasion

STM 3910 Oral Interpretation or STM 3925 Directing I

**Major Electives** (18 s.h.) selected with departmental advisement from courses in Speech/Theatre/Media

**FREE ELECTIVES** (see page 28) 46

**Minor in Speech and Theatre Arts**

18 s.h.

**Required Courses** 15

STM 1900 Speech	3
STM 2920 Introduction to the Theatre	3
STM 2925 Technical Theatre Production	3
STM 2960 Acting I	3
STM 3925 Directing I	3

**Elective** selected with departmental advisement from courses in Speech/Theatre/Media

## 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 instructor.

#### **ESL 0103 Listening Skills (3)**

Extensive practice in developing listening skills through exercises in dictation, following oral directions, notetaking, etc.  
Prerequisite: Consent of instructor.

#### **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 short passages.  
Prerequisite: ESL 0100 or consent of instructor.

#### **ESL 0202 Pronunciation II (3)**

Continuation of English Pronunciation I for students who require additional practice.  
Prerequisite: ESL 0102 or consent of instructor.

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#### **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 instructor.

#### **ESL 0303 English Conversation (3)**

Designed to develop fluency in the spoken language and to enlarge student's English vocabulary, especially with regard to institutions and customs of the United States.  
Prerequisite: Consent of instructor.

#### **ESL 0402 Vocabulary Development II (3)**

Continuing systematic expansion of English vocabulary.  
Prerequisite: ESL 0302 or consent of instructor.

*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 instructor.

#### **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 coordinator.

**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 coordinator.

**DEVELOPMENTAL**

*Degree credit not granted for these courses. See page 32.*

**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 1010 or Eng 0109. To be taken on a Pass/Fail basis. Not for college credit. (Additional 1¼ weekly writing lab. required.)

Prerequisite: Permission of department chairperson.

**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 1010. To be taken on a Pass/Fail basis. Not for college credit. (Additional 1¼ weekly writing lab. required.)

Prerequisite: Permission of department chairperson.

**WRITING**

*Eng 1010 is prerequisite to all English courses beyond the 1000 level except in cases of exemption or permission of the instructor.*

**Eng 1010 Composition (3)**

Development of skills in reading and writing expository prose and in the techniques of research.

**Eng 2000 Writing About Literature (3)**

Bauer, Katz

A course to develop skills in critical reading and analytical writing.

**Eng 2010 Creative Writing (3)**

Banks, Okin

Instruction and practice to develop skills in the writing of fiction, poetry and drama.

**Eng 3000 Writing Poems (3)**

Thomason

Probe and practice in the nature of poetic vision as expressed through the symbols of early language on to contemporary patterns.

**Eng 3005 Advanced Composition (3)**

Katz, Weinstein

Instruction and practice in techniques of writing to develop a dependable prose style.

**Eng 3010 Playwriting (3)**

Okin

A course in the writing of play scripts.

**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.

**Eng 4005 Writing Fiction (3)**

The theory and practice of writing fiction.

**LANGUAGE****Eng 2101 Origin and Structure of the English Language (3)**

Brilliant

An overview of the history of the English language and of the grammatical structure in English.

Prerequisite: Eng 1010.

**Eng 3101 (2100) Introduction to Linguistics (3)**

Brilliant, Hacke

Introduction to the systematic study of language and the chief concerns of modern linguistics.

**Eng 3105 Language, Meaning and Human Behavior (3)**

Hacke, Thomason

Theories of meaning and behavioral consequences of language.

**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)**

Brilliant

Selected topics on applied linguistics, specifically second language learning and dialect. Prerequisite: Eng 3101 or permission of instructor.

**Eng 4100 keystones in Language (3)**

Thomason

Language systems, semantics, general semantics, linguistics and related matters.

**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)**

Brilliant

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.

**SURVEY****Eng 2200 World Literature (3)**

O'Day, Reicker, Shaffer-Koros

Selected readings in Western literature from ancient times to the present day, studied as an interpretation of the continuum of human experience.

**Eng 2205 British Literature I (3)**

Major writers, styles, ideas in English literature from Beowulf to Milton.

**Eng 2206 British Literature II (3)**

Major writers, styles, ideas in English literature from Milton to the 20th century.

**Eng 2210 World Drama (3)**

Evans

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.

**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)**

Shaffer-Koros

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.

**Eng 2250 Children's Literature (3)**

Krueger

A survey of traditional and modern stories, poems, plays, and informational materials for children.

- Eng 2255 Literature for the Adolescent (3)** Krueger  
A study of traditional and contemporary literature of interest and value to adolescents.
- Eng 2260 Yiddish Literature in Translation (3)** Weinstein  
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.
- Eng 3200 Black American Literature (3)** Kafka  
Historical study of writings of Afro-American poets, novelists, and essayists, with emphasis on the contribution of the Afro-American to American letters.
- 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.
- Eng 3210 Russian Literature in Translation (3)** Fyne  
Representative works in English translation of major writers from Pushkin to Solzhenitsyn.
- Eng 3250 Russian Studies in Leningrad and Moscow (3)** Fyne  
Travel course to the Soviet Union, offered only during January Mid-Year Study semester, for study of the culture, history, aesthetics, art, music and drama that form the backdrop to the literature of Leningrad and Moscow. Travel costs will vary. Students should consult instructor and Director of International Studies. May be used as free elective only. Prerequisite: Permission of instructor.
- Eng 3255 Literature at Its Source: London to Edinburgh and Back (3)** Krueger  
Travel course to London, York and Edinburgh, offered only during January Mid-Year Study semester, to study and observe historical, cultural and social influences on children's literature and literature for young adults. Travel costs will vary. Students should consult instructor and the Director of International Studies. May be used as free elective only. Prerequisite: Permission of instructor.

## PERIOD

- Eng 3300 Ancient Greek and Roman Literature in Translation (3)**  
Greek and Roman literature in English translation from Homer to Virgil.
- Eng 3305 Medieval Epic, Saga and Romance (3)**  
Analysis of outstanding literary works, relating them to the period, and exploring the relevance of the works to Western culture, past and present.
- Eng 3306 Renaissance Prose and Poetry (3)**  
Analysis of outstanding literary works, relating them to the period, and exploring the relevance of the works to Western culture, past and present.
- Eng 3310 Sixteenth Century English Renaissance (3)** Scotto  
The "Golden Age" in English literature (exclusive of Shakespeare) from the close of the Middle Ages to the death of Elizabeth I, with focus on the development of English fiction and verse forms, the effect of religious and political controversy in the literature, and the rise of "popular" writing.
- Eng 3315 17th Century Prose and Poetry (3)** O'Day  
Major works of Milton, Donne, Dryden, Bunyan, the Metaphysical and Cavalier poets and other writers, examined in relation to the 17th century and modern times.
- Eng 3316 Elizabethan and Stuart Drama: 1587-1642 (3)** Scotto  
Major writers from Marlowe to the closing of the theatres in 1642, with the omission of Shakespeare.  
Prerequisite: Eng 2205 or 2215 or permission of instructor.

- Eng 3320 Restoration and Eighteenth Century Drama (3)**  
British dramatic literature of the period from 1660-1800, with emphasis on the comedies of Wycherly, Congreve, Sheridan and Goldsmith.
- Eng 3325 Eighteenth Century English Literature (3)**  
Pope, Swift, Boswell and Johnson with emphasis on satire, the development of periodical literature and biography.
- Eng 3330 English Novel of the 18th Century (3)** Bauer  
The development of the modern English novel with attention to Defoe, Richardson, Fielding, Smollet, and Sterne.
- Eng 3335 English Romantic Literature (3)** Evans  
Writings of Wordsworth, Byron, Shelley, Coleridge, Keats, Hazlitt, and Lamb, studied in relation to the history and culture of the time.
- Eng 3340 Victorian Literature (3)** Suiter  
Readings from selected novelists and such authors as Carlyle, Arnold, Mill, Ruskin, Tennyson, Browning, and the pre-Raphaelites.
- Eng 3342 The Irish Literary Tradition (3)** Kennedy  
Emergence of the modern Irish literary voice through an analysis of the interpenetration of religion, politics, and literature, especially in writers like Yeats, George Moore, Synge, Joyce, O'Casey, Frank O'Connor, and selected contemporary poets.
- Eng 3345 Twentieth Century British Literature (3)**  
Prose fiction, drama, poetry, biography and criticism, and their connection with the dynamics of the culture.
- Eng 3350 Contemporary Literature (3)** Shaffer-Koros  
American, British and Continental literature of the twentieth century, predominantly post-World War II, including fiction, drama, poetry, and non-fiction.
- Eng 3355 American Transcendentalism: The Movement in Literature, 1815-1871 (3)** Haselton  
Origins and development of Transcendentalism. Achievements of the movement in literature. Emphasis of ideas and on literary theory and practice of Emerson, Thoreau, and Whitman. Some consideration of minor literary figures and of the movement in its broader aspects.  
Prerequisite: Eng 2220 or permission of instructor.
- Eng 3360 American Literature Between the World Wars (3)** Weinstein  
Prose and poetry of the period from World War I to the beginning of World War II. Emphasis on literary experimentalism, social and political ferment, and the influence of regionalism and expatriation on American writers of the first half of the twentieth century.  
*Other courses acceptable for the Period requirement of English majors:*  
**Eng 3506, 3507, 3515, 3600, 3603**

## FIGURES

- Eng 4400 Chaucer (3)** Scotto  
Development of Chaucer's artistic genius from the early poems through the *Troilus and Criseyde* and *The Canterbury Tales* as the final synthesis of the medieval world, with attention to the language, versification, literary characteristics, and historical background.
- Eng 4405 Shakespeare: Selected Plays (3)** Dolkey, Evans, Scotto  
A detailed analysis of texts, sources, analogues, and criticism of a limited number of plays.  
Prerequisite: Eng 2215.
- Eng 4410 Milton (3)** O'Day, Scotto  
Milton's poetry and prose, with emphasis on critical analysis and scholarly problems and the philosophical, religious and political thought of the seventeenth century, as found in Milton and his contemporaries, such as Hobbes, Descartes, Locke, Burton and Browne.

**Eng 4413 William Blake (3)** Evans  
Intensive reading of selected lyric and shorter prophetic poems, with special emphasis on Blake as visionary writer in his cultural context (and in ours).

**Eng 4415 Poe, Hawthorne and Melville (3)** Bauer, Scotto, Weinstein  
The poetry, fiction, and criticism of the three writers with emphasis also on literary, biographical and historical data.  
Prerequisite: Eng 2220 (recommended) or Eng 2221.

**Eng 4417 Henry James (3)** Haselton  
The fiction of Henry James with emphasis on the development of his art, critical analysis of important selected works, examination of his contributions to the genres of the novel and short story.  
Prerequisite: Eng 2221 or permission of instructor.

**Eng 4420 Fitzgerald, Faulkner, and Hemingway (3)** Weinstein  
The major fiction of the writers with emphasis on literary, biographical and historical values.  
Prerequisite: Eng 2220 or Eng 2221 (recommended).

**Eng 4430 Ibsen, Strindberg, Chekhov, and Shaw (3)** Dolkey, Okin  
Representative plays of these four major figures.

*Other courses acceptable for Figures requirement of the English major:*

**Eng 4500, 4610, 4620, 4630**

#### GENRE

**Eng 3500 Poetry (3)** Thomason  
The corpus, origins, and use of English language poetry and its relation to social currents of our time.

**Eng 3502 The Bible as Literature (3)** O'Day  
Study of the literary forms of the Old and New Testaments and their influences on Western literature.

**Eng 3506 Modern British and American Poetry: 1900-1945 (3)** De Fanti, Evans  
The genesis of modern poetry, its major characteristics, and its relation to the poetic tradition.

**Eng 3507 Contemporary British and American Poetry: 1945 to Present (3)** De Fanti, Evans  
An exploration of the most significant developments in British and American poetry since 1945.

**Eng 3510 Aspects of the Novel (3)** Reicker  
Such novelists as Joyce, Gide, Kafka, Lawrence, Hemingway, Faulkner, and Woolf, studied in relation to their antecedents in the realistic novel of the 19th century.

**Eng 3515 Modern Drama (3)** Dolkey, Okin, Scotto  
Representative plays of such dramatists as Ibsen, Strindberg, Pirandello, Beckett, Miller, and Genet, discussed in terms of form and dramatic structure.

**Eng 3517 Biography (3)** DeFanti  
Study of biography in its various manifestations from ancient times to the present.

**Eng 3525 Literary Naturalism (3)** Bauer  
An intensive study of naturalism as a reflection of social and scientific ideas and of aesthetic developments in literature during the late nineteenth and the early twentieth centuries.

**Eng 3530 The Short Story (3)**  
The history, theory, and practice of the European and American short story.

**Eng 3535 Science Fiction (3)**  
Study of major themes in the development of science fiction in short stories and novels from H. G. Wells to present writers, such as Blish, Bradbury, Campbell, Clarke, Pohl, and Simak.

**Eng 3540 The American Short Story in Film (3)** Bauer  
Analyses of representative American short stories from Hawthorne to Updike and study of films based upon them.

**Eng 3550 Characters in American Drama (3)** Dolkey  
A study of American drama with special focus on characterization.

**Eng 3555 Comedy (3)** Dolkey  
An analysis of the form and structure of comic drama from Aristophanes to Neil Simon.

**Eng 4500 Three Masters of Modern Poetry (3)**  
An intensive study of three major twentieth century figures, such as Yeats, Pound, Eliot, Williams, or Stevens.  
Prerequisite: Three hours of poetry.

*Other courses acceptable for the Genre requirement of English majors:*

**Eng 3316, 3320, 3330, 3601, 4430**

**Eng 4550 Theory and Criticism: The Literature About Literature (3)** Katz  
Reading and examination of theory and criticism from classical times to the present approached as a literary genre with its own conventions and subject matters. Emphasis on theories of literary imagination; problems of literary representation; poetics; the question of authority; and the value of literature.  
Prerequisite: Two literature courses or permission of instructor.

#### 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 1010 requirement or its equivalent, and who have a "B" or better average.*

**Eng 3600 Honors Course in Modern Literature (3)** O'Day  
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.*

**Eng 3601 Honors Course in Poetry (3)** Thomason  
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.*

**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)** Thomason  
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.*

**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)**

Evans

Examination of Frost through a close reading of his poetry, supplemented by the essays, letters, and biography. Frost's traditionalism, his wide range of poetic forms and content, his persona or mask, and his place in American Literature.

Prerequisite: "B" average.

**Eng 4630 Honors Course in James Joyce (3)**

Kennedy

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.

**THEMES****Eng 2705 "Rags to Riches" (3)**

Evans

The political, social and psychological effects of wealth on human behavior as expressed in literature.

**Eng 2715 British Women Writers: A Feminist Perspective (3)**

An analysis of the fiction of some women writers from a feminist point of view.

**Eng 2725 The Other Americans: A Survey of Minority Group Writing (3)**

Kafka

Survey, from Colonial times to the present, of minority group writers, consciously writing to protest their alienated status and to maintain their group's identity.

**Eng 3705 Parodies Lost: Man Looks at Himself Seriously through Humor (3)**

Reicker

A serious study of what man laughs at and why, from Aristophanes to the present, including movies, advertising, and magazines such as *Mad*, *National Lampoon*, and *PMLA*.

**Eng 3710 Coming of Age (3)**

O'Day

A study of the themes of childhood, loss of innocence and initiation into maturity, as they are treated in a variety of English and continental literary works.

**Eng 3715 Changing Aspects of Love in Western Literature (3)**

Kafka

The changing aspects of love as depicted in the Western literary tradition from Homer to the present.

**Eng 3723 The American Jewish Novelist and the Modern World (3)**

Weinstein

An in-depth study of several Jewish-American novelists who have helped to shape and reflect contemporary literature and contemporary social and psychological consciousness.

**Eng 3730 Theme and Motif in Literature (3)**

A study of selected themes in literature of the Western world, their origins, variations and adaptability to different literary eras, with attention given to the effects of symbol, motif and genre on theme.

**Eng 3735 Saints, Sinners, and Fools (3)**

Scotto

A thematic study of the Grail legend, the Faust legend, and the Rogue hero, in terms of origins, symbols and motifs.

**Eng 3740 In Sickness and In Health: Medicine in Literature (3)**

Evans

A thematic exploration of literature dealing with medicine, medical practices and medical personnel.

**Eng 4710 Literature and the Supernatural (3)**

The influences on our culture of magic, occult philosophies, witchcraft, and the paranormal, examined from traditional and contemporary sources in literature and the arts.

**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)**

O'Day

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.

**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)**

Fyne

Instruction in theoretical and practical journalistic techniques, with assignments in feature writing, reporting, proofreading and editing.

**Eng 2935 Feature Writing in Journalism (3)**

Fyne

Instruction and practice in the principles of writing feature articles for both newspapers and magazines with emphasis on style, organization, and human interest.

**Eng 2975 Journalism in the Free Society (3)**

Fyne

Analysis and evaluation of the journalist's role in a free society emphasizing the need for objective reporting.

**Eng 3920 Specialty Writing in Journalism (3)**

Fyne

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.

**Eng 3925 Editing Skills in Journalism (3)**

Fyne

Instruction and workshop experience in the principles and practical skills required for editing newspapers and magazines, including newsroom administration.

**Eng 4910 Journalism/Public Relations Field Placement (6)**

Fyne

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.

**INTERDISCIPLINARY COURSES**

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

**ID 2010 Philosophy in Literature (3)**

Pashman, Weinstein

**ID 3600 Romance of Words (3)****ID 3660 Continental and American Realism (3)**

Bauer

**ID 4545 Marketing Communications Workshop (3)**



## Speech/Theatre/Media Courses

### 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.

Prerequisite: By advisement only.

### STM 1900 Speech Communication (3)

Theory and practice of speech-communication principles in interpersonal, small group and large audience situations.

### 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.

### STM 2705 Oral Interpretation (3)

A literary analysis and performance course in the oral reading of prose, poetry and drama.

Prerequisite: STM 1900.

### STM 2905 Public Speaking (3)

The preparation and delivery of various types of speeches for public audiences.

Prerequisite: STM 1900 or permission of instructor.

### STM 2910 Parliamentary Procedure and 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: STM 1900 or permission of instructor.

### STM 2915 Group Discussion (3)

An analysis of the theory and process involved in group problem solving.

Prerequisite: STM 1900.

### STM 2920 Introduction to the Theatre (3)

A basic survey of the art and craft of the theatre.

### STM 2925 Technical Theatre Production (3)

An introduction to the basic elements of scenery, costuming, make-up, sound and lighting.

### STM 2935 Movement I (3)

Control of the actor's body, including the art of pantomime, and historic dance for the stage.

Prerequisite: STM 2960.

### 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: STM 2925.

### STM 2955 Makeup I (3)

Basic straight and character makeup, using grease-paint, pancake and plastics.

### 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.

### 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: STM 1900.

### 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: STM 1900.

### STM 3405 Costuming I (3)

Historical survey of costume and its application to stage costume design and construction.

Prerequisite: STM 2920.

### 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.

### STM 3700 Speech for Broadcasting (3)

Radio and television announcing techniques, including voice improvement, interviewing, narrating, disc jockeying.

Prerequisite: STM 1900.

### STM 3825 Public Relations (3)

Principles and practices of planning and implementing public relations programs.

Prerequisite: STM 2975.

### STM 3900 Voice and Speech (3)

Voice and speech improvement, treating the voice as a subjective, living phenomenon.

Prerequisite: STM 1900.

### STM 3905 Stage Dialects (3)

Dialect as a tool in oral interpretation, using phonetic transcription to develop auditory, muscular and imitative speech skills.

Prerequisite: STM 1900.

### 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: STM 1900.

### STM 3920 Theatre Speech and Scene Studies (3)

The traditional course in speech for the actor comprising study and practice in using the voice, breath control, articulation-enunciation-pronunciation, phonetics, projection and acoustics. Practical application is supplied in scene studies.

Prerequisite: STM 2960.

### 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: STM 2960 or permission of instructor.

### STM 3930 Acting II (3)

An advanced course in acting as a creative process, including acting theories, methods and styles.

Prerequisites: STM 1900 and 2960.

### STM 3935 Creative Drama (3)

Exploration of the creative process, involving use of body movement, color, sound, light, space and language.

### STM 3939 Dramatics Workshop for Children (3)

Theories and techniques of creative dramatics with young people. Students plan and lead workshops with local children.

Prerequisite: Acting I or Creative Drama or permission of instructor.

**STM 3940 Children's Theatre (3)**

Theory and practice of the theatre for children.

**STM 3945 Lighting Design (3)**

Harper

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: STM 2925.

**STM 3950 The Art of Persuasion (3)**

D. Lumsden

Examination of the nature of persuasion in human interaction situations.

Prerequisite: STM 1900.

**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.

**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: STM 2925, 3940 or permission of instructor.

**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: STM 2960 or 2925 and permission of instructor.

**STM 3960 Advanced Technical Theatre Production (3)**

Harper

An advanced course in traditional and contemporary solutions to technical production problems. Additional expenses of approximately \$15.00 may be incurred by the student.

Prerequisite: STM 2925.

**STM 3965 Organizational Communication (3)**

D. Lumsden

Examination of communication behavior in an organizational structure, implementation of communication principles through in-class presentations.

Prerequisite: STM 1900.

**STM 3975-3977 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 hour.

Prerequisites: Permission of speech/theatre/media coordinator; depending on nature of project, STM 2925, 2960 or 3925.

**STM 3980 Broadcast Journalism (3)**

Remmers

Instruction in theoretical and practical radio and television journalism techniques, with writing assignments in news, features, sports, editorials and documentaries.

Prerequisite: STM 2975.

**STM 3985 History of Broadcasting (3)**

Remmers

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: STM 2975.

**STM 3990 Development of Cinematic Drama (3)**

Trzesinski

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: STM 1900.

**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.

**STM 4910 Oral Interpretation of Poetry (3)**

Dunn

An exploration of the interrelatedness of the poet, the poem and the reader in the oral performance of poetry.

Prerequisite: STM 3910.

**STM 4920 Readers' Theatre (3)**

Dunn

The group approach to the oral interpretation of literature.

Prerequisite: Interview with instructor.

**STM 4925 Directing II (3)**

Murphy

Artistic and technical problems in directing the classical, the period, the avant-garde and experimental play.

Prerequisites: STM 1900 and 3925.

**STM 4930 Acting as a Profession (3)**

Murphy

Study of the professional New York theatre emphasizing the audition and the process of beginning a career.

Prerequisites: STM 1930, 3930 or permission of instructor.

**STM 4940 History of the Theatre (3)**

Murphy

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 \$15.00).

**STM 4945 Contemporary London Theatre (3)**

Murphy, Dunn

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.

**STM 4950 Seminar in Theatre Administration (3)**

Dunn

A problem-centered seminar dealing with contemporary theatre administration.

Prerequisites: STM 1900, 2925 and 2960.

**STM 4955-4956 Cooperative Education: Work-Study in Speech/Theatre/Media (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 speech-theatre-media 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 Speech/Theatre/Media courses and approval of speech/theatre/media coordinator.

**STM 4960 Acting for Television (3)**

Murphy

The skills of television acting with practical, on-camera experiences.

Prerequisites: STM 2960; junior or senior level STM option majors only.

## FINE ARTS

Faculty: Buchner, Buncamper, Burger, Cade, Cohan, Coon, Cornish, Fuhrman, Giacalone, Goodwin, Greenberg, Holloway, Howe, Jochnowitz, Jones, Lipscomb, Lord, Metzger, Nicolescu, Pjero (Chairperson), Schwartz, Stotz, Tatton, Topper, Troy, Valla, Victoria, Wallach, Wilber

The Fine Arts Department offers a studio major, a major in art history and a minor in fine arts.

### B.A. Studio Major

The studio major has three options: Artist/Craftsperson, Interior Design, and Visual Communications. Within each option, the student may pursue one of three levels of concentration in fine arts courses: liberal arts (30 s.h.); specialized (42 s.h.); professional (72 s.h.).

Students who wish to enter the professional level must have a 3.0 GPA for the first 30 credits in courses in the major and, must successfully undergo a portfolio review during the semester in which those 30 credits will have been completed. Those not admitted at that time may reapply while continuing further on the specialized level. The professional level begins only after the specialized (42 s.h.) is completed.

**Structure of the Major** There are three components common to every option and level of concentration within the studio major: General Education (36 s.h.), Core (21 s.h.) and Additional Cognate Requirements (6 s.h.). The core is a series of courses designed to develop skills fundamental to all the visual arts. Each studio option builds on this foundation. The basic structure of the major follows:

	124-134 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	36
<b>ADDITIONAL COGNATE REQUIREMENTS</b>	6
AH 1700-1701 Art History I & II	6
<b>MAJOR REQUIREMENTS</b>	30-72
<b>Core Requirements</b> (21 s.h.)	
FA 1100 Two-Dimensional Design	3
FA 1101 Three-Dimensional Design	3
FA 1230-1231 Drawing I & II	6
FA 2100 Color Theory	3
FA 3200 Painting	3
FA 3276 Sculpture Workshop: Fabrication or FA 3277 Sculpture Workshop: Modelling and Casting	3
<b>Level of Concentration</b> <i>One of the following:</i>	
Liberal Arts (9 s.h.)	
Specialized (21 s.h.)	
*Professional (51 s.h.)	

#### FREE ELECTIVES (see page 28)

Number of s.h. varies with option and level. See succeeding pages.

\*Requirements for the artist-teacher professional level differ. Please see p. 142.

### Option: Artist/Craftsperson

This option enables the student to elect one of 3 emphases: studio art, studio craft and artist-teacher. The studio art and studio craft emphases provide specialized study in ceramics, drawing, fibers, film-making, jewelry, painting, photography, printmaking, sculpture and woodworking, and graduates are pursuing careers in these fields. The artist-teacher emphasis is based on the philosophy that the best teachers are also competent practicing artists. It is, therefore, a broad program of study in studio art and crafts, art history and education. As a result, graduates may fill varied roles in museums and galleries, as well as pursue careers as working artists. Successful completion of the professional artist-teacher level meets requirements for N.J. certification to teach in grades K-12.

### Level: Liberal Arts

	124 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	36
<b>ADDITIONAL COGNATE COURSES</b> (see page 138)	6
<b>MAJOR REQUIREMENTS</b>	30
<b>Core Requirements</b> (21 s.h.) (see page 138)	
<b>Artist/Craftsperson Requirements</b> (9 s.h.)	
*FA 2200 Materials and Techniques or FA 3230 Life Drawing†	3
FA 3800 Philosophy of Art	3
<i>One of the following:</i>	3
†FA 3280 Ceramics I	
FA 3282 Jewelry I	
FA 3284 Introduction to Textiles	
FA 3290 The Woodworker's Art	
<b>FREE ELECTIVES</b> (see page 28)	52

\*course in development

†FA 3230 and 3280 required for Artist/Teacher students.

Option: Artist/Craftsperson  
Level: Specialized

		124 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)		36
<b>ADDITIONAL COGNATE REQUIREMENTS</b> (see page 138)		6
<b>MAJOR REQUIREMENTS</b>		42
<b>Core Requirements</b> (21 s.h., see page 138)		
<b>Artist/Craftsperson Requirements</b> (21 s.h.) <i>Complete one area:</i>		
STUDIO ARTS AND STUDIO CRAFTS		
*FA 2200 Materials and Techniques or FA 3230 Life Drawing	3	
FA 3260 Printmaking: Relief and Intaglio or FA 3261 Printmaking: Lithography and Screen Printing	3	
FA 3270 Photography or FA 3600 Filmmaking	3	
FA 3800 Philosophy of Art	3	
<i>One of the following:</i>	3	
FA 3280 Ceramics I		
FA 3282 Jewelry I		
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	
†ARTIST-TEACHER		
FA 3230 Life Drawing	3	
FA 3260 Printmaking: Relief and Intaglio or FA 3261 Printmaking: Lithography and Screen Printing	3	
FA 3270 Photography	3	
FA 3280 Ceramics I	3	
FA 3284 Introduction to Textiles	3	
FA 3800 Philosophy of Art	3	
<i>One of the following:</i>	3	
FA 3282 Jewelry I		
FA 3290 The Woodworker's Art		
FA 3600 Filmmaking I		
<b>FREE ELECTIVES</b> (see page 28)		40

\*course in development

†(For certification, students must complete the Professional Artist-Teacher level.)

Option: Artist/Craftsperson  
Level: Professional Studio Art or Studio Craft

		130 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)		36
<b>ADDITIONAL COGNATE REQUIREMENTS</b> (see page 138)		6
<b>MAJOR REQUIREMENTS</b>		72
<b>Core Requirements</b> (21 s.h., see page 138)		
<b>Artist/Craftsperson Requirements: Specialized</b> (21 s.h., see page 140)		
<b>Professional Requirements</b> (30 s.h.)		
<i>Complete one area of emphasis:</i>		
STUDIO ART		
*FA 4285 Fine Arts Seminar	3	
AH 3740 Modern Art	3	
Six of the following: FA 2210, 3201, 3230, 3260, 3261, 3271, 3276, 3277, 3600, 3601, 3602, 4200, 4262, 4270, 4276	18	
Two courses in studio crafts	6	
STUDIO CRAFT		
AH 3740 Modern Art	3	
*FA 4285 Fine Arts Seminar	3	
One course from every craft area in which courses have not yet been taken	3-9	
Five to seven of the following: FA 3260, 3261, 3270, 3281, 3283, 3285, 3286, 3287, 3288, 3289, 3290, 3291, 3600, 4000, 4001, 4280, 4281, 4283	15-21	
<b>FREE ELECTIVES</b> (see page 28)		16

\*course in development

Option: Artist/Craftsperson  
Level: Professional Artist-Teacher

129 s.h.

<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	36
<b>ADDITIONAL COGNATE REQUIREMENTS</b> (see page 138)	6
<b>MAJOR REQUIREMENTS</b>	69
<b>Core Requirements</b> (21 s.h.) (see page 138)	
<b>Artist/Craftsperson Requirements: Specialized</b> (21 s.h.) (see page 140)	
<b>Professional Requirements</b> (27 s.h.)	
ID 2900 Field Experiences in a Multicultural Art Education Setting	3
FA 3900 Introduction to Art Education I	3
FA 3901 Introduction to Art Education II	3
FA 4900 Principles and Techniques of Art Education	4
FA 4990 Student Teaching in Fine Arts	10
**CS 34-- Reading in Content Area I	2
**CS 44-- Reading in Content Area II	2
<b>ADDITIONAL CERTIFICATION REQUIREMENTS</b>	18
STM 1900 Speech	3
<i>One course from each of the following five groups:</i>	15
EdP 3801, 3802, 4801	
Psy 2100, 2110	
EPS 4010, 4020, 4030, 4040, 4050, 4070	
General Education Cluster II (see page 26)	
General Education Cluster III (see page 26)	

\*\*course in development

## Option: Interior Design

The option in Interior Design 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 society. The curriculum provides strong professional training to develop competence in solving problems of design in present and future living and working environments. It includes instruction in residential, commercial, and public space design and planning. In order to acquire interdisciplinary background in such areas as store planning, industrial design and barrier-free design, students are urged to take additional course work in other departments, for example management science, psychology and industrial studies.

## Level: Liberal Arts

124 s.h.

<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	36
<b>ADDITIONAL COGNATE REQUIREMENTS</b> (see page 138)	6
<b>MAJOR REQUIREMENTS</b>	30
<b>Core Requirements</b> (21 s.h.) (see page 138)	
<b>Interior Design Requirements</b> (9 s.h.)	
FA 1400 Drafting for Interior Design I	3
FA 3410 Introduction to Interior Design	3
FA 3440 Interior Design Studio I	3
<b>FREE ELECTIVES</b> (see page 28)	52

Option: Interior Design  
Level: Specialized

124 s.h.

<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	34
<b>ADDITIONAL COGNATE REQUIREMENTS</b> (see page 138)	6
<b>MAJOR REQUIREMENTS</b>	42
<b>Core Requirements</b> (21 s.h.) (see page 138)	
<b>Interior Design Requirements</b> (21 s.h.)	
FA 1400 Drafting for Interior Design I	3
FA 3410 Introduction to Interior Design	3
FA 3420 Textiles for Interior Design	3
FA 3440 Interior Design Studio I	3
FA 3490 Lighting for Interiors	3
AH 3790 History of Furniture and Interiors	3
AH 3792 History of Architecture	3
<b>FREE ELECTIVES</b> (see page 28)	40

Option: Interior Design  
Level: Professional

	130 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	36
<b>ADDITIONAL COGNATE REQUIREMENTS</b> (see page 138)	6
<b>MAJOR REQUIREMENTS</b>	72
<b>Core Requirements</b> (21 s.h.) (see page 138)	
<b>Interior Design Requirements: Specialized</b> (21 s.h.) (see page 143)	
<b>Professional Requirements</b> (30 s.h.)	
FA 1401 Drafting for Interior Design II	3
FA 3430 Rendering for Interior Design I	3
FA 3441 Interior Design Studio II	3
FA 4450 Interior Design: Trade Information and Business Practices	3
FA 4410 Design Projects for Interiors	3
<i>Complete one area of emphasis:</i>	
<b>RESIDENTIAL INTERIOR DESIGN</b>	
*AH 3791 Decorative Arts for Interior Design	3
FA 4400 Residential Interior Design	3
FA 4440 Interior Design Portfolio	3
Two of the following: AH 3740; FA 3060, 3288, 3289, 3302, 3431, 4469; I.S. 3303, 4305	6
<b>COMMERCIAL INTERIOR DESIGN</b>	
FA 3431 Rendering for Interior Design II	3
FA 4420 Commercial Interior Design	3
FA 4440 Interior Design Portfolio	3
Two of the following: FA 3000, 3060, 3302, 3320, 3340, 3794, 4469; *ID 3460; IS 2501, 3201, 3204, 3303	6
<b>TEXTILES AND CRAFTS INTERIOR DESIGN</b>	
FA 3285 Surface Design on Fabrics	3
FA 3286 Weaving I	3
FA 4440 Interior Design Portfolio	3
Two of the following: *AH 3791; FA 3260, 3261, 3287, 3288, 3289, 3320, 3431, 3450, 4469; I.S. 3202	6
<b>STORE PLANNING AND DESIGN</b>	
*FA 3411 Fundamentals of Store Planning and Design	3
*FA 3412 Practical Studio in Store Planning and Design	3
FA 3431 Rendering for Interior Design II	3
Two of the following: FA 3060, 3320, 4414; *ID 3460; IS 3201, 3204, 3303	6
<b>Elective Apprenticeship</b> (3 s.h.) <i>taken in addition to the 130 s.h. required for the degree:</i>	
FA 4490 Interior Design Apprenticeship	
<b>FREE ELECTIVES</b> (see page 28)	16

\*course in development

Option: Visual Communications

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, media studies 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.

Level: Liberal Arts

	124 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	36
<b>ADDITIONAL COGNATE REQUIREMENTS</b> (see page 138)	6
<b>MAJOR REQUIREMENTS</b>	30
<b>Core Requirements</b> (21 s.h.) (see page 138)	
<b>Visual Communications Requirements</b> (9 s.h.)	
FA 1300 Visual Communications Seminar	3
FA 3300 Lettering	3
FA 3301 Preparing Art for Printing or FA 3310 Commercial Design Fundamentals	3
<b>FREE ELECTIVES</b> (see page 28)	52

Option: Visual Communications  
Level: Specialized

	124 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	36
<b>ADDITIONAL COGNATE REQUIREMENTS</b> (see page 138)	6
<b>MAJOR REQUIREMENTS</b>	42
<b>Core Requirements</b> (21 s.h.) (see page 138)	
<b>Visual Communications Requirements</b> (21 s.h.)	
FA 1300 Visual Communications Seminar	3
FA 3270 Photography	3
FA 3300 Lettering	3
FA 3301 Preparing Art for Printing	3
FA 3310 Commercial Design Fundamentals	3
AH 3748 History of Visual Communications	3
<i>One of the following:</i>	3
FA 3311 Graphic Design	
FA 3312 Advertising Design	
FA 3340 Illustration I	
FA 3670 Television Production I	
<b>FREE ELECTIVES</b> (see page 28)	40

Option: Visual Communications  
Level: Professional

130 s.h.

**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36

**ADDITIONAL COGNATE REQUIREMENTS** (see page 138) 6

**MAJOR REQUIREMENTS** 72

**Core Requirements** (21 s.h.) (see page 138)

**Visual Communications Requirements: Specialized**  
(21 s.h.) (see page 145)

**Professional Requirements** (30 s.h.)

*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: FA 3271, 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: FA 2210, 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: FA 3370, 3601, 3602,  
3671, 3672, 4270; IS 3604, 3605 9-12

Three additional FA courses selected with  
departmental advisement 9

**Elective Apprenticeship** (6 s.h.) *taken in addition to  
the 130 credits required for the degree:*

FA 4300 Communications Apprenticeship

**FREE ELECTIVES** (see page 28) 16

**B.A. in Art History**

Art history, a traditional liberal arts discipline, is concerned with the understanding and interpretation of the visual arts within an historical context. This major prepares students for art oriented occupations. Additional background in the humanities, especially languages, and courses in museum training are recommended. Programs should be selected with advisement.

124 s.h.

**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36

**MAJOR REQUIREMENTS** 30

**Required Courses** (18 s.h.)

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 s.h.)

Any four additional courses in art history

**FREE ELECTIVES** (see page 28) 58

**Minor in Fine Arts**

This program is for students who wish to develop their general understanding and ability in the visual arts.

18 s.h.

**Required Courses**

FA 1100 Two-Dimensional Design 3

FA 1101 Three-Dimensional Design 3

AH 1700-1701 Art History I & II 6

**Electives selected with departmental advisement** 6

**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 3050 The International Design Conference in Aspen (3)**

Opportunity to attend and participate in the IDCA held annually in Colorado. Experts of international stature, both theorists and practitioners of design-related activities, come together each year for a week in Aspen to share their experiences and knowledge. Conference is addressed to those interested in such design fields as graphic design, interior design, architecture, industrial design and media design. Travel costs incurred by the students.

Prerequisite: Permission of instructor.

**FA 3060 Design and the Urban Environment (3)**

Buchner

Physical and aesthetic problems of the city environment—its growth, planning, housing, transportation and other facilities. Studio approach to the solution of regional planning problems.

**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 and three-dimensional materials and processes are studied. The integrative nature of the design process and to 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.

Prerequisite or corequisite: FA 1100.

**FA 3100 Advanced Design (3)**

Studio course for the advanced student who has dealt successfully with basic two and three dimensional design. Assignments will vary depending on student strengths and interests, but the design process will be probed for common qualities. Some research in design is a required portion. May be repeated once for credit.

Prerequisite: FA 1100, 1101.

**FA 3110 Introduction to Computer Graphics (3)**

Studio course which emphasizes high quality visual output while exploring the computer as a tool for the artist and designer.

Prerequisites: CpS 1931 or equivalent, FA 1100, 2100.

**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)**

Burger

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.

Prerequisite: FA 1230 or permission of instructor.

**FA 3200 Painting I (3)**

Studio course in design and expression in various media of painting, dealing with both traditional and experimental methods.

Prerequisites: FA 1100, 1230; Prerequisite or corequisite: FA 2100.

**FA 3201 Painting II (3)**

A studio course for the more advanced student of painting. The emphasis is directed toward developing the individual's form of expression in painting.

Prerequisite: FA 3200.

**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)**

Metzger, Piero

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)**

Metzger, Piero

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)**

Tatton

Basic photography, including exposure, developing, printing, and enlarging. Historic and contemporary forms in photography.

**FA 3271 Intermediate Photography (3)**

Tatton

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)**

Nicolescu, Topper

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).

Required as a choice of either FA 3276 or 3277 as part of the Core Program.

**FA 3280-3281 Ceramics I & II (3,3)**

Buncamper, Jones

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. FA 3280 is prerequisite to FA 3281.

**FA 3282 Jewelry I (3)**

Goodwin

Introductory studio course which explores design and construction of jewelry. Basic forming methods are covered, as well as methods of relating other materials to metal. Jewelry and metal design as an art form in our own time and in selected historic periods.

Prerequisite: FA 1000 or FA 1101.

**FA 3283 Jewelry II (3)**

Goodwin

Intermediate studio course continuing the work of FA 3282. Study of more advanced techniques, such as centrifugal casting, enamelling, electroplating, niello and lapidary.

Prerequisite: FA 3282.

**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.

Prerequisite: FA 1000 or FA 1100.

**FA 3285 Surface Design on Fabrics (3)**

The materials and processes for embellishment of the fabric surface including the direct application of dyes, resist dyeing and printing.

Prerequisite: FA 1000 or 1100.



**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.

Prerequisite: FA 1000 or FA 1100.

**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)**

Buchner

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)**

Buchner

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)**

Buchner

Designing and working with wood, emphasizing original expression. Exploring the nature of wood and related fibrous materials, and working with the tools, equipment and 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 3295, 3296, 3297 The Artist's Studio (1, 2, 3)**

Specialized studio course taught off campus in an artist's studio by an artist. Offerings vary, but provide opportunities not available on campus. May be repeated for credit.

Prerequisite: Permission of sponsoring professor.

**FA 4200 Advanced Painting (3)**

Development of a series of paintings in a single medium.

Prerequisite: FA 3201. Corequisite: FA 2100.

**FA 4262 Advanced Printmaking (3)**

Metzger, Pierre

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)**

Tatton

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)**

Nicolescu, Topper

Continuation of experiences in FA 3276 and 3277 on an individualized basis.

Prerequisites: FA 3276, 3277.

**FA 4280 Advanced Ceramics (3)**

Buncamper, Jones

Continuation of the experiences of FA 3281 on an individualized basis. Professional quality in design and skill, clay preparation, glaze theory, firing, kiln construction. May be repeated once for credit.

Prerequisite: FA 3281.

**FA 4281 Whiteware (3)**

Buncamper

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 technique.

Prerequisite: FA 3281 or permission of instructor.

**FA 4283 Advanced Jewelry (3)**

Goodwin

Continuation of experience of FA 3283 on individualized basis. Techniques such as granulation, electroforming, forging, silversmithing; exotic materials and specialized equipment. May be repeated once for credit.

Prerequisite: 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 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, audio-visual.

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)**

Jochowitz, Valla

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.

**FA 3350 Corporate and Institutional Uses of Graphic Design (3)**

Valla

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 1400 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 3410 or permission of instructor.

**FA 1401 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 1400 or permission of instructor.

**FA 3410 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.

**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 3410 or permission of instructor.

**FA 3421 Techniques of Applied Design for Interiors (3)**

Study of the construction of draperies, upholstery and cabinetry used in the interior design profession examined through lecture and demonstration. Additional materials required.

Prerequisite: Permission of instructor.

**FA 3430 Rendering for Interior Design I (3)**

Introduction to rendering techniques used by the interior designer for professional presentations. Additional fees for materials and equipment: field trips.

Prerequisite: FA 1401.

**FA 3431 Rendering for Interior Design II (3)**

Further development of rendering techniques used by the interior designer for professional presentations with focus on individual expertise. Additional fees: materials, equipment and field trips.

Prerequisite: FA 3430 or permission of instructor.

**FA 3440 Interior Design Studio I: Workshop in Residential, Business, and Industrial Design (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, 1101, 1400, 3410.

**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 3440.

**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 1400 or permission of instructor.

**FA 4400 Residential Interior Design (3)**

Studio course for the interior designer as applied to the home environment. Additional fees: materials and field trips.

Prerequisite: FA 3441 or permission of instructor.

**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 or permission of instructor.

**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 4410 or permission of instructor.

**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 4440 Interior Design Portfolio (3)**

Comprehensive preparation of portfolio for professional employment in interior design; residential, commercial and public spaces. Field trips and additional fees may be required.

Prerequisite: FA 4410.

**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: Admission to Interior Design Option: Professional level and departmental approval.

**MUSEUM TRAINING****FA 4500 Museum Training: Theory (3)**

Cohan

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)**

Cohan

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)**

Troy

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 3602 Film Documentary (3)**

Techniques of research involved in preparing for the filming of the documentary. Various film techniques are studied and explored in terms of the documentary.

Prerequisite: FA 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 1020; 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 3900 Introduction to Art Education I (3)**

Introductory field experience for students preparing to teach art. Course work involves participation as a teacher-aide in a public school classroom. Observation of teaching procedures, work with small groups, evaluation of programs. For Art Education Majors only.

Prerequisite: Junior level.

**FA 3901 Introduction to Art Education II (3)**

The nature and function of the visual arts in education, grades 1 through 12. Materials and methods, curriculum organization, principles and practices of teaching, classroom management, and the role of the art teacher in the total school program. Jr. year/spring.

Prerequisite: FA 3900.

**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.

**FA 3920 Art in Early Childhood Education (3)**

Content similar to that of FA 3910 but dealing with children of the nursery school age through the third grade. Not intended for fine arts majors.

**FA 3921 Art Media for Occupational Therapists (3)**

Greenberg

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 4900 Principles and Techniques of Art Education (4)**

Taught concurrently with the student teaching assignment. Functions as a guide for the field experience in the areas of classroom teaching and the role of the art program in the total school curriculum.

Prerequisite: FA 3901.

**FA 4921 Art Media in Gerontology (3)**

Greenberg

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 3901.

**FA 4990 Student Teaching in Fine Arts (10)**

Experience in fulltime teaching in a public school under the guidance and direction of a cooperating teacher and a college supervisor.

Prerequisites: FA 3901 and departmental approval. Must be taken in conjunction with FA 4900.

**INTERDISCIPLINARY COURSES**

*The following are found under Interdisciplinary courses. (See Index.)*

**ID 3700 Survival of Classical Mythology (3)****ID 4051 Art for the Exceptional Child (3)****ID 4545 Marketing Communications Workshop (3)****ID 4850 Interrelating the Arts (3)****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)**

Wallach

American art and its cultural and historical contexts from colonial times to the present.

**AH 3710 Italian Renaissance Painting (3)**

Lord

Italian painting of the fourteenth, fifteenth and sixteenth centuries.

**AH 3720 Baroque Art (3)**

Lord

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)**

Stotz, Wallach

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)**

Stotz

Study of painting and sculpture in Europe and America from 1945 to present.

**AH 3745 Impressionism and Post-Impressionism (3)**

Wallach

European art from Manet to Van Gogh and Toulouse-Lautrec.

**AH 3748 History of Visual Communications (3)**

Wallach

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)**

Giacalone

The art of China from Neolithic time to the Ch'ing Dynasty.

**AH 3751 The Art of Japan (3)**

Giacalone

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**

Giacalone

The art and culture of India including Buddhist art, Moslem art, Hindu art and art of Southeast Asia.

**AH 3760 Medieval Art (3)**

Stotz

Architecture, painting, and sculpture of the Early Medieval, Romanesque, and Gothic periods.

**AH 3770 Greek and Roman Art (3)**

Wilber

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, Camerouns, 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 adaption 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 3794 History of Ornamentation and Motifs (3)**

Ornamentation and ornamenting motifs in architecture, furniture and textiles as seen in contemporary societies. For interior design and art history majors only.

Prerequisites: FA 3790, 3792 and permission of instructor.

**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)**

Lord

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.

Faculty: Aleman, Edreira (Chairperson), Feito, Gnarra, Markle, Portuondo, Rodriguez, Salins, Wendell

The major in French or Spanish has traditionally been one of the main strengths in the study of humanities. Achievement of technical competence in the language affords continuing self-education. A strong background in French or Spanish language and literature serves as an excellent preparation for advanced professional study, especially law, government and teaching. In addition, there are interesting career opportunities in business or industry, at home or abroad. The Spanish major particularly is invaluable to those considering social work and other fields of community relations.

### B.A. in French

124 s.h.

**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36

**MAJOR REQUIREMENTS** 30

**Required Courses** (6 s.h.)

Fr 3100 Advanced French Composition 3

Fr 3105 Advanced French Conversation 3

**Major Electives** (24 s.h.) *selected from the upper division (3000-4000 level) courses given in French*

**FREE ELECTIVES** (see page 28) 58

### B.A. in Spanish

124 s.h.

**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36

**MAJOR REQUIREMENTS** 30

**Required Courses** (6 s.h.)

Sp 3100 Advanced Spanish Composition 3

Sp 3105 Advanced Spanish Conversation 3

**Major Electives** (24 s.h.) *selected from the upper division (3000-4000) courses in Spanish*

**FREE ELECTIVES** (see page 28) 58

**Collateral Program: Instruction in Subject Areas, K-12** Students who desire New Jersey teacher certification along with the above major elect the Instruction in Subject Areas collateral and must contact the Department of Educational Arts and Systems for admission and advisement.

### Courses Taught in English

**FL 3010 Comparative Phonology (3)** Aleman  
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.

**FL 3100-3105 Masterpieces of French Literature in Translation I & II (6)** Wendell  
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.

**FL 3200 Man and Society in Modern German Literature (3)** Salins  
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.

**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

## 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 Aboard (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 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)**

Markle

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.

#### **Fr 3215 French Civilization II (3)**

Markle

Continuation of Fr 3210, with emphasis on the nineteenth and twentieth centuries.

Prerequisite: Fr 2102 or permission of instructor.

### PERIODS

#### **Fr 4300 French Medieval Literature (3)**

Markle

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.

#### **Fr 4305 French Literature of the Renaissance (3)**

Wendell

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.

#### **Fr 4311-4312 The Classical Age I & II (3, 3)**

Markle

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.

#### **Fr 4315 The Age of Enlightenment (3)**

Wendell

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.

#### **Fr 4320 Twentieth Century French Literature I (3)**

Gnarra

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.

#### **Fr 4325 Twentieth Century French Literature II (3)**

Gnarra

Introduction to existentialist and avant-garde literature. Course conducted in French.

Prerequisite: Fr 2102 or permission of instructor.

## GENRES

**Fr 4400 Introduction to the History of French Drama (3)** Gnarra  
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.

**Fr 4405 The French Novel (3)** Wendell  
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.

**Fr 4410 The Poetry of France (3)** Wendell  
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.

## THEMES

**Fr 4600 Pre-Romanticism and Romanticism (3)** Gnarra  
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.

**Fr 4605 Realism and Naturalism (3)** Gnarra  
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.

## 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.

## 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)** Salins  
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.

**Ger 3105 Advanced German Conversation and Composition II (3)** Salins  
A continuation of Ger 3100.  
Prerequisite: Ger 2102 or permission of instructor.

### SURVEY

**Ger 3200 Masterpieces of German Literature I (3)** Salins  
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.

**Ger 3205 Masterpieces of German Literature II (3)** Salins  
A continuation of Ger 3200.  
Prerequisite: Ger 2102 or permission of instructor.

**Ger 3210 German Civilization I (3)** Salins  
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.

**Ger 3215 German Civilization II (3)** Salins  
Continuation of Ger 3210, with emphasis on the nineteenth and twentieth centuries. Conducted in German.  
Prerequisite: Ger 2102 or permission of instructor.

### SEMINARS AND INDEPENDENT STUDY

**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.  
Prerequisite: Ger 3100 or 3105 or permission of instructor.

## 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)**

Salins

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)**

Salins

Designed to expand the students' 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.

## 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.

**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.  
Prerequisite: Sp 2102 or permission of instructor.

**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.  
Prerequisite: Sp 2102 or permission of instructor.

**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.  
Prerequisite: Sp 2102 or permission of instructor.

**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.  
Prerequisite: Sp 2102 or permission of instructor.

**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.

Prerequisite: Sp 2102 or permission of instructor.

**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.

Prerequisite: Sp 2102 or permission of instructor.

**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.

Prerequisite: Sp 2102 or permission of instructor.

**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 Gauchesca 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 2102 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.

**HEALTH AND RECREATION**

Health Faculty: Blake, Chut, Darden (Chairperson), Famighetti, Fox, Krueger, Ramoth

Recreation Faculty: Benson, Valentine

**B.A. in Urban and Outdoor Recreation**

The major in Urban and Outdoor Recreation prepares students for careers in recreation programs associated with education, industry, medical services, community and institutions, and agencies and commercial enterprises of both private and public nature.

The student may plan a group of elective courses to reinforce a particular interest area or a professional goal. Possibilities include study of the atypical or handicapped, business management, government science, black studies or interdisciplinary environmental courses, fine arts, dance, music, audio visual, etc.

124 s.h

**GENERAL EDUCATION REQUIREMENTS (see page 26) 36****Required Cognate Courses (9 s.h.)**

*Social/Behavioral Sciences and History Cluster:*

Psy 1000 General Psychology	3
PS 2110 American State and Local Political Systems	3
Soc 3150 Urban Sociology or SW 2900 Introduction to Social Work	3

**ADDITIONAL COGNATE COURSE 3**

Psy 2100 Child Psychology or SpE 2052 Introduction to Psychology of the Handicapped

**MAJOR REQUIREMENTS 44****Required Courses (38 s.h.)**

Rec 2901 Foundations of American Recreation	3
Rec 2903 Orientation to Lifetime Physical Recreation	3
Rec 2910 Program Organization and Facility Design	3
Rec 3800 Environmental Recognition	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 Individual and Group Leadership Skills	3
Rec 4903 Senior Seminar-Problem Solving	3
PEd 2600 Camping	3
MgS 3030 Personnel Management	3

**Major Electives (6 s.h.) selected with advisement**

**FREE ELECTIVES (see page 28) 41**

## Minor in Urban and Outdoor Recreation

18 s.h.

### Required Courses

18

Rec 2901 Foundations of American Recreation	3
Rec 2903 Orientation to Lifetime Physical Activities	3
Rec 2910 Program Organization and Facility Design	3
Rec 3800 Environmental Recognizance	3
Rec 4900 Individual and Group Leadership Skills	3
PEd 2600 Camping	3

## Minor in Health Education

18 s.h.

### Required Courses

12

HEd 1125 Critical Issues of Contemporary Health	3
HEd 2231 First Aid and Accident Prevention	2
HEd 3533 Methods and Materials for Teaching Health Education in Elementary and Secondary Schools	3
Bio 2402 Human Anatomy and Physiology	4
<b>Electives</b> <i>two courses in health education selected with advisement</i>	6

## Health Education Courses

### GENERAL

#### \*HEd 1125 Critical Issues and Values of Contemporary Health (3)

Contemporary health issues and health-related problems coupled with an exploration of selected resources and strategies designed to advance individual, familial and community health.

#### 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.

Prerequisite: HEd 1100, 1125 or permission of instructor.

#### 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 Health Education and Recreation. 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.

## FIRST AID, SAFETY, ACCIDENT PREVENTION

### **Hed 2231 First Aid and Accident Prevention (2)**

Blake

An investigation of accident prevention plus the theory and practice of First Aid and Personal Safety including Cardiopulmonary Resuscitation as recommended by the American Red Cross. At the successful completion of this course, the student will receive the Red Cross Standard First Aid and Personal Safety Certificate.

### **Hed 3230 Safety Education (3)**

Home, school and industrial safety as it relates to the educated consumer.

### **Hed 4231 First Aid Instructor Course (3)**

Blake

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 2231 or current American Red Cross certification in Cardiopulmonary Resuscitation and in Standard First Aid and Personal Safety.

## 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)**

Famighetti

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)**

Ramoth

The past, present and future individual and societal concepts of dying, death and bereavement, death education, and exploration of related ethical issues.

### **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)**

Famighetti

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 Alcohol and Narcotics Education (3)**

Ramoth

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.

### **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)**

Darden, Fox, Krueger

An overview of sex and sexuality in today's society, with implications for evolving male-female relationship, dating patterns, marriage and responsible parenthood.

**Hed 4434 Sex Education (3)**

Darden

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.

**Hed 4450 Sexual Function and Dysfunction (3)**

Krueger

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.

**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)**

Blake, Darden

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.

**Hed 3533 Methods and Materials of Health Education in Elementary and Secondary Schools (3)**

Krueger

Knowledge, methods, skills, curriculum content and organization prerequisites to the implementation of dynamic health education in grades K-12.

Prerequisites: EdP 3801, HEd 1100, 1125 or 1150.

**Hed 3537 School and Community Health Program (2)**

Blake, Darden

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.

**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)**

Chut

Prevention, sociological and anthropological aspects, planning, and organization of community health problems and programs.

**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.

**Recreation Courses****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 Orientation to Life-Time Physical Recreation (3)**

Designed to introduce each student to a basic awareness of many individual lifetime physical recreational activities and to help develop a degree of proficiency in selected areas. Fees for use of off-campus facilities will depend upon the activity.

**Rec 2910 Program Organization and Facility Design**

Nolan

Program organization and facility design of public and private recreational agencies studied.

**Rec 3300 Recreation for Special Populations (3)**

Valentine

Overview of a special field in recreation orientation focusing on recovery and adjustment to illness or disability.

**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.

**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 Financing Recreation, Park and Leisure Services (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.

**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)**

Arnold

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 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.

**Rec 3910 In-Semester Practicum (3)**

Benson

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.

**Rec 4500 Internship (5)**

Extended experience in 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: Permission of instructor.

**Rec 4900 Individual and Group Leadership Skills (3)**

The study of leadership techniques in different recreational organizations and agencies. Principles and procedures for effective leadership will be presented.

**Rec 4903 Senior Seminar—Problem Solving (3)**

Benson

Each student is to develop a proposal for a specific area in recreation or environmental interpretation in which s/he has great individual interest. These will provide the basis for seminar discussions. Current problems, trends and developments will be considered.

Prerequisites: Rec 3910, 4500.

## HEALTH PROFESSIONS

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.

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.

### B.S.N. IN NURSING (see page 239)

This is an upper division program open only to registered nurses.

## B.S. in Medical Record Administration

Faculty: Crawford, Johnson, Weber (Coordinator)

The Medical Record Administration program is designed to meet the accreditation standards of a joint committee of the Council on Allied Health Education and Accreditation of the American Medical Association and the American Medical Record Association. Graduates are eligible to take the national examination to be certified as a Registered Record Administrators (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 undergraduates and post-baccalaureate students. The undergraduate must have completed all the preprofessional coursework including program prerequisites and post-baccalaureates must complete prerequisites for the program for admission. A certificate of completion is awarded to post-baccalaureate students who complete the program.

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 the medical, administrative, ethical and legal requirements of the health care facility in which he or she is employed. The Medical Record Administration program is housed in the Department of Economics, Geography and Management Science.

132 s.h.

### GENERAL EDUCATION REQUIREMENTS (see page 26) 36

#### Required Cognate Courses (13 s.h.)

##### Science and Mathematics Cluster:

Bio 1000 Principles of Biology 4

Mat 1052 College Algebra and Trigonometry 3

##### Social/Behavioral Sciences and History Cluster:

Psy 1000 General Psychology 3

Eco 1021 Principles of Economics II 3

### ADDITIONAL COGNATE COURSES 12

Che 1031 Fundamentals of General Chemistry 4

Che 1032 Fundamentals of Organic and Biochemistry 4

Bio 2409 Human Physiology and Anatomy 4

### MAJOR REQUIREMENTS 66

#### Courses in Medical Record Administration (45 s.h.)

MRA 2011 Introduction to Medical Record Profession 1

MRA 2013 Medical Terminology 3

MRA 3111 The Medical Staff 1

MRA 3112 Special Health Records	2
MRA 3114 Development & 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 4512 In-Service Education in MRD	2
MRA 4514 Organization and Management of MRD	4
MRA 4523 Medical Record Administration Seminar	3
MRA 4612 Directed Practice II	2
MRA 4614 Management Affiliation	4
<b>Supporting Courses in Related Disciplines (21 s.h.)</b>	
MgS 2031 Health Care Organization & Management	3
MgS 3030 Personnel Management	3
Mat 1016 Statistics	3
CpS 1931 Computer Arithmetic Algorithms	3
CpS 1958 Health Information Systems	3
PA 2000 Health Care Systems in U.S.	3
Eng 3090 Business, Professional and Technical Writing	3

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**FREE ELECTIVES (see page 28) 18**

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## Medical Record Administration Courses

### MRA 2011 Introduction to Medical Record Profession (1)

Introduction to the profession of Medical Record Administration; its place in the health care system; educational requirements.

Prerequisite: Sophomore standing.

### 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.

Corequisite: Bio 2409 or permission of instructor.

### MRA 3111 The Medical Staff (1)

A comprehensive review of the organization of the responsibilities of a medical staff in various types of health care facilities.

Prerequisite: Acceptance into MRA 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.

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.

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.

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.

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.

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.

Prerequisite: MRA 3314.

**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.

Prerequisite: MRA 4612.

**MRA 4514 Organization and Management of a Medical Record Department (4)**

An application of the principles of management to medical record administration.

Prerequisite: 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.

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.

Prerequisites: MRA 4514, 4612.

**B.S. in Medical Technology**

Coordinator: J.M. Kmetz

Students who successfully complete this program are eligible for national certification in medical technology. The program is affiliated with the University of Medicine and Dentistry of New Jersey—School of Health Related Professions and Barnert Memorial Hospital Center, Jersey Shore Medical Center, Monmouth Medical Center, Morristown Memorial Hospital, Muhlenberg Hospital, Orange Memorial Hospital Unit of the Hospital Center at Orange, St. Francis Medical Center, 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.

124 s.h.

**GENERAL EDUCATION REQUIREMENTS (see page 26) 36****Required Cognate Courses (13 s.h.)***Sciences and Mathematics Cluster:*

Mat 1052 College Algebra and Trigonometry 3

Phy 2091 General Physics I 4

*Social/Behavioral Sciences and History Cluster:*

One sociology course 3

One psychology course 3

**ADDITIONAL COGNATE COURSES 4***To be taken in the freshman and sophomore years*

Phy 2092 General Physics II 4

**MAJOR REQUIREMENTS 66****Required Courses (36 s.h.)**

Bio 1000 Principles of Biology 4

Che 1083-1084 General Chemistry I & II 8

Che 2180 Principles of Organic Chemistry 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 30

Clinical Preceptorship I & II

**FREE ELECTIVES (see page 28) 18**



## B.S. in Medical Technology 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.

Kean College is affiliated with Muhlenberg Hospital for training in cytotechnology. Students may attend other cytotechnology programs. The hospitals select the students for training.

	<b>124 s.h.</b>
<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	<b>36</b>
<b>Required Cognate Courses</b> (13 s.h.)	
<i>Sciences and Mathematics Cluster:</i>	
Mat 1052 College Algebra and Trigonometry	3
Phy 1000 Principles of Contemporary Physics or Phy 2091-2092 General Physics I & II	4
<i>Social/Behavioral Sciences and History Cluster:</i>	
One course in sociology	3
One course in psychology	3
<b>ADDITIONAL COGNATE COURSES</b>	<b>8</b>
Che 1083-1084 Chemistry I & II	8
<b>MAJOR REQUIREMENTS</b>	<b>65</b>
<b>Required Courses</b> (35 s.h.)	
Bio 1000 Principles of Biology	4
Che 2180 Principles of Organic Chemistry	4
Bio 2200 Cell Biology	4
Bio 3305 Principles of Microbiology	4
Bio 3260 Histology	4
Bio 3403-3404 Anatomy and Physiology I & II	8
Bio 4105 Essentials of Biochemistry	4
Bio 3704 Principles of Genetics	3
ID 4879-4880 Cytotechnology Clinical Preceptorship I & II	30
<b>FREE ELECTIVES</b> (see page 28)	<b>15</b>

## B.S. in Medical Technology 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 in histotechnology. The hospital selects the students for training.

**124 s.h.**

<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	<b>36</b>
<b>Required Cognate Courses</b> (13 s.h.)	
<i>Sciences and Mathematics Cluster:</i>	
Mat 1052 College Algebra and Trigonometry	3
Phy 2091 General Physics I	4
<i>Social/Behavioral Sciences and History Cluster:</i>	
One course in sociology	3
One course in psychology	3
<b>COGNATE COURSES</b>	<b>12</b>
Che 1083-1084 Chemistry I & II	8
Phy 2092 General Physics II	4
<b>MAJOR REQUIREMENTS</b>	<b>66</b>
<b>Required Courses</b> (36 s.h.)	
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
<b>FREE ELECTIVES</b> (see page 28)	<b>10</b>

### 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.

**B.S. in Occupational Therapy**

Faculty: Kramer (Coordinator), Glasser, Oyer, Weiss

The Occupational Therapy program requires four years of academic courses including practicum training plus six months of supervised field experience in hospitals or appropriate clinical settings. A special application and selection process is required for admission. The program is housed in the Department of Psychology and is accredited by the American Occupational Therapy Association and the American Medical Association.

128 s.h.

**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36**Required Cognate Courses** (16 s.h.)*Science and Mathematics Cluster:*

Bio 1000 Principles of Biology 4

Mat 1052 College Algebra and Trigonometry 3

*Social/Behavioral Sciences and History Cluster:*

Psy 1000 General Psychology 3

Psy 2100 Child Psychology 3

Soc 1000 Social Life and Society 3

**ADDITIONAL COGNATE COURSES** 12

FA 3921 Art Media for Occupational Therapy 3

Psy 3120 Adult Psychology 3

Psy 3540 Abnormal Psychology 3

PEd 3505 Kinesiology 3

**MAJOR REQUIREMENTS** 74

Che 1031-1032 Chemistry 8

Bio 2409 Essentials of Human Physiology and Anatomy 4

Bio 3405 Gross Anatomy 4

Bio 3406 Neuroscience 4

FA 3288 Furniture Making or FA 3290 Woodworkers Art 3

OT 2400 Introduction to Occupational Therapy 3

OT 3301-3302 Life Tasks and Activities Throughout

the Life Span I and II 6

OT 3410-3411 OT Theory I &amp; II 7

OT 3610 Activity Group Process 3

OT 3210-3211 Clinical Conditions I &amp; II 7

OT 4920 Seminar in OT I: Psychosocial Dysfunction 6

OT 4921 Seminar in OT II: Physical Dysfunction 6

OT 4922 Seminar in OT III: Developmental Dysfunction 4

OT 4401 Administration and Organization in

Health Care Settings 2

OT 4501 Supervision for Occupational Therapists 1

OT 4930-4931 Advanced Fieldwork Seminar 6

**FREE ELECTIVES** (see page 28) 6

## Occupational Therapy Courses

### OT 2400 Introduction to Occupational Therapy (3)

Introduction to profession of occupational therapy, its place in health care system, educational requirements; principles of rehabilitation and habilitation; consideration of ethical and legal aspects of occupational therapy. Field work requires placement in approved setting for 25 hours per semester.

Prerequisite: Psy 1000.

### OT 3210 Clinical Conditions I: Psychosocial Dysfunctions (3)

Comprehensive study of major clinical conditions commonly treated in occupational therapy which impinge upon the patient's/client's capacity for psychosocial dysfunction. Emphasis placed on the probable effects of clinical conditions on the individual's ability to perform life tasks and activities through the life span and the role of the occupational therapist in treatment.

Prerequisites: OT 2400, Psy 3540 and permission of program coordinator.

Corequisite: OT 3410.

### OT 3211 Clinical Conditions II: Physical and Developmental Dysfunction (4)

Study of those pathological conditions commonly treated in occupational therapy which impinge upon the patient's/client's capacity for physical function.

Prerequisites: OT 3410; Bio 3405 and permission of program coordinator.

Corequisite: OT 3411; Bio 3406.

### OT 3301-3302 Life Tasks and Activities Throughout the Life

Span: I and II (3,3)

In depth study of life tasks and activities throughout the developmental stages within the framework of occupational performance, i.e. self care, work, play-leisure activities and the performance components, i.e. motor, sensory-integrative, cognitive, psychological and sociological functions. OT 3301 is prerequisite for OT 3302.

Prerequisites: Bio 2409; FA 3921; Psy 2100, 3120 and permission of program coordinator.

### OT 3410 Occupational Therapy Theory I: Psychosocial Dysfunction (3)

Description of the components and principles of the occupational therapy treatment process, emphasizing components of theory and practice within a theoretical frame of reference. Theories analyzed are: objects relations analysis, action-consequence, developmental, sensory-integration and occupational behavior as they relate to the treatment of patient/client with psychosocial dysfunction.

Prerequisites: OT 2400, Psy 3540 and permission of program coordinator.

### OT 3411 Occupational Therapy Theory II: Physical and Developmental Dysfunction (4)

Problem-solving approach to selected occupational therapy theories and treatment approaches for the patient/client with physical and developmental dysfunction. Provides basic knowledge, understanding and skill in the application of principles and processes of treatment evaluation, planning and implementation. Lecture and laboratory.

Prerequisites: OT 3301, 3302, 3410; Bio 3405 and approval of program coordinator.

Corequisites: Bio 3406; OT 3211.

### OT 3610 Activity Group Process (3)

Comprehensive study of the concepts and principles of developmental and activity group as applied in the practice of occupational therapy. Focus on role and function of occupational therapist in promoting, influencing or enhancing psychosocial function or remedial dysfunction in a group context. Development of basic skills in evaluation and implementation of developmental and/or 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.

### OT 4401 Administration and Organization in Health Care Settings (2)

Basic study of concepts and principles of administration and organization as applied in health care settings. Basic concepts of systems theory are studied. Relationship between administration/organization and health care delivery are explored.

Prerequisites: OT 3411 and permission of program coordinator.

### OT 4501 Supervision (1)

Basic principles and concepts of supervision. Focus on supervision as a teaching-learning process. Problem-solving methods applied to supervisory issues commonly encountered in occupational therapy.

Prerequisite: OT 3411 and permission of program coordinator.

### 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.

### 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.

### 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.

### OT 4931 Advanced Fieldwork Seminar: Physical Dysfunction (6)

A three month full-time placement in a physical dysfunction affiliation center selected according to American Occupational Therapy Association guidelines. An additional affiliation in developmental dysfunction, hand, or other specialty is optional. 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.

### 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.

## B.S. in Physical Therapy

Faculty: Brown (Coordinator), Glasser, Merians, Maykish, Wollins

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 accredits the program.

**Admission to the Professional Phase** Each year twenty-four 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 of at least 2.5;  
grade of at least "C" in all required science, mathematics and English composition prerequisites;  
evidence of direct knowledge of and/or experience in P.T. practice;  
evidence of extracurricular and/or work experience that demonstrates interpersonal skills;

a written statement explaining reasons for seeking acceptance into the program. 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 non-Kean students and November for Kean 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.

132 s.h.

### GENERAL EDUCATION REQUIREMENTS (see page 26) 36

#### Required Cognate Courses (7 s.h.)

##### Science and Mathematics Cluster:

Bio 1000 Principles of Biology	4
Mat 1052 College Algebra and Trigonometry	3

### ADDITIONAL COGNATE COURSES 23

Che 1031 Fundamentals of General Chemistry	4
Che 1032 Fundamentals of Organic and Biochemistry	4
Phy 2091 General Physics I	4
Bio 2409 Essentials of Human Physiology and Anatomy	4
One course in Mathematics selected with advisement from Mat 1016, 1931, 2411, 2412	3
Phy 2092 General Physics II	4

### MAJOR REQUIREMENTS 64

Bio 3406 Neuroscience	4
PEd 3510 Physiology of Exercise	3
STM 3510 Communication for Allied Health Professionals	3
PT 3000 Dynamics of Physical Therapy Praxis I	6
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 3200 Communities in Health Care	3
PT 3500 Clinical Medicine I	3
PT 3501 Clinical Medicine II	3
PT 3900 Human Gross Anatomy for Physical Therapists	6
PT 4200 Physical Therapy Praxis in the Health Care Community	3
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	2

### FREE ELECTIVES (see page 28) 9

## Physical Therapy Courses

### PT 3000 Dynamics of Physical Therapy Praxis I (6)

Orientation to physical therapy practice. Biomechanics, basic patient treatment skills, massage, hydrotherapy, exercise, basic safety and patient management, evaluation skills. Prerequisite: Permission of instructor.

### PT 3001 Dynamics of Physical Therapy Praxis II (6)

Aspects of kinesiology—functional and dysfunctional—with clinical correlations; written communication in physical therapy. Practice clinical skills in exercise, basic gait and functional training; basic evaluation skills.

Prerequisites: PT 3000, 3200, 3900; STM 3150 and permission of instructor.

Corequisite: PT 3500.

### PT 3200 Communities in Health Care (3)

The medical model and alternative interpretations of health, illness and therapeutic intervention; theories and practices of health care services in the contemporary Western world; selected Eastern influences and related health care practices. Focus on diversity and complexity of the therapeutic relationship as it is influenced by consciousness of self, time, space, body, illness and therapy.

Prerequisite: Permission of instructor.

### PT 3500 Clinical Medicine I (3)

Clinical medical specialties (including cardiology, rheumatology, orthopedic surgery, cardiopulmonary surgery, neurosurgery, neurology, rehabilitation medicine, primary care and community health).

Prerequisites: PT 3000, 3200; STM 3510 and permission of instructor.

Corequisite: PT 3001.

### PT 3501 Clinical Medicine II (3)

Essential pathological processes, conditions and manifestations in relationship to their influences on the patient's capacity for body movement and independent living.

Prerequisites: PT 3001, 3500; Bio 3406; PEd 3510 and permission of instructor.

Corequisite: PT 4002.

### PT 3900 Human Gross Anatomy for Physical Therapists (6)

Advanced study of structure of human body; structural interrelationships as basis for function, dysfunction, therapeutic intervention. Emphasis on neuromusculoskeletal integrations.

Prerequisites: Bio 2409 and permission of instructor.

Corequisite: PT 3000.

### PT 4002 Dynamics of Physical Therapy Praxis III (4)

Rehabilitation techniques and equipment, aspects of human motor development from birth to death integrated with neurodevelopmental sequence and techniques evolving from this orientation. Advanced analysis of human locomotion, gait training, advanced evaluation techniques.

Prerequisites: PT 3001, 3500; Bio 3406; PEd 3510 and permission of instructor.

Corequisite: PT 3501.

### PT 4003 Dynamics of Physical Therapy Praxis IV (6)

Advanced analysis, integration and synthesis of physical therapy practices introduced in PT 3000, 3001, 4002; administration and supervision; joint evaluations; full time clinical affiliation; implementation of clinical investigation project planned in PT 4600.

Prerequisites: PT 3501, 4002, 4600, 4705, 4710.

Corequisite: PT 4900.

### PT 4200 Physical Therapy Praxis in the Health Care Community (3)

Physical therapy practice as a community of individual practitioners participating in and influencing the health of individuals through pragmatic therapeutic interrelationships. Interpretations of the physical therapist and physical therapy practice through consideration of oneself as a physical therapist vis-a-vis the patient and the community of health care in contemporary America.

Prerequisites: PT 3501, 4002, 4600, 4705, 4710 and permission of instructor.

### PT 4600 Clinical Investigation in Physical Therapy Praxis (3)

Concepts, methodologies and terminology of clinical investigation and their meaning for physical therapy practice. Clinical research design and critical scrutiny emphasized. Students plan a clinical investigation project to be implemented and reported during the next semester.

Prerequisites: PT 3900, 3001, 3500; PEd 3510; Bio 3406 and permission of instructor.

Corequisite: PT 4710.

### PT 4705 Innovations in Physical Therapy Praxis (3)

Advanced study of assessment and/or treatment technology utilized in physical therapy practice.

Prerequisites: PT 3001, 3500; Bio 3406; PEd 3510 and permission of instructor.

### PT 4710 Scientific Assessment of Human Motion (3)

Neurophysiological principles underlying human motion. Application of principles of assessment of motion and choice of appropriate neurophysiological techniques to improve the quality of motion.

Prerequisites: PT 3001, 3500; Bio 3406; PEd 3510 and permission of instructor.

Corequisites: PT 4002, 4600.

### PT 4800 Physical Therapy Seminar (3)

Student directed seminar; student selected topics derived from self and program evaluation, clinical experience and clinical investigation project in PT 4600.

Prerequisites: PT 4002, 4500, 4600, 4705, 4710 and permission of instructor.

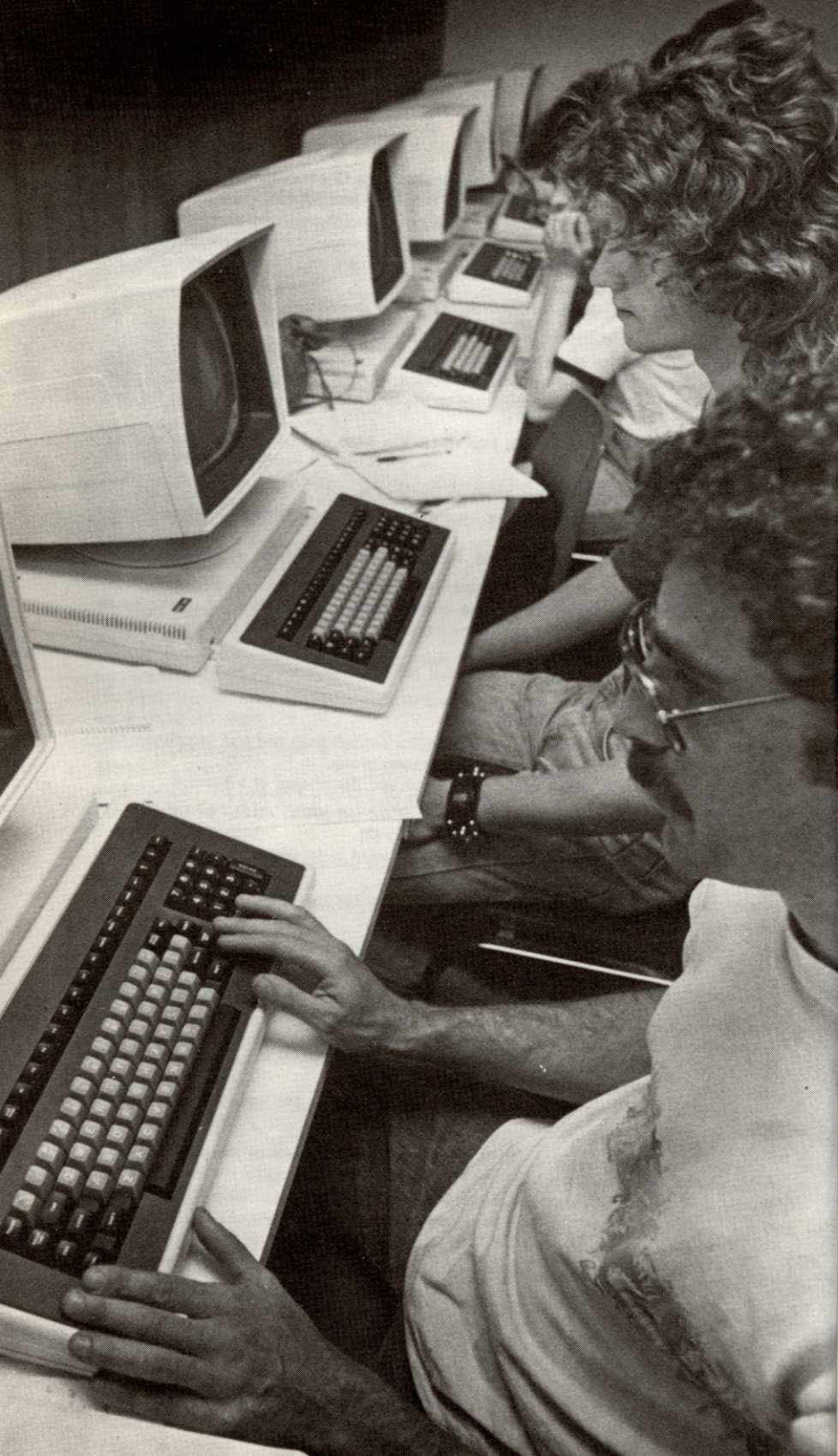
Corequisite: PT 4003.

### PT 4900 Directed Study for Physical Therapists (2)

Special interest topics selected by students for directed, independent study with physical therapy faculty.

Prerequisites: PT 3501, 4002, 4600, 4705, 4710 and permission of instructor.

Corequisite: PT 4003.



## HISTORY

Faculty: Didsbury, Fridlington, Furer, N. Goldberg, Higgins, Leonard, Letterese, Lewis, Lutz, Mayer, Raichle, Rice, Siegel, Socarras, Spaulding, S. Strauss, Tyson, L.H. Zimmer, (Chairperson)

### B.A. in History

124 s.h.

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**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36

**MAJOR REQUIREMENTS** 30

**Required Courses** (18 s.h.)

His 1030 History of Western Civilization I or His 1040 History of Western Civilization II or one other course in Western civilization (1000-2000 level)	3
His 2303 United States History to 1877	3
His 2304 United States History 1877 to Present	3
One 2000-3000 level course selected from either: African, Asian, Latin American or Middle Eastern history	3
Two 3000-4000 level courses in European history	6

**Major Electives** (12 s.h.) advanced electives and comparative studies at 3000-4000 level may include:  
His 4990 Senior Seminar

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**FREE ELECTIVES** (see page 28) 58

**Collateral Program: Instruction in Subject Areas, K-12.** Students who desire New Jersey teacher certification along with the above major elect the Instruction in Subject Areas Collateral and must contact the Department of Educational Arts and Systems for admissions and advisement.

### Minor in History

21 s.h.

**Electives** two courses selected from the following: 6

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 selected from upper division (3000 and 4000 level) courses with departmental advisement.** 15

### 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)**

Goldberg, Letterese, Lewis

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.

**His 1051 The Processes of Civilization: Cultural Borrowings and the Emergence of Western Man (3)**

Lewis, Spaulding

The significance of the interaction of Byzantine, Islamic and Western European cultures in the emergence of Western man.

**His 1052 The Grand Design of the Modern State: The Formation of the European Community (3)**

Higgins, Zimmer

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.

**His 1053 Capitalism, Technics and Culture: European Reconnaissance and Expansion (3)**

Higgins, Lutz, Strauss

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.

**His 1060 From Scientific Revolution to Democratic Revolutions (3)**

Siegel, Strauss

The Intellectual Revolution of the 17th and 18th centuries with special emphasis on the resultant revolutionary upheavals from England to Russia.

**His 1061 Freedom and Organization: Nationalism, Imperialism and Industrialism (3)**

Goldberg, Lutz, Zimmer

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.

**His 1062 Modern World Civilization: Crises of the Contemporary World (3)**

Staff

A survey of world civilization in modern times stressing the geopolitical, economic, and social inter-connections among the major regions of the globe.

**His 1070 Women in Western Civilization (3)**

Strauss

Role of women in Western civilization. Contributions of women as individuals and as a group.

**His 2000-2001 Historical Explorations with Film: Scientific Discovery and the Ascent of Man (3,3)**

Siegel

Using the widely acclaimed *Ascent of Man* film series created by the late Jacob Bronowski, course explores the great moments of scientific discovery against an 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.

**His 2050 History of Western Medicine (3)**

Lewis

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)**

Lewis

Archaeology as a method of historical inquiry; relationship of archaeological and literary evidence; survey of major archaeological sites.

**His 3110 Greek Civilization (3)**

Lewis

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)**

Lewis

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)**

Lewis

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)**

Lewis

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)**

Lewis

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)**

Lewis

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)**

Lewis

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)**

Zimmer

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.

**His 3232 Medieval Europe: History and Civilization II (3)**

Zimmer

A continuation of His 3231 which is not prerequisite. The height of the Middle Ages; the decline and end of medieval civilization.

Prerequisite: Six hours of history.

**His 3233 England in the Middle Ages (3)**

Zimmer

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.

**His 3234 Europe in the 17th Century (3)**

Higgins

An analysis of the political, economic, military, and intellectual trends in Europe from the end of the Reformation period to the end of the reign of Louis XV. Special emphasis on developments in science and philosophy and in political and social thought.

Prerequisite: Six hours of history.

**His 3235 Europe in the 18th Century (3)**

Zimmer

An analysis of the intellectual, political economic, and social developments in 18th century Europe before the French Revolution. Special attention given to the concept of the Enlightenment.

Prerequisite: Six hours of history.

**His 3236 The Tudor-Stuart Age: Society in Conflict (3)**

Strauss

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.

**His 3237 The Emergence of Modern England: 1689-1815 (3)**

Strauss

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.

**His 3238 The Age of Reform: England Since 1815 (3)**

Strauss

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.

**His 3239 France and the Revolutionary Tradition Since Napoleon (3)**

Siegel

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.

**His 3240 Renaissance and Reformation (3)**

Zimmer

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.

**His 3241 The Wealth of Nations: Roots of the 20th Century World Economy (3)**

Siegel

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.

**His 3244 The Nazi Era: Germany Before the Holocaust (3)**

Goldberg

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.

**His 3252 European Intellectual History in the 19th and 20th Centuries (3)**

Lutz

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 3273 Ireland: Mystique and History (3)**

Higgins

Struggle of a national and religious group to gain independence will be related to the role played by an Irish leavening in the web of Western civilization. The fratricidal conflict in Northern Ireland viewed as a harsh relevancy.

Prerequisite: Six hours of history.

**His 3274 Ireland: Mystique and History: Union to Disunion, 1801-1977 (3)**

Higgins

The struggle of a national and religious group to gain independence related to the role played by the Irish in Western civilization. In our era of confrontation, the fratricidal conflict in Northern Ireland viewed as a harsh relevancy.

Prerequisite: Six hours in history.

**His 3280 Spain: The Rise of the First World Power (3)**

Socarras

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)**

Socarras

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 3283 The Crises of Modern Spain (3)**

Socarras

The history of Spain in the 19th and 20th centuries; the internal forces that have shaped its history.

Prerequisite: Six hours of history or permission of instructor.

**His 4220 The Revolutionary Era, 1789-1870 (3)**

Higgins

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)**

Siegel

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.

**His 4234 Revolutionary and Soviet Russia (3)**

Siegel

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.



**His 4235 Industrial Revolution: Topics in the History of Technological Society (3)**

Siegel

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.

**His 4237 Europe Since 1870 (3)**

Letterese

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.

**His 4238 History of Germany, 1805 to Present (3)**

Goldberg

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.

**His 4239 The Hapsburg Empire and the Nationality Problem, 1804-1918 (3)**

Lutz

A study of the Hapsburg Empire from its formal establishment in 1804 to its dissolution in 1918; economic, social, and political developments related to the problems of nationality and the multi-national state; interplay between Hapsburg policies and the ambitions of Central Europe's Germans, Italians, Hungarians, Czechs, Serbs, etc., which weakened the Empire, led it into World War I, and contributed to its disintegration along national lines. Prerequisite: Six hours of history.

**His 4240 History of Ethnic Minorities in Europe (3)**

Lutz

A comparative-historical approach to Europe's ethnic minorities. Distinctive characteristics of ethnic minorities studied. Close attention given to relations between Europe's smaller ethnic groups and its larger, more powerful ethnic groups. Rapid review of ethnic origins and pre-modern period, with chief attention given to developments in the 19th and 20th centuries.

Prerequisite: Six hours of history.

**His 4241 German Culture Between the Wars: A View from "The Cabaret" (3)**

Goldberg

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.

**His 4242 Twentieth Century France: Imperial Glory to Identity Crisis (3)**

Siegel

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.

**His 4250 The Papacy and Its History**

Socarras

The political development of the Papacy and its role and influence in shaping Western history and civilization.

Prerequisite: Junior level or permission of instructor.

**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 2381 History of Latin America to 1825 (3)**

Socarras

An 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)**

Socarras

An 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 in history.

**His 3305 The History of the Black American—to 1900 (3)**

Rice, Tyson

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.

**His 3306 20th Century Black History (3)**

Rice, Tyson

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.

**His 3323 Progress of American Medicine (3)**

Goldberg

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.

**His 3324 The American West (3)**

Fridlington

History of the advancing frontier in the United States from colonial times through the nineteenth century with analysis of its effect on the institutional and intellectual development of the American people. Emphasis on historiography of the American frontier.

Prerequisite: Six hours of history.

**His 3326 History of New Jersey (3)**

Fridlington

Social and political development of New Jersey within context of American history.

Prerequisite: Six hours of history.

**His 3330 The Labor Movements in America: 1864 to Present**

Raichle

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)**

Furer

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.

**His 3340 20th Century America (3)**

Raichle, Rice

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.

**His 3341 The End of American Innocence (3)**

Raichle

The 1920's: emergence of flappers, flivvers, prosperity, prohibition, conservatism, jazz, the Ku Klux Klan, Republican dominance and a literary renaissance.

**His 3352 The History of American Childhood to 1890 (3)**

Raichle

The study of early American child development viewed as a major conduit of the heritage of civilization. Focus on the view of the child, particularly in terms of national values, and the practices to inculcate those values. *Does not fulfill major requirements.*

Prerequisite: Sophomore standing or permission of instructor.

**His 3353 The History of American Childhood since 1890 (3)** Mayer

The study of recent American child rearing in the context of constantly accelerating dynamics in American society. The maturing of the social sciences, the dissipation of absolute values and the impact of "crisis" situations emphasized.  
Prerequisite: Six hours of history.

**His 3354 The Private Life of the American People (3)** Raichle

The past of the American family, 1607 to the present: child-rearing, courtship, dating and mating, marriage and sexual behavior.  
Prerequisite: Junior standing.

**His 3360 History of Business in America (3)** Fridlington

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.

**His 3363 America in the 1960's: The Turbulent Decade (3)** Raichle

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.

**His 3370 Canadian History: 1534 to Present (3)** Higgins

Events and institutional developments involved in the emergence of the Dominion of Canada as a contributor to both American history and world history.  
Prerequisite: His 2303 or 2304.

**His 3381 Cuba and the Modern World (3)** Socarras

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 3419 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 4321 American Liberty and Law (3)** Raichle

After a brief introduction to the Supreme Court and Constitution, a detailed analysis of the growth and development of the Bill of Rights. In effect, the course attempts to probe how free speech is; what religious liberty means; what the right of privacy is; and what rights the accused person has.  
Prerequisites: His 2303-2304.

**His 4323 Religion in America: An Historical Approach (3)**

Surveys, objectively and within the discipline of history, religious developments in American history from the background of settlement to current religious trends. Examines the interaction of secular and religious aspects of our culture. Goal: knowledge and understanding of the basic beliefs and practices of Roman Catholicism, Judaism, and the major religious denominations of Protestantism; and appreciation of the contribution of each to American civilization. Special attention given to possible religious significance in current movements among the youth.  
Prerequisite: Six hours of history.

**His 4327 Growth of American Thought (3)** Raichle

A survey of American hopes, aspirations and sense of purpose from Emerson and Thoreau to the present. Through critics and champions of democratic faith an attempt is made to outline a pattern of American thought.  
Prerequisites: His 2303-2304 or equivalent.

**His 4328 Dissent, Crisis and Consensus in American History (3)**

An effort in quantitative and impressionist history focusing on those incidents when dissent flared into violence. An attempt made to find recurring themes, make comparisons, collect and classify data, and draw conclusions.  
Prerequisite: Six hours of history.

**His 4329 The Puritan Presence in American History, 1620-1776 (3)**

The Puritan influence on American life with critical analysis of relationship to the origins and nature of the American Revolution.  
Prerequisites: Six hours of history, junior standing or permission of instructor.

**His 4361 The American City (3)** Furer

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.

**His 4362 Pre-Columbia Civilizations: The Andean Region (3)** Socarras

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)** Socarras

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 4364 History of the North American Indian (3)** Tyson

Survey of the history and culture of the North American Indian from primeval times to the contemporary period.  
Prerequisite: Six hours of history.

**His 4365 American Foreign Affairs I: 1775-1899 (3)** Mayer

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.

**His 4366 American Foreign Affairs II: 1899 to Present (3)** Mayer

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.

**His 4367 The History of American Immigration (3)** Furer

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.

**His 4368 The Civil War and Reconstruction (3)** Rice

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.

**His 4383 History of the Caribbean World (3)** Socarras

Evolution of modern Caribbean World from pre-Columbian times to present. Emphasis on the major social, cultural, economic and political threads of development.  
Prerequisite: Six hours of history.

**His 4384 The Emergence of Brazil (3)** Socarras  
The historical and cultural development of Brazil from its discovery to the present.  
Prerequisites: Six hours of history.

### ASIAN

**His 2471 History of Far Eastern Civilization to 1600 (3)** Didsbury, Leonard  
Survey of the major historical developments in China, Korea, Japan and Vietnam, from earliest times to the seventeenth century.

**His 2472 Modernization of China and Japan, 1600 to Present (3)** Didsbury, Leonard  
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.

**His 3400 Diplomatic History of the Far East in the 19th and 20th Centuries (3)** Leonard  
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.

**His 3410 China in the 20th Century (3)** Leonard  
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.

**His 3415 Vietnam's Struggle for Autonomy (3)** Leonard  
Study of the origins of Vietnamese political life, the nature of early Vietnamese relations with Imperial China, the impact of French domination, the nature of Vietnamese nationalism in the 20th century through the second Indo-China War. *Does not fulfill major requirements.*  
Prerequisite: Sophomore standing or permission of instructor.

**His 3416 The Asian Woman (3)** Leonard  
The history of women's involvement in politics, economics and society in Asia. Special attention to women in China and India in the traditional and modern periods. The evolution of the female's position during the process of modernization. *Does not fulfill major requirements.*  
Prerequisite: Sophomore standing or permission of instructor.

**His 3420 Southeast Asia and Western Dominance, 1500-1900 (3)** Tyson  
A survey of the historical development of Southeast Asia, focusing on the 15th century, immediately prior to European expansion, the period of European intrusion from the 16th to 19th centuries, the rise of nationalist movements in the late 19th century; particular emphasis on Indonesia, Burma, the Malay Peninsula, and the Philippines.  
Prerequisite: Six hours of history.

**His 3425 Southeast Asia in the 20th Century (3)** Tyson  
Selected studies in the social, political, and economic history of Southeast Asia during the 20th century, focusing on nationalist movements, the effect of Japanese imperialism during World War II, decolonization processes in Indonesia, Burma, Malaya, the Philippines, French Indo-China and the position of Southeast Asian states in international politics in the 20th century.  
Prerequisite: Six hours of history.

**His 4410 The Rise of Modern Japan, 1600-1970 (3)** Leonard  
Focus on Japan's transition to modernity and its rise to world power status in the twentieth century.  
Prerequisite: Six hours of history.

### AFRICAN

**His 2500 Survey of African Prehistory and History (3)** Spaulding  
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.

**His 2510 Political History of Africa in the 20th Century (3)** Spaulding  
A study of the development of African nationalism in the 20th century and its emergence from European colonial domination.

### MIDDLE EASTERN

**His 3600 Historical Survey of Islamic Civilization in the Near East (3)** Spaulding  
From the emergence of Islam until the dissolution of the Caliphate in the 20th century.  
Prerequisite: Six hours of history.

**His 3610 The Ottoman Empire (3)** Spaulding  
A study of the rise and decline of Ottoman power, from vibrant conqueror to "the sick man of Europe."  
Prerequisite: Six hours of history.

**His 3620 Modern Israel (3)** Zimmer  
Development of Zionism from the era of the French Revolution through the establishment and development of the State of Israel. *Does not fulfill major requirements.*  
Prerequisite: Sophomore standing or permission of instructor.

### COMPARATIVE

**His 3843 Sex in History (3)** Strauss  
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.

**His 3850 Explorations in Psychohistory (3)** Mayer  
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.

**His 3851 Alienated Youth, Past and Present (3)** Lutz  
An historical approach to the youth movements of alienation, from the Goliards of the 11th and 12th centuries to the New Left of the 20th century.  
Prerequisite: Six hours of history.

**His 3860 Jewish History (3)** Zimmer  
Beginning with the period of the Patriarchs, an overall picture of the most important eras in the history of the Jewish people. *Does not fulfill major requirements.*  
Prerequisite: Sophomore standing or permission of instructor.

**His 3861 Modern Jewish History (3)** Zimmer  
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. *Does not fulfill major requirements.*  
Prerequisite: Sophomore standing or permission of instructor.

**His 3870 Dreams and Nightmares: Utopias and History (3)** Didsbury  
A study of various conceptions of ideal and sinister societies—utopias and dystopias—from Plato to Huxley. The economic foundation and structure of the retrospective conceptions; the emergence of a negativist utopian tradition in post-industrial civilization.  
Prerequisite: Six hours of history.

**His 4840 Women in History (3)** Leonard, Lewis, Strauss  
 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.

**His 4841 Women in the Modern Age (3)** Strauss  
 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.

**His 4870 Planning for Tomorrow Today: Alternative Futures (3)** Didsbury  
 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.

**His 4875 The Emergence of Law in Society (3)** Socarras  
 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)** Didsbury  
 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.

**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 insights into the problems of historical methodology and research.  
 Prerequisite: Twelve hours of history.

**His 4991 Field Work and Seminar in Urban Studies (3)** Furer  
 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.

**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)** Lewis  
**ID 3900 Interdisciplinary Seminar on Futurism (3)** Didsbury  
**ID 4001 Myth and Symbolism in Pre-Hispanic Mexico (3)** Socarras  
**ID 4002 Egyptian Mythology (3)** Socarras  
**ID 4100 China During the Age of Confucius (3)** Leonard

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 School of Arts and Sciences and the School of Education.

**Collateral Program: Afro-American Studies**

This program is offered to all students interested in an interdisciplinary approach to the study of the Black experience in America. The program can be taken only in conjunction with a major academic curriculum and is set up individually for each student.

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<b>Required Areas</b> <i>Two courses from each group:</i>		12
<b>HUMANITIES</b>		
Eng 3200 Black American Literature	5-6	
AH 3780 History of African Art		
Mus 2230 African Music Tradition		
<b>BEHAVIORAL AND SOCIAL SCIENCES</b>		6
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		
PS 3700 The Urban Political System: Politics and Problems		
Soc 2300 Racial and Cultural Minorities		
Soc 3150 Urban Sociology		
<b>Electives</b>		(minimum) 6
EC 4210 Multicultural Education in the Early Childhood Years		
EdP 3802 Educational Psychology of the Disadvantaged Urban Child		
EPS 4050 Urban Education		
EPS 4060 Education in the Non-Western World		
Soc 2310 Sociology of Poverty		
SW 2900 Introduction to Social Work		
SW 3950 Methods of Social Work I		
Any course listed in Required Areas (above) and not used to fulfill those requirements.		

## 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 for example:

*For native speakers of English*—Sp 2101-2102 Intermediate Spanish I and II and Sp 3100 Advanced Spanish Composition or Sp 3105 Advanced Spanish Conversation.

*For native speakers of Spanish*—Eng 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.

24 s.h.

### Required Courses

EAS 3150 Introduction to Bilingual Education	3	18
EAS 3151 Teaching Techniques for Bilingual/ Bicultural Schools	3	
EAS 3710 Teaching English as a Second Language	3	
EAS 4150 Bilingual Child: Language and Culture	3	
EAS 4151 Bilingual Child: Problems of Adjustment to American Society	3	
EAS 4152 Language and Reading Skills in Bilingual/Bicultural Schools	3	

### Electives *two courses selected with advisement:*

CS 3410 Sociolinguistics and Reading	6
EdP 3802 Educational Psychology of the Disadvantaged Urban Child	
Eng 2100 Introduction to Linguistics	
Eng 3105 Language, Meaning and Human Behavior	
EPS 4050 Urban Education	
His 4383 History of the Caribbean World	
Soc 2300 Racial and Cultural Minorities	
Soc 2310 Sociology of Poverty	
Sp 3240 Development of Puerto Rican Culture	
Sp 4420 Twentieth Century Spanish-American Poetry	
Sp 4425 Essay in Spanish-American Literature	

## Collateral Program: Career Education for the Handicapped

Coordinators: D. Barnhart, M. Van Nest

Collateral designed for students in Industrial Arts and Teacher of the Handicapped who desire special training in Career Education for the Handicapped.

21 s.h.

### Required Core Courses

IS 4111 Exploring Special Education—Industrial Arts/Vocational Education	3	12
IS 4112 Basic Manufacturing and Packaging Techniques	3	
SpE 3161 Career Education for the Handicapped	3	
SpE 4161 Practicum in Career Education for the Handicapped	3	

### Required Courses

FOR TEACHER OF HANDICAPPED MAJORS	9	
IS 3301 Woodworking for the Non-Major		3
<i>Two of the following selected with advisement:</i>		6
IS 1200 Elements of Drafting	9	
IS 1300 Elements of Electronics		
IS 1400 Elements of Metalworking		
IS 1600 Elements of Graphics		
IS 1700 Elements of Power		
IS 4001 Technology for Children		
FOR INDUSTRIAL ARTS MAJORS		
SpE 2052 Introduction to Psychology of the Handicapped		3
SpE 3050 Mainstreaming—Process and Techniques		3
SpE 4053 Orientation in Psychological Testing		3

### 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 level.

21 s.h.

#### Required Courses

Eng 3300 Ancient Greek and Roman Literature in Translation or Eng 3603 Honors Course in Greek and Roman Literature	3	9
His 3110 Greek Civilization	3	
His 3120 Roman Civilization	3	

**Electives** *four courses selected with advisement from the following:*

AH 3700 Greek and Roman Art		12
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: Developmental Disabilities

Coordinator: B. Calloway

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 are those seeking continuing professional education.

21-22 s.h.

#### Required Courses

SpE 2052 Introduction to Psychology of the Handicapped	3
SpE 2157 Introduction to the Severely/Multiply Handicapped	3
*Bio 2402 Human Physiology and Anatomy	4
EC 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	3

\*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 fieldwork courses and with advisement of both departments may substitute an equivalent course for this requirement.

## 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.

50-56 s.h.

<b>Required Courses</b>		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	
<i>One of the following: (3/4 s.h.)</i>		
Geo 1010 The Earth, The Environment of Man	3	
Geo 2010 Geography of Man	3	
Geol 1200 Introduction to Geology	4	
<i>One of the following: (4/8 s.h.)</i>		
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	
<b>Electives</b> to be selected from courses outside the student's major, with advisement		10

## 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.

21 s.h.

<b>Required Courses</b>		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	
<b>Electives</b> <i>four courses selected from the following:</i>		12
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		
MgS 3130 Forecasting Techniques in Business and Economics		
MgS 4100 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: 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 only by special permission of the Department of Early Childhood Education. The program is designed to develop the understanding and skills which enable individuals to fulfill their roles realistically and creatively.

24 s.h.

### Required Courses

	15
EC 3610 Child Advocacy: Implications for Helping Practitioners	3
EC 3800 The Family as Educator	3
EC 4325 Practicum: Educational Implications for Serving Families	6
Soc 2100 Sociology of the Family	3
<b>Electives selected with departmental advisement</b>	<b>9</b>

## 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 s/he is interested or shows exceptional ability.

41 s.h.

### 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: Gerontology

Coordinator: R. Famighetti

The 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 prepares students to offer direct services or serve as beginning administrators. Practitioners will enhance skills and knowledge for career ladder advancement.

24 s.h.

### Required Courses

	15
Hed 3700 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
Hed 4750 Practicum in Gerontology	3
<b>Electives three courses selected with advisement from the following:</b>	<b>9</b>
EdP 4801 Group Dynamics	
FA 4921 Art Media in Gerontology	
Hed 3725 Death in Perspective	
Hed 4775 Close Encounters of the Institutional Kind	
Hed 4700 Seminar in Issues of Gerontology	
Hed 4725 Human Sexuality in the Later Years	
ID 4900 Adult Protective Services	
PEd 4601 Physical Activity Programming for Senior Adults	
Psy 3110 Life Span Developmental Psychology	
Psy 3120 Adult Psychology	
Rec 3720 Recreation and the Aged	
Rec 4300 Recreation for Special Populations	

## Collateral Program: Judaic Studies

Coordinator: J. Preil

	<b>24 s.h.</b>	
<b>Core Courses</b> <i>three courses selected from the following:</i>		<b>9</b>
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 EAS 4742 Teaching the Holocaust	3	
<b>Electives</b> <i>selected from upper division (3000 and 4000 level) courses with advisement</i>		<b>12</b>
<b>Required Course</b>		<b>3</b>
*ID 4---Seminar in Judaic Studies		

\*Course in development

## 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 courses 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 Earth and Planetary Environments departments.

For more information, contact A. Lee Meyerson, Earth and Planetary Environments Department or R. W. Schuhmacher, Biology.

**28 s.h.**

<b>Required Courses</b>		<b>20</b>
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	
<b>Electives</b> <i>minimum of two advanced courses selected from the appropriate interest group:</i>		<b>8</b>
<b>MARINE BIOLOGY</b>		
Bio *4470, 3414, 3425, *4415, 4455, *3565, 3815		
<b>MARINE GEOLOGY</b>		
Geol 3263, 3264, 4263, 4265, 4266, ES 4953-4954, ES 4963-4964		
<b>OCEANOGRAPHY</b>		
Che 2283, 3284, 3381-3382; Met 3370; Phy 4491, 4592		

\*Taught at the Consortium Field Station only.

## 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 within the General Education requirements of the major, as follows:

### Humanities Cluster:

STM 1900 Speech

Eng 2000 Writing About Literature

Phi 1100 Philosophy

### Sciences and Mathematics Cluster:

Mat 3247 Abstract Algebra

### 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

27 s.h.

### Required Courses

CS 1401 College Reading and Study Skills 3 12

One course in Statistics 3

Phi 3307 Philosophy of Law 3

Acc 2200 Principles of Accounting I 3

**Electives** select one course from each of the 15

following 5 categories or substitute in each

as recommended by the departments:

### ENGLISH-SPEECH/THEATRE/MEDIA

STM 2905, 2970 or other course in oral English

### HISTORY

His 1061, 2303, 2304, 4321

### PHILOSOPHY

Phi 2300, 2500, 3300, 3309, 3313

### POLITICAL SCIENCE

PS 2100, 2110, 3130, 3150, 3151, 3250, 3680, 3685

### PSYCHOLOGY

Psy 3540, 3630

## 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 when fulfilling general education requirements.

24 s.h.

### Required Courses

His 4361 History of the American City 3 9

His 4991 Field Work and Seminar in Urban Studies 6

**Electives** to be selected with advisement for appropriateness to the student's major 15

## 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.

24 s.h.

### Required Courses

HEd 3160 Health Perspectives for Women 3 12

His 4840 Women in History 3

His 4841 Women in the Modern Age 3

Psy 3340 Psychology of Women 3

**Electives** four courses selected with advisement for appropriateness to the major academic curriculum 12

## Interdisciplinary Courses

### COLLEGE ORIENTATION

#### ID 1000 College Careers and Choices (3)

The purpose of higher education and potential roles of an individual student within the college environment. Orientation to academic, social and career coping skills necessary for successful adjustment and for maximizing individual potential. Open to freshmen only. Graded on pass/fail basis.

### ALLIED HEALTH PROFESSIONS

#### ID 1050 Orientation to Allied Health Professions (3)

Overview of the health care delivery system in the United States emphasizing the inter-relationships among health care personnel and patients.

## EDUCATION AND HUMAN SERVICES

### **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 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 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 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.

## 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.

Prerequisite: Environmental Studies core.

### **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 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.

### **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 status 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.

### **ID 3315 Ethics and Public Policy (3)**

D'Souza

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. Prerequisites: One course in philosophy and one course in public administration or political science, or permission of instructor.

### **ID 3600 The Romance of Words (3)**

Myers

Designed to excite students' interest in the understanding of and enthusiasm for 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.

### **ID 3660 Continental and American Realism (1850-1900) (3)**

I. Bauer, J. Bauer

An examination of the aesthetic theories and practices of Flaubert, Zola, Turgenev, Verga, Howells and James.

### **ID 3700 Survival of Classical Mythology in Art (3)**

Lord

Survey of Greco-Roman myths and their transformations in art from antiquity through the Renaissance.

Prerequisite: ID 3100 or permission of instructor.

### **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)**

Didsbury

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.

### **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)**

Socarras

An examination of the Egyptian mythological concepts and systems.

Prerequisite: Junior standing or permission of instructor.

### **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 4300 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.

Prerequisites: 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."

**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.

**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.

**MATHEMATICS**

Faculty: Abeles, Arnow, Butcher, Deavours, Garb, Giegerich, Goldberg, Hahn, Hothersall, Krantz, J. Levine, Lipson (Chairperson), Malbrock, Marchand, Rabinowitz, Santomauro, Thornton, Zoll

**B.A. in Mathematical Sciences**

A major in the mathematical sciences is designed to fulfill several objectives: to develop mathematical reasoning through problem solving; to investigate that mathematical theory which facilitates an understanding of mathematical applications; to provide background for careers in applied mathematics, computer science, 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.

Students interested in teaching must also elect the collateral program: Instruction in Subject Areas.

**124 s.h.****GENERAL EDUCATION REQUIREMENTS (see page 26) 36****Required Cognate Course (3 s.h.)**

*Sciences and Mathematics Cluster:*

Mat 2110 Discrete Structures

**ADDITIONAL REQUIRED COGNATES 12**

CpS 1941 Computer Organization and Programming 3

CpS 2995 Computational Methods in Matrix and Linear Algebra I 3

Two additional courses to be selected with departmental advisement from computer science, physics, electronics, economics or management science 6

**MAJOR REQUIREMENTS 30****Required Courses (18 s.h.)**

Mat 2411 Calculus I 3

Mat 2412 Calculus II 3

Mat 3451 Calculus III 3

Mat 3452 Calculus IV 3

Mat 3455 Differential Equations 3

Mat 3544 Probability 3

**Major Electives (12 s.h.) to be selected with departmental advisement from courses on the 3000/4000 level.**

**FREE ELECTIVES (see page 28) 46**

Students interested in certification to teach mathematics must also elect the **Collateral Program: Instruction in Mathematics**. They are required to take the following courses: a course in geometry, a course in statistics, a course in abstract algebra and Phy 2095.

**Minor in Mathematics**

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.

**B.S. in Computer Science**

The courses of instruction in computer science are designed to provide for a major program with various emphases so that a student may select a background for the areas that follow:

data processing related to business, economics and/or management science;

technology related to physics, electronics and/or mathematics with investigations related to computer architecture;

mathematics with computer applications;

graduate studies in computer science.

This program, as described, is subject to revision. Students are urged to consult the department for the most current information.

**Option: Data Processing**

124 s.h.

**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36**COGNATE COURSES** 12

Four courses in economics and/or management science

**MAJOR REQUIREMENTS** 30**Required Courses** (9 s.h.)CpS 1932 Principles and Procedures of  
Electronic Data Processing 3

CpS 2993 Computer Programming I 3

CpS 3994 Computer Programming II 3

**Major Electives** (21 s.h.) *to be selected with departmental advisement from the computer science area, exclusive of CpS 1931.***FREE ELECTIVES** (see page 28) 46**Minor in Computer Science****Option: Data Processing**

18 s.h.

**Required Courses** (9 s.h.)CpS 1932 Principles and Procedures of  
Electronic Data Processing 3

CpS 2993 Computer Programming I 3

CpS 3994 Computer Programming II 3

**Electives** (9 s.h.) *to be selected with departmental advisement from the computer science area, exclusive of CpS 1931.***B.S. in Computer Science****Option: Technology**

124 s.h.

**GENERAL EDUCATION REQUIREMENTS** (see page 26) 36**COGNATE COURSES\*** 12

Physics, Electronics and/or Mathematics

**MAJOR REQUIREMENTS** 30**Required Courses** (10 s.h.)

CpS 3900 Digital Computer Circuit Principles 4

CpS 2993 Computer Programming I 3

CpS 3994 Computer Programming II 3

**Major Electives** (20 s.h.) *to be selected with departmental advisement from the computer science area, exclusive of CpS 1931.***FREE ELECTIVES** (see page 28) 46

\*Students having little or no background in electronics should schedule appropriate cognate or elective course work early in their program prior to enrolling in CpS 3900. Suggested courses include Phy 3392-3 or IS 2501-2.

**Minor in Computer Science****Option: Technology**

18 s.h.

**Required Courses** (10 s.h.)

CpS 3900 Digital Computer Circuit Principles 4

CpS 2993 Computer Programming I 3

CpS 3994 Computer Programming II 3

**Electives** (8 s.h.) *to be selected with departmental advisement from the computer science area, exclusive of CpS 1931.***Mathematics Courses****DEVELOPMENTAL COURSES***Degree credit not granted for these courses. See page 32.***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)**

Goldberg

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)** Butcher, Thornton  
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 1011 Number Theory in Elementary Mathematics (3)**  
Properties of prime numbers. Development of creativity in elementary school mathematics. Figurate numbers, composite numbers, factorization methods, modular arithmetic. Euler's function. For non-mathematics majors.

**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 1014 Elementary Mathematical Systems (3)**  
Sets, logic, groups, rings, fields. Many concrete examples, both numerical and non-numerical, are studied as examples of elementary mathematical structures. 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, non-parametric 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)** Zoll  
Study of algebraic representations of points, lines and conic sections; transformations, polar coordinates, parametric representations, solid analytic geometry.  
Prerequisite: Mat 1052 or 3 1/2 years of high school mathematics.

### LOGIC AND FOUNDATIONS

**Mat 2110 Discrete Structures (3)** Butcher, Goldberg  
Sets, relations, Boolean algebra, groups, monoids, machines. Applications to computing.  
Prerequisite: Mat 1052.

**Mat 3155 Mathematical Logic (3)** Lipson  
Simple and compound statements. Understanding tools of logic. Statement calculus and predicate calculus, their applications.  
Prerequisite: Mat 2412 or permission of instructor.

### ALGEBRA

**Mat 3225 Computational Methods in Matrix and Linear Algebra II (3)**  
Continuation of topics discussed in CpS 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; CpS 2995.

**Mat 3247 Abstract Algebra I (3)** Butcher, Goldberg  
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 2103 or permission of instructor.

**Mat 3248 Abstract Algebra II (3)** Butcher, Goldberg  
Rings, integral domains, fields, ideals and quotient rings, rings of polynomials, homomorphisms, extension field and vector spaces.  
Prerequisite: Mat 3247 or permission of instructor.

### GEOMETRY

**Mat 2341 Modern College Geometry I (3)** Abeles  
A survey of Euclidean, similarity and affine geometries; transformations; groups of transformations.  
Prerequisite: Mat 1053 or permission of instructor.

**Mat 2346 Modern Euclidean Geometry (3)**  
Circle of Apollonius, Ceva's Theorem, Menelaus' Theorem, homothetics, inversion, and Apollonius' problem.

### ANALYSIS

**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)** Hothersall, Krantz  
Multidimensional calculus: vector algebra, partial differentiation, grad, div, and curl operations.  
Prerequisite: Mat 2412 or permission of the instructor.

**Mat 3452 Calculus IV (3)** Hothersall, Krantz  
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.

**Mat 3455 Differential Equations (3)** Krantz  
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.

**Mat 4451 Advanced Calculus I (3)** Malbrock  
Fundamental concepts of calculus. Functions of one variable, sequences, limits, continuity, differentiation and integration.  
Prerequisite or corequisite: Mat 3452 or permission of instructor.

**Mat 4452 Advanced Calculus II (3)**

Malbrock

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.

**Mat 4465 Complex Variables (3)**

Malbrock

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.

**PROBABILITY AND STATISTICS****Mat 2026 Statistical Decision Theory (3)**

An introduction to the science of decision making under conditions of uncertainty; the relationship between real situations and mathematical models.

Prerequisites: 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 (3)**

Abeles

Discrete and continuous random variables; conditional probability and independence, functions of random variables; mathematical expectation; the moment-generating functions; and the study of important distributions, such as the binomial, Poisson, normal, gamma, and chi-square. Applications.

Prerequisite: Mat 2412.

**Mat 3570 Multivariate Analysis (3)**

Zoll

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 Mathematical Statistics (3)**

Abeles

Discrete and continuous random variables. Functions of random variables. Two-dimensional random variables. Expected values and variance of random variables and functions. Correlation and regression. Normal, gamma, and chi square distributions. The moment-generating function. Samples and sampling distributions. Estimating parameters. Testing hypotheses.

Prerequisite: Mat 3544.

**NUMBER THEORY****Mat 3624 Number Theory (3)**

Goldberg

Properties of the integers: divisibility, primes, theory of congruence, Diophantine equations, number theoretic functions—with an historical study of important problems.

Prerequisite or corequisite: Mat 3451.

**APPLICATIONS****Mat 3815 Cryptography and Cryptanalysis (3)**

Deavours

Historical comments, monoalphabetic substitution, homophonic substitution, periodic polyalphabetics, 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.

**Mat 3891 History of Mathematics (3)**

Lipson

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.

**Mat 4404 Introduction to Applied Mathematics (3)**

Krantz

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.

**Mat 4800 Elements of Graph Theory (3)**

Levine, Zoll

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)**

Deavours

Related algebraic, probabilistic, and statistical concepts, N-gram distributions, Chi, Phi, and Kappa tests, entropy and redundancy, index of coincidence, unicity point theory, isomorphs; 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.

**Computer Science Courses****CpS 1931 Computer Arithmetic Algorithms (3)**

Historical development of computers, components of a computing system, keypunch machines, and terminals. Flow charts, programming, debugging, and analysis of numerical and non-numerical algorithms processed via electronic digital computers. *Does not fulfill computer science major requirements.*

**CpS 1932 Principles and Procedures of Electronic Data Processing (3)**

Arnow, Deavours, Garb

Fundamental principles and procedures of electronic data processing include: historical development of electronic machines, punched-card data processing, machine language coding, systems analysis and procedure, flow charts, utilization of coded-data representation for arithmetic and control units, and programming scientific and sequential information for various kinds of electronic machines.

Prerequisite: CpS 1931.



**CpS 1941 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 1931.

**CpS 1948 Computer-Based Business Systems (3)**

Arnow

Analysis design, installation and implementation of computer based business systems with examples drawn from various fields including manufacturing, management information, marketing, and accounting. Applications via remote and local computing facilities.

Prerequisite: CpS 1931 or equivalent.

**CpS 1979 Combinatorics (3)**

Zoll

Fundamental representations and operations with fixed radix systems and residue systems. Applications to searching techniques, coding and switching theory and sort/merge operations.

Prerequisite: CpS 1931.

**CpS 2931 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. Preparation for participation in the computer science industrial cooperative program.

Prerequisite: CpS 1932 or the equivalent.

**CpS 2942 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 1941.

**CpS 2990 Computer Assembly Language (3)**

Garb, Santomauro

Basic principles of assembly language; machine language format, input/output instructions, arithmetic statements; non-numeric, decision, and iteration procedures; subprograms, storage techniques, algorithmic designs, macros. Relationship to computer architecture; register configurations, central processor unit, storage facilities, and peripheral devices.

Prerequisite: CpS 1941 or permission of instructor.

**CpS 2993 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 1931 and Mat 2411.

**CpS 2995 Computational Methods in Matrix and Linear Algebra I (3)**

Abeles

Basic operations with matrices, sparse matrices, eigenvalue problems, combinatorial mathematics, systems of linear equations, linear transforms and vector spaces. Computer applications in linear programming, economics and science.

Prerequisite: Mat 2411; CpS 1931 or equivalent.

**CpS 3900 Digital Circuitry Principles (4)**

Cokewood, Jahn, Silano

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.

**CpS 3932 Business Oriented Programming Techniques II**

Continuation of the topics discussed in CpS 2931 with emphasis on programming efficiency and multifile processing. Applications involving magnetic tape and direct access storage devices using index sequential files with random and sequential retrieving.

Prerequisite: CpS 2931 or equivalent.

**Mat 3941 Numerical Analysis (3)**

Garb

Basic operations of numerical computation related to aspects of elementary mathematical operations, approximation and exact data, interpolation, error analysis, recursion formulas, sequences and series. Impact of computers, electronic and manual, from the standpoint of efficiency, accuracy, and suitability to processing problems for solution sets.

Prerequisite or corequisite: Mat 3451. CpS 2993 recommended.

**Mat 3942 Numerical Calculus (3)**

Giegerich, Hothersall

Computer algorithms for the solution to numerical calculations, error analysis, polynomial approximations, composite integration formulas, quadrature, linear system of equations, solution of non-linear equations, and ordinary differential equations.

Prerequisites: Mat 3941 and CpS 2993. May be taken with CpS 3994. Mat 3451 recommended.

**CpS 3962 Computer Augmented Accounting II (3)**

Arnow

A continuation of the topics discussed in MgS 3261 with emphasis on design testing and implementation of computer based accounting systems. Topics will include programming and debugging techniques, storage media, file organization and system utilities.

Prerequisites: Acc 3261 and CpS 3932 or permission of instructor.

**CpS 3994 Computer Programming II (3)**

Double precision, complex and logical values, predefined and written subroutines, n-dimensional arrays, subprograms, numeric, logical alphanumeric, literal and blank data, mixed mode, indexing, and optimized programs used in intricate mathematical problems.

Prerequisite: CpS 2993.

**CpS 3998 Computer Security and Information Theory (3)**

Deavours

Information and coding, measurement and transmission of information, redundancy, noise, data bank security in government and industry, computer network weaknesses, data encryption.

Prerequisite: CpS 3994.

**CpS 4900 Elements of Systems Programming (3)**

Garb

Computer structure, machine languages, specifications of registers, instruction codes, structure of assemblers, symbol tables for structures and techniques, macro operators, data-flow circuits, input/output control, and selected applications.

Prerequisites: CpS 2990 and 3994 recommended.

**CpS 4910 Computer Programming Languages (3)**

Garb

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 2990.

**CpS 4920 Compiler Construction (3)**

Santomauro

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 2990 or 4900 or permission of the instructor.

**CpS 4930 Data Communication Systems (3)**

Arnow

A survey of machines and devices utilized to communicate with and retrieve information from a computer.

Prerequisite: CpS 3994.

**CpS 4940 Data Structures (3)**

Arnow, Santomauro

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.

Prerequisites: CpS 2990 and 3994. CpS 4900 and Mat 4800 recommended.

**CpS 4950 Computer Operating Systems (3)**

Deavours, Garb

An introduction to basic computer elements and logic design techniques employed in computer systems organization.

Prerequisites: CpS 2990 and 3994.

**CpS 4960 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.

Prerequisites: CpS 4930 and 4950 or permission of instructor.

**CpS 4965 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 3994.

**CpS 4980 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 4991 Advanced Assembler Language Programming (3)**

Santomauro

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 2990 or permission of the instructor.

**CpS 4999 Cooperative Education in Computer****Science (3)**

Arnow, Garb, Santomauro

Practical field experience providing resources other than those within the college environment. These credits cannot be used towards the 30 credits of course work required for computer science majors. No more than 40 semester hours in computer science may be counted toward the 124 hours of the degree. Therefore, credits in cooperative education which exceed the total of 40 are taken beyond the degree requirements.

Prerequisites: Minimum 15 hours in computer science selected from CpS 1932, 2931, 2990, 2993, 3900, and 3994; minimum 3.00 GPA in major; minimum 2.75 cumulative GPA; approval of advisory committee.

**COURSES FOR NON-MAJORS****CpS 3090 Personal Computing (3)**

Deavours

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)**

Deavours

Introduction and survey of microcomputer systems including manufacture, system structure, software and applications.

Prerequisite: CpS 3090.

**MUSIC**

Faculty: Cullen, Engelhard, Feldman, Golub, Grace, Herron, Hoyle, Huber, Montgomery (Chairperson), Price, L. J. Zimmer.

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).

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. in Music**

124 s.h.

**\*GENERAL EDUCATION REQUIREMENTS (see page 26) 36****Required Cognate Courses (3 s.h.)***Humanities Cluster*

Mus 1000 Survey of Music 3

**\*MAJOR REQUIREMENTS 46****Required Courses**

Mus 1101-1102 Music Theory I & II 6

Mus 1201 Basic Sight-Singing and Ear-Training 3

Mus 2103-2104 Music Theory III & IV 6

Mus 2201-2202 Music History I & II 6

Mus 28-- , 38-- Ensembles 8

Mus 3111 Form and Analysis 3

Mus 36-- Private Studio Lessons 14

**FREE ELECTIVES (see page 28) 42**

\*General Education and Major Requirements are presently under revision. Students are encouraged to check with their advisor.

**Minor in Music**

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.

18 s.h.

**Required Courses 9**

Mus 1000 Music Survey 3

Mus 1101 Music Theory I 3

Mus 1201 Basic Sight-singing and Ear Training 3

**Electives** nine credits in music to be selected with departmental advisement 9

## B.A. in Music Education

		131 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b>		32
<b>Core Requirement</b>	3	
Eng 1010 English Composition		
<b>Breadth Requirements</b>		
<i>English/Humanities</i>	9	
STM 1900 Speech		
Mus 1000 Music Survey		
Mus 1050 Music Fundamentals		
<i>Social/Behavioral Sciences</i>	9	
Psy 1000 General Psychology		
Psy 2100 Child Psychology or Psy 2110 Adolescent Psychology		
Mus 2201 History of Music I		
<i>Physical/Biological Sciences</i>	4	
<i>Mathematical Sciences</i> (not including computer science)	3	
<i>Health and Physical Education</i>	4	
HED 1125 Contemporary Issues in Health One course in physical education		
<b>ADDITIONAL REQUIRED COGNATES</b>		21
**ID----Intellectual and Cultural Traditions	3	
**ID----Emergence of Modern World or His 1062 from Western to World Civilization	3	
**ID----World Literature or a literature course in English department	3	
**ID----Inquiry and Research	3	
**ID----Science and Technology in the Modern World	3	
<b>Electives</b> two courses to be selected from music with advisement	6	
<b>BEHAVIORAL/SOCIAL SCIENCES</b>		18
Overlap with General Education	6	
EdP 3901 Educational Psychology	3	
EPS 2000 Teacher, School and Society	3	
EPS 4050 School and Society: Cultural Minority and Urban Perspectives	3	
SpE 2051 Introduction to Education of the Handicapped	3	
<b>ACADEMIC SEQUENCE</b>		37
Mus 36-- Private Studio Lessons	14	
Mus 3--- Ensembles	7	
Mus 1101-1102 Music Theory I & II	6	
Mus 2103-2104 Music Theory III & IV	7	
Mus 2202 Music History II	3	

**PROFESSIONAL SEQUENCE**

		29
Mus 2900 Foundations and Principles of Music Education	3	
Mus 3310 Elementary School Music	3	
Mus 3320 Secondary School Music	3	
**CS 34-- Reading in Content Areas I	2	
**CS 44-- Reading in Content Areas II	2	
Mus 15-- Instrumental Methods (Class Strings, Brass, Percussion, Woodwinds, Voice, Piano)	2	
Mus 4300 Student Teaching	10	
Mus 3121 Conducting	4	

**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 1101-1102 Music Theory I & II (3,3)**

Review of music fundamentals, notations and grammar, written and keyboard harmony, ear training, sight singing and dictation.

Prerequisite: Music major curriculum or department consent.

**\*Mus 1201 Basic Sight-singing and Ear-Training (3)**

Review of music rudiments, introduction to music literature and styles through study of representative compositions. Development of critical and analytical listening faculties through class or outside listening and live performances.

**\*Mus 2103-2104 Music Theory III & IV (3,3)**

Continuation of Mus 1101-1102, including chromatic and post-functional harmony, possibly counterpoint and the beginning of original creative work.

Prerequisite: Mus 1102 or equivalent.

**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.

\*course currently undergoing revision

\*\*course in development

**\*Mus 3111 Form and Analysis (3)** Golub, Grace  
Tonal and structural analysis and study of formal design in music of different styles.  
Prerequisite: Mus 2104 or equivalent.

**Mus 3112 Analytical Techniques (3)**  
Analysis and study of large, complex contemporary works, possibly individual creative work.  
Prerequisite: Mus 3111 or equivalent.

**\*Mus 3121 Conducting I (3)** Cullen  
Course is designed to provide the student with the basic techniques of conducting, with the emphasis on their practical application through the medium of choral music. Concurrent with enrollment in the conducting course, membership in the concert chorus is required.  
Prerequisite: Mus 2103 or permission of instructor.

**\*Mus 3122 Conducting II (3)** Cullen  
Development of conducting skills used in orchestra and band rehearsals and performances. Study of various scores and instrumental arrangements.  
Prerequisite: Mus 3121 or equivalent.

**\*Mus 3131 Orchestration I (3)** Staff  
Instrumental ranges and playing characteristics, principles of scoring, reductions from full scores, and scoring for small instrumental ensembles.  
Prerequisite: Mus 2104 or equivalent.

**\*Mus 3132 Orchestration II (3)** Staff  
Continuation of Orchestration I. Scoring transcriptions or original compositions for full orchestra, possibly including solo with orchestra and voices with orchestra combinations.  
Prerequisite: Mus 3131 or equivalent.

**Mus 3133 Instrumental Arranging (2)** Zimmer  
Scoring for various instrumental combinations other than orchestra, including concert, stage, dance, jazz, band, chamber groups or various combos.  
Prerequisite: Mus 3131 or equivalent.

**\*Mus 3134 Choral Arranging (2)** Cullen  
Arranging for various vocal combinations with or without accompaniment, using works by others or original compositions.  
Prerequisite: Mus 3131 or equivalent.

**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 1750.  
Prerequisite: Mus 1000, 1202 or department consent.

**Mus 2202 Music History II (3)**  
Historic development of music from 1750 to the present.  
Prerequisite: Mus 1000, 2201 or department consent.

**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.

\*course currently undergoing revision.

**Mus 3201 History of Musical Instruments (3)** Grace  
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.

**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.

**Mus 3250 Jazz in American Culture: From Dixieland to Rock (3)** Yurochko  
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.

**Mus 3255 Music of the American Theatre (3)** Feldman  
The evolution of theater music in the United States from the nineteenth century minstrel shows to the musicals of the present.

**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)** Cullen  
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.

**Mus 4211 Songs of Sorrow and Solace (3)** Cullen  
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.

**Mus 4220 Opera Literature (3)** Huber  
Development of opera since baroque through the present with detailed study of representative works and composers within the genre and references to other music stage works in various periods, styles and civilizations.  
Prerequisite: Music major curriculum, Mus 1000 or department consent.

**Mus 4230 Keyboard Literature (3)** Feldman  
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.

**Mus 4240 Chamber Music Literature (3)** Hoyle  
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.

**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)** Grace  
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.

**Mus 4268 Ludwig Van Beethoven (3)** Golub  
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.

**Mus 4269 Richard Wagner (3)** Golub  
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.

**Mus 4270 Gustave Mahler (3)** Golub  
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.

**Mus 4271 Debussy and Ravel (3)** Hoyle  
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.

**Mus 4272 Igor Stravinsky (3)** Golub  
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.

**Mus 4274 Scriabin, Delius and Ives (3)** Huber  
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.

**Mus 4277 Giuseppe Verdi (3)** Golub  
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.

## 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.

**Mus 2310 Elementary School Music Education (3)** Engelhard, Price  
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.

**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. Guided class observations and a supervised 40 hour field experience to be assigned by the Teaching Performance Center are required. Emphasis on activities and materials for gifted and talented students, ethnically diverse groups, mainstreaming and special education classes.  
Prerequisite: Music education major curriculum.

**Mus 3320 Secondary School Music (3)**  
Course development, 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. Guided class observations and a supervised 40 hour field experience to be assigned by the Teaching Performance Center are required.  
Prerequisite: Music education major curriculum.

**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)** Zimmer  
A study of music as a therapeutic means of dealing with exceptional children and adults.  
Prerequisite: SpE 2052 or permission of instructor.

**Mus 3410 Music in Physical Therapy (3)** Zimmer  
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.

**Mus 4400 Music for the Child in Special Education (3)** Zimmer  
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.

**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 1551-1552 Strings I and II (½ 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.

**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.

**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)**

Cullen

**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

**Mus 2870 Brass Choir (½)**

Herron

**Mus 2879 Jazz Ensemble (1)**

**Mus 2880 Jazz Workshop (½)**

**Mus 2890 Percussion Ensemble (½)**

P. Price

**Mus 2895 Guitar Ensemble (½)**

*Full curricular ensembles:*

**Mus 3800 Concert Chorus (½)**

Cullen

**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)**

Huber

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.

## **NURSING**

### **B.S.N. in Nursing**

Faculty: DeWitt, Fitzsimons, Oiler (Chairperson), Salmond

The upper division nursing major is open only to registered nurses. Admission is competitive and through a special application process.

The B.S.N. in Nursing prepares registered nurses to enter professional practice and to assume new and changing roles as professionals in a wide variety of health care settings. The upper division curriculum includes advanced course work in nursing and related disciplines. The program accommodates the needs of working registered nurses. The upper division course work may be completed in two years of full-time study or four years of study on a part-time basis.

**Degree Requirements:** The degree requirements for the Bachelor of Science in Nursing are shown below. Prerequisites for admission are indicated with an asterisk (\*). These prerequisites, which include specified courses in the sciences and social sciences and twenty-two credits in nursing 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 will be evaluated and credit toward the degree will be granted for courses already completed in areas other than nursing in accordance with the policies of Kean College for transfer of credit.

132 s.h.

<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	36
<b>Required Cognate Courses</b> (15-16 s.h.)	
<i>Humanities Cluster:</i>	
Phi 1100 Philosophy	3
<i>Sciences and Mathematics Cluster</i>	
*Chemistry I	3-4
Mat 1016 Statistics	3
<i>Social/Behavioral Sciences and History Cluster:</i>	
*One course in General Psychology	3
*One course in Introductory Sociology	3
<b>ADDITIONAL COGNATE COURSES</b>	9-12
*Chemistry II	3-4
*Anatomy and Physiology	6-8
<b>MAJOR REQUIREMENTS</b>	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
MgS 3030 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
Nurs 3000 Conceptual Models for Professional Practice in Nursing	3
Nurs 3100 Professional Nursing Practice with the Well Family	5
Nurs 3300 Issues in Professional Practice	3
Nurs 3900 Research in Nursing	3
Nurs 4000 Professional Nursing Practice with the Family in Crisis	5
Nurs 4100 Professional Nursing Practice in Chronic Health Problems	5
Nurs 4900 Independent Practicum in Nursing	2
<b>FREE ELECTIVES</b> (see page 28)	11-16

## 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 co-requisite: 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.

### Nurs 3900 Research in Nursing (3)

Introduction to systematic investigation of nursing problems includes historical overview of research in nursing and current research priorities. Classroom practice in critiquing research reports, applying findings, and using elements of the research process.

Prerequisites: Nurs 3000 and Mat 1016.

### Nurs 4000 Professional Nursing Practice with the Family in Crisis (5)

Application of systems theory as basis for health team collaboration and client advocacy in the health care delivery system. Focus on expanding knowledge and skills requisite to intervening in family health crises, including delegation and supervision of implementation of nursing orders. Special emphasis on planning and evaluation phases of nursing process, and leading conferences as leadership strategy on nursing team.

Prerequisites: Nurs 3100, 3300 Psy 3110, Soc 2100.

Pre or co-requisites: Nurs 3900, MgS 3030.

### Nurs 4100 Professional Nursing Practice in Chronic Health Problems (5)

Intensive study of chronicity as it affects the individual, family and community. Development of knowledge and skill requisite to intervening in clients' management of chronic health problems with emphasis on client groups as modality of care. Refinement of advocacy role in full implementation of functions of teaching, counseling, coordinating, leading, and facilitating change with clients.

Prerequisite: Nurs 4000.

Pre or co-requisites: Psy 3630, HED 3635.

### Nurs 4900 Independent Practicum in Nursing (2)

Concluding course in which students integrate knowledge gained to select, develop, and implement projects with clinical nursing foci. Emphasis on facilitating students' transition to role of baccalaureate prepared nurse practitioners, and preparing them for future roles in professional nursing practice.

Pre or co-requisites: Nurs 4100, Phi 3314.



# PHILOSOPHY AND RELIGION

Philosophy &  
Religion

Faculty: Burt, Catalano, D'Souza (Chairperson), Fethe, Pashman, Pezzolo, Sitelman, Stern

## B.A. in Philosophy and Religion

	124 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	36
<b>MAJOR REQUIREMENTS</b>	30
<b>Required Courses</b> (12 s.h.)	
Phi 1100 Philosophy or an alternate philosophy course at the 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, minimum 2000 level or above	3
One course in religion, minimum 2000 level or above	3
<b>Major Electives</b> (18 s.h.) <i>selected with advisement</i>	
<b>FREE ELECTIVES</b> (see page 28)	58

## Minor in Philosophy and Religion

	18 s.h.
<b>Required Courses</b>	6
Phi 1100 Philosophy	3
Rel 1700 Introduction to Comparative Religion	3
<b>Electives</b> <i>four courses selected with advisement</i>	12

## 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.

### HISTORY OF PHILOSOPHY

#### Phi 2200 Ancient Philosophy (3)

Fethe

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.

#### Phi 2203 Oriental Philosophy (3)

D'Souza

A study of fundamental and characteristic problems in philosophy as they are considered in the Oriental traditions.

#### Phi 3200 Modern Philosophy: The Age of Genius (3)

Fethe

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.

#### 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)

Burt

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.

#### 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)

Burt

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)

Burt

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.

#### Phi 3305 Aesthetics (3)

Sitelman

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.

#### Phi 3307 The Philosophy of Law (3)

Pezzolo

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.

#### Phi 3308 Values in Conflict (3)

Fethe

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.

**Phi 3309 Theories of Punishment (3)**

Pezzolo

A description and critical appraisal of various philosophical and legal justifications for punishment. Special emphasis on philosophical pictures of human nature relative to punishment.

**Phi 3310 Business Ethics (3)**

W. Stern

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.

**Phi 3311 Values and Society (3)**

Fethe

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.

**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)**

Fethe

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.

**Phi 3314 Moral Problems in Medicine and Health Care (3)**

Fethe

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: Phi 1100 or permission of instructor.

**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)**

Catalano

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.

**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, LOGIC, PHILOSOPHY OF SCIENCE**

**Phi 2500 Language and Logic (3)**

Fethe, Stern

Development of the basic principles of rational thinking: definitions and fallacies; elements of classical and modern logic.

**Phi 2510 Understanding Arguments (3)**

Fethe

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.

**Phi 3500 The Philosophy of History (3)**

Fethe

The philosophical problems raised by the study of history; the meaning and pattern of history; freedom vs. determinism and the nature of historical generalizations.

Prerequisite: Three hours in philosophy or permission of instructor.

**Phi 3503 Theory of Knowledge (3)**

Analysis of the concepts of knowledge, belief, truth, falsity, error, meaning and ideas.

Prerequisite: Phi 1100 or permission of instructor.

**Phi 3505 Readings in Philosophy of Science (3)**

Pashman

Philosophical analysis of the concepts underlying the physical sciences including law, theory, particle, wave, verifiability, truth, and probability. The interrelation between methodology of the physical sciences and that of the social sciences.

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.

**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.

**Religion Courses**

**Rel 1700 Introduction to Comparative Religion (3)**

D'Souza

A survey of Hinduism, Buddhism, Taoism, Confucianism, Judaism, Christianity and Islam, emphasizing the origin, tenets, development and contemporary situation of each religion.

**Rel 2700 Oriental Religions: Hinduism and Buddhism (3)**

D'Souza

The history and thought of Hinduism and Buddhism; their role in the culture of India and East Asia.

**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)**

D'Souza

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.

**Rel 3701 The New Religions in America (3)**

D'Souza

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.

**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)**

D'Souza

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.

**Rel 3705 Major Ideas in Jewish Religion (3)**

Sitelman

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.

**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.

**Rel 4700 Issues in Modern Religion (3)**

D'Souza

A study of the most significant issues in modern religious thought—natural science and religion; biology and religion; social theory and religion; psychoanalysis and religion; history and religion.

Prerequisite: Three hours in philosophy or religion.

**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

**PHYSICAL EDUCATION**

Faculty: Andzel, Bakker, Ball, Chaison, Errington, Palgi, Scuderi, Shiposh (Chairperson), Venezia

**B.A. in Physical Education**

The major in physical education is designed to provide professional preparation for men and women to teach physical education in grades K-12. It will also enable them to develop and organize quality intramural programs in both elementary and secondary schools and to provide the highest levels of coaching in interscholastic athletics.

A 2.5 cumulative grade point average (GPA) is required for admission into the program. For other admission requirements, refer to Physical Education Handbook.

128 s.h.

**GENERAL EDUCATION REQUIREMENTS**

32

**Core Requirement**

Eng 1010 English Composition 3

**Breadth Requirements**

\*English/Humanities (from at least 2 disciplines) 9

STM 1900 Speech

\*Social/Behavioral Sciences 9

Psy 1000 General Psychology

Psy 2100 Child Psychology

Soc 1000 Social Life and Society

\*Physical and Biological Sciences 4

Bio 1000 Principles of Biology

\*Mathematical Sciences (not including computer science) 3

Health and Physical Education 4

HEd 1125 Contemporary Issues in Health

PEd Sport forms (one course to be selected with departmental advisement)

**ADDITIONAL REQUIRED COGNATES**

21

\*\*ID ---- Intellectual and Cultural Traditions 3

\*\*ID ---- Emergence of Modern World or His  
1062 From Western to World Civilization 3

\*\*ID ---- World Literature or a literature course in  
English department 3

\*\*ID ---- Inquiry and Research 3

Bio 2402 Human Physiology and Anatomy 4

**Electives Courses selected from any of the above  
\* areas 5**

\*\*course in development

<b>BEHAVIORAL/SOCIAL SCIENCES</b>		21
Overlap with General Education	9	
PEd 1500 Introduction to Motor Learning	3	
PEd 4605 Evaluation in Physical Education	3	
EdP 3801 Educational Psychology	3	
EPS 2000 Teacher, School and Society	3	

<b>ACADEMIC SEQUENCE</b>		31
Overlap with General Education	11	
PEd 2500 Introduction to Biomechanics	3	
PEd 3505 Kinesiology	3	
PEd 3510 Physiology of Exercise	3	
HEd 2331 First Aid and Accident Prevention	2	

**Sport Forms**

<b>TEAM SPORTS: select two of the following:</b>	2
PEd 1010, 1030, 1035, 1055, 1065, 1070, 1075, 1095	

<b>INDIVIDUAL SPORTS: select two of the following:</b>	2
PEd 1000, 1005, 1020, 1025, 1040, 1080, 1088, 1092, 1098	

<b>ADVANCED SPORTS: select two of the following:</b>	2
PEd 1081, 2000, 2010, 2025, 2030, 2035, 2040, 2065, 2082, 2083, 2088, 2095	

<b>OPTION: one additional course from any of the above</b>	1
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<b>DANCE/GYMNASTICS: one of the following:</b>	1
PEd 1045, 1047, 2048	
PEd 1151 Beginning Folk and Square Dance	1

**PROFESSIONAL EDUCATION** 36

PEd 2800 Pre-professional Field Experience	3
PEd 3110 Methods and Materials for Dance	2
PEd 3610 Physical Education Curriculum I	4
PEd 3611 Physical Education Curriculum II	5
PEd 4600 Adapted Physical Education	3
PEd 4610 Introduction to Organization, Administration and Supervision of Physical Education	3
PEd 4690 Student Teaching	12
**CS 34-- Reading in Content Areas I	2
**CS 44-- Reading in Content Areas II	2

\*\*course in development

**B.A. in Health and Physical Education**

130 s.h.

**GENERAL EDUCATION REQUIREMENTS** 32

Same as B.A. in Physical Education

**ADDITIONAL REQUIRED COGNATES** 21

Same as B.A. in Physical Education

**BEHAVIORAL/SOCIAL SCIENCES** 21

Same as B.A. in Physical Education

**ACADEMIC SEQUENCE** 37

Same as B.A. in Physical Education 31

*Two of the following:* 6

HEd 3150, 3160, 3230, 3400, 4231, 4233, 4434, 4450

**PROFESSIONAL EDUCATION** 39

Same as B.A. in Physical Education 36

HEd 3533 Methods and Materials of Health Education in Elementary and Secondary School 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.

28 s.h.

**Required Courses**

Bio 2402 Human Anatomy and Physiology	4
PEd 1500 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
<i>Select 3-6 semester hours from the following group:</i>	3-6
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.

45 s.h.

### Required Courses

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
<i>Select one of the following:</i>	3
EdP 3801 Educational Psychology	
Psy 2100 Child Psychology	
Psy 2110 Psychology of Adolescence	
Psy 3630 Social Psychology	
Psy 4360 Physiological Psychology	
<i>Select one of the following:</i>	2 or 3
Hed 1125 Contemporary Issues in Health Programs	3
Hed 3537 School and Community Health Programs	2
Hed 4650 Community Health Counseling	3

## 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.

27 s.h.

### Required Courses

MgS 2030 Business Organization and Management	3
Psy 3120 Adult Psychology	3
PEd 3500 Care and Prevention of Athletic Injuries	3
PEd 3510 Physiology of Exercise	3
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

## Courses

### SPORT FORMS

<b>PEd 1000 Beginning Archery (1)</b>	Ball, Scuderi
Archery, terminology, safety and fundamental skills. Opportunities will be provided for competition and archery games.	
<b>PEd 1005 Badminton I (1)</b>	Errington
Includes the skills, knowledge and strategies of badminton.	
<b>PEd 1010 Beginning Basketball (1)</b>	Bakker
Fundamental skills, techniques, rules, and concept of play.	
<b>PEd 1015 Bowling (1)</b>	
The fundamentals of beginning bowling discussed and demonstrated, particularly the basic approaches and deliveries. Rules and scoring regulations also discussed.	
<b>PEd 1018 Canoeing (2)</b>	Venezia
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).	
<b>PEd 1020 Conditioning Activities (1)</b>	Andzel
Emphasis is placed upon development of cardiovascular, cardiorespiratory and musculoskeletal fitness. Covers physiological bases of conditioning.	
<b>PEd 1025 Beginning Fencing (1)</b>	Errington
Fundamentals of foil fencing and the rudiments of competition.	
<b>PEd 1030 Beginning Field Hockey (1)</b>	Scuderi
Fundamental skills, techniques, rules and concepts of team play in field hockey.	
<b>PEd 1035 Beginning Football (1)</b>	Andzel
Basic motor skills and offensive and defensive strategies in football.	

- PEd 1040 Beginning Golf (1)** Errington  
The basic skills of golf examined.
- PEd 1045 Beginning Gymnastics (Men's Events) (1)** Ball  
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)** Ball  
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)** Shiposh  
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)** Errington, Palgi, Venezia  
Basic skills, techniques, rules and concepts of soccer.
- PEd 1070 Beginning Softball (1)** Bakker  
Skills, techniques, rules and team strategies of softball.
- PEd 1075 Speedball (1)**  
Skills, techniques, rules, and concepts of speedball.
- PEd 1080 Beginning Swimming (1)** Venezia  
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. Prerequisite: Novices or non-swimmers only.
- PEd 1081 Intermediate Swimming (1)** Venezia  
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)** Shiposh  
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)** Ball  
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 and offensive and defensive patterns. Prerequisite: PEd 1010 or permission of instructor.
- PEd 2025 Intermediate Fencing (1)** Errington  
Advanced fencing skills and techniques. Prerequisite: PEd 1025 or permission of instructor.
- PEd 2030 Intermediate Field Hockey (1)** Scuderi  
Advanced skills and techniques of field hockey. Rules, advanced team strategy. Prerequisite: PEd 1030 or permission of instructor.
- PEd 2035 Intermediate Football (1)** Andzel  
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)** Ball  
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 2065 Intermediate Soccer (1)** Errington, Palgi  
Emphasis on intermediate soccer skills, knowledge and offensive and defensive team strategies. 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 snorkling. 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 Senior 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 2088 Intermediate Tennis (1)** Shiposh  
Reviews fundamental tennis skills (ground strokes, serve, volley) and covers more advanced aspects (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)** Venezia  
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)**

Chaison

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 2101 Intermediate Jazz Dance (1)**

Chaison

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 3100 Creative Dance for Children (3)**

Chaison

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)**

Chaison

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)**

Chaison

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 Technique for Physical Education Majors (2)**

Chaison

An intensive semester course in the techniques and teaching methods of modern dance. Required of all physical education majors.

**PEd 3115 Dance Composition (3)**

Chaison

The elements of dance, various types of accompaniment and staging and the relationship of these to dance composition.

Prerequisite: PEd 1100 or permission of instructor.

**PEd 3120 Dance Theater (3)**

Chaison

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)**

Andzel

The biomechanical, physiological and psychological elements of coaching.

Prerequisites: PEd 1500 or 2500 and PEd 3505 or 3510.

**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.

Prerequisite: PEd 2082.

**PEd 3310 Coaching and Officiating of Baseball (3)**

Bakker

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)**

Bakker

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.

Prerequisite: PEd 2010 or permission of instructor.

**PEd 3320 Coaching and Officiating Field Hockey (3)**

Educationally sound coaching and officiating of field hockey studied. Students will be prepared to take a recognized field hockey officials rating examination.

Prerequisite: PEd 2030 or permission of instructor.

**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.

Prerequisite: PEd 2035 or permission of instructor.

**PEd 3330 Coaching and Administration of Tennis Competition (3)**

Shiposh

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)**

Development of the individual skills and team strategies for power volleyball and consideration of coaching and officiating of volleyball. Students will be prepared to take a recognized officials rating examination.

Prerequisite: PEd 2095 or permission of instructor.

**PEd 3345 Coaching and Officiating Softball (3)**

Bakker

Rules, techniques and procedures of officiating softball together with the strategies, fundamentals and psychology of coaching softball examined.

**PEd 3350 Coaching and Officiating Soccer (3)**

Errington

Skill and strategy analysis of soccer together with the officiating and rule interpretations of soccer.

Prerequisite: PEd 2065 or permission of instructor.

**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).

Prerequisite: PEd 1048 or permission of instructor.

**SCIENTIFIC FOUNDATIONS****PEd 1500 Introduction to Motor Learning (3)**

Palgi

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.

**PEd 2500 Introduction to Biomechanics (3)**

Errington

The application of biomechanics to human movement, emphasizing physical education activities.

**PEd 3500 Care and Prevention of Athletic Injuries (3)**

Ball

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.

**PEd 3501 Advanced Athletic Training (3)**

Ball

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.

**PEd 3502 Clinical Experiences in Athletic Training I (3)**

Ball

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.

**PEd 3503 Clinical Experiences in Athletic Training II (3)**

Ball

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.

**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.

**PEd 3505 Kinesiology (3)**

Ball, Errington

Analysis of human movement in terms of biomechanics and muscular anatomy.

Prerequisite: PEd 2500 or permission of instructor.

**PEd 3510 Physiology of Exercise (3)**

Andzel, Palgi

The structure and function of skeletal muscles, energy sources, and oxygen requirements for muscular activity. Two lectures and one laboratory per week.

Prerequisite: Bio 2402 or permission of curriculum chairperson.

**PEd 4626 Prescriptive Exercise Programming (3)**

Principles and techniques for evaluating, prescribing, and monitoring exercise in an adult fitness program.

Prerequisite: PEd 3510.

**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)**

Chaison

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.

**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 Physical Education Curriculum I (4)**

Scuderi

Curriculum development in physical education for grades K-12 in a wide range of cultural settings. Teaching styles, methods, materials and evaluation techniques for movement, team sports, individual sports, aquatics, dance, gymnastics and recreational games in all phases of the program. Integration of physical education with other facets of the school program. A one day per week field experience is required.

Prerequisite: Soc 1000.

**PEd 3611 Physical Education Curriculum II (5)**

Scuderi

A continuation of PEd 3610, which is a prerequisite.

**PEd 3615 Physical Education in the Elementary School (1-1/2)**

Scuderi

A laboratory workshop program using classroom, gymnasium and outdoor play space situations to examine methods and materials in physical education for the several grades. Philosophy, objectives, and principles of physical education prepares the student to cooperate effectively with the specialist.

**PEd 4600 Adapted Physical Education (2)**

Ball

Theory and implementation of current concepts in physical education for special populations.

**PEd 4605 Evaluation in Physical Education (3)**

Errington

Approaches to testing and evaluation are discussed. Covers basic statistical concepts and the construction, administration and uses of skills and knowledge tests.

**PEd 4610 Introduction to Organization, Administration and****Supervision of Physical Education (3)**

Scuderi

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 Program (3)**

The principles and practices necessary for the organization and administration of effective adult fitness programs in business and industry.

**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 (12)**

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 (1800) Physical Education: Pre-Professional Field Experience (3)**

Shiposh

An observational and analytical study of physical education programs in a multi-cultural society. Approximately one-third of the course involves a supervised field-based experience.

**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 Sport (3)**

Shiposh

Survey of the historical, legislative, biophysical, and socio-psychological dimensions of women and sport with a focus on the American women in sport.

**INDEPENDENT STUDY****PEd 4900 Independent Study in Physical Education (3)**

The student selects an area of study in health and physical education under the guidance of faculty. The students and an assigned faculty member meet at regular intervals concerning the study. A minimum of 75 hours of research is required.

**POLITICAL SCIENCE**

Faculty: Byrne, Daly, Farahi, Israel, Kahn, Kelly, Laudicina, Lederman, Ross, Rubin (Chairperson), Shenis, Weiss

**B.A. in Political Science**

124 s.h.

**GENERAL EDUCATION REQUIREMENTS (see page 26)** 36**Required Cognate Course (3 s.h.)**

*Social/Behavioral Sciences and History Cluster:*

One course in public administration

(Two courses in U.S. history recommended)

**MAJOR REQUIREMENTS** 30**Required Courses (12 s.h.)**

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 s.h.)** *six political science courses, five*

*of which must be at the 3000-4000 level; may include PA*

*1000 Introduction to Public Administration and PA 3110*

*American Federalism. No additional public administration*

*courses may be selected without prior department approval.*

**FREE ELECTIVES (see page 28)** 58

**Collateral Program: Instruction in Subject Areas, K-12** Students who desire New Jersey teacher certification along with the above major elect the Instruction in Subject Areas collateral and must contact the Department of Educational Arts and Systems for admissions and advisement.

**Minor in Political Science**

21 s.h.

**Required Courses**

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** *four courses in political science, three of which must be at the 3000-4000 level, selected with advisement. May include one course in public administration, with prior approval of department chairperson.* 12

## B.A. in Public Administration

124 s.h.

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### GENERAL EDUCATION REQUIREMENTS (see page 26) 36

#### Required Cognate Courses (12 s.h.)

PS 2100 American Government and Politics	3
PS 2110 American State and Local Political Systems	3

*Two courses selected from the following:*

CpS 1931 Computer Arithmetic Algorithms
Acc 2200 Principles of Accounting I
MgS 2120 Business Statistics
PS 3550 Scope and Methods of Political Science

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### MAJOR REQUIREMENTS 30

#### Required Courses (12 s.h.)

PA 1000 Introduction to Public Administration	3
PA 3010 Contemporary Public Organization	3
PA 3030 Administration of the Public Finances	3
PA 3110 American Federalism	3

**Major Electives (18 s.h.)** *Six public administration courses; may include PS 3140 The American Presidency and PS 3700 The Urban Political System. No additional political science courses may be elected without prior department approval.*

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### FREE ELECTIVES (see page 28) 58

## Minor in Public Administration

18 s.h.

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### Required Courses 12

MgS 2120 Business Statistics <i>or</i>	
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** *two courses in public administration, selected with advisement. May include one course in political science with prior approval of department chairperson.* 6

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## B.A. in Political Science or Public Administration Option: Criminal Justice

124 s.h.

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### GENERAL EDUCATION REQUIREMENTS (see page 26) 36

#### Required Cognate Courses (12 s.h.)

##### *Social/Behavioral Sciences and History Cluster:*

PS 1010 Introduction to Politics I: Elements of Politics	3
PS 1020 Introduction to Politics II: Political Institutions	3
PA 1000 Introduction to Public Administration	3
Soc 1000 Social Life and Society	3

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### ADDITIONAL COGNATE COURSES 12

#### *One course from each of the following three groups:*

PS 2110 American State and Local Political Systems	3
PA 3030 Administration of Public Finances	
CpS 1931 Computer Arithmetic Algorithms	3
Acc 2200 Principles of Accounting I	
MgS 2120 Business Statistics	3
PS 3550 Scope and Methods of Political Science	
Phi 3309 Theories of Punishment	3
Phi 3307 Philosophy of Law	
Soc 2710 Crime and Delinquency	3
One additional course from any of the above groups	3

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### MAJOR REQUIREMENTS 30

#### Required Courses (6 s.h.)

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

#### Departmental Electives (24 s.h.)

##### CRIMINAL JUSTICE (12 s.h.) *four courses selected with advisement from the following:*

PS 3630 Police Role in the Community	3
PS 3650 Juvenile Justice	3
PS 3680 Constitutional Law: Criminal Procedure	3
PS 4600 Honors Seminar in Criminal Justice	3
PA 3600 Police Organization and Administration	3
PA 3610 Correctional Systems	3
PA 3620 Probation and Parole	3
PA 3640 Comparative Criminal Justice Systems	3

##### POLITICAL SCIENCE/PUBLIC ADMINISTRATION

(12 s.h.) *four courses selected with advisement from areas other than criminal justice above.*

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### FREE ELECTIVES (see page 28) 46

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## 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)**

Kahn, Rubin, Shenis

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.

#### **PS 2110 American State and Local Political Systems (3)**

Rubin, Weiss

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.

#### **PS 2130 American Political Issues (3)**

Kahn, Ross

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

#### **PS 3100 The Legislative Process (3)**

Rubin

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.

#### **PS 3120 Political Parties (3)**

Lederman

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.

#### **PS 3130 The American Judicial Process (3)**

Israel

The politics of the American judicial system, how cases come before the courts and their impact upon the political system.

Prerequisites: PS 1010, 1020 and 2100 or permission of instructor.

#### **PS 3135 Political Participation (3)**

Israel, Kahn

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

#### **PS 3140 The American Presidency**

Kahn

In depth study of the presidency in terms of its institutional and behavior aspects, with special emphasis on the exercise of the powers of the presidency.

Prerequisites: PS 1010, 1020 and 2100 or permission.

#### **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.

#### **PS 3151 Constitutional Law: Civil Liberties (3)**

Continuation of PS 3150, which is a prerequisite with emphasis on the First Amendment to the Constitution, and the Equal Protection Clause of the Fourteenth Amendment.

Prerequisites: PS 3150 or permission of instructor.

#### **PS 3160 Ethnic Politics in the United States (3)**

Kahn, Laudicina

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.

#### **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)**

Daly, Kahn, Rubin

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.

#### **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).

### THEORY

#### **PS 3200 Classical Political Theory (3)**

Shenis

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.

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

Ross, Shenis

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.

#### **PS 3220 Contemporary Political Ideologies (3)**

Ross

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, 1020.

**PS 3250 American Political Theory (3)**

Ross

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.

**COMPARATIVE****PS 3300 Comparative Government (3)**

Kelly, Ross, Shenis

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.

**PS 3310 Comparative Non-Western Government (3)**

Ross

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.

**PS 3320 The Politics of the Middle East (3)**

Kahn

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.

**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.

**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.

**PS 3350 Totalitarian Politics (3)**

Ross

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

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

**INTERNATIONAL****PS 3400 International Politics (3)**

Kelly, Shenis

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.

**PS 3410 International Organization (3)**

Kelly

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.

**PS 3418 The Arab-Israeli Conflict (3)**

Kahn

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.

**PS 3430 International Terrorism (3)**

Israel

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)**

Kahn, Kelly

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.

**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).

**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.

**BEHAVIOR****PS 3500 Political Behavior (3)**

Israel

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.

**PS 3550 Scope and Methods of Political Science (3)**

Byrne, Kelly

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.

**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.

**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: Soc 1000 or permission of instructor.

**PS 3650 Juvenile Justice (3)**

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

Prerequisites: Soc 1000 or permission of instructor.

**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.

**PS 3685 Substantive Criminal Law (3)**

Common Law felonies, criminal culpability and criminal defenses.

Prerequisite: PS 2600.

**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 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.

**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.

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

Rubin

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

Prerequisite: PS 2100.

**INTERNSHIP****PS 4800 Cooperative Education in Political Science (9)**

Rubin

**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.

**PS 4802 Cooperative Education in Political Science II (6)**

Rubin

**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.

**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 faculty member.

**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.

**PA 3000 Public Management (3)**

Kelly, Laudicina

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.

**PA 3010 Contemporary Public Organizations (3)**

Laudicina

Theoretical and scientific bases of public organizations. Research methods.

Prerequisite: PA 1000 or PS 2100 or permission of instructor.

**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.

**PA 3030 Administration of the Public Finances (3)**

Lederman

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.

**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.

**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.

**PA 3070 Administration of Public Policy (3)**

Lederman

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.

**LEVELS OF GOVERNMENT****PA 3110 American Federalism (3)**

Lederman

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.

**PA 3130 The Administration of Metropolitan Areas (3)**

Laudicina

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.

**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.

**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.

**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)**

Kelly, Weiss

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.

**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.

**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.

**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.

**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.

**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 and 3650 or Soc 2710.

## HEALTH CARE AND ADMINISTRATION

### PA 2700 (2000) The 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.

### 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.

### 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.

## SEMINAR

### PA 4700 Seminar in Public Administration (3)

Laudicina

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; or permission of instructor.

## 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.

### PA 4801 Internship in Public Administration II (3)

Continuation of PA 4800.

Prerequisites: PA 4800 and permission of instructor.

### PA 4810 Cooperative Education in Public Administration (9)

### PA 4811 Seminar for Cooperative Education Students in Public Administration (6)

Laudicina

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.

### 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.

## PSYCHOLOGY

Faculty: Angers, Bruel, DiSalvi, Feigenbaum, Fraunfelker, M. Harris, N. Harris, Howard, Jaffe, Kaplowitz, Kind, Lorber, Moldawsky, Morelli, R. Roth, Samenfeld (Chairperson), Saperstein, S. Schwartz, Springer, F. Stern, Youtz, Zito

## B.A. in Psychology

The major in Psychology is intended to acquaint students with the scientific field of knowledge of human and animal behavior and the methods by which such knowledge is acquired. Once acquired, this knowledge, which may be expressed in the form of research and measurement skills, interpersonal skills and communication skills, may be applied to promote self-understanding and human welfare. 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.

124 s.h.

## GENERAL EDUCATION REQUIREMENTS (see page 26) 36

### Required Cognate Course (3 s.h.)

*Social/Behavioral Sciences and History Cluster:*

Psy 1000 General Psychology or equivalent 3

### Recommended Cognate Courses (13 s.h.)

Mat 1052 College Algebra and Trigonometry or

Mat 1053 Analytic Geometry 3

One course in biology, chemistry or physics 4

Soc 1000 Social Life and Society 3

One other course in anthropology or sociology 3

## MAJOR REQUIREMENTS 31

### Required Courses (19 s.h.)

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 s.h.) four courses selected with departmental advisement, not to include Psy 3650**

## FREE ELECTIVES (see page 28) 56



## Minor in Psychology

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 majoring in teaching; professional, for those planning to enter a graduate program in psychology. Particulars of these or other individualized approaches should be discussed with departmental advisors.

Psy 1000 General Psychology is a prerequisite to all courses. Psy 3650 is excluded from the minor.

	18/19 s.h.
<b>Required Courses</b>	
<i>One of the following:</i>	3
Psy 2100 Child Psychology	
Psy 2110 Psychology of Adolescence	
Psy 3110 Life-Span Developmental Psychology	
Psy 3120 Adult Psychology	
Psy 3130 Psychology of Aging	
<i>One of the following:</i>	3/4
Psy 3200, 3310, 3330, 3360, 3400, 3420, 4200, 4230, 4360, 4380, 4390, 4400, 4420, 4440	
<i>One of the following:</i>	3
Psy 3320, 3340, 3540, 3630, 3660, 4310, 4450, 4520	
<b>Electives three additional courses as selected from the above list.</b>	9/10

## Courses

### GENERAL

- Psy 1000 General Psychology (3)** Staff  
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)** Staff  
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)** Kind  
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.

### DEVELOPMENTAL

- Psy 2100 Child Psychology (3)** Staff  
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)** Feigenbaum, Zito  
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.
- Psy 3110 Life-Span Developmental Psychology (3)** Staff  
An examination of various psychological processes as they develop across the life-span. Emphasis on theories and concepts of psychological development in interaction with biological and social development.  
Prerequisite: Psy 1000.
- Psy 3120 Adult Psychology (3)** DiSalvi  
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.
- Psy 3130 The Psychology of Aging (3)** Staff  
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.

### EXPERIMENTAL AND MEASUREMENT

- Psy 3200 Psychological Statistics (3)** S. Schwartz  
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.
- Psy 4200 Tests and Measurements (3)** Fraunfelker  
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.
- Psy 4230 Experimental Psychology (4)** Staff  
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)** M. Harris  
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.

**SPECIALIZED AREAS: THEORETICAL AND EXPERIMENTAL**

**Psy 3310 Psychology of Learning (3)** Jaffe, Morelli  
Major principles of learning examined in terms of theoretical origins, current research and strategic applications.

Prerequisite: Psy 1000.

**Psy 3320 Theories of Personality (3)** Staff  
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)** Springer  
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.

Prerequisite: Six hours of psychology and junior standing.

**Psy 3340 Psychology of Women (3)** Kind, Saperstein  
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.

**Psy 3360 Theories of Motivation (3)** Kaplowitz  
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.

**Psy 4310 History and Systems of Psychology (3)** Youtz  
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.

**Psy 4360 Physiological Psychology (3)** M. Harris  
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.

**Psy 4380 Psychology of Perception (3)** S. Schwartz  
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.

**Psy 4390 Cognitive Processes (3)** Staff  
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.

**SPECIALIZED AREAS: APPLIED**

**Psy 3400 Organizational Behavior (3)** Springer  
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, organizational development and workers' participation.

Prerequisite: Psy 1000.

**Psy 3420 Environmental Psychology (3)** S. Schwartz, Springer  
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)** Jaffe, Morelli  
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.

**Psy 4420 Industrial/Organizational Psychology (3)** Springer  
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.

**Psy 4440 Functional Neuropsychology (3)** Youtz  
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.

**Psy 4450 Survey of Therapeutic Psychology (3)** Saperstein  
Basic principles, major theories and research in therapeutic psychology. Includes psychoanalytic, humanistic and behavioral models.

Prerequisite: Psy 3540.

**PERSONALITY DYNAMICS**

**Psy 3540 Abnormal Psychology (3)** Staff  
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)** N. Harris  
The psychodynamic influences on individual and group behavior, as explicated in major works of psychoanalytic psychology.

Prerequisite: Psy 3320.

**SOCIAL PSYCHOLOGY AND GROUP PROCESSES**

**Psy 3630 Social Psychology (3)** Kaplowitz, Lorber  
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.

**Psy 3650 Understanding Self and Others (3)** Feigenbaum, Saperstein, F. Stern  
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. Graded on pass/fail basis only. *Does not fulfill psychology major or minor requirements.*

Prerequisite: Psy 1000.

**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)** M. Harris

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.

**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. 3.00 GPA average or better 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.

**SOCIOLOGY, ANTHROPOLOGY AND SOCIAL WORK**

Sociology Faculty: Kameron, Langer, Mayo (Coordinator), Naughton, Stimson, Wase, Wheeler, Yellin  
Social Work Faculty: Elais, Graves (Chairperson), Herina, Schreiber, Williams

**B.A. in Sociology**

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 courses useful in teaching social science on the secondary school level. Students should consult with departmental advisors about courses in each area of concentration.

	124 s.h.
<b>GENERAL EDUCATION REQUIREMENTS</b> (see page 26)	36
<b>MAJOR REQUIREMENTS</b>	30
<b>Required Courses</b> (12 s.h.)	
Soc 1000 Social Life and Society: Introduction to Sociology	3
Soc 2050 Social Statistics	3
Soc 2052 Methods of Social Research	3
Soc 3050 Development of Sociological Theory	3
<b>Major Electives</b> (18 s.h.) <i>six courses, at the 3000-4000 level</i>	
<b>FREE ELECTIVES</b> (see page 28)	58

**Minor in Sociology**

Six courses (18 s.h.) in sociology: two courses on the 2000 level; two on the 3000 level; one course on the 4000 level.

## Bachelor of Social Work

The Social Work program is accredited by the Council on Social Work Education and prepares students for immediate employment as professional social workers upon completion of the B.S.W. degree. It further provides the background necessary for advanced training and graduate school. Opportunities exist in the areas of public welfare, probation, child welfare and family service.

124 s.h.

### GENERAL EDUCATION REQUIREMENTS (see page 26) 36

#### Required Cognate Courses (16 s.h.)

##### Science and Mathematics Cluster:

Bio 1000 Principles of Biology 4

##### Social/Behavioral Sciences and History Cluster:

Eco 1020 Principles of Economics 3

PS 2100 American Government and Politics 3

Psy 1000 General Psychology 3

Soc 1000 Social Life and Society 3

### ADDITIONAL COGNATE COURSES 9

Mat 1016 Statistics or Soc 2050 Social Statistics 3

Psy 2100 Child Psychology 3

Soc 2052 Methods of Social Research 3

### MAJOR REQUIREMENTS 40

#### Required Courses (34 s.h.)

SW 2900 Introduction to Social Work 3

SW 2950 Human Behavior and Social Environment 3

SW 3900 Contemporary Social Policy and Services 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 Experience III & IV 8

SW 4910-4911 Senior Integrative Seminar I & II 4

#### Major Electives (6 s.h.) two additional social work

courses selected with the guidance of the advisor.

### FREE ELECTIVES (see page 28)

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## 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.

### THEORY AND METHOD

#### Soc 2050 Social Statistics (3)

Stimson

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.

#### Soc 2052 Methods of Social Research (3)

Stimson

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.

#### Soc 2060 Soap Operas and Society (3)

Stimson

The soap opera is treated as both a force in American society and a laboratory where values and interaction patterns can be examined. Symbolic interactionist concepts applied to the soap opera phenomenon.

Prerequisite: Soc 1000.

#### Soc 3050 Development of Sociological Theory (3)

Wase, Yellin

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.

#### Soc 3052 Qualitative Methods in Social Research (3)

Stimson

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.

#### Soc 3060 Society and Self (3)

Kammerman, Stimson

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.

#### Soc 4051 Contemporary Sociological Theory (3)

Wase

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.

#### Soc 4052 Evaluation Research (3)

Stimson

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.

#### Soc 4054, 4055 Advanced Research Seminar I, II (3,3)

Stimson

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.

**Soc 4060 Personal and Social Interaction (3)** Kamerman, Stimson  
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.

**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.

### INSTITUTIONS

**Soc 2100 Sociology of the Family (3)** Mayo  
Analysis of sociological factors in marriage and the family in modern society, with cross-cultural comparisons.  
Prerequisite: Soc 1000.

**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)** Wase  
Education as a social institution and an organizational complex. The relationship between educational objectives and cultural values, manifest and latent functions of education.  
Prerequisite: Six hours of sociology or permission of department chairperson.

**Soc 3150 Urban Sociology (3)** Mayo, Naughton  
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.

**Soc 3151 The Community (3)** Mayo, Naughton  
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.

**Soc 3404 Society and Computer Culture (3)** Naughton  
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.

**Soc 4100 Sociology of Religion (3)** Yellin  
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: Six hours of sociology or permission of department chairperson.

**Soc 4110 Political Sociology (3)** Yellin  
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: Six hours of sociology or permission of department chairperson.

**Soc 4150 Sociology of Death (3)** Kamerman, Yellin  
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.

**Soc 4300 Medical Sociology (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.

### FORMAL ORGANIZATIONS

**Soc 3200 Work and Careers: A Sociological Approach (3)** Wheeler  
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.

**Soc 4200 Complex Organizations (3)** Wase, Wheeler  
A survey of theory and research on complex or formal organizations. Major emphasis on the bureaucratic model, its modifications and special adaptations.  
Prerequisite: Six hours of sociology or permission of department chairperson.

### SOCIAL DIFFERENTIATION

**Soc 2300 American Ethnic & Racial Groups (3)** Naughton  
The cultural traditions and social relations among ethnic and racial groups in American society.  
Prerequisite: Soc 1000.

**Soc 2305 Hispanic Americans in Contemporary Society (3)** Naughton  
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.

**Soc 2308 The Female World: Fairy Tale and Fact (3)** Wase  
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)** Kamerman  
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.

**Soc 3350 Social Inequality in America (3)** Wheeler, Yellin  
An analysis of wealth, power, and prestige in America. Comparisons with other societies.  
Prerequisite: Soc 1000 or permission of department chairperson.

**Soc 3360 Population (3)** Mayo  
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: Six hours of sociology or permission of department chairperson.

**Soc 3370 Sociology of the American Jewish Community (3)** Langer  
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: Six hours of sociology or permission of department chairperson.

**Soc 4301 Sex and Society (3)**

Yellin

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.

**Soc 4350 Sociology of Aging (3)**

Wase

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)**

Wheeler

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: Six hours of sociology or permission of department chairperson.

**Soc 3410 Social Movements (3)**

Wheeler

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 or permission of department chairperson.

**Soc. 4401 Social Change (3)**

Naughton

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 or permission of department chairperson.

**Soc 4450 Sociology of Extreme Situations (3)**

Langer

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 or permission of department chairperson.

**DEVIANCE AND DISORGANIZATION**

**Soc 2710 Crime and Delinquency (3)**

Langer

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 or permission of department chairperson.

**Soc 4700 Sociology of Deviance (3)**

Langer

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 or permission of department chairperson.

**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.

**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)**

Tyson

An analysis of the city as a cultural setting using anthropological methods including ethnographic field work.

Prerequisite: Ant 1800 or permission of instructor.

**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)**

Tyson

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.

**Social Work Courses**

**SW 2900 Introduction to Social Work (3)**

Graves, Williams

An historical overview of the societal patterns of dealing with man's problems, from ancient to modern times, as reflections of changing values, institutions, and philosophies.

Prerequisite: Soc 1000 or permission of instructor.

**Soc 2950 Human Behavior and Social Environment (3)**

Elais, Schreiber, Herina

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.

**SW 3900 Contemporary Social Policy and Services (3)**

Graves, Schreiber

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.

Prerequisite: SW 3950-3951.

**SW 3901 Comparative Social Welfare (3)**

Graves

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.

**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.

Prerequisites: SW 2900 or permission of department chairperson.

**SW 3950 Methods of Social Work I (3)**

Elais, Herina, Schreiber

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.

Prerequisite: SW 3900.

**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.

Prerequisite: SW 3900.

**SW 3952 Methods of Social Work II (3)**

Elais, Herina, Schreiber

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.

**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)**

Graves, Williams

Generic social work practice enlarged with focus on intervention on group, organizational, community and institutional levels.  
Prerequisites: SW 3950 and 3951.

**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)**

Graves, Herina, Schreiber

Weekly seminar to integrate social work content and theory with field experience.  
Corequisite: SW 4900.

**SW 4911 Senior Integrative Seminar II (2)**

Graves, Herina, Schreiber

Continuation of weekly seminar to help students integrate theory and practice.  
Corequisite: SW 4901.

**SW 4950 Organization and Delivery of Social Services (3)**

Graves, Williams

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.

**SW 4960 Social Work with Groups (3)**

Schreiber

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.

**SW 4970 Social Work with Individuals (3)**

Herina

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.

**SW 3971 Practice and Issues in Service to Children (3)**

Herina

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.

**SW 4980 Community Organization (3)**

Graves, Williams

A specialized method course deepening understanding of the principles, methods and integration of community practice in social work.  
Prerequisite: SW 3951.

**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.

**SPECIAL EDUCATION AND INDIVIDUALIZED SERVICES**

Faculty: Bachkai, Barnhart, Berson, Bilowit, Calloway, Cohen, Dubin, Fanelli, Fisher, Frankel, Gaza, Hart, Healy, Heller, Jonas (Chairperson), Larghi, LeComte, Prince, Rosenberg, Roth, Segal, Shulman, Terr, Ward

**B.A. in Special Education Teacher of the Handicapped**

This program prepares students for New Jersey certification as teachers of the handicapped in grades K-12. The certificate covers classes for the educable and trainable mentally retarded, the neurologically impaired, the perceptually impaired, the socially maladjusted, the emotionally disturbed, the physically/orthopedically handicapped and the multiply handicapped. An option is available for students who wish to major in the area of the handicapped but who do not desire a teaching certificate. (see footnote: Non-Certification option). A 2.5 cumulative grade point average (GPA) is required for admission into the program.

130/131 s.h.

**GENERAL EDUCATION REQUIREMENTS**

	32
<b>Core Requirement</b>	3
Eng 1010 English Composition	
<b>Breadth Requirements</b>	
*English/Humanities (from at least 2 disciplines)	9
STM 1900 Speech	
*Social/Behavioral Sciences	9
Psy 1000 General Psychology	
Soc 1000 Social Life and Society	
<i>One of the following:</i>	
Soc 2100 Sociology of the Family; Soc 2900 Introduction to Social Work; PS 3650 Juvenile Justice	
*Physical and Biological Sciences	4
*Mathematical Sciences (not including computer science)	3
Health and Physical Education	4
HEd 1125 Contemporary Issues in Health	
One course in physical education	

**ADDITIONAL REQUIRED COGNATES**

	2
**ID ---- Intellectual and Cultural Traditions	3
**ID ---- Emergence of the Modern World or His 1062 From Western to World Civilization	3
**ID ---- World Literature or a literature course in English department	3
**ID ---- Inquiry and Research	3
**ID ---- Science and Technology in the Modern World	3
<b>Elective choose two of the following:</b> Psy 3310 Psychology of Learning; Psy 3320 Theories of Personality; Psy 4380 Psychology of Perception	6

<b>BEHAVIORAL/SOCIAL SCIENCES</b>		21
Overlap with General Education	3	
<i>One of the following:</i>		
Psy 2100 Child Psychology; Psy 2110 Psychology of Adolescence; Psy 3110 Life Span Psychology	3	
EdP 3801 Educational Psychology	3	
EPS 2000 Teacher, School and Society	3	
EPS 4050 School and Society: Cultural, Minority and Urban Perspectives	3	
SpE 2052 Introduction to Psychology of the Handicapped	3	
SpE 4053 Orientation to Psychological Testing	3	

**ACADEMIC SEQUENCE** 30

Overlap with General Education	12	
Overlap with Behavioral/Social Sciences	9	
**SpE ---- Language Development of the Exceptional Child	3	
SpE 4262 Signing	3	
<i>One of the following:</i>	3	
Hed 3300 Community Mental Health; HEd 3350 Death in Perspective; HEd 3400 Human Sexuality; HEd 3635 Introduction to Public Health; HEd 2231 First Aid and Accident Prevention; HEd 4333 Alcohol and Narcotics Education; PEd 1500 Introduction to Motor Learning; PEd 2500 Introduction to Biomechanics; EC 3800 The Family Educator		

**PROFESSIONAL EDUCATION** 43/44

SpE 2051 Introduction to Education of the Handicapped	3	
<i>One of the following:</i>	3	
SpE 2152 Introduction to Mental Retardation; SpE 2155 Introduction to Learning Disabilities; SpE 2156 The Emotionally Disturbed; SpE 2157 The Severely Multiply Handicapped		
**EAS 3--- Adaptive Content Areas for the Handicapped	3	
CS 3400 Teaching Reading in the Elementary School	3	
**CS 4--- Reading for the Handicapped	3	
SpE 3155 Special Education Methods and Curriculum I	3	
**SpE 3--- Special Education Field Experience I (concurrent with SpE 3155)	1	
SpE 3156 Special Education Methods and Curriculum II	3	

\*\*course in development

**SpE 3--- Special Education Field Experience II (concurrent with SpE 3156)	1	
SpE 4134 Student Teaching	12	
**SpE 4--- Senior Seminar (concurrent with SpE 4134)	3	
<i>One of the following:</i>	2/3	
Mus 2305 Early Childhood Music Education; Mus 2310 Elementary School Music Education; Mus 3400 Therapeutic Use of Music; SpE 4151 Arts and Crafts for Exceptional Children		
<i>One of the following:</i>	3	
LM 4700 Audio-Visual Media of Instruction; IS 4001 Technology for Children-Early Childhood and Elementary School Industrial Arts; SpE 3161 Career Education for the Handicapped; IS 4111 Exploring Industrial Arts/Vocational Special Education; SPS 4900 Guidance		

**FREE ELECTIVES** (see page 28) 7

\*\*course in development

**Non-Certification Option** Students who elect to major in Special Education: Teacher of the Handicapped and do not seek N.J. teacher certification may substitute as follows: a course selected with departmental advisement in place of CS 4400; a field experience in a non-education setting selected with departmental advisement in place of SpE 4134. The field experience course is in development. Consult the department for current information.

**Collateral Program in Career Education for the Handicapped** This program is open to students in Industrial Arts and Teacher of the Handicapped and is described in the Interdisciplinary Collateral Programs section. See Index.



## B.A. in Speech and Hearing

The major in speech and hearing is designed to prepare the student to meet state certification requirements as a speech correctionist or a teacher of the deaf or hard of hearing. It is also designed to provide basic training for other clinical opportunities by offering a broad base for further graduate work and thus qualify students for certification by the American Speech and Hearing Association (ASHA). Students are required to apply for admission into the major during the second semester of the freshman year. A 2.5 cumulative grade point average (GPA) is required for admission into the program.

### Option: Speech Correction

128 s.h.

#### GENERAL EDUCATION REQUIREMENTS (see page 26) 36

##### Required Cognate Courses (16 s.h.)

###### Humanities Cluster:

STM 1900 Speech 3

###### Sciences and Mathematics Cluster:

Bio 1000 Principles of Biology 4

Mat 1016 Descriptive Statistics 3

###### Social/Behavioral Sciences and History Cluster:

Psy 1000 General Psychology 3

Psy 2100 Child Psychology 3

#### ADDITIONAL COGNATE COURSES 9

*Selected from Clusters I, II and/or III in General Education Requirements to include:*

Bio 2402 Principles of Human Anatomy and Physiology 4

#### MAJOR REQUIREMENTS 69

EAS 3100 Elementary Curriculum and Methodology 3

One from: EPS 4010, 4020, 4030, 4040, 4050, 4070 3

EdP 3801 Educational Psychology 3

\*\*CS 3400 Teaching of Reading in the Elementary School 3

CS 4400 Advanced Reading Techniques: Elementary Level 3

SpE 2051 Introduction to Education of the Handicapped 3

SpE 4053 Orientation in Psychological Testing 3

All courses offered in the area of Speech and Hearing except that SpE 2052 Introduction to Psychology of the Handicapped may be substituted for SpE 4259 Nature and Etiology of Stuttering 48

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#### FREE ELECTIVES (see page 28) 14

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Students majoring in this program, who also desire elementary certification, should contact the department of Educational Arts and Systems. Supplementary courses to meet elementary certification are required as well as a student teaching experience in an elementary classroom.

## Option: Deaf Education

131 s.h.

#### GENERAL EDUCATION REQUIREMENTS 32

##### Core Requirement 3

Eng 1010 English Composition

##### Breadth Requirements 9

\*English/Humanities (from at least 2 disciplines)

STM 1900 Speech

\*Social/Behavioral Sciences (from at least 2 disciplines) 9

Psy 1000 General Psychology

Psy 2100 Child Psychology or Psy 2110 Psychology of Adolescence

\*Physical and Biological Sciences 4

Bio 1000 Principles of Biology

\*Mathematical Sciences (not including computer science) 3

Mat 1016 Statistics

Health and Physical Education 4

Hed 1125 Contemporary Issues in Health

One course in physical education

#### ADDITIONAL REQUIRED COGNATES 21

\*\*ID ---- Intellectual and Cultural Traditions 3

\*\*ID ---- Emergence of Modern World or His 1062 From Western to World Civilization 3

\*\*ID ---- World Literature or a literature course in English department 3

\*\*ID ---- Inquiry and Research 3

\*\*ID ---- Science and Technology in the Modern World 3

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#### ACADEMIC SEQUENCE 33

Overlap with General Education 3

Overlap with Behavioral/Social Sciences 9

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\*\*course in development

SpE 2251 Introduction to Speech, Language and Hearing Disorders	3
SpE 2255 Normal Language Development	3
SpE 2260 Anatomy and Physiology of Ear and Speech Mechanism	3
**SpE 3253 Language Disorders	3
SpE 3259 Basic Audiology	3
SpE 4262 Signing I	3
**SpE 4263 Signing II	3
<hr/>	
<b>PROFESSIONAL EDUCATION</b>	42
SpE 1250 Introductory Field Experiences in Speech/Language Pathology, Audiology and Education of Hearing Impaired	3
CS 3400 Teaching Reading in the Elementary School	3
**CS 4--- Reading for the Handicapped	3
SpE 2051 Introduction to Education of the Handicapped	3
SpE 3262 Aural Rehabilitation	3
SpE 3263 Methods of Teaching the Deaf I	3
**SpE 3264 Methods of Teaching the Deaf II	3
**SpE 4034 Student Teaching	12
<i>Three of the following:</i>	9
EAS 3110 English in the Elementary School; EAS 3120 Mathematics in the Elementary School; EAS 3130 Science in the Elementary School; EAS 3140 Social Studies in the Elementary School	

## Special Education Courses

### GENERAL AND INTRODUCTORY

**SpE 2051 Introduction to Education of the Handicapped (3)**  
Early detection and proper care of all disabilities are considered in this course. Etiology, diagnosis and prognosis, different treatments and remedial procedures and their educational implications; basic educational procedures for the various disabilities. Visitations are made to observe programs for the mentally and physically handicapped. A minimum of 25 hours of observation and participation is required.

**SpE 2052 Introduction to Psychology of the Handicapped (3)**  
The psychology of all types of disabilities, mental and physical. The degrees of retardation, their causes and the concomitant disorders of behavior. The emotional and social adjustment of the physically handicapped. The psychological basis for appropriate education and care of all types of handicaps.

**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.

\*\*course in development

### **SpE 4053 Orientation in Psychological Testing (3)**

Overview of clinical tests and other assessment techniques used in special education. An introduction to the way instruments are constructed and validated. Practice in the administration of a few tests under supervision to provide familiarity with the behavior of handicapped individuals in test situations.  
Prerequisite: SpE 2051.

### INTERDISCIPLINARY

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

### **ID 4051 Art for the Exceptional Child (3)**

### TEACHER OF THE HANDICAPPED

### **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. Each student expected to spend a minimum of 25 hours in observation and participation in a program for the mentally retarded.  
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. Students expected to participate for a minimum of 25 hours in a program for the learning disabled.  
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. Each student is expected to participate for a minimum of 25 hours in a program for 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 and programming. Each student is expected to participate for a minimum of 25 hours in a program for the severely multiply handicapped.  
Prerequisite: SpE 2051.

### **SpE 3155 Special Education Methods and Curriculum I (4)**

Basic methods course in special education. Includes historical perspective, resources, legislation, classification, curriculum design, teaching strategies and scheduling. A 40 hour field experience is required. *Freshmen entering after 9/84 will receive three credits.*  
Prerequisite: SpE 2154, 2155, 2156 or 2157.

### **SpE 3156 Special Education Methods and Curriculum II (4)**

Basic methods course in special education. Includes observation of children, instructional strategies, classroom environment, evaluation, material selection, working with parents, self-evaluation and classroom management. A 40 hour field experience required. *Freshmen entering after 9/84 will receive three credits.*  
Prerequisite: SpE 3155.

### **SpE 3161 Career Education for the Handicapped (3)**

Overview of theories and practices in career education for the handicapped. Occupational and life skills explored.

**SpE 4134 Student Teaching: Handicapped (8)**

Full-time unpaid teaching experience for eight weeks in an educational setting under the direction of a college supervisor and cooperating teacher. Freshmen entering after 9/84 will receive twelve credits.

Prerequisites: Successful completion of 90 credits and SpE 3156.

**SpE 4151 Introduction to Arts and Crafts for Exceptional Children (3)**

Meaningful and interesting manual activities for sequential skill development. Projects are with wood, leather, plastics, metal, ceramics, basketry, cardboard and weaving.

Prerequisite: SpE 3155.

**SpE 4161 Practicum in Career Education for the Handicapped (3)**

Field experience in a career/vocational program for the handicapped. Supervisory sessions held by faculty. Students spend 8 hours per week in a career education setting.

Prerequisites: Completion of 15 credits in Career Education for the Handicapped Colateral Program or permission of instructor.

**SPEECH AND HEARING**

**SpE 1250 Introductory Field Experiences in Speech/Language Pathology, Audiology and Education of the Hearing Impaired (3)**

Exposure to individuals with various types of degrees of speech/language and hearing handicaps in various work settings. Includes 10 full days of visits to special classes, schools, clinics and hospitals.

**SpE 2251 Introduction to Speech, Language and Hearing Disorders (3)** Shulman

An orientation course for all classroom teachers and the basic course for speech and hearing majors. It presents an introduction to the field of speech pathology with emphasis on the recognition and treatment of speech disorders in school children.

**SpE 2254 Phonetics (3)**

Shulman

English sounds in connected speech, intonation, phonetic dictation, acoustical and anatomical relationships. Application is made to problems of language teaching and disorders of communication.

**SpE 2255 Normal Language Development (3)**

LeComte, Shulman

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.

**SpE 2260 Anatomy and Physiology of the Ear and Speech Mechanism (3)**

Shulman

A study of the basic structures and functions of the auditory and speech mechanisms. Application of such study is made to the field of audiology and speech pathology.

**SpE 3252 Teaching Language to the Deaf and Hard of Hearing (3)** LeComte

A review of auditory cognition and language development. Principles and methods of teaching language to persons having communication disorders and auditory deficits. This course meets requirements for certification in the area of teaching the deaf and hard of hearing, and is of particular value to teachers of the mentally retarded who have faulty language development. (Not open to students entering after 9/83)

**SpE 3256 Disorders of Articulation and Voice (3)**

LeComte

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, 2254 and 2260.

**SpE 3257 Organic Disorders of Speech and Language (3)**

Heller

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.

**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.

**SpE 3262 Aural Rehabilitation (Lip-Reading and Auditory Training) (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.

**SpE 3263 Methods of Teaching the Deaf and Hard of Hearing (3)**

Development of classroom materials for the deaf or hard of hearing child. Modification of the curriculum for the deaf or hard of hearing. Utilization of aural rehabilitation procedures in teaching subject matter in the classroom. Lesson planning based on classroom needs of the hearing handicapped.

Prerequisite: SpE 3262.

**SpE 4203 Student Teaching (8)**

Experience in full time teaching in a public school under the guidance and direction of a cooperating teacher and a college supervisor.

**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, hospitals or clinics.

Prerequisites: SpE 3256 and 3257.

**SpE 4258 Theory of Clinical Practice in Speech and Hearing II (2)**

A continuation of SpE 4257 which is a prerequisite.

**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 4257.

**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.

**SpE 4262 Signing (3)**

A basic practicum course in signing with the deaf. This course includes learning basic signs and finger spelling and practice to enhance receptive and expressive skills. Class attendance is required.

**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.

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## Educational Psychology Courses

### EdP 3801 Educational Psychology (3)

An analysis of learning theory and its application. Considers cognition, motivation, tests and measurements.

Prerequisite: A course in general psychology.

### EdP 3802 Educational Psychology of the Disadvantaged Urban Child (3) Hart

Designed for the student interested in the learning process as it relates to children from urban environments and differing urban cultures. Some topics considered include: the myth of cultural deprivation, development of self-concept, behavioral characteristics and standardized testing. Attention given to successful innovative techniques, especially in the language arts.

Prerequisite: EdP 3801.

### EdP 4801 Group Dynamics-Principles and Applications (3) Larghi, Fanelli, Prince

Principles of group function (types of groups, group structure, communication, leadership, membership roles, etc.), means of observing and recording group information, and techniques of working with groups. Designed for students in group processes and group work in education, recreation and allied fields. Attendance in this course is required.

Prerequisite: One course in psychology.

### EdP 4802 Introduction to Educational and Psychological Research (3) Cohen

An introduction to the steps involved in educational and psychological research; the use of source materials; and a survey of basic statistical concepts.

Prerequisite: Junior or senior standing.

### EdP 4804 Introduction to Behavior Modification for Teachers (3) Fanelli

Intensive review of the principles of learning and ways in which they may be translated into educational practice. Students carry out projects designed to modify the behaviors of regular and special classroom pupils and to effect the self-modification of the teacher's own behavior.

Prerequisite: Six semester hours of psychology.

### 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 4902 Internship/Seminar in Training and Development (4)

Supervised on-site placement of 150 hours in business, industry and other non-school settings, using skills in training and development. Four required on-campus seminars. Internship offered in cooperation with Kean College Cooperative Education Program.

Prerequisites: EdP 4901 and acceptance into the Collateral in Training and Development Program.

## Student Personnel Services Course

### SPS 4900 Guidance (3)

Guidance techniques employing personal inventory, occupational and educational information and counseling studied as ways to help middle, secondary and special pupils solve their problems.

## TECHNOLOGY (Industrial Studies)

Faculty: Angebrandt, Clinton, Cokewood, Daken, Friedman, Jahn, Lokuta, Peterson, Sladicka (Chairperson), Thatcher, Van Nest

## B.A. in Industrial Education

In the preparation of industrial arts teachers for grades K-12 emphasis is placed on an understanding of our complex technical society and the problems growing out of such complexity as well as the teaching of manipulative skills. It is recognized that the graduate must be an educator first and an industrial arts teacher second. Students who complete this program will be eligible for a New Jersey certificate to teach industrial arts in grades K-12.

131 s.h.

### GENERAL EDUCATION REQUIREMENTS

	32
<b>Core Requirement</b>	3
Eng 1010 English Composition	
<b>Breadth Requirements</b>	9
<i>*English/Humanities</i>	
STM 1900 Speech	
Eng 3005 Advanced Composition or Eng 3090 Business, Professional and Technical Writing	
<i>*Social/Behavioral Sciences</i>	9
Psy 1000 General Psychology	
Psy 2110 Psychology of Adolescence or Psy 2100 Child Psychology	
Soc 1000 Social Life and Society	
<i>*Physical and Biological Sciences</i>	4
<i>*Mathematical Sciences</i> (not including computer science)	3
<i>Health and Physical Education</i>	4
HEd 1125 Contemporary Issues in Health	
One course in physical education	

### ADDITIONAL REQUIRED COGNATE COURSES

	21
**ID---- Intellectual and Cultural Traditions	3
**ID---- Emergence of Modern World or His 1062 From Western to World Civilization	3
**ID---- World Literature or a literature course in English department	3
**ID---- Inquiry and Research	3
**ID---- Science and Technology in the Modern World	3
<b>Elective any two IS elements courses</b>	6

\*\*course in development

<b>BEHAVIORAL/SOCIAL SCIENCES</b>		9
Overlap with General Education	9	
EPS 2000 Teacher, School and Society	3	
EPS 4050 School and Society: Cultural, Minority and Urban Perspectives	3	
EdP 3801 Educational Psychology	3	
<b>ACADEMIC SEQUENCE</b>		39
<b>Remaining 4 IS Elements Courses</b>	12	
IS 1200 Elements of Drafting		
IS 1300 Elements of Construction		
IS 1400 Elements of Manufacturing		
IS 1500 Elements of Electronics		
IS 1600 Elements of Graphics		
IS 1700 Elements of Power		
<b>Major Cluster</b>	15	
<b>CONSTRUCTION</b>		
IS 2301 Machine Woodworking	3	
IS 2302 Furniture Design and Construction	3	
IS 3303 Carpentry and Building Construction	3	
IS 4304 Contemporary Trends in Woodworking	3	
IS 4305 Cabinetmaking	3	
<b>COMMUNICATION (select one area of specialization)</b>		
<b>DRAFTING AND DESIGN</b>		
IS 2201 Technical Drafting	3	
IS 2202 Machine Drafting and Design	3	
IS 3200 Design Fundamentals	3	
IS 3204 Architectural Drafting	3	
IS 4206 Technical Illustration	3	
<b>ELECTRONICS</b>		
IS 2501 Circuit Analysis I	4	
IS 2502 Circuit Analysis II	4	
IS 3503 Solid-State Devices	4	
IS 3504 Circuit Systems I	3	
<b>GRAPHICS</b>		
IS 2601 Advanced Letterpress Reproduction	3	
IS 2602 Screen Process Reproduction	3	
IS 3603 Black and White Photographic Reproduction	3	
IS 4406-4607 Lithographic Reproduction I & II	6	
<b>MANUFACTURING</b>		
IS 2401 Welding Technology	3	
IS 2402 Metal Fabrication	3	
IS 3403 Foundry: Theory and Practices	3	
IS 3404 Machine Metals	3	
IS 4405 Products Manufacturing	3	

<b>COMPREHENSIVE</b>		
IS 2202 Machine Drafting and Design	3	
IS 2301 Machine Woodworking	3	
IS 3404 Machine Metals	3	
IS 2501 Circuit Analysis I	4	
IS 2602 Screen Process Reproduction	3	
<b>Electives Choose from two (2) clusters other than major cluster</b>	12	
<b>PROFESSIONAL EDUCATION</b>		30
IS 2106 Sophomore Field Experience	3	
IS 3107 Junior Field Experience	3	
IS 4108 Industrial Arts Curriculum and Laboratory Design	3	
IS 4109 Principles and Techniques of Teaching Industrial Arts	3	
IS 4110 Student Teaching	12	
CS 4403 Developmental Program in Reading	3	
CS 4406 Teaching Reading in the Secondary School	3	

\*\*course in development

**Collateral Program In Career Education for the Handicapped.** This program is open to students in Industrial Arts and Teacher of the Handicapped and is described in the Interdisciplinary Collateral Programs section. See Index.

## B.S. in Industrial Technology

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.

125 s.h.

### GENERAL EDUCATION REQUIREMENTS (see page 26) 36

#### Required Cognate Courses (19 s.h.)

##### Humanities Cluster:

STM 1900 Speech 3

##### Sciences and Mathematics Cluster:

Mat 1052 College Algebra & Trigonometry 3

Phy 2091 General Physics I 4

##### Social/Behavioral Sciences and History Cluster:

Eco 1020-1021 Principles of Economics I & II 6

Psy 1000 General Psychology 3

### ADDITIONAL COGNATE COURSES 13

Mat 1053 Analytic Geometry 3

Mat 2411 Calculus I 3

CpS 1931 Computer Arithmetic Algorithms 3

Phy 2092 Physics II 4

### MAJOR REQUIREMENTS 65

#### Technical/Managerial Core (26 s.h.)

IS 1200 Elements of Drafting (Design students take IS 2201 Technical Drafting) 3

IS 1901 Introduction to Industrial Technology 2

IS 2900 Preparation of Technical Documents 3

IS 2903 Materials Science 3

MgS 2200 Principles of Accounting 3

MgS 3030 Personnel Management 3

MgS 3410 Marketing 3

IS 3900 Industrial Statistics and Quality Control 3

IS 3903 Principles of Industrial Purchasing 3

#### Area Specialization (27 s.h.) choice of one area:

##### DESIGN TECHNOLOGY

IS 3200 Design Fundamentals 3

IS 3201 Model Design 3

IS 4206 Technical Illustration 3

IS 4207 Design Delineation 3

IS 4210 Design Application 3

IS 4211 Design Studio (in development) 6

Electives selected with permission of area advisor 6

##### ELECTRONICS TECHNOLOGY

IS 2501-2502 Circuit Analysis I & II 8

IS 3503 Solid-State Devices 4

IS 3504 Circuit Systems I 3

IS 4505 Digital Circuit Concepts 3

IS 4506 Fabrication 3

IS 4507 Solid State Circuit Design 3

IS 4508 Linear Integrated Circuits and Special Semiconductor Devices 3

##### GRAPHIC ARTS TECHNOLOGY

IS 2601 Advanced Letterpress Reproduction 3

IS 2602 Screen Process Reproduction 3

IS 3603 Black and White Photographic Reproduction 3

IS 3604-3605 Color Photographic Reproduction I & II 6

IS 4606-4607 Lithographic Reproduction I & II 6

IS 4608-4609 Color Separation I & II 6

##### MANUFACTURING TECHNOLOGY

IS 2202 Machine Drafting and Design 3

IS 2401 Welding Technology 3

IS 3403 Foundry: Theory and Practices 3

IS 3404 Machine Metals 3

IS 3420 Introduction to Nondestructive Testing 3

IS 4405 Products Manufacturing 3

IS 4406 Non-Ferrous Metallurgy 3

IS 4407 Ferrous Metallurgy 3

IS 4408 Modern Metal Joining Processes 3

##### MECHANICAL CONTRACTING TECHNOLOGY

IS 2805 Heating, Ventilating, Air Conditioning and Plumbing Systems and Equipment 3

IS 2810 Interpretation of Construction Drawings and Specifications 3

IS 2820 Building Piping Systems Design 3

IS 3830 Estimating for the Mechanical Contracting Industry 3

IS 3840-3850 Building Environmental Systems Design I & II 6

IS 4810 Industrial Law 3

IS 4835 Mechanical Contracting Project Management 3

IS 4840 Mechanical Contracting Management 3

Electives selected with advisement of area coordinator 12

### FREE ELECTIVES (see page 28) 11

## Minor in Industrial Technology

	21 s.h.
<b>Required Core Courses</b>	6
IS 2900 Preparation of Technical Documents	3
IS 1200 Elements of Drafting (Design students take IS 2201 Technical Drafting)*	3
<b>Specialization Courses selected at 2000 level or above in one of the following areas of the Industrial Studies departmental offerings:</b>	15
Design	
Electronics	
Graphic Arts	
Manufacturing	
Mechanical Contracting	

\*Note: Departmental advisement is encouraged.

## Courses

### COURSES FOR NON-DEPARTMENTAL MAJORS

#### IS 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.

#### IS 3068 The History of Photography (3)

Lokuta

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.

#### IS 3301 Woodworking for the Non-Major (3)

Peterson

Instruction and practical experience for the novice using woodworking, tools, machines, fasteners, bonding agents and finishes as related to forming simple functional objects.

#### IS 4001 Technology for Children—Early Childhood and Elementary School Industrial Arts (3)

Peterson

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.

### EDUCATION

#### IS 2106 Industrial Arts Sophomore Field Experience (3)

Van Nest

An introductory field experience in multi-cultural educational setting from kindergarten through senior high school. A strong correlation exists between the seminar activities and field experiences.

#### IS 3107 Industrial Arts Field Experience Seminar (3)

Van Nest

An introductory field experience in a multi-cultural setting for those preparing to teach industrial arts. Course work includes: professional responsibilities, general principles of school organization, methods of instruction, and classroom management from kindergarten through high school.

#### IS 4106 Construction and Use of Audio-Visual Media (3)

Provides an awareness of the values of audio-visual materials and of the considerations involved in constructing such material. Emphasis is placed on the variety of material available for audio-visual purposes and their application in instructional situations.

#### IS 4108 Industrial Arts Curriculum and Laboratory Design (3)

Van Nest

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: IS 3107.

#### IS 4109 Principles and Techniques of Teaching Industrial Arts (3)

Van Nest

An introduction to patterns of organization, laboratory management, teaching methods, and lesson planning as they pertain to industrial arts education.

Prerequisite: IS 3107.

#### IS 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, IS 2106 and 3107.

#### IS 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.

#### IS 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: IS 4111, 3301, 1300 or permission of instructor.

#### IS 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.

#### IS 4182 Independent Study in Industrial Education II (3)

A continuation of IS 4181.

#### IS 4183 The World of Construction (3)

Van Nest

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.

#### IS 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

#### IS 1200 Elements of Drafting (3)

Application of drafting room standards and experiences in the use of drafting instruments, lettering, pencil and ink line work, freehand sketching, and in the reproduction of drawings. Instruction includes geometric construction, orthographic projection, sections and conventions, working drawings, and graph and chart construction.

#### IS 2201 Technical Drafting (3)

Clinton

A comprehensive study of the spatial relationships of orthographic projection as related to auxiliary views, revolutions, intersections, and developments.

**IS 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: IS 1200 or 2201.

**IS 3200 Design Fundamentals (3)**

An investigation of the basic aspects and the traditional concepts of design and of their implication to contemporary design.

**IS 3201 Model Design (3)**

Planning, material selection and fabrication techniques of model making and their concurrent relationships to the total design process.  
Prerequisite: IS 3200.

**IS 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: IS 1200 or 2201 and 1500.

**IS 3204 Architectural Drafting (3)**

Clinton

Construction details and fabrication techniques of a small residential building. Preparation of a complete set of working drawings.

Prerequisite: IS 1200 or 2201.

**IS 4205 Light Building Design (3)**

Clinton

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: IS 2201 and 3204.

**IS 4206 Technical Illustration (3)**

Pictorial reproduction with emphasis on the characteristics of axonometric and perspective projection.

Prerequisite: IS 3200.

**IS 4207 Design Delineation (3)**

Rendering techniques and methods as related to design delineations with an emphasis on industrial practices.

Prerequisite: IS 4206.

**IS 4210 Design Application (3)**

Application of basic design principles in the construction of a series of three-dimensional forms.

Prerequisite: IS 3200.

**WOODS****IS 1300 Elements of Construction (3)**

Peterson, Van Nest

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.

**IS 2301 Woodworking (3)**

Peterson

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.

**IS 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: IS 2301.

**IS 3303 Carpentry and Building Construction (3)**

Van Nest

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.

**IS 4304 Contemporary Trends in Woodworking (3)**

Peterson

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: IS 2301.

**IS 4305 Cabinetmaking (3)**

Peterson, Van Nest

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: IS 2301.

**MANUFACTURING/METALS****IS 1400 Elements of Manufacturing (3)**

Sladicka

Explores manufacturing and industrial organization as related to metal casting, sheet metal fabrication, machine operations, forging, heat treating and welding. Emphasis placed on effective laboratory practice as determined by established testing procedures.

**IS 2401 Welding Technology (3)**

Sladicka

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.

**IS 2402 Metal Fabrication (3)**

Sladicka

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: IS 1400 and 2401.

**IS 3403 Foundry: Theory and Practices (3)**

Sladicka

Emphasizes experience in a variety of industrial metal casting techniques including sand-molds, investment castings, full molds, shell molds, and other molding processes.

Prerequisites: IS 1400 or permission of instructor.

**IS 3420 Introduction to Nondestructive Testing (3)**

Friedman

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.

**IS 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.

**IS 4410 Inspection of Fabricated Structures (3)**

Goodman

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: IS 2401, 4408 or approval of instructor.

**IS 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.



**IS 3404 Machine Metals (3)** Sladicka

A comprehensive study of machine tool operations and setups including aspects of quality control and use of industrial measuring instruments.

Prerequisite: IS 1400.

**IS 4405 Products Manufacturing (3)** Sladicka

Simulation of industrial production, taught in conjunction with Machine Drafting and Design, with emphasis on the manufacture of a metal product.

Prerequisite: IS 3404.

**IS 4406 Non Ferrous-Metallurgy (3)** Goodman

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.

**IS 4407 Ferrous Metallurgy (3)** Goodman

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: IS 4406 or permission of instructor.

**IS 4408 Modern Metal Joining Processes (3)** Goodman

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: IS 2401.

**IS 4409 Commercial Aspects of the Metals Industry (3)** Goodman

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.

**IS 4420 Industrial Radiography (3)** Friedman

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 TC1a 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: IS 3420 or permission of instructor.

**IS 4430 Ultrasonic Testing I (3)** Friedman

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.

**ELECTRONICS****IS 1500 Elements of Electronics (3)** Cokewood, Jahn

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.

**IS 2500 General Electricity Electronics (3)** Cokewood, Jahn

Practical understanding and application of the electrical-electronic concepts found in all areas of industrial education.

Prerequisite: IS 1500.

**IS 2501 Circuit Analysis I (4)** Daken, Jahn

Review of electrical fundamentals and detailed analysis of circuits and circuit elements energized by steady-state and transient d-c voltage sources.

**IS 2502 Circuit Analysis II (4)** Daken, Jahn

Principles governing the behavior of d-c circuits and components extended to consider circuits energized by alternating voltages.

Prerequisite: IS 2501.

**IS 3503 Solid-State Devices (4)** Cokewood, Jahn

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: IS 2501.

**IS 3504 Circuit-Systems (3)** Jahn

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: IS 2502, 3503.

**IS 4505 Digital Circuit Concepts (3)** Cokewood

Systematic introduction to digital concepts and circuits basic to most digital systems. Logic elements, digital devices and their arrangements stressed in a generic array of systems.

Prerequisite: IS 3503.

**IS 4506 Fabrication and Development of Electronic Devices (3)** Cokewood

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: IS 3504.

**IS 4507 Fundamentals of Solid State Circuit Design (3)** Cokewood

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: IS 3503.

**IS 4508 Linear Integrated Circuits and Special Semiconductor Devices (3)** Cokewood, Jahn

Parameters and operating characteristics of linear integrated and special semiconductor devices are analyzed and applied with circuit design and application consideration.

Prerequisites: IS 2502, 3503.

**IS 4509 Microprocessor Theory and Application (3)** Cokewood, Daken

A broad based introduction to microprocessors and related topics. Special emphasis placed on interfacing practices and applications.

Prerequisites: IS 2502, 4505.

**IS 4510 Micro-Systems Applications (3)**

Introduction to the equipment, transducers, circuitry, and techniques for applying micro-processors/microcomputers to practical systems. Special emphasis placed on input and output transducers, signal conditioning and time techniques.

Prerequisites: IS 4509 and knowledge of BASIC language.

**GRAPHICS****IS 1600 Elements of Graphics (3)**

Experiences in the fundamentals of letterpress printing, screen process reproduction and offset lithography.

**IS 2601 Advanced Letterpress Reproduction (3)**

Angebrandt

Designed to provide the student with a comprehensive background of knowledge and experience in the various aspects of letter press printing.

Prerequisite: IS 1600.

**IS 2602 Screen Process Reproduction (3)**

A background in screen process printing and experiences in related photo mechanics.

Prerequisite: IS 1600.

**IS 3603 Black and White Photographic Reproduction I (3)**

Lokuta

Background in basic photography with emphasis on camera technique, photographic compositions, and darkroom operation.

Prerequisite: Students must have own appropriate camera.

**IS 3604-3605 Color Photographic Reproduction I & II (3,3)**

Lokuta

Advanced course in photography with emphasis on light and its evaluation, color transparency exposure and development, color negative development and enlargement, and densitometric controls for quality work.

Prerequisite: IS 3603.

**IS 3606 Scientific Photography (3)**

Lokuta

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.

**IS 3607 Black and White Photographic Reproduction II (3)**

Lokuta

Advanced black and white photography with special emphasis on the zone system, densitometry and advanced darkroom techniques.

**IS 4606-4607 Lithographic Reproduction I & II (3,3)**

Angebrandt

Opportunity to develop skills and technical information essential to the area of offset lithography.

Prerequisite: IS 2602.

**IS 4608-4609 Color Separation I & II (3,3)**

Angebrandt

Comprehensive understanding of the principles of color separation and its utilization in the graphic arts.

Prerequisites: IS 3605 and 4607.

**POWER****IS 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****IS 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.

**IS 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.

**IS 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: IS 2810.

**IS 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, re-design, etc.

Prerequisites: IS 2810, 2820, 3840.

**IS 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: IS 3830.

**IS 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.

**IS 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: IS 3840.

**IS 4810 (4910) Industrial 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.

**IS 4835 (4935) Mechanical Contracting 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: IS 3830.

**IS 4840 (4940) Mechanical Contracting Management (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: IS 3830.

**TECHNOLOGY****IS 1901 Introduction to Industrial Technology (2)**

Thatcher

Survey of the nature, content and implications of careers in industrial technology. Analysis and discussion of the current critical issues of industry.

**IS 2900 Preparation of Technical Documents (3)**

Thatcher

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.

**IS 2903 Material Science (3)**

Friedman

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.

**IS 3900 Industrial Statistics and Quality Control (3)**

Thatcher

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.

**IS 3901 Plant Layout (3)**

Analysis of industrial plant layout procedures from initial planning to installation and evaluation phases.

Prerequisite: IS 2201.

**IS 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.

**IS 3903 Principles of Industrial Purchasing (3)**

An overview of purchasing procedures and functions to allow middle management personnel an introductory understanding of industrial purchasing.

**IS 4900 Industrial Safety (3)**

Basic fundamental principles of industrial accident prevention; significant, accident statistics and costs; appraising safety performances; industrial plant hazards and safeguards; fire control fundamentals.

**IS 4901 Advanced Industrial Safety (3)**

Provides an understanding and a contrast between safety theories and today's knowledge of human behavior and motivation.

Prerequisite: IS 4900 or permission of instructor.

**IS 4902 Occupational Health Hazards—Chemical (3)**

Provides an understanding of chemical health hazards encountered in the work place, their recognition, evaluation and control.

Prerequisite: IS 4900 or may be taken concurrently.

**IS 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: IS 4902 or permission of instructor.

**IS 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.

**IS 4998-4999 Cooperative Education in Industrial Studies (3,6)**

An opportunity for upper level students majoring in Industrial Education or Industrial Technology to obtain supervised work experience related to their area of specialization.

Prerequisites: Junior 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.

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# Admissions Fees and Financial Aid

## 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 and as a college-educated member of society. 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. Should this not be possible, reapplication at a later date will be necessary.*

All procedures for application and admission are published in detail in a special bulletin which is available on request through the Office of Admissions. All prospective students are urged to contact the College as follows:

Director of Admissions  
Kean College of New Jersey  
Union, New Jersey 07083  
Tel. 201-527-2195

## 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 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.

## 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, providing the date of discharge occurred no longer than two months prior to the date of application. Ex-servicemen will be expected to meet all other admissions criteria. Applications must be received by the Admissions Office within 30 days before the beginning of the semester for which the candidate wishes to enroll.

## EPIC Program

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.

## FEES AND FINANCIAL AID

Tuition, fees and expenses are established by the New Jersey Board of Higher Education 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	\$32.00
Non Resident—Per semester hour	\$52.00

### Fees (all fees subject to change)

<b>Admissions</b>	\$10.00
Required of each applicant, non-refundable.	
<b>Acceptance Deposit</b> (non refundable)	\$50.00
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.	
<b>General Service Fee</b>	\$3.00
Per semester hour	
<b>Student Activity: Full-time Student</b>	\$2.25
Per semester hour	
<b>Student Activity: Part-time Student</b>	\$1.25
Per semester hour	
<b>Athletic Fee</b>	\$1.25
Per semester hour. Charged to full-time students only	
<b>Student Life Facility Fee</b>	\$3.00
Per semester hour	
<b>Late Registration</b> (non-refundable)	\$15.00
A charge placed on students who register on the date published as late registration and thereafter.	
<b>Late Payment</b>	\$15.00
A charge for payments made after the due date as established by the Business Office.	
<b>Student Teaching</b>	\$60.00
Charged in addition to tuition. The fee is non-refundable and is assessed when student teaching assignments are made.	
<b>Teaching Certificate</b>	\$30.00
Required of all candidates in each area of certification. It is due with remittance of Student Teaching fee.	
<b>Campus Parking: Full-time Student</b>	\$10.00
Covers the academic year. All student vehicles are to be registered with the Parking Office.	
<b>Campus Parking: Part-time Student</b>	\$4.00
Covers both fall and spring semesters.	
<b>Campus Parking: Summer Session</b>	\$4.00

### College Apartments

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

### Student Health Insurance \$48.00

This 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 \$200, except for industrial education majors who purchase certain items which will be used throughout the four years for an additional cost of about \$300.

### REFUND

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	

### 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 differences 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 March 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 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.

The Student-Aide Program provides part-time and summer jobs for full-time matriculated students. Factors in employment are required skills and interest in the job, not necessarily financial need.

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. Freshman 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 may 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 Ceres 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.

**Isadore and Frieda Holtz Foundation Scholarship**—A scholarship of \$500 is awarded to a sophomore or junior on the basis of good scholarship, promise, and ability.

**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 \$200 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**—A \$200 scholarship 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 \$300 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.

# Directories

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## \*COLLEGE CALENDAR 1984-1986

### 1984

#### Fall Semester

Sept. 6	Thursday	Classes begin
Nov. 22	Thursday through	Thanksgiving recess
Nov. 25	Sunday	
Dec. 21	Friday	Classes end

### 1985

#### Mid-Year Study Program

Jan. 7	Monday	Classes begin
Jan. 25	Friday	Classes end

#### Spring Semester

Jan. 28	Monday	Classes begin
Apr. 1	Monday through	Spring recess
Apr. 17	Sunday	
May 31	Friday	Classes end

#### Commencement

June 6	Thursday	
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#### Summer Session

June 24	Monday	Classes begin
July 4	Thursday	Independence Day recess
Aug. 1	Thursday	Classes end

### 1985

#### Fall Semester

Sept. 5	Thursday	Classes begin
Nov. 28	Thursday through	Thanksgiving recess
Dec. 1	Sunday	
Dec. 20	Friday	Classes end

### 1986

#### Mid-Year Study Program

Jan. 6	Monday	Classes begin
Jan. 24	Friday	Classes end

#### Spring Semester

Jan. 27	Monday	Classes begin
Mar. 24	Monday through	Spring recess
Mar. 30	Sunday	
May 30	Friday	Classes end

#### Commencement

June 5	Thursday	
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#### Summer Session

June 24	Monday	Classes begin
July 4	Friday	Independence Day recess
July 31	Thursday	Classes end

\*Subject to change

## 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 toward 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 the 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 Elmora Avenue (Route 439). Continue to Route 82 (Morris Avenue). Campus is on the 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.

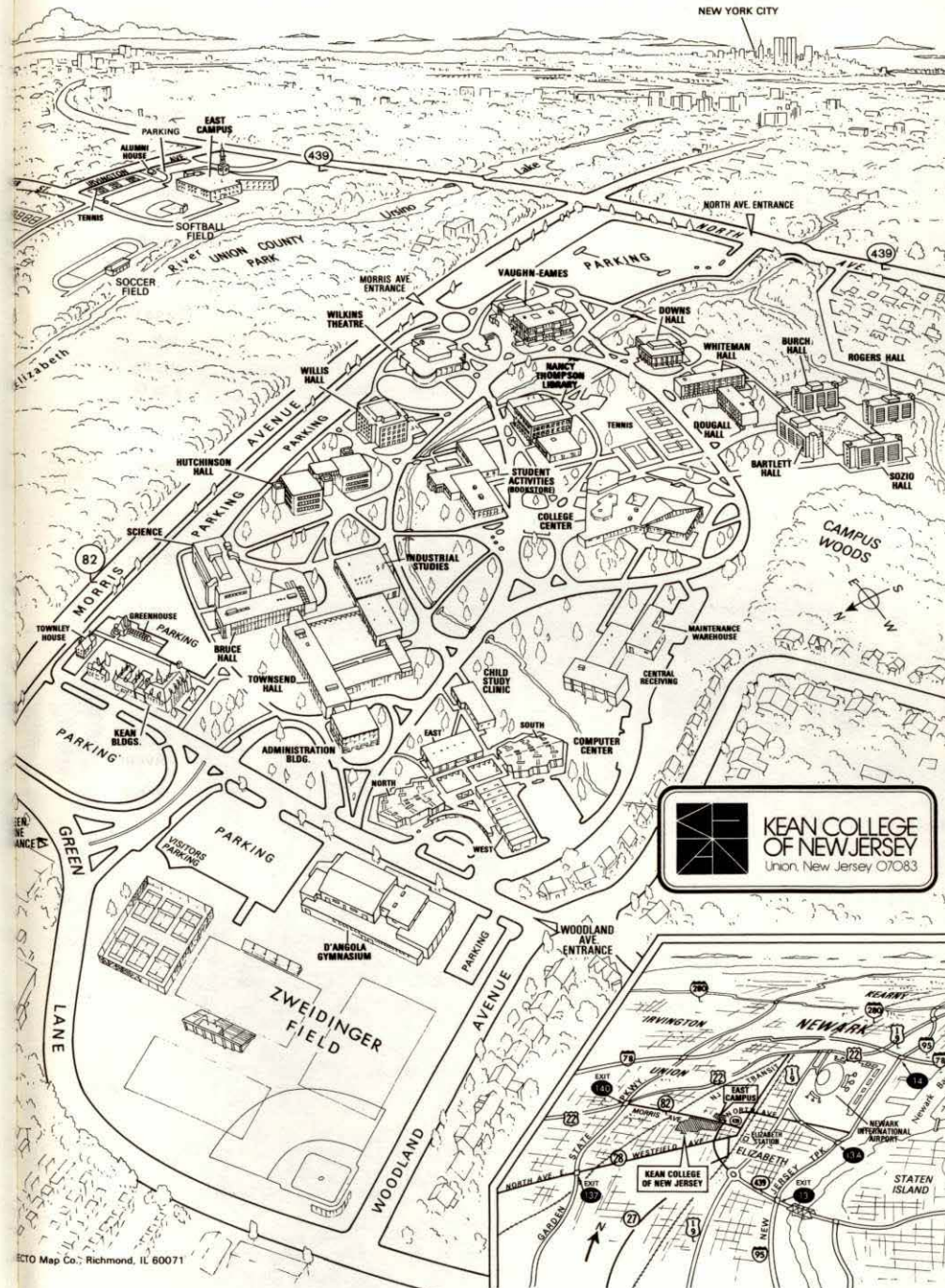
### By TRAIN:

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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ECTO Map Co., Richmond, IL 60071



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