

NEW YORK STATE COLLEGE OF HUMAN ECOLOGY

ADMINISTRATION

Francille M. Firebaugh, dean

Charles McClintock, associate dean

Lucinda A. Noble, associate dean; director of Cornell Cooperative Extension

Carol L. Anderson, assistant dean; associate director of Cornell Cooperative Extension

Christine Olson, assistant dean; assistant director, Cornell University Agricultural Experiment Station

Brenda Bricker, director, admissions

Mary Rhodes, registrar and director, student services

FACILITIES

The College of Human Ecology, through its teaching, research, and extension programs, seeks to understand and improve the relations of people to their environments, especially to those settings most critical for growth and development—home, school, work, and leisure. Faculty and students examine individuals in relation to their family, neighborhood, workplace, and community, seeking a balance between theory and practice that will improve the quality of everyday life.

The college is housed in Martha Van Rensselaer Hall. The Division of Nutritional Sciences, an intercollege division supported jointly by this college and the College of Agriculture and Life Sciences, has space in Savage Hall and in Martha Van Rensselaer Hall.

The buildings include administrative and faculty offices, classrooms, auditoriums, and lecture halls; wet chemistry and biochemistry laboratories for nutrition, food science, and textile science; experimental food laboratories; design studios and a computer-aided design laboratory; woodworking shops; experimental observation rooms with one-way vision screens and sound-recording equipment; educational television studios; and a printing and reproduction facility. Also included are learning resource centers for career planning and academic study, a historical costume collection, a human metabolic research unit, a research animal facility, cold rooms, a constant temperature and humidity laboratory, and an experimental nursery school.

Specialized equipment for teaching and research includes biochemical and chemical instruments for spectroscopy, chromatography, radioisotope analysis, electrophoresis, microscopy, and ultracentrifugation; physical testing equipment; and cameras, videotape, and sound recording equipment.

DEGREE PROGRAMS

	Degree
Biology and Society	B.S.
Consumer Economics and Housing	B.S.
Design and Environmental Analysis	B.S.
Human Development and Family Studies	B.S.
Human Service Studies	B.S.
Nutritional Sciences	B.S.
Policy Analysis	B.S.
Textiles and Apparel	B.S.
Individual Curriculum	B.S.

DIVISION OF STUDENT SERVICES

B. Bricker, director, Office of Admissions

W. Graham, director, Office for Planning and Information Systems

Mary Rhodes, college registrar and director, Office of Student Services

Persons interested in undergraduate study in human ecology should contact the Office of Admissions, 172 Martha Van Rensselaer Hall. Those interested in graduate study should contact the graduate field representative identified among the faculty of each department. Department faculty are listed at the beginning of the course descriptions for each department.

Matriculated students can find assistance with matters of academic credit and graduation requirements in the Office of the College Registrar, N101 Martha Van Rensselaer Hall. Assistance with academic advising, career planning and placement, and personal counseling may be obtained from the Office of Student Services, N101 Martha Van Rensselaer Hall.

The Students

The College of Human Ecology undergraduate enrollment is 1,279 with 56 percent in the upper division. About 340 students are graduated each year, and last year 239 freshmen and 133 transfer students matriculated. One hundred faculty members serve as advisers for undergraduates.

The college's undergraduate admissions committee selects applicants who are academically well prepared and appear most likely to profit from the college's various curricula. Admission is selective. In 1989, 84 percent of freshmen were in the top 10 percent of their high school graduating classes. Fifty-six percent had verbal Scholastic Aptitude Test (SAT) scores over 600 and 85 percent had math scores of 600 or better.

Approximately 73 percent of the student body comes from New York State, with the remainder from other parts of the United States and abroad. Twenty-two percent were identified as members of minority groups in 1990.

Approximately 233 graduate students have members of the college's faculty chairing their special committees. The college awarded 57 master's degrees and 43 doctorates last year.

ACADEMIC PROGRAMS

Majors

Each department offers a major, and within most departmental majors there are specific options. The college also offers two interdepartmental majors. Selecting a major means choosing one option in one department. Although a student may satisfy the requirements of more than one major option, he or she is officially certified to graduate under only one. (The college urges students who satisfy more than one major or option to make note of this in the credentials they file in the university's Career Center and to seek recommendations from faculty associated with the options completed.) Majors include the following options.

Consumer Economics and Housing (CEH): The department supervises the department major and the policy analysis major.

Design and Environmental Analysis (DEA): interior design, facility planning and management, human environment relations.

Human Development and Family Studies (HDFS): does not have separate options. Courses focus on cognitive, social, and personality development; phases of development; and family studies and life course. The department administers an honors program for selected students.

Human Service Studies (HSS): does not have separate options. Courses focus on three content clusters: human service environments, programs, and processes. A professional internship and senior seminar are required. Students may meet the requirements of an accredited bachelor's degree program in social work.

Nutritional Sciences (NS): the department supervises the department major. (By careful planning, students may also meet the minimum academic requirements of The American Dietetic Association.) The department administers an honors program for selected students.

Textiles and Apparel (TXA): apparel design, apparel-textile management, fiber science.

Interdepartmental Major in Biology and Society (ID-BS).

Interdepartmental Major in Policy Analysis (ID-PA).

Individual Curriculum: It is possible to develop an individual program of study if none of the above programs fits particular educational and career objectives.

Changing Majors

Because any student's interests and goals may change as new options emerge, the college provides ways for students to change their majors. When a declared major no longer seems to meet a student's educational goals, a counselor or faculty adviser may be able to point out alternatives. If the student decides to make a change, a change-of-major form (available from the Office of Student Services, N101 Martha Van Rensselaer Hall) ensures that the change is sent to the department in which the student wishes to major, so an adviser can be assigned to the student.

Students of Mature Status

The college recognizes that students who interrupted their formal education and are returning to school have needs different from those of the average undergraduate. To facilitate the education of mature students, defined as those twenty-four years old or older at matriculation, the college has adopted certain procedures specifically for that group.

Mature students are permitted to enroll for as few as 6 credits without petitioning and are also permitted to extend their residency beyond the normal eight terms.

It is highly recommended that mature students contact the director of the Continuing Education Information Service, B12 Ives Hall, for information on resources available through that office.

Special Students

Students eligible for special status are those visiting from other institutions and interested in particular programs in the college; those with a bachelor's degree preparing for graduate study or jobs and careers in human ecology-related fields; or those who have interrupted their education and are considering completing degree programs. Students accepted in the non-degree status of special student may enroll for a maximum of two semesters. During the second semester of attendance, a special student must either apply for admission as a transfer or plan to terminate studies in the college at the end of the semester.

Special students are expected to take a minimum of 12 credits each semester and to take one-half to two-thirds of their work in the state divisions of the university. Work taken while a person is classified as a special student may be counted toward the requirements of the bachelor's degree.

Empire State Students

Occasionally a student who is completing requirements for a degree through the Empire State College Program is interested in taking a human ecology course. This can be done by registering through the Division of Summer Session, Extramural Study, and Related Programs, B12 Ives Hall. All rules of the extramural division apply, and registrations will be accepted only on a space-available basis and with the written approval of the course instructor.

At the time of registration, Empire State College students provide the extramural division with a completed copy of Empire State College's notification of cross-registration form number, SA-22, F-031, to verify enrollment in Empire State College. Such students will be charged 25 percent of the standard extramural tuition per credit.

CONSUMER ECONOMICS AND HOUSING

The behavior of people as consumers and family members and their interactions with private markets and public sectors of the economy are increasingly important as the economy becomes more service-based. One result has been an increasing demand from business and government for trained individuals who understand consumers, families, the markets in which they deal, and how public policies affect the markets and through them consumers and families. The demand has been sufficient to elevate salaries for well-trained individuals.

The consumer economics and housing major provides such training. The major combines economics with statistics, sociology, and family resource management to study how consumer markets work, how firms and consumers behave, the role governments play in consumer protection, how functions shift between households and markets as prices, incomes, social values, and legislation change, and how changes in the family affect consumer markets. Students interact with the faculty and with each other both in the classroom and in field-based learning experiences in the Ithaca area, New York City, Washington, or abroad.

Graduates in consumer economics and housing are prepared for a wide variety of consumer- and family-related positions in business and government. The major also provides an excellent foundation for further studies in economics, law, graduate business, and policy analysis.

The consumer economics and housing major is flexible. Students are assigned a faculty adviser by the advising coordinator unless the student wants a particular adviser. The earlier the decision to major in CEH is made, the greater the freedom to develop a program to meet individual educational or career goals. Transfer students are urged to discuss their plans with a faculty adviser as soon as possible. An appointment may be made directly with an adviser or with the advising coordinator, Peter Zorn.

DESIGN AND ENVIRONMENTAL ANALYSIS

The Department of Design and Environmental Analysis (DEA) is concerned with planning, designing, and managing interior environments to satisfy human needs. Most people spend over 90 percent of their lives inside buildings. Those settings have substantial and far-reaching effects on the quality of our lives. The processes for creating and maintaining the built environment face enormous challenges. These include frequent social and organizational change, technological advances, new building methods, and finite resources. The program in DEA is dedicated to preparing professionals who can meet these challenges.

Diverse faculty backgrounds and teaching approaches help students to develop their multidisciplinary problem-solving and creative abilities, aesthetic judgment, and analytical thinking. Excellent laboratory, shop, studio, and computer facilities permit exploration of innovative concepts for the design and management of interior environments. The relationship between people and their physical

surroundings is explored through a combination of academic courses, field experience, and applied research. Examples of student class projects and faculty work are frequently on display in the department's gallery. The DEA Resource Center includes books, journals, newsletters, and materials samples for student use.

Options

The department offers undergraduate education in three professional areas: interior design, facility planning and management, and human-environment relations. The interior design option is accredited by the Foundation for Interior Design Education Research (FIDER).

To take full advantage of the course sequences and electives, it is important to select an option as early as possible. This is particularly true in the interior design option. Transfer students in the interior design option may need one or two extra semesters to complete the program.

Option I: Interior Design

The interior design option prepares students for professional careers in the planning and design of interior spaces and associated products. The program emphasizes a problem-solving approach based upon knowledge of buildings and their associated systems, furnishings and interior products, human-environment relations, and design principles. Some students combine this program with one of the other options.

Careers are available in interior design and space planning, interior architecture, facility planning, interior product design, and housing. This program also serves as an excellent preparation for graduate study in interior design, facility management, architecture, and product design.

Option II: Facility Planning and Management

This option is designed to prepare students for professional careers in facility management. The program focuses on the planning, design, and management of facilities for large, complex organizations such as corporations, health-care institutions, research and development laboratories, and universities. Facility planning and management is a basic management function that coordinates and integrates information and expertise from areas such as planning and design, real estate and business administration with human factors, ergonomics, environmental psychology, telecommunications, and building operations for the purpose of developing and managing facilities that support individual and organizational effectiveness.

Excellent career opportunities exist in the facility management divisions of private companies, institutions, the health-care industry, and with private consulting firms offering facility management services. The program is also a good preparation for graduate study in business, planning, or one of the design disciplines and for advanced study in facility planning and management.

Option III: Human-Environment Relations

Human-environment relations focuses on the interaction between people and their physical surroundings. This option seeks to expand understanding of how the environment affects human perception, cognition, motivation,

performance, health, safety, and social behavior, and to use that knowledge to help architects, planners, interior designers and product designers to plan, design, and manage safe and effective environments. The effect of human capabilities or characteristics such as family structure, life-style, social class, and stage in life cycle on environmental needs and requirements is also a focus of the program. Career opportunities are available in design firms and in urban planning and other public agencies as well as in the facility management and product design division of private companies. Human-environment relations is good preparation for graduate study leading to a Ph.D. degree in the social sciences and a career in academic or other research-oriented settings in either the public or private sector. It can also serve as the basis for graduate study in an environmental planning or design discipline such as architecture, facility planning and management, interior design, landscape architecture, or city and regional planning. Electives in the social sciences and in research methods and statistics are encouraged.

Academic Advising

All DEA majors are matched with a faculty adviser during their first semester by advising coordinator Michael Boyd, in 3M13A Martha Van Rensselaer Hall.

Consultation with faculty advisers about future goals, departmental requirements, sequences of courses, and electives inside or outside the college to meet special needs helps students develop their programs. Students majoring in interior design, especially, must begin early to plan and collect materials for a portfolio of their work, which is necessary for many positions and for application to graduate schools. Faculty advisers can make recommendations on what to include. Students are free to change advisers. Although advisers must sign the schedule card during course enrollment each term, it is the student's responsibility to keep track of his or her courses and to make sure that the program meets graduation requirements for the major and the college.

Ownership and Exhibition of Student Work

All design work done in studios as part of an academic program is the property of the department until it has been released by the instructor. The department is not responsible for loss or theft of student work.

HUMAN DEVELOPMENT AND FAMILY STUDIES

The programs of the Department of Human Development and Family Studies (HDFS) are concerned with how people develop throughout the life course. Of equal interest is the family as a context for individual development and as a part of the larger structure of society. An ecological perspective—the person in interaction with complex biological, situational, and environmental conditions of everyday life—is featured in many departmental courses.

Major social science disciplines concerned with the development of individuals and with the structure and function of families are represented among faculty members with backgrounds in psychology, sociology, history, and

education. The department's programs of instruction, extension, and research provide diverse opportunities for students to prepare for career development or to acquire the bases for graduate study. Many of the department's majors are interested in clinical psychology, counseling, law, medicine, special education, or university teaching and research that require some graduate study. Others may go directly into employment in business or industry or take bachelor's-level positions as youth counselors, day-care workers, personnel assistants, research technicians, social program assistants, etc.

Academic Advising

Every HDFS major is assigned a faculty adviser in the department, and advising conferences are required at least twice a year. An adviser helps plan the course work and consults with the student about career options. The adviser can also help students find special opportunities for individual study or for experience outside the classroom. Although advisers must sign course schedule cards, it is the student's responsibility to keep track of his or her courses and to make sure that the program meets graduation requirements for the major and the college. Students who need an adviser or who want to change advisers for any reason should check with the department office, in NG14 Martha Van Rensselaer Hall.

Curriculum

HDFS majors usually combine a broad liberal education with a more specialized focus on either a problem of human concern or a substantive area of concentration. Areas of specialization available within HDFS include infant, child, adolescent, and adult development; abnormal development; family studies; and social-personality and cognitive development. Some students combine an HDFS major with premedical or prelaw training or with specialized work in an area outside the department, such as communication arts, nutrition, business, or government.

During their first two years, students are expected to combine a variety of liberal arts courses with HDFS core courses HDFS 115 (Human Development); HDFS 150 (Families and the Life Course); and intermediate courses in phases of development, cognition, or social-personality. This encourages diversity yet ensures a common base for upper-level courses in the major. Courses within the department vary from lectures and discussions to research and independent study.

All students are encouraged to participate in an experiential learning course in their particular area of interest. The course may focus on a naturalistic or laboratory setting (e.g., nursery school, youth detention center, retirement home) or on a research setting (e.g., interviewing, administering tests, observing behavior).

An HDFS major also takes a number of upper-level departmental courses in particular areas as described in the Student Guide. Additional information is available in the HDFS Office of Undergraduate Education, NG14 Martha Van Rensselaer Hall.

Math Requirement

HDFS majors are required to fulfill a math requirement by passing Education 115 or demonstrating equivalent competency by scoring 26 or above on the Cornell math assessment exam taken during orientation week.

Teaching Certification Option

The cooperative Cornell HDFS–State University College at Cortland education program is designed to meet New York State certification requirements for teaching grades N–6 while simultaneously earning the Cornell bachelor's degree in HDFS. The program requires that the student spend three years at Cornell and the senior year and part of two summers registered in absentia at SUC Cortland. Students keep their Ithaca housing, since Cortland is just 18 miles away and the one-semester teaching internship is based in Ithaca.

This highly selective undergraduate program offers an alternative to the option of seeking a master's degree in education after the undergraduate studies at Cornell have been completed. Students interested in the program should discuss the merits of each option with the Coordinator of Undergraduate Education in NG09 MVR.

Course work at Cornell must be carefully planned. Elective options will be somewhat limited because it will be necessary to consider the twenty-seven Cortland credits plus three education courses at Cornell as electives. More information is available in the HDFS Office, NG14 Martha Van Rensselaer Hall.

Honors Program

The honors program leading to a Bachelor of Science degree with honors in HDFS is designed to provide in-depth research experience for students interested in graduate school and to challenge students who enjoy research. Interested students should consult the coordinator of the honors program during their sophomore year.

A grade-point average of 3.3 is recommended for entry into the program, although promising students who lack the grade-point average also may apply if they can otherwise demonstrate their potential for honors work. Honors students must take an approved course in research design, preferably in the sophomore or junior year.

Students spend part of their junior and senior year working on a thesis under faculty supervision, completing the project before March 15 of the senior year when the student's oral examination is held. More information is available in the department's Office of Undergraduate Education, NG14 Martha Van Rensselaer Hall.

Language Competency

The HDFS faculty believe that competence in a foreign language is an essential liberal arts goal for the educated HDFS student. Such exposure opens another culture for exploration at both the instrumental and expressive levels, helps students understand language itself, and encourages knowledge of language as a fundamental intellectual tool and as an essential communicative asset with potential applied benefits. While this is not a graduation requirement, it is strongly recommended that HDFS majors develop competency in a second language.

The following departments teach foreign languages or literature or both in the College of Art and Sciences: Africana Studies and Research Center, Asian Studies, Classics, German Literature, Modern Languages and Linguistics, Near Eastern Studies, Romance Studies, and Russian Literature.

Work toward foreign language competency should be undertaken in the freshman and sophomore years. Please note that high school or transferred language courses can be used for advanced standing credit, even if the student does not want to do any further language work at Cornell.

Speakers of languages other than English may be awarded credit for their bilingual ability. Their English achievement is measured by the Test of English as a Foreign Language (TOEFL), a requirement for matriculation. Their performance in one other language learned outside the academic environment is measured by examination, and evidence of abilities in reading and writing, as well as speaking, is required. A maximum of 6 advanced placement credits are granted to students who demonstrate PROFICIENCY equivalent to course work at the 200 level or above at Cornell. Students may not earn credit both for PROFICIENCY in their native language and for studying English as a second language at Cornell.

Language Course Placement and Credit

Students who have had two or more years of high school study in a language may not register in any course in that language without being placed by examination. Nor may transfer students register without examination, even though they may have been given credit for language work elsewhere.

The type of examination depends on the language course and the level of achievement:

- 1) French, German, Italian, Russian, and Spanish courses: the standardized College Placement Test (CPT). Entering students who have not taken the CPT in high school and who want to continue their language study must take the CPT at Cornell during orientation week. Students may retake this examination at Cornell if they have studied the language a year or more since last taking the test. To do this, students register with the Academic and Career Counseling services, 203 Barnes Hall, and pay a fee.
- 2) Latin (all courses except 105 and 107): departmental examination.
- 3) Greek (all courses except 101, 104, and 111): departmental examination.
- 4) Arabic: departmental examination.
- 5) Hebrew: departmental examination.
- 6) Other languages: special examinations: see the professor in charge.
- 7) High achievement (students with a CPT score of 650 or better in French, German, Hebrew, Italian, Russian, and Spanish): the Cornell Advanced Standing Examination (CASE).

An entering or continuing student with high achievement scores should take the Cornell Advanced Standing Examination (CASE).

See section on College of Arts and Sciences, Language Requirement, for further information.

HUMAN SERVICE STUDIES

Faculty in the Department of Human Service Studies (HSS) prepare students for a variety of careers in programs that serve individuals, families, and the community. HSS graduates work in schools, social services, Cooperative Extension, health and mental health programs, and community development agencies.

They are employed in such positions as counselors, school teachers, social workers, community educators, planners, and researchers. Many HSS graduates pursue graduate study in law, education, medicine, social work, health, and a variety of social sciences. HSS majors come from diverse backgrounds, but they share a common goal of wanting to serve the needs of others.

HSS is unique in that it integrates a broad spectrum of courses offered by several departments and colleges and focuses them for professional practice in the human services. All HSS students take courses that provide a knowledge base in three content clusters:

1. Human service environments – course choices provide students with knowledge about the working context within which the human service provider functions, including a base in social psychology, group and organizational behavior, social system perspectives, power and leadership.
2. Human service programs – courses for this requirement are selected to provide the student an introduction to historical and current program models, barriers to service delivery, developments in health, education and social welfare—all in the context of both the client and the work done by the human service professional.
3. Human service processes – courses for this requirement are designed to provide students with methods to work effectively in human service programs and environments. Courses include planning and development content, program delivery modes, decision-making processes, basic social planning methods, and program evaluation.

All students take a professional internship and an integrative senior seminar. Regardless of their specific career goals, students acquire a broad understanding of human services and the ways they can collaborate to improve the human condition. In addition, students specialize in an area of concentration such as health, education, social welfare, policy, planning, or evaluation.

Academic Advising

It is important for a student who is interested in majoring in Human Service Studies to declare that major as early as possible. Once that is done, students work with their assigned faculty advisers to plan course work and related educational activities. Students are free to change advisers. Although faculty advisers must sign the schedule card during course enrollment each term, it is the student's responsibility to keep track of courses and make sure that the program meets graduation requirements of the major and the college.

Social Work Program

The undergraduate social work major at Cornell has as its principal educational

objective the preparation of students for beginning professional social work practice. In addition, the major prepares students for graduate education in social work and contributes to the enrichment of a college education by helping students understand social welfare needs, services, and issues.

The social work program is accredited by the Council on Social Work Education. Students who complete all requirements are eligible to apply for beginning-level employment as professional social workers or to apply for advanced standing in a graduate school of social work.

TEXTILES AND APPAREL

The Department of Textiles and Apparel (TXA) focuses on the use of textiles and fibrous materials for apparel, durable and nondurable household goods, composites, geotechnical, and biomedical applications. Programs in the department, in keeping with the overall mission of the college, emphasize the use of materials to meet human needs. The curriculum includes the application of design principles, physical and materials science, economics and marketing, government policy/regulation, management of products and their delivery, and technological developments.

Practical problem-solving skills are developed in the department's laboratories and studios. Academic course work is further enhanced by field and international experiences. Gallery space provides the setting to display design work. In addition, the Cornell University Costume Collection, housed in the department, provides a valuable resource; items from the collection are made available to students for classroom and special-study use.

Academic Advising

All TXA majors are matched with a faculty adviser by the advising coordinator, S. Kay Obendorf (208 Martha Van Rensselaer Hall). Students are strongly urged to discuss their goals, course selection and sequence, electives, and career plans with their faculty adviser. Students in apparel design must begin early to work with their advisers to develop a professional portfolio of their work. Students are free to change advisers; changes must be recorded with the advising coordinator. Although advisers must sign the schedule card during course enrollment each term, it is the student's responsibility to keep track of his or her courses and to make sure that the program meets graduation requirements for the major and the college.

Ownership and Exhibition of Student Work

All apparel design work done as part of the academic program is the property of the department until it has been released by the instructor. Certain exceptional work may be retained by the department to exhibit for academic purposes. The department is not responsible for loss or theft of student work.

Course Fees

No grade will be given in a course unless the course fee has been paid by the last week of classes.

Key Policy for Apparel Design Studios

To allow design students access to studios for out-of-class work at any hour in which Van Rensselaer Hall is open, and to provide security for the studios, the department has instituted a key policy. Each student in TXA 040, 145, 264, 367, 375, 425, 446, and 465 who submits a security deposit of \$50 will be given a key to the studio in which his or her class is held. In the event that *any* key is lost, the studio will be rekeyed, and the cost will come from the security deposit of the student who lost the key. At the end of each semester, the studio will be assessed for missing and damaged equipment. The total amount assessed will be deducted from the security deposits of all students assigned to that studio. If all keys are returned and no damage or theft is reported, the security deposits will be returned at the end of the semester. Students who do not wish to work in the studio outside of class hours may elect not to have a key and therefore will not be required to submit a security deposit. Under no circumstances will these students be admitted to the studio outside of class hours.

Options

Students may select options in apparel design, apparel-textile management, or fiber science. The curriculum is based on manipulation of form, color, and the physical characteristics and structures of fabric to solve functional and aesthetic apparel problems; the application of economic and marketing principles to consumer and industry problems in the textile-apparel sector; and the study of chemical, physical, and engineering properties of fibrous structures and polymers. Depending on previous course work, transfer students may need one or two extra semesters to fulfill the requirements of the major.

Option I: Apparel Design

The study of apparel design includes both functional and aesthetic considerations in the design of body coverings. The program emphasizes a problem-solving approach that enables the student to bring a background in apparel, textiles, and human factors to the design process.

Option II: Apparel-Textile Management

Apparel and textile management combines the fields of apparel and textiles with those of economics, business management, and organizational policy. Students combine theory with case studies to find solutions to everyday problems. Course work is drawn from many interrelated disciplines, including textiles, apparel, economics, business management, and communication, as well as practical field experiences. This provides students with the experience of working with professionals from a wide variety of disciplines. Students often combine this option with either Option I (Apparel Design) or III (Fiber Science).

Option III: Fiber Science

Applications for textile structures include advanced engineering composites, protective clothing for industrial and military environments, and biomedical materials, as well as the more traditional applications found in apparel and home furnishings. The fiber science option provides a strong base in mathematics and the physical sciences combined with supporting courses in engineering, consumer economics, and the social sciences.

Career Opportunities

Graduates of programs in the Department of Textiles and Apparel have found challenging employment within the textile and apparel sector, in independent and government-sponsored research, and in community organizations. Recent graduates are working in the fields of new product development, design, management, engineering, communications, and marketing. In addition, the program prepares students for graduate or professional study in fiber and polymer science, textile marketing, apparel design, textiles, or business and management.

INTERDEPARTMENTAL MAJOR IN BIOLOGY AND SOCIETY

Biology and society is a multidisciplinary program for students with special interests in such problems as genetic engineering, environmental quality, food and population, the right to medical care, and the relation between biology, society, and ethics and/or public policy, as well as for students who plan postgraduate study in management, health, medicine, law, or other related fields.

Because the biology and society major is multidisciplinary, students must attain a basic understanding of each of the several disciplines it comprises, by including introductory courses in the fields of biochemistry, chemistry, mathematics, genetics, ecology, ethics, and history. In addition, majors are required to take core courses in biology and society, a set of electives, and a special senior seminar.

Course work in the College of Human Ecology must be taken in two of the following three concentrations: human development and the environment, health, or social policy and human services. The other basic requirements of the college must also be met. Programs incorporating those required courses are designed in consultation with a faculty adviser to accommodate each student's individual goals and interests. For further information on the major, including courses of related interest, specific course requirements, and application procedures, see the Human Ecology Student Guide.

INTERDEPARTMENTAL MAJOR IN POLICY ANALYSIS

As our economy has become more complex, so too has the role of the public sector in our society. An understanding of governmental processes and of how public policies affect the several segments of society has become more important. Individuals with the ability to evaluate government programs critically and trace their impacts quantitatively to consumers, families, business, and industry are in demand at all levels of government and business. Supervised by the Department of Consumer Economics and Housing, the policy analysis major uses the resources of the college and the university to trace and estimate government's influence in the economy.

In the policy analysis major, the student gains a basic understanding of the role of government in the economy and the political environment in which policy is made. Students concentrate on learning the economic, cost/benefit, and

statistical skills necessary to evaluate the performance of government programs and policies—consumer policy, housing policy, welfare policy, environmental policy, foreign policy, for example. Because experience in legislative, regulatory, and public administration activities is helpful in providing the context for policy analysis, involvement in Field and International Study, Cornell-in-Washington, and Cornell Abroad is encouraged. The specific requirements for policy analysis are listed under the interdepartmental majors.

Graduates in policy analysis are attractive to business and industry as well as to government because of their analytical skills in economics and statistics, and their knowledge of political processes. Students also use the major for further work in policy studies, law, and business administration.

The policy analysis major is flexible and allows individual program planning. The faculty adviser assigned by the undergraduate advising coordinator can help develop a program to meet individual educational and career goals. This is particularly important in constructing the appropriate policy concentrations. Transfer students are urged to contact their faculty adviser as soon as possible. An appointment may be made directly to talk either with an adviser or with the advising coordinator, Peter Zorn.

INDIVIDUAL CURRICULUM

A student who has educational and professional objectives that cannot be met satisfactorily within the framework of existing majors in the College of Human Ecology may petition to develop an individual curriculum. To be approved, the curriculum must be within the focus of the college and be interdisciplinary in design, include at least 40 credits in human ecology courses, and not exceed the normal number of credits allowed in the endowed divisions. A student develops an individual curriculum in consultation with faculty advisers from at least two subject-matter fields and the program coordinator.

Such a program of study should encompass a substantial part of the student's undergraduate education and must include at least three semesters. For this reason, a request to follow an individual curriculum should be made as early as possible and must be made before the second semester of the junior year.

If an individual curriculum seems advisable, Patti Papapietro, the individual curriculum coordinator in the Office of Student Services, N101 MVR, will provide direction in formally developing a program of study. Although the individual curriculum coordinator must sign the course enrollment schedule during course enrollment each term, it is a student's responsibility to follow the curriculum as planned or to have any necessary revision approved in writing by his or her advisers and the program coordinator in advance of the program change.

SPECIAL OPPORTUNITIES

Several special programs allow students to receive academic credit for fieldwork and internship experience, to study in absentia, or to enter particular graduate programs after the junior year.

Teacher Certification in Home Economics

Students can combine any major in the college with additional course work that leads to a certificate of qualification for teaching home economics (kindergarten through twelfth grade) in New York State and a number of other states.

Human Ecology Field and International Study

Field Study

Field study enables students to learn from participation in community and organizational settings and from structured reflection on that experience through discussion, reading, and writing. This process of integrating conceptualizing issues with practice distinguishes field study and provides the rationale for granting academic credit.

The Human Ecology Field and International Study Office, 159 Martha Van Rensselaer Hall, offers college-wide, prefield preparation and field-based courses with an interdisciplinary problem-solving approach to social issues. Field placements are located in the Ithaca area, New York City, Albany, Washington, D.C., Boston, and elsewhere. Courses are open to registration by all Cornell students.

International Study

Study abroad provides students with an opportunity to add an international dimension to their human ecology program through course work focusing on international problems and intercultural understanding and through sponsored programs of study abroad for which credit is available. Course work in a foreign institution will, in general, be planned to increase knowledge of the people and institutions of the country concerned; fieldwork may provide guided experience in family, community, or agency situations of the country concerned and in an area related to individual student interest in human ecology.

Opportunities for study abroad are available for human ecology students in several ways: through Cornell Abroad, through U.S. college-sponsored programs abroad, and through direct enrollment in a foreign university. In each case, students will remain registered at Cornell during the overseas study, and their study abroad will be credited as part of their Cornell degree program. Applications for study abroad should be submitted to the study-abroad adviser in the Field and International Study Office.

University Programs

Africana Studies and Research Center

Courses taken in the Africana Studies and Research Center (ASRC) may be used to meet some of the distribution requirements of the college. Up to two courses or 8 credits of such courses may be applied toward the 12 additional credits in natural and social sciences (section I-C of the graduation requirements) or

toward the 9 additional credits in communication, analysis, and the humanities (section II-B). This allowance is in addition to the freshman writing seminar credits that may be taken in ASRC. Other courses taken in the center count as endowed division electives.

A list of ASRC courses approved to meet distribution requirements or as electives is available in the Office of Student Services.

Double-Registration Programs

Johnson Graduate School of Management

A limited number of highly qualified students from Cornell undergraduate divisions, including human ecology, may be accepted by the Johnson Graduate School of Management after the junior year. Students need the approval of the admissions office and the registrar in the College of Human Ecology. Accepted students should be aware that if the management course work taken in the senior year is in excess of the 21 additional credits allowed in the Cornell endowed divisions, they will be charged for the additional credits on a per-credit basis. Students entering this program must also complete requirements for the degree and major in Human Ecology.

Law School

A small number of highly qualified applicants may be admitted to the Cornell Law School after only three years of undergraduate education. The requirements for admission under these circumstances are more stringent than for acceptance after four years of undergraduate study. Applicants must present outstanding qualifications and strong professional motivation. The junior-year applicant follows the ordinary application procedures for Cornell Law School admission. Interested students should contact the Law School director of admissions to discuss the extraordinary admissions criteria. Since students accepted to this program will be spending their senior year in the Cornell Law School, they need to plan ahead to ensure that distribution requirements for the B.S. degree from the College of Human Ecology will be met. Successful applicants need the approval of the college registrar.

Cornell Medical College

A limited number of highly qualified students from three Cornell divisions, including the College of Human Ecology, may be accepted by the Cornell Medical College after the junior year. To be considered for this program, the student must have completed 105 credits toward graduation by the end of the junior year. Students also need to plan ahead to ensure that distribution requirements for the bachelor of science degree will be met. Accepted students receive 15 credits toward the B.S. degree from their first year of study at the College of Medicine. Interested students should contact the Health Careers Program office in 203 Barnes Hall.

Off-Campus Programs

New York State Assembly Internships

A limited number of session internships with the New York State Assembly are available in spring semester to students of sophomore status and above who are enrolled in New York State colleges or universities. Human ecology students apply to the program through

the student's major department. The New York State Assembly also sponsors a summer internship. Further information about internship programs may be obtained through the Field and International Study Office, 170 Martha Van Rensselaer Hall.

Ithaca College

Full-time undergraduate students at Cornell may petition to enroll in courses at Ithaca College. Students pay regular tuition to Cornell and only special fees to Ithaca College, if any are charged. Students are allowed to register for one course a term and may take no more than 12 credits in four years. Exceptions will be granted to Cornell students enrolled in methods and practice-teaching courses at Ithaca College.

Cornell students are eligible to register only in Ithaca College courses that are relevant to their program and that do not duplicate Cornell courses. Acceptance of Cornell students into Ithaca College courses is on a space-available basis. Participation in this program is not guaranteed, and Ithaca College has the right to accept or reject students for any reason it deems appropriate. The program is available only during the fall and spring semesters.

For further information students should contact the college registrar, N101 Martha Van Rensselaer Hall.

Wells College

Full-time undergraduate students at Cornell may petition to enroll in courses at Wells College. Students pay regular tuition to Cornell and only special fees to Wells College, if any are charged. Students are allowed to register for one course a term and may take no more than 12 credits in four years. Exceptions will be granted to Cornell students enrolled in methods and practice-teaching courses at Wells College.

Cornell students are eligible to register only in Wells College courses that are relevant to their program and that do not duplicate Cornell courses. Acceptance of Cornell students into Wells College courses is on a space-available basis. Participation in this program is not guaranteed, and Wells College has the right to accept or reject students for any reason it deems appropriate. The program is available only during the fall and spring semesters.

For further information students should contact the college registrar, N101 Martha Van Rensselaer Hall.

PLANNING A PROGRAM OF STUDY

Academic Advising

When students decide to major in a particular department, they are assigned to a faculty adviser by the advising coordinator in that department. The advising coordinator can help match the student's needs with the special interests of a faculty member. Students are free to change advisers as their own interests change and should see the advising coordinator to discuss such a change. Faculty advisers and counselors in the Office of Student Services, N101 Martha Van Rensselaer Hall, are available to discuss course requirements and sequences, and electives inside or outside the college, as well as future goals and career opportunities. Although advisers must sign the

course enrollment schedule card during course enrollment each term, it is the student's responsibility to keep track of his or her courses and to make sure that the program meets graduation requirements for the major and the college. Advising coordinators in each department are happy to answer questions about the advising system and the undergraduate major. Students who are exploring alternative majors should work closely with college counselors who are available for planning and referral to department resource faculty.

Completing Graduation Requirements

A summary of record is kept for each student in the Office of Student Services, N101 Martha Van Rensselaer Hall. At fall registration each continuing student receives a copy showing which major and graduation requirements have already been met. It is important to check this summary and to bring any questions to the attention of staff members in the Office of Student Services. Although a student may complete the requirements of more than one major, he or she is officially certified to graduate under only one.

Electives

Students have individual objectives in choosing courses beyond the minimum requirements of the major. The university is diverse; the departments, centers, and special programs numerous; the fields of study almost unlimited. Counselors and department advisers are available to discuss which courses may interest students and round out their educations.

Students should consult the index of this Announcement for information on where different subjects are taught in the university. Some subjects are taught in more than one division of the university.

Foreign Language Study and Placement

Students who studied a foreign language before coming to Cornell and who want to continue must take either the College Entrance Examination Board (CEEB) achievement test in that language or a departmental language placement test. The latter is given during orientation week in September and again in December, January, and May. Students in human ecology who plan to work with non-English-speaking people in this country or abroad often find it necessary to be proficient in another language. Students who wish to study abroad may find that many study-abroad programs in non-English-speaking countries require the equivalent of two years of college-level language study. For more detailed information, see the section "Advanced Placement of Freshmen."

GRADUATION REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE

General

Students applying as undergraduates who do not have the required academic unit in biology, chemistry, or physics are required to show evidence of having met this deficiency before matriculation in the college.

Freshmen and sophomores are required to enroll in at least one human ecology course per semester.

To graduate, students need to

- 1) meet college credit and distribution requirements,
- 2) complete requirements for a major,
- 3) achieve a cumulative average of 1.7 (C-) or better,
- 4) fulfill residency requirements, and
- 5) complete two terms of physical education within the first two semesters.

College Requirements

These are the general areas of study and specific courses and credits required of every student in the college. The major you choose may require specific courses listed below or may leave you free to choose among certain courses listed there.

I. Natural and Social Sciences (24 credits)

- A. *Natural sciences* (6 credits) selected from Biological Sciences 101–103, 102–104, 105–106, 109–110; Chemistry 103–104, 207–208, 215–216; and Physics 101–102, 112, 201 or 202, 207–208. Biological sciences courses must be taken sequentially.
- B. *Social sciences* (6 credits) selected from economics (including CEH 110, 111 but excluding Agricultural Economics 221 and 310); psychology (including Education 110, 311, 317; DEA 150; HDFS 115, 216, 217, 218, 219); sociology (including rural sociology, CEH 148, and HDFS 150). *Do not take both Economics 101 and CEH 110; Economics 102 and CEH 111; Psychology 275 and HDFS 360; Rural Sociology 101 and Sociology 101; or Sociology 243 and HDFS 150; they are equivalent courses.*
- C. *Additional credits* (12 credits) selected from any subjects listed above or from courses in anthropology (except archaeology); Astronomy 101 or 102; biochemistry; microbiology; genetics and development; Geological Sciences 101; and government.

II. Communication, Analysis, and the Humanities (15 credits)

- A. *Freshman writing seminars* (6 credits) selected from courses listed in the freshman writing seminar brochure.
- B. *Additional credits* (9 credits) selected from art; communication; comparative literature; computer science; drawing; English; ancient or modern foreign languages; history; history of art; history of architecture; mathematics; music; Natural Resources 407; philosophy; statistics (students *should not take both* Industrial and Labor Relations 210 and Agricultural Economics 310, since the courses are substantially the same); theatre arts; DEA 101, 111, or 115; HSS 292; TXA 125, 375; and selected ASRC courses (list available in the Office of Student Services, N101 Martha Van Rensselaer Hall).

III. Human Ecology (40 credits)

- A. *Requirements for the major* (the number of credits required varies by major and option).
- B. *Fifteen credits to include course work in at least two departments outside the major*

with two courses totaling 6 credits minimum in one department and one 3-credit course in a second department. Not more than 3 credits of the 15 may be in special studies 400, 401, 402, either departmental or FIS (Field and International Study). HE 100 cannot be used to fulfill this requirement, nor can an undergraduate teaching assistantship designated "403."

IV. Additional Credits (41 credits)

- A. *Requirements for the major* (number of credits varies from 0 to 15 credits).
- B. *Electives* (number of credits varies from 26 to 41 credits).

Credit requirements in this section are met through courses in the *state divisions of Cornell*:

- College of Human Ecology (in addition to courses in sections I, II, and III)
- College of Agriculture and Life Sciences
- School of Industrial and Labor Relations
- College of Veterinary Medicine

and through courses in the *endowed divisions of Cornell*:

- Africana Studies and Research Center
- College of Architecture, Art, and Planning
- College of Arts and Sciences
- College of Engineering
- School of Hotel Administration
- Johnson Graduate School of Management

Courses in the endowed divisions in this section may not exceed a total of 21 credits.

V. Physical Education (2 credits)

Students who have successfully fulfilled these requirements should have completed at least two terms of physical education in their freshman year.

Related Policies

College course requirement. Freshmen and sophomores are required to enroll in at least one course in the College of Human Ecology each semester. Students who fail to comply with this requirement will be reviewed by the Committee on Academic Status for appropriate action.

Section II. Students who score 4 or 5 on the Princeton AP Exam are awarded 3 credits in English. Students who score 5 on the Princeton Exam are exempt from one freshman writing seminar in addition to the 3 English credits awarded.

In sections I, II, and III, the required credits listed are the minimums; credits taken in excess of those minimums (section I, 24 credits; section II, 15 credits and section III, 40 credits) count toward electives (section IV, 41 credits).

In sections I and II, courses specified by the major to meet the requirements in the sections may either be used as meeting the credit requirements in those sections or be applied toward the additional credits in section IV.

Section IV. *There is no limit to the number of credits that may be taken in the state divisions of Cornell, and therefore students may choose to take additional state credits and graduate with more than 120 credits.*

Credits in the endowed divisions in this section may not exceed 21. Any course taken in an endowed division for which a grade of F or U is received will be counted as part of the 21 endowed credits allowed.

Elective credits earned in Cornell's endowed divisions during summer session, in absentia credits, and transfer credits are counted as credits earned in the state divisions and therefore do not count as part of the 21 credits allowed in the endowed divisions in meeting the requirements of this section.

Not more than 21 credits in section IV may be taken in the endowed divisions of the university except under *both* of the following conditions:

- 1) The students must have senior status (must be in the final two semesters prior to graduation);
- 2) Payment must be made for each credit taken in excess of the 21 allowed, *whether or not the courses are passed*. For the precise fee per credit, students should call the Office of the Bursar.

Related Policies for Transfer Students

Section I-A. Transfers who are entering human ecology programs in consumer economics and housing, design and environmental analysis, human service studies (with the exception of the social work program), and policy analysis can satisfy the College of Human Ecology's natural science graduation requirements with any course(s) taken to meet a former college's natural science requirements as long as the course(s) transferred dealt with matter, energy, and their interrelationships and transformations. Courses in areas such as psychology and mathematics are not included, even though courses in these areas may have been taken to meet a former institution's natural science requirement.

Section II-A. Transfer students should have taken at least 6 credits in courses in English composition or in courses requiring substantial writing and offering instruction in writing equivalent to that offered in the freshmen writing seminar program at Cornell. Students who have not fulfilled this requirement before transferring must fulfill it after matriculation.

Section III-B. External transfer students can meet the requirement for course work outside the major in the College of Human Ecology by completion of either of the following:

- 1) 15 credits of work, outside their department, comprised of transfer credit and credit earned in the college,
- or
- 2) credits all taken in this college (no transfer credit is allowed to meet this requirement), on the basis of the status of the student's matriculation and prorated as follows:

*Cornell
Human Ecology
Credits to Satisfy
Work outside
the Major*

Status at Matriculation

Freshman (1-25 transfer credits)	15
Sophomore (26-55 transfer credits)	12
Junior (56-85 transfer credits)	9
Senior (86-120 transfer credits)	9

In both options, the courses must be in at least two departments outside the major with two courses comprising 6 credits in one department and at least one 3-credit course in a second department. Transfer students from other Cornell divisions are required to take the full 15 credits outside the major.

Note that transfer students are still responsible for completing a total of 40 human ecology credits under section III.

Section IV. Transferred credits for courses applied toward electives do not reduce the 21 Cornell endowed credits that students are allowed. Courses with a passing grade below C- will not transfer to meet human ecology degree requirements.

Section V. Transfer students who have had the equivalent of two semesters of college (and therefore enter as sophomores) are not required to take physical education at Cornell, regardless of whether they took physical education at their first college. Exemption or postponement for medical reasons must be cleared by Gannett Health Center. For further information about exemption from, or postponement of, physical education, students should consult the college registrar, Mary Rhodes, in N101 Martha Van Rensselaer Hall.

Related Policies for Freshmen

Section V. Freshmen are required to take two semesters of physical education during their freshman year. Freshman transfer students entering with 12 or more credits have their physical education requirement reduced to one term.

Residency Requirements

All college curricula are planned to fit within an eight-semester program. An average schedule of 15 credits a semester (in addition to physical education) is considered standard, and if pursued for eight semesters will provide the credits needed for graduation. If the student completes all the requirements—for the major, for distribution, for total credits, and for cumulative average—in fewer than eight semesters, the degree may be conferred at the end of the semester in which the last requirements are met. Students who plan to receive their degrees early should notify the college registrar at the beginning of the semester so that their names can be placed on the list of degree candidates.

Sometimes a student (particularly a transfer student) may need an additional semester to complete a program. To register for a semester beyond the eighth, the student submits a petition to the college registrar. The petition should detail the reasons for wanting to enroll for the extra semester and include a list of courses planned for the additional semester. Such requests are usually granted when there appears to be no feasible way for the student to complete the professional curriculum or the degree requirements without the extra semester.

Freshmen entering the college with 15 transfer credits have seven semesters in which to complete the degree. Transfer students must complete at least 60 credits at Cornell.

Mature students (those at least twenty-four years old at the time of matriculation) are not required to petition the college registrar for approval to study beyond the usual eight semesters.

Exemptions from Requirements

Students who want an exemption from a specific graduation or major requirement may petition, and approval may be given under certain circumstances. Full information about the petition process is given in the Human Ecology Student Guide. Petition forms are available in the Office of Student Services, N101 Martha Van Rensselaer Hall.

PROCEDURES

Course Enrollment

Course enrollment occurs in two steps. During enrollment students request courses, and at university registration students complete information forms, receive their schedules, and have their university IDs validated.

Students are expected to complete course enrollment during specified times each semester. Failure to do so carries a \$10 penalty, which can be waived only if circumstances are completely beyond the student's control. It is the student's responsibility to find out the dates of course enrollment.

Freshmen and transfer students enrolling for the first time in the university in the fall term enroll in their courses during the summer before they arrive on campus.

Continuing students enroll for fall semester in March or April, and enroll for spring semester in October or November preceding the beginning of the term.

Since new students starting at midyear do not have an opportunity to enroll in courses until after they arrive on campus, the college tries to reserve places for them in human ecology courses. The orientation schedule given to all new students lists a specified time for enrolling in such courses. For the first three weeks of the term, new students have an opportunity to add courses in other divisions of the university as well as in human ecology.

Enrollment

Course enrollment materials are mailed to each new student. Continuing students are notified of course enrollment dates by poster and by notices in the *Cornell Daily Sun*. Course enrollment materials are available for continuing students in the Office of Student Services, N101 Martha Van Rensselaer Hall.

Before or during course enrollment, students discuss their program plans with a department adviser or a college counselor in the Office of Student Services. For their advising sessions, students need the list of last-minute changes issued by the college registrar, and the *Course and Time Roster* issued by the university registrar. Students must have their course enrollment schedule signed by their departmental major faculty adviser, or if they have not declared a major, by a college counselor.

Students file completed enrollment materials by the announced deadline in the Office of Student Services, N101 Martha Van Rensselaer Hall.

The following policies and procedures apply to course enrollment.

Permission of Instructor

Certain courses may be taken only with the permission of the instructor as indicated in

Cornell University: Courses of Study. For such courses, students must obtain the instructor's permission before filing their course enrollment form during the pre-enrollment period. Instructors indicate their permission to take the course by signing the student's course enrollment form.

Students interested in taking a course in the Department of Art in the College of Architecture, Art, and Planning are required to register with the departmental secretary before enrolling in the course. Seniors who want to take an elective course in the Johnson Graduate School of Management are required to obtain permission of the instructor on a course authorization form that the student then files with that school's registrar in 312 Malott Hall.

Special Studies Courses

Each department in the College of Human Ecology (CEH, DEA, HDFS, HSS, DNS, and TXA as well as the Field and International Study Program) offers special studies courses that provide opportunities for students to do independent work not available in regular courses. One of those courses, designated 300, Special Studies for Undergraduates, is intended primarily for students who have transferred from another institution and need to make up certain course work.

The other special studies courses are 400, Directed Readings; 401, Empirical Research; and 402, Supervised Fieldwork. Those courses are normally taken by upperclass students, and work is supervised on an individual basis by a faculty member in the department in which the course is offered. It is important for students to use the appropriate course number (300, 400, 401, or 402) for a special project.

A student who wants to take special studies courses talks with the faculty member under whose supervision the study would be done and then prepares a plan of work. If the faculty member agrees to supervise the study, the student completes a multicopy special studies form, a multicopy description of the study to be pursued. The student obtains the signatures of the instructor and the department chair as well as the student's department adviser before submitting it to the Office of Student Services. The student also must complete a course registration form in the Office of Student Services. Special studies forms and instructions are available in the Office of Student Services, N101 Martha Van Rensselaer Hall.

To register in a special studies course taught in a department outside the college, students should follow the procedures established for that department.

Course Loads

The normal course load in the college ranges from 12 to 18 credits. *During the course enrollment period no student may enroll for more than 15 credits or five courses, whichever is greater, without special permission from the college registrar.* To receive permission, a student attaches a note to the course schedule, citing reason(s) for carrying a heavier load, before submitting it to the Office of Student Services, N101 Martha Van Rensselaer Hall.

Credits beyond 15 may be added during the first three weeks of the semester without special permission.

Students should avoid planning excessive work loads; the time required to keep abreast of courses tends to increase as the semester progresses. *Courses cannot be dropped after the seventh week of classes without petitioning,* so students should try to avoid the need to drop courses.

Except for those with mature student status, students must carry at least 12 credits (exclusive of physical education). In special cases, a student may petition to carry between 8 and 12 credits. Forms for petitioning and advice on how to proceed are available from the Office of Student Services, N101 MVR.

Except for mature students, it is seldom possible to have tuition prorated if a student carries fewer than 12 credits during a semester. (See the college registrar for more information.)

Students of mature status may carry 6 to 12 credits without petitioning and may have their tuition prorated. However, at the beginning of each term, mature students planning to take a light course load should pick up a proration of tuition form from the Office of Student Services, fill it out, have it signed by the college registrar, and return it to the bursar's office in Day Hall.

Oversubscribed Courses

Enrollment in many human ecology courses is limited. When a course is over enrolled, students are generally assigned on the basis of seniority or by criteria defined for each course as listed in *Cornell University: Courses of Study*. Student's professional goals may be considered. Those students not admitted to a course may be placed on a waiting list.

Late Course Enrollment

Students who do not file a course enrollment form during the course enrollment period usually must wait until the beginning of the semester to enroll and must pay a \$10 fee. Extensions are rarely granted and usually only for documented illness.

Students who do not meet the deadline for any reason should see the college registrar in N101 MVR as soon as possible. The college registrar can explain available options on course enrollment procedures under such circumstances.

University Registration

University registration for human ecology students occurs in the auditorium of MVR Hall during the week preceding the start of classes. The Office of the University Registrar announces the specific times of registration.

At registration, students first have their ID validated and pick up a college registration card at the university table immediately inside the door of MVR auditorium.

Next, students fill out the college registration card and proceed to the college table where they submit their college registration card; in return, they receive a computer printout of courses for which they are officially enrolled.

Important: Students are responsible for checking their course schedule for accuracy of course numbers, credit hours, and other data. If there are errors, students must correct them immediately. Procedures for correcting enrollment errors as well as making changes for other reasons are described below under **Course Enrollment Changes**.

Students also receive a *Course and Room Roster* which indicates the locations of their classes.

During university registration in the fall semester, each continuing student receives a copy of his or her **summary of record** from the Office of Student Services. This summary shows graduation and major requirements that the student has completed. Students are responsible for assuring that their academic program meets graduation requirements. Resolve any questions about graduation requirements with the appropriate staff person in the Office of Student Services. Students may direct questions about their academic programs to their faculty adviser or to a counselor in the Office of Student Services.

Late University Registration

A student clearing his or her financial obligations **after** the deadline date on the bursar's bill is considered late. **Late registrants are assessed a finance charge on the bursar's bill starting from the date the bill is due.** Starting the fourth week of the term the assessment for late registration is as follows:

fourth week	\$85
fifth week	\$95
sixth week	\$105

After the sixth week, \$25 is charged for each additional week. After completing late university registration, the student submits the college registration card to the Office of Student Services and receives a computer printout of the courses for which he or she is officially registered. *Students who fail to register by the seventh week of the term will be withdrawn from the university. Should withdrawn students wish to return, they must reapply through the admissions committee.*

Course Enrollment Changes

Deadlines

- During the first three weeks of the term, courses may be added or dropped without charge.
- From the fourth through the seventh week of the term, course changes may be made with the permission of the instructor and payment of a \$15 processing fee.
- After the third week of the term, instructors have the right to consider students' requests for course changes on an individual basis or to announce at the beginning of the term a specific date between the fourth and seventh weeks beyond which they will no longer approve course changes.
- After the seventh week of the term, no course change may be made without petitioning for approval. Petitions are usually granted only in circumstances beyond a student's control (for example, illness). A student petitioning for medical reasons should provide substantiating medical evidence with the petition.
- A student who submits a petition after the seventh week of the term requesting permission to drop a course must attach a statement from his or her faculty adviser to that petition indicating whether or not the advisor supports the request.

- After the eighth week of the term, any student granted permission to drop a course after petitioning will automatically receive a grade of **W** (Withdrawn), and the course will remain on the official transcript.

Deadlines for Half-Term Courses

Students may drop half-term courses within the first three-and-one-half weeks of the course. Students may add classes after the first week of classes only with the permission of the instructor. After the first three-and-one-half weeks, students must petition to drop the course. (See **Petition Process, General Petition Form** for information on the procedure.)

Procedures

It is to the student's advantage to make any necessary course enrollment changes as early in the term as possible. Adding new courses early makes it easier for the student to keep up with course work. Dropping an unneeded course early makes room in the course for other students who may need it for their academic programs.

Ideally, students evaluate their course work load carefully at the beginning of the term. If, in the first week or two, the instructors do not discuss the amount of material to be covered and the extent of student assignments, students need to ask about course requirements.

Some procedures required for course enrollment are also required for course enrollment changes. For example, the instructor's permission must be obtained for a course requiring it, and the same forms for special studies courses must be completed. Aside from the procedures listed below for course enrollment changes, all course change forms for **nutritional science majors** must be signed by the faculty department adviser.

Waiting List: The Office of Student Services maintains waiting lists for students who want to enroll in courses that have been filled. Waiting lists are maintained on a first-come, first-served basis without regard to seniority or other factors. To keep their names active on a waiting list, students must **check in person every 48 hours** with the Office of Student Services; names of students who do not check in are automatically dropped from the list.

Limited enrollment classes: Students who do not attend the first two class sessions of courses with limited enrollment are automatically dropped from the course list. Students can avoid being dropped from a class by notifying the instructor that unavoidable circumstances have prevented their attendance.

There is no charge for course changes completed during the first three weeks of the term. To make course changes during the **first three weeks**, a student takes the following five steps:

- 1) Obtains a course-change form from the Office of Student Services, N101 MVR.
- 2) Completes the form and takes it to the appropriate office for signature: for human ecology courses, the forms should be taken to the Office of Student Services; for courses outside the college, the forms should be taken to the appropriate departmental office in the other college.

- 3) Makes sure that his or her name is added to the list of enrolled students for a course being added, or removed from the class list for a course being dropped. Asks the person recording the change to sign the form.
- 4) **Submits all signed forms to the Office of Student Services, including the forms for out-of-college courses.** Changes are not completed until the signed forms are filed in that office. If a student does not drop a course that he or she no longer attends, the student is in danger of receiving an **F** in the course.
- 5) Receives carbon copies of each course change form at the time it is submitted. It is **important** for students to keep these copies to verify later that the forms were filed.

To make course changes during the **fourth through seventh** weeks of the term, a student takes the following steps:

- 1) Completes the five steps listed above for changes made during the first three weeks.
- 2) Obtains the instructors' signatures on the course change form for human ecology courses.
- 3) Pays a \$15 fee.

To make course changes **after the seventh week** of the term, a student must file a general petition form. (See the section below, **Petition Process**.) Students are expected to attend classes and to do assigned work until the petition has been formally approved or denied.

In absentia Study

Under certain conditions, credit toward a Cornell degree may be given for in absentia study, that is, study done at an accredited institution away from Cornell after the student matriculates in the College of Human Ecology.

To be eligible for in absentia study, a student must be in good academic standing and must receive permission in advance from the college registrar. Students not in good standing may study in absentia but will not receive transcript credit until they have been returned to good standing by the Committee on Academic Status. In some cases, students may petition for in absentia credit after the work has been completed, but there is no guarantee that such credit will be awarded without advance approval.

In absentia petition forms are available in the Office of Student Services, N101 MVR. The student completes the form, has it signed by his or her faculty adviser, attaches catalog descriptions for the courses that will be taken, then submits the form to the Office of Student Services, N101 MVR.

Students receive notice of the petition decision by means of a letter from the college registrar. If the petition is granted, students also receive a form with the letter which must be completed and returned with the fee of \$15 to the Office of Student Services to complete in absentia registration. If the in absentia study is undertaken during the summer, the \$15 fee is charged only if the summer study is for more than 8 credit hours.

A student may take up to 15 credits in absentia as long as the courses do not duplicate courses already taken and the in absentia courses are applicable to the requirements of the college.

A student's petition for more than 15 credits in absentia may be allowed under the following conditions: (1) the work taken represents a special educational opportunity not available at Cornell, (2) it relates to the student's particular professional goals, and (3) those goals are consistent with the focus of the college. The in absentia petition form is used to request more than 15 credits in absentia.

The college registrar requests approval from the appropriate department if a student wants to apply in absentia credit to requirements for his or her major. If in absentia credit is sought for a modern foreign language in which the student has done work, approval by the Department of Modern Languages and Linguistics (College of Arts and Sciences) must be obtained. The department will recommend the number of credits the student should receive and may require the student to take a placement test after returning to Cornell.

The student is responsible for having the registrar of the institution where in absentia study is taken send transcripts of grades to the Office of Student Services in the College of Human Ecology. Only then will credit be officially assessed and applied to the Cornell degree. Credit for in absentia study will be granted **only** for those courses with grades of C- or better. Only credits (not course names and grades) for in absentia study appear on the Cornell University transcript.

A student who holds a Regents' or Children of Deceased or Disabled Veterans Scholarship may claim that scholarship for study in absentia if the study is done in a college in New York State and if it is for a maximum of 15 credits acceptable to the College of Human Ecology.

The rules regarding study in absentia apply to transfer students with the additional stipulation that at least 60 credits must be taken at Cornell. At least 40 of the 60 credits must be in the College of Human Ecology at Cornell unless the student has transferred equivalent human ecology credit. (No more than 20 credits of equivalent credit may be applied to the 40 credits required in human ecology course work.)

Leaves of Absence

A student may request a leave of absence before the beginning of the semester or during the first seven weeks of the semester for which a leave is sought. A leave may be extended for a second semester by requesting an extension in writing from the Office of Student Services.

A student considering a leave of absence is urged to discuss plans with a counselor in the Office of Student Services. The counselor can supply the necessary forms for the student to complete and file with the Office of Student Services, N101 MVR.

Requests for a leave of absence received after the first seven weeks of the semester, or requests for a leave of absence from students who have already had two semesters' leave of absence, will be referred for action to the Committee on Academic Status. The committee may grant or deny such requests, attaching conditions as it deems necessary. Leaves of absence after the first seven weeks are generally granted only when there are compelling reasons why a student is unable to complete the semester, such as extended illness.

A student who requests a leave of absence after the first seven weeks is advised to attend classes until action is taken on the petition. A student whose petition for a leave of absence is denied may choose to withdraw or to complete the semester.

The academic records of all students who are granted a leave of absence are subject to review, and the Committee on Academic Status may request grades and other information from faculty members to determine whether the student should return under warning or severe warning or in good academic standing.

Withdrawal

A withdrawal is a termination of student status at the university. Students may voluntarily withdraw at any time by notifying a counselor in the Office of Student Services and filing a written notice of withdrawal in the Office of Student Services. A student considering such an action is urged to discuss plans with a counselor in the Office of Student Services, N101 MVR.

In some instances a student may be given a withdrawal by the college registrar. A student who leaves the college without an approved leave of absence or does not return after the leave has expired will be given a withdrawal after the seventh week of the term in which he or she fails to register.

A student who has withdrawn from the college or who has been given a withdrawal by the college registrar and who wishes to return at a later date must reapply through the Committee on Admissions for consideration along with all other applicants for admission. If the student was in academic difficulty at the time of the withdrawal, the request for readmission will be referred to the Committee on Academic Status for consideration, and that committee may stipulate criteria under which the student may be readmitted to the college.

Petition Process

The petition process permits students to request exceptions to existing regulations. Petitions are considered individually, weighing the unique situation of the petitioning student with the intent of college and university regulations.

Students can avoid the necessity to petition by carefully observing the deadlines that affect their academic program. See the **Course Enrollment Changes** section above for some of the important deadlines. If unsure about a deadline, check with a counselor in the Office of Student Services, N101 MVR.

Although many kinds of requests can be petitioned in the college, options other than petitioning may be preferable in some cases. To explore whether a petition is appropriate, the student may discuss the situation with a college counselor or the college registrar in the Office of Student Services.

Students may appeal petitions denied by the college registrar to the Committee on Academic Status. Students who appeal a denied petition **must** attach a statement from the student's faculty adviser before CAS will consider the appeal.

Two kinds of petition forms are available. The uses for both forms are described in the *Human Ecology Student Guide*.

General Petition Form

The general petition form is available in the Office of Student Services, N101 MVR. After completing the form, submit it to the Office of Student Services. Students learn the result of the petition process for the general petition form by checking their mail folder in the student mail center, 144 MVR.

In absentia Petition Form

The in absentia petition form is available in the Office of Student Services, N101 MVR. After completing the form, submit it to the Office of Student Services. In absentia petitions must have attached to them the catalog descriptions of the courses for which credit is requested from the other institution. In absentia petition decisions are sent to students via the U.S. postal service.

GRADES

See the "Grading Guidelines" section for information on the official university grading policies.

S-U Grades

Some courses in the college and in other academic units at Cornell are offered on an S-U basis; that fact is indicated in the *Cornell University: Courses of Study*. University regulations concerning the S-U system require that a grade of S be given for work equivalent to a C- or better; for work below that level, a U must be given. No grade point assignment is given to S, and S or U grades are not included in the computation of semester or cumulative averages. A course in which a student receives an S is, however, counted for credit. No credit is received for a U. Both the S and U grades appear on a student's record. A student who is attempting to qualify for the Dean's List must take at least 12 credits for the usual A-F grades.

Only juniors and seniors may take an S-U grade in courses in which the grade of S or U is optional; however, sophomores may take courses in which only the grade of S or U is offered. A student may take no more than four courses (or 12 credits) on an S-U basis during his or her college career; however, more than one S-U course may be taken in one semester. S-U courses may be taken only as electives or in the 15 credits required in the college outside the major unless the requirements for a specific major indicate otherwise. Freshmen enrolled in English 137 and 138 (offered for S-U grades only) are permitted to apply those courses to the freshman writing seminar requirement.

To take a course for an S-U grade, a student must check the course description to make sure that the course is offered on the S-U basis; then either sign up for S-U credit on the course enrollment form, or file an add/drop/change form in the Office of Student Services before the end of the third week of the term. After the third week of the term, students must petition the college registrar to change grade options. Forms are available in the Office of Student Services.

Grades of Incomplete

A grade of incomplete is given when a student does not complete the work for a course on time but when, in the instructor's judgment, there was a valid reason. A student with such a reason should discuss the matter with the instructor and request a grade of incomplete.

Beginning fall 1984, a grade of incomplete may remain on a student's official transcript for a maximum of two semesters and one summer after the grade is given, or until the awarding of a degree, whichever is the shorter period of time. The instructor has the option of setting a shorter time limit for completing the course work.

If the work is completed within the designated time period, the grade of incomplete will be changed to a regular grade on the student's official transcript. If the work is not completed within the designated time period, the grade of incomplete will be automatically converted to an F.

When a student wants to receive a grade of incomplete, the student should arrange a conference with the instructor (preferably before classes end and the study period begins) to work out the agreement. A form, called *explanation for reporting a final grade of F or incomplete*, which has been signed by both the instructor and the student, must be submitted by the instructor to the Office of Student Services. This form is submitted with the final grade sheets whenever a grade of incomplete is given.

This form is for the student's protection, particularly in the event that a faculty member with whom a course is being completed leaves campus without leaving a record of the work completed in the course.

If circumstances prevent a student from being present to consult the instructor, the instructor may, if requested by the student, initiate the process by filling out and signing part of the form and turning it in to the Office of Student Services with the grade sheet. Before a student will be allowed to register for succeeding semesters, he or she must go to the Office of Student Services to fill out and sign the remainder of the form.

If the work is satisfactorily completed within the required time, the course appears on the student's official transcript with an asterisk and the final grade received for the semester in which the student was registered for the course.

A student who completes the work in the required time and expects to receive a grade must take the responsibility for checking with the Office of Student Services (about two weeks after the work has been handed in) to make sure that the grade has been received. Any questions should be discussed with the course instructor.

NOTE: Grades received more than three weeks after the end of a term are NOT computed in the student's term average when computing the Dean's list. Therefore, students who feel a missing grade or a grade change will make them eligible for the Dean's list must have that grade reported to the Office of Student Services no later than the end of the third week after the term has ended. For purposes of this rule, the last day of final exams is the last day of the term.

ACADEMIC HONORS

The college encourages high academic achievement and recognizes outstanding students in several ways.

Dean's List. Excellence in academic achievement is recognized each semester by placing on the Dean's List the names of students who have completed satisfactorily at least 12 credits with letter grades other than S or U and who have a semester grade point average of 3.5 or above. No student who has received an F or U in an academic course will be eligible.

Kappa Omicron Nu seeks to promote graduate study and research and to stimulate scholarship and leadership toward the well-being of individuals and families. As a chapter of a national honor society in the New York State College of Human Ecology, it stimulates and encourages scholarly inquiry and action on significant problems of living—at home, in the community, and throughout the world.

Students are eligible for membership if they have attained junior status and have a cumulative average of not less than B. Transfer students are eligible after completing one year in this institution with a B average.

Current members of Kappa Omicron Nu elect new members. Not more than 10 percent of the junior class may be elected to membership and not more than 20 percent of the senior class may be elected. Graduate students nominated by faculty members may be elected.

Bachelor of Science with Honors recognizes outstanding scholastic achievement in an academic field. Programs leading to a degree with honors are offered to selected students by the Department of Human Development and Family Studies and the Division of Nutritional Sciences. Information about admission to the programs and their requirements may be obtained from the appropriate department or division.

Bachelor of Science with Distinction recognizes outstanding scholastic achievement. Consideration will be given to seniors whose academic standing at the end of seven semesters is in the top 10 percent of the graduating class. The honor is conferred on those seniors who are in the top 5 percent of the class after grade point averages have been adjusted by including grades for transfer work and after grades earned in the fifth, sixth, and seventh terms have been given double weighting in the final average. The graduating class includes students who will complete requirements for Bachelor of Science degrees in January, May, or August of the same calendar year.

To be eligible for consideration, transfer students must have completed 45 credits at Cornell. In determining the academic standing of a transfer student, previous work taken at another institution is included in the computation of the student's academic average. Names of seniors who meet these requirements are presented to the faculty of the college for approval.

The primary objectives of the honor society, **Phi Kappa Phi**, are to promote the pursuit of excellence in higher education and to recognize outstanding achievement by students, faculty, and others through election to membership. Phi Kappa Phi is unique in that it recognizes scholarship in all academic disciplines.

To be eligible for membership students must rank in the top ten percent of the senior class, or in the top five percent of the junior class. Provisions also exist for the election of faculty members and graduate students whose work merits recognition.

NONDEPARTMENTAL COURSE

100 Critical Reading and Thinking

Fall, spring, or summer. 2 credits. Enrollment limited. Priority is given to freshmen and sophomores; juniors and seniors are admitted with permission of the instructor. S-U grades only.

Fall and spring: sec, T R 10:10 or 11:15, plus two 1-hour labs to be arranged. H. Selco.

The objective of this course is to enable students to increase critical reading and thinking abilities. Theory and research associated with a wide range of reading, thinking, and learning skills are examined. Emphasis is placed on developing and applying analytical and evaluative skills. Laboratory instruction is individualized and provides the opportunity to focus intensively on increasing comprehension, reading rate, and vocabulary.

INTERDEPARTMENTAL COURSES

Field and International Study Program

S. Beck, director; R. Bounous, S. Gaber, D. Giles, F. McCarthy, L. Shaw

Field Study

Field study enables students to learn from participation in community and organizational settings and from critical reflection on that experience through discussion, reading, and writing. The process of integrating concepts with practice distinguishes experiential education. Students earn credit by participating in internships and community-based research.

The Field and International Study Program (159 Martha Van Rensselaer Hall) offers courses in pre-field preparation and field-based courses with an interdisciplinary problem-solving approach to social issues. Field study programs are located in the Ithaca area, New York City, and Washington, D.C., with other opportunities possible through arrangements with Field and International Study Program faculty. Courses are open to registration by all Cornell students.

International Study

Study abroad provides students an opportunity to add an international dimension to their human ecology program through credit-earning course work and intercultural understanding in sponsored programs. Learning and participating in a foreign institution will increase a student's knowledge of the people and institutions of the country concerned; fieldwork will provide guided experience in family, community, or agency situations of the country concerned and in an area related to individual student interest in human ecology.

Opportunities for study abroad are available for human ecology students in several ways: through Cornell Abroad or through other U.S. college-sponsored programs abroad. Information and applications for study abroad are available in the Field and International Study Program office (MVR 159).

FIS 100 Skills for Learning in the Field

Fall or spring. 2-3 credits. Prerequisite: permission of instructor. Open to all levels, undergraduate and graduate.

First 7 weeks of semester; T 1:30-4:25 and variable hours thereafter. Fall or spring. R. Bounous.

Students learn how to become self-directed learners and gain understanding of how to integrate theory and experience. Topics include experiential learning, cross-cultural communication, participant observation, investigative interviewing, understanding nonverbal communication, and critical analysis. All of the concepts are applied through fieldwork assignments.

FIS 200 Preparation for Fieldwork: Perspectives in Human Ecology

Fall or spring. 4 credits. Limited to 25 students per section. Prerequisite: permission of instructor. Required of all students planning to do FIS 400-level field study or research.

T R 10:10-12:05 or 2:30-4:25. D. Giles.

Introduces students to skills essential for field study, internships, community research, and other experiential learning courses. This course focuses on understanding the multiple cultural and social settings that students will encounter in the small group, organizational, and community contexts of their field study. Through a cycle of active learning, reflection, and reading, students gain experience in analysis of assumptions and biases, participant observation and interviewing skills, effective communication, and group dynamics. By structuring and reflecting upon their own learning, students are prepared for self-directed, experience-based learning that is the core of field and international study. Course readings provide a conceptual framework for experiential learning and field study methods. Working in small task groups, students apply and synthesize these skills and concepts in community-based projects. Previous semesters' projects included "Collegetown Redevelopment," "Recycling Behavior in Student Neighborhoods," and "Neighborhood Housing Needs in Ithaca."

FIS 210 Preparation for International and Cross-Cultural Experience

Fall or spring. 3 credits. Not open to freshmen. Prerequisite: permission of instructor; preference given to students planning to study abroad or participate in international internships.

T R 12:20-1:40. F. McCarthy.

The course has two main objectives. One is to prepare students for international and cross-cultural experience through the application of observation and interviewing skills, analysis of social and cultural factors in selected countries, and consideration of key issues such as poverty, inequality, industrialization, and race, class, and gender exploitation; the second is to link international processes such as trade and resource flows with national policies and the effects of these processes and policies on the life chances and experience of people. Class activities include discussion, lectures, field experiences, skill development, and a small-group presentation. Students will develop

interviewing and observation skills through projects that will focus on the countries in which they intend to study or intern. Strongly recommended for students planning to study abroad, to do international internships, or to take FIS 410. FIS 210 may be substituted for FIS 200 with permission of instructor.

FIS 400 Families in Cross-Cultural Perspective (also Human Development and Family Studies 354)

Fall. 3 credits.

M W 7:30–9:00 p.m. S. Beck.

The sociological study of families from a comparative perspective, looking at similarities and differences across cultures and across ethnic groups. A major focus is on the interdependence of the family system and social institutions.

FIS 401 Empirical Research

For study that predominantly involves data collection and analysis.

FIS 402 Supervised Fieldwork

Fall, spring, or summer. 3–15 credits. Limited to 20 students. Prerequisite: FIS 200. Enrollment by permission of instructor. Applications due in the Field and International Study Office during the preceding semester's course enrollment period.

Hours to be arranged. Faculty.

Supervised field study involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of concepts with practice. Credit is variable to allow for combined departmental and interdepartmental sponsorship and supervision.

Information on placement opportunities is available in the Field Study Office, 159 Martha Van Rensselaer Hall. Students should begin planning at least a semester in advance for field study.

FIS 403 Teaching Apprenticeship

For study that includes assisting faculty with instruction.

FIS 406 Sponsored Field Learning or Internships

Fall or spring. 6–15 credits. Limited to 15 students; intended for juniors and seniors. Prerequisite: FIS 200. Enrollment by permission of instructor. Applications are due in the Field and International Study Office during the preceding semester's course enrollment period.

Hours to be arranged. S. Beck.

A course for students seeking interdepartmental sponsorship and supervision of participation in structured, off-campus field experiences or internships operated by non-Cornell or non-credit-granting institutions or agencies. Completion of course requirements is signified by a formal presentation to the college community upon return to Cornell (graduating seniors may make special arrangements). Credit is variable to allow students to arrange for combined interdepartmental and departmental sponsorship and supervision.

Information on course enrollment and internship opportunities is available in the Field Study Office, 159 Martha Van Rensselaer Hall. Students should begin planning more than one full semester before leaving campus for an internship.

FIS 407 Field Experience in Community Problem Solving

Fall or spring. 6–15 credits. Limited to 25 students.

FIS 407 Section 01 Issue: Literacy

Prerequisites: FIS 100, FIS 200, or FIS 210; and permission of instructor. Applications due in the Field and International Study Office during the preceding semester's course enrollment period.

Sem, R 1:30–4:25; hours in the field to be arranged. R. Bounous.

A course designed to provide students with a structured, closely supervised field experience encompassing an ecological approach to human problem solving. Students spend approximately twenty hours each week working directly on the literacy project, three hours each week in seminar, and additional time completing seminar readings and assignments. The seminar is aimed at assisting students in systematically analyzing the complex factors that affect the implementation of new programs, policies, or projects. Set in this context, the field placement is viewed as a case study in the ecology of organizational decision making. Supervision of the literacy projects is provided by the course instructor.

Credit is variable to allow students to arrange for combined interdepartmental and departmental sponsorship and supervision.

Information on projects is available during course enrollment in the Field and International Study Office, 159 Martha Van Rensselaer Hall. Students may assist in the planning and project-identification process by making their interests known to the office a full semester before intended enrollment in the course.

FIS 407 Section 02 Issue: Poverty and Homelessness in the Upstate Region

Prerequisites: FIS 200 and permission of instructor.

Sem, T R 10:10–11:40; hours in the field to be arranged. L. Shaw.

A course focusing on understanding the problems of poverty and homelessness as well as on service to a local agency that is attempting to respond to them. Students will participate in either service delivery or a research project on behalf of the agency. The aim is to develop skills that will enable students to analyze complex community problems and design solutions that contribute substantive, enduring results to the community.

FIS 408 The Ecology of Urban Organizations: New York City Field Experience

Fall or spring. 9–15 credits. Limited to 25 students; intended for juniors and first-semester seniors. Prerequisites: FIS 200 and permission of instructor. Applications due in the Field and International Study Office during the preceding semester's course enrollment period. Students may enroll in FIS 408 for up to 15 FIS credits. Information on placements is available in 159 Martha Van Rensselaer Hall. Students should begin planning at least one semester before they apply to this course.

S. Gaber.

A course designed to enhance students' understanding of organizational behavior and decision making through a program that integrates internship experience with classroom learning. Students, participating as interns in a variety of New York City agencies and firms, are challenged to examine interpersonal, institutional, interorganizational, and environmental factors that shape professional

practice and human problem solving in formal organizations. From an ecological perspective, students explore how such factors as employee motivation, organizational culture, formal structure, communication patterns, leadership style, technology, demographics, politics, and regional economics influence patterns of staff interactions, management policy, and organizational initiatives. Student placements exist in advertising, communications, fashion design, financial services, government, health care, human services, retailing, and many other fields. Weekly seminars include lectures, discussions, simulations, speakers, cultural events, and field trips to neighborhoods and organizations throughout the New York metropolitan area.

FIS 409 The Ecology of Organizations in the Upstate Region: Ithaca-Area Field Experience

Fall or spring. 4–15 credits. Limited to 25 students. Prerequisites: FIS 200 and permission of instructor. Applications are due in the Field and International Study Office during the preceding semester's course enrollment period. Weekly seminar meets concurrently with HSS 414.

Sem, T 1:30–4:25; hours in the field to be arranged. L. Shaw.

A variable-credit course designed to give students an in-depth understanding of contemporary organizations and the forces that shape and influence them. The course combines participation in a community setting within commuting distance of the Cornell campus with a weekly seminar. The goal of the course is to provide students the opportunity to work in an organization or agency and at the same time provide self-conscious reflection upon their experiences, using field research or ethnographic methods. Students can arrange for combined interdepartmental and departmental sponsorship and supervision.

Information on placement opportunities is available in the Field and International Study Office, 159 Martha Van Rensselaer Hall. Students should begin planning at least a semester in advance for field study.

FIS 410 Advanced Seminar: Analysis of International Experience

Fall or spring. 3 credits. Prerequisites: experience abroad and permission of instructor.

T R 2:30–4. F. McCarthy.

This course provides a context for the integration and interpretation of cross-cultural experience for students returning to the United States after extended periods abroad. The course encourages students to relate personal experience to socioeconomic factors such as gender, race and class, and structuring living situations at home and abroad. Among the issues to be pursued are cultural shock, reentry, patterns and conditions of work, social relationships, friendship, ideology and social explanation, identity and patterns of power and authority. The course features readings, special projects, presentations, and discussions encouraging and facilitating the analysis and understanding of individual cross-cultural experience. The purpose of the course is to maximize student involvement in shaping the analysis and integration of their cross-cultural experience in relation to their personal concerns international processes and academic interests.

CONSUMER ECONOMICS AND HOUSING

W. K. Bryant, chair; J. Gerner, graduate faculty representative; P. Zorn, undergraduate advising coordinator; R. Avery, W. K. Bryant, P. Chi, F. Firebaugh, J. Gerner, L. Gosse, R. Heck, J. Hogarth, L. Jacobsen, R. Key, E. S. Maynes, D. Mont, P. Pollak, J. Reschovsky, J. Swanson, E. Trzcinski, P. Zorn.

CE&H 110 Introductory Microeconomics

Fall. 3 credits. S-U grades optional. Students who have taken Economics 101 or another introductory microeconomics course should not register for this course.

M W F 9:05; sec. to be arranged.

P. Zorn.

Principles of microeconomics with an emphasis on its applicability to consumers. The course acquaints students with the basic economic models of household and firm behavior and their interaction in markets. The goal is to provide students with the ability to analyze the economic implications of consumer decisions and public policies.

CE&H 111 Introductory Macroeconomics

Spring. 3 credits. S-U grades optional. Students who have taken Economics 102 or another introductory macroeconomics course should not register for this course.

M W F 11:15. R. Avery.

Principles of macroeconomics with an emphasis on the relevance of economic policies to consumers and households. Topics include national income accounting, aggregate demand and aggregate supply, the role of monetary and fiscal policy in confronting the problems of inflation and unemployment, and international economics.

CE&H 210 Intermediate Microeconomics

Fall or spring. 4 credits. Prerequisite: CEH 110 or equivalent. Course packets on sale in department at approximate cost of \$15.

Fall: Lecs, M W F 10:10 or 11:15; disc, W 2:30 or 3:35 or R 2:30 or 3:35. Two evening prelims. L. Gosse. Spring: M W F 1:25. Staff.

Theory of demand and consumer behavior including classical and indifference curve analyses; theories of production and cost; models for the following markets—competitive, monopoly, monopolistic competition, oligopoly, and inputs; general equilibrium; welfare economics; public goods; risk.

[CE&H 212 Family Resource Management

Fall. 3 credits. Not open to freshmen. S-U grades optional. Class notes for sale at Kinko's. Not offered 1991–92.

M W F 2:30. R. Key.

An introduction to management concepts and theories of efficient resource utilization from a social systems perspective. The focus is on the family's use of resources to attain goals and meet demands. A systems framework is used to analyze family managerial behavior throughout the life-cycle and specific situations such as single-parent, blended, and low-income families.]

CE&H 226 Household and Family Demography

Spring. 3 credits. Prerequisite: RSOC 101 or equivalent. S-U grades optional.

T R 10:10–11:25. L. Jacobsen.

This course identifies important trends in U.S. household and family structure, examines the demographic, social, and economic forces behind recent changes in household structure, and evaluates current and future consequences and policy implications of these changes for both households and society. Topics include historical and contemporary trends in the size and composition of families and households, trends in marriage, divorce, remarriage, contraception, childbearing, and living arrangements, and interrelationships between household division of labor. Policy implications of all of the above are also considered.

CE&H 232 Consumer Decision Making

Spring. 3 credits. Prerequisite: CEH 110 or permission of instructor.

M W F 10:10. E. S. Maynes.

This course is designed to help individuals make more effective choices as consumers. In pursuit of this goal, the course introduces the student to relevant concepts, theories, and research from economics, consumer economics, marketing, and statistics. Topics covered include informationally imperfect markets, assessing consumer information, seeking redress, bargaining, dealing with inflation, decision-making rules, the concept and measurement of quality, and consumerism. Students prepare price-quality maps of local consumer markets. A second part of the course introduces the student to the concept of consumer sovereignty and assesses the performance of markets as critiqued by economists and consumerists.

CE&H 233 Consumers in the Market

Fall. 3 credits. Prerequisites: CEH 110 or equivalent.

M W F 2:30. R. Key.

A study of the structure and functioning of consumer retail markets with emphasis on the role and activities of the major players in these markets—firms, consumers, and governments. The nature and consequences of various types of market failures are studied from the perspective of the firm, the consumer, and the role of government. Case studies and outside lecturers are used to impart reality to the course.

CE&H 247 Housing and Society

Spring. 3 credits. S-U grades optional.

M W F 11:15. Two evening prelims. P. Chi.

A survey of contemporary American housing issues as related to the individual, the family, and the community. The course focuses on the current problems of the individual housing consumer, the resulting implications for housing the American population, and governmental actions to alleviate housing problems.

CE&H 300 Special Studies for Undergraduates

Fall or spring. Credits to be arranged.

Hours to be arranged. Staff.

Special arrangement for course work to establish equivalency for courses not transferred from a previous major or institution. Students prepare a multicopy description of the study they want to undertake, on a form available from the Student Services Office. The form, signed by both the instructor directing the study and the head of the department, is filed at course registration or during the change-of-registration period.

[CE&H 301 Special Studies for Undergraduates

Fall or spring. 1 credit. Prerequisite: a course in introductory microeconomics and coregistration in a CEH 300- or higher-level course. S-U grades only. Not offered 1991–92.

Six 1-1/2 hour lecs, weeks 2–4 of term.

Hours to be arranged. Staff.

Topics covered will be utility maximization, marginal analyses, derivation of demand curves, price and income effects, present value, and other relevant topics.]

CE&H 307 Introduction to Econometrics

Fall. 3 credits. Prerequisites: Ag Econ 310 or equivalent.

T R 8:40–9:55. D. Mont.

The course introduces students to basic econometric principles and the use of statistical procedures in empirical studies of economic models. Assumptions, properties, and problems encountered in the use of multiple regression procedures are discussed, and simultaneous equation models are introduced. Students are required to specify, estimate, and report the results of an empirical model.

CE&H 315 Personal Financial Management

Spring. 3 credits. Preference given to human ecology students; limit 200; not open to freshmen. S-U grades optional.

M W F 10:10. Evening prelim. R. Heck.

The study of personal financial management at various income levels and during different stages of the family life cycle. Topics include the use of budgets and record keeping in achieving family economic goals, the role of credit and the need for financial counseling, economic risks and available protection, and alternative forms of saving and investment.

[CE&H 320 Economics of Family Policy

Fall. 3 credits. Prerequisite: CEH 210. Not offered 1991–92.

Hours to be arranged. Staff.

This course examines the economics of family policy, including the behavior that surrounds alimony and child support policy, child welfare policy, marriage arrangements, day care, and maternity leave.]

CE&H 325 Economic Organization of the Household

Fall. 3 credits. Prerequisite: CEH 110 or equivalent. S-U grades optional.

M W F 9:05. W. K. Bryant.

Theories and empirical evidence about how households spend their resources are used to investigate the ways they alter the amounts and proportions of time and money spent in various activities, their size, and their form in response to changing economic forces.

CE&H 330 The Economics of Consumer Policy

Fall. 3 credits. Open to juniors, seniors, and graduate students. Prerequisites: CEH 110-111 or permission of instructor. Class packets on sale at Campus Store.

T R 10:10-11:25. Staff.

Students are acquainted with the basic approaches to consumer policy and perform economic analyses of specific consumer policy issues. Three specific areas of policy intervention are addressed: externalities and public goods; anti-trust and regulation of "Natural" monopolies; and markets characterized by imperfect information. Policy discussions are reinforced through the use of specific real-world examples. Students are required to submit a research paper focusing on one specific area of policy intervention discussed in class.

[CE&H 341 The Economics of Consumers' Housing Decisions]

Fall. 3 credits. Prerequisite: CEH 110 or equivalent. Recommended: CEH 210 or equivalent. S-U grades optional. Offered alternate years. Not offered 1991-92. Next offered 1992-93.

T R 1-2:15. Staff.

This course is designed to acquaint students with the economic issues associated with consumers' housing decisions. The focus of the course is on the development of economic models that characterize these decisions, although attention is also paid to the empirical support for the models. The specific decisions considered include: housing consumption, mobility, tenure choice, home improvement, housing maintenance, and mortgage choice. As time permits, the issue of discrimination in the mortgage and housing markets is also considered.]

CE&H 348 Housing and Urban Policy

Spring. 3 credits. Prerequisite: CEH 110 or equivalent. S-U grades optional.

M W F 9:05. J. Reschovsky.

An analysis of government tax, regulatory, and expenditure programs that affect the housing market. Programs and policies at the federal, state, and local levels will be investigated. Detailed consideration will be given to assisted housing programs, community development activities, tax policies, housing finance, fair housing, zoning, and other governmental activities that deal with housing. Local public finance and its relation to housing markets and urban policy will be considered. Economic theory will be used to evaluate these policies.

CE&H 355 Wealth and Income

Fall. 3 credits. Open to sophomores, juniors, and seniors; graduate students may elect to audit and write a research paper for 1 to 2 credits under CEH 600. Prerequisites: CEH 110-111 or equivalent. S-U grades optional.

M W F 1:25. J. Gerner.

The wealth and income positions of American households are defined and described and their economic determinants discussed along with the impacts of tax and expenditure policies and the economics of the political positions for and against such policies.

CE&H 356 The Economics of Welfare Policy

Spring. 3 credits. Prerequisite: CEH 110 or equivalent. S-U grades optional.

M W F 9:05. D. Mont.

Using the tools of economics, this course examines welfare policy. Included are an examination of which populations are affected, what behavior various policies are likely to engender, and how much income redistribution occurs as a result of various welfare policies. Also evaluated are various proposals for welfare reform.

CE&H 365 Economics of Consumer Law

Fall. 3 credits. Prerequisite: CEH 110 or equivalent. S-U grades optional.

M W F 11:15; sec to be arranged. Staff.

Economic analysis of the roles played both by the courts and by federal and state regulatory legislation in altering consumer markets, consumer behavior, and consumer welfare. Topics include economic analyses of contract law, products liability, and accident law, as well as of the activities of such agencies as the Federal Trade Commission, the Food and Drug Administration, and the Consumer Product Safety Commission.

CE&H 400-401-402 Special Studies for Undergraduates

Fall and spring. Credits to be arranged. S-U grades optional.

Hours to be arranged. Staff.

For advanced independent study by an individual student or for study on an experimental basis with a group of students in a field of CEH not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake, on a form available from the Counseling Office. This form must be signed by the instructor directing the study and the department chair and filed at course registration or within the change-of-registration period after registration. To ensure review before the close of the course registration or change-of-registration period, early submission of the special studies form to the department chair is necessary. Students, in consultation with their faculty supervisor, should register for one of the following subdivisions of independent study.

CE&H 400 Directed Readings

For study that predominantly involves library research and independent reading.

CE&H 401 Empirical Research

For study that predominantly involves data collection and analysis.

CE&H 402 Supervised Fieldwork

For study that involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of theory and practice.

CE&H 411 Time as a Human Resource

Spring. 3 credits. Prerequisite: one course in sociology. Recommended: one course in microeconomics. S-U grades optional. Class notes for sale at Kinko's. Offered alternate years.

M W F 12:20. R. Key.

A set of historical and contemporary readings examining time management concepts and applications. Investigates changes in time use of family members in relation to social change. Explores meanings of market work, household work, and leisure in the context of family choices at different stages of the life cycle. Investigates current research concerning time allocations made by family members to household and market work. Examines use of time as a measure of household production.

CE&H 415 Financial and Human Capital Investments

Spring. 3 credits. Prerequisites: CEH 110 or 111; CEH 315.

T R 10:10-11:25. R. Heck.

This course approaches investment decisions from the viewpoint of the individual consumer and/or household. Investigates a broad array of investment choices including: human capital investments in one's self and other family members; real estate investments; small businesses; and the traditional financial investments such as bonds, stocks, and mutual funds. Analyzes each investment choice within a general cost/benefit framework using basic economic principles or concepts of imputed values/costs; time costs; after-tax values; expected values (risk); present and future values, and in light of the goals and financial plan of the household.

CE&H 433 Consumerism and the Consumer Affairs Professional

Spring. 3 credits. Prerequisite: junior or senior status.

T R 1:25-2:40. S. Maynes.

This course is intended for students who in the future might become part of or come into contact with (1) consumerism, (2) the consumer movement, and (3) the consumer affairs profession. The course analyzes interactions among consumers, the consumer movement, and consumer representatives in business and government. The history, present state, and probable future and function of consumerism and the field of consumer affairs will be treated. Extensive use will be made of presentations by consumer affairs professionals from corporations, consumer organizations, and government. In-class forums will consist of presentations, debates, and evaluation of consumer policies and information. Each forum will be themed and paired with class assignments involving the critiquing of print or broadcast information/policies.

CE&H 434 Financial and Credit Markets and Policy

Spring. 3 credits. Prerequisite: CEH 111. S-U grades optional.

T R 8:40-9:55. R. Avery.

This course will look at the structure of financial markets in the United States. A number of different markets and institutions will be examined including: banks, savings and loans, insurance companies, pension funds, government bond markets, credit unions, and finance companies. The principles underlying government regulation of these institutions will be explored, as well as management problems and concerns. The emphasis will be on learning the institutional environment, not on personal finance.

CE&H 444 Housing for the Elderly

Spring. 3 credits. Prerequisite: CEH 247 or permission of instructor. S-U grades optional. T R 2:30-3:45. P. Chi.

This course focuses on the housing needs of the elderly, their current housing conditions—living arrangements, tenure patterns, housing quality and housing expense burden—and socioeconomic and psychological aspects of the housing environment of the elderly.

Attention is also given to government housing programs for the elderly, integrating housing and related social service activities, and options for alternative housing.

[CE&H 445 Housing, Neighborhood, and Community]

Fall. 3 credits. Prerequisite: CEH 247 or permission of instructor. S-U grades optional. Offered alternate years. Not offered 1991-92. Next offered 1992-93.

M W 2:30-3:45. P. Chi.

A study of interrelationships between housing conditions, neighborhood transition, and community development. Both theoretical and empirical perspectives on residential patterns, neighborhood change, and community power will be examined. Special attention is also given to government policies that deal with fair housing, residential segregation, neighborhood revitalization, and community development.)

CE&H 485 Evaluation of Public Policies

Fall. 3 credits. Prerequisites: CEH 110 or equivalent and an introductory statistics course. Recommended: CEH 210 or equivalent.

M W F 10:10. J. Reschovsky.

This course provides an introduction to the techniques used to evaluate public policies and programs. It will begin with a review of basic concepts in evaluative research: causal inference, validity, and experimental and quasi-experimental designs. The remainder of the course will concentrate on the tools of cost benefit analysis as a device for evaluating the effectiveness of government programs. Discussions of the techniques, issues, and problems of cost benefit analysis will be highlighted by examples of its use in a variety of public policy areas. Economic analysis and statistical techniques will be emphasized.

CE&H 600 Special Problems for Graduate Students

Fall and spring. S-U grades optional.

Hours to be arranged. Staff.

Independent advanced work by graduate students recommended by their chair and approved by the head of the department and the instructor.

CE&H 601 Research Workshop in Consumer Economics and Housing

Fall and spring. 1-3 credits. S-U grades only. W 12:20. Staff.

Research seminar designed to provide a forum for graduate students in consumer economics and housing to present their own thesis research at an early stage and to provide critical input for other graduate students.

CE&H 602 Family Resource Management Concepts

Fall. 3 credits. Prerequisite: graduate standing. Class notes for sale in department at approximate cost of \$75.

T R 2:30-3:45. R. Key.

Introduction at the graduate level to theories and empirical research on family resource allocation behavior. Particular attention is paid to problems associated with the modeling and measurement of theoretical concepts.

CE&H 603 Economics of Consumer Demand

Fall. 3 credits. Prerequisite: CEH 210, or Economics 311 or 313 or concurrent enrollment in one of the three. S-U grades optional. M W F 10:10. J. Gerner.

Introduction at the graduate level to theory and empirical research on household demand, consumption, and savings.

CE&H 604 Economics of Household Behavior

Spring. 3 credits. Prerequisite: CEH 210 or Economics 311 or 313 or concurrent enrollment in one of the three. S-U grades optional. M W F 1:25. D. Mont.

Examination of theoretical and empirical literature concerning market work, human capital formation, household production, and family formation.

CE&H 605 Information and Regulation

Spring. 3 credits. Prerequisite: CEH 603.

Class packets on sale at Campus Store.

M W F 2:30. Staff.

A survey of the problems and policies accompanying informational failures and other market failures with regard to consumer well-being. Governmental regulation of products, of producers, of consumers, and of prices is examined. Antitrust activity, disclosure requirements, advertising restrictions, and regulatory agencies are examined in terms of their ability to serve the public interest or to serve special interests. Economic analysis, rather than institutional structure, is emphasized.

CE&H 606 Demographic Techniques

Fall. 3 credits. S-U grades optional.

T R 12:20-1:35. L. Jacobsen.

This course provides an introduction to the methods, measures, and data used in the analysis of human populations. Topics include demographic rates, standardization and decomposition of differences in rates, life-table analysis, cohort analysis, sources and quality of demographic data, population estimation and projection, and stable population models. Special data sources and methodological issues pertaining to population dynamics and to changes in families and households are also considered.

CE&H 607 Econometric Topics

Spring. 3 credits. S-U grades only. Prerequisite: Ag Econ 710 or equivalent. Offered alternate years.

M W 2:30-3:45. R. Avery.

An advanced econometric course consisting of two separate modules. The first module will cover household survey methodology including sample design, questionnaire development, data weighing, and imputation. The second module will focus on limited dependent variable models. Linear probability, logistic probit, and tobit models will be examined as well as problems of sample section bias.

CE&H 608 Housing Economics

Fall. 3 credits. Prerequisite: CEH 210 or Economics 311 or 313.

T R 10:10-11:25. P. Zorn.

Introduction at the graduate level to economic theory and empirical research in the housing market. The course will generally take a micro perspective, focusing on housing demand (households' housing mobility, tenure, and consumption decisions), housing supply (maintenance, home improvement, and new construction), and housing finance (mortgage markets, mortgage choice, mortgage termination). Attention will be paid to the operation of the housing market as well as to relevant public policy issues (governmental tax policy, rent control, discrimination).

CE&H 702 Household Resource Allocation

Spring. 2 credits. Prerequisite: CEH 602 or permission of instructor. S-U grades optional. Offered alternate years. Offered second 7 weeks of term.

M W 2:30-3:45. R. Key.

Family resource allocation is studied in the context of decision processes, and the behavior of decision makers. The relationship of decision making to family management is also explored.

[CE&H 703 Consumption and Demand Analysis]

Spring. 2 credits. Prerequisite: intermediate microeconomics, CEH 603, and CEH 604; or permission of instructor. S-U grades optional. Offered alternate years. Not offered 1991-92. Next offered 1992-93.

Offered second 7 weeks of term.

R 1-4:00. W. K. Bryant.

Major developments in the theory of household behavior with applications to consumption, saving, demand, and expenditure behavior of households. Complete demand systems are surveyed along with theoretically justified specifications of price, income, and demographic variables. The empirical implications of household production for demand are examined. If time permits empirical implications for demand of bargaining models of the household are discussed.)

CE&H 704 Family Economics

Fall. 2 credits. Prerequisite: CEH 604 or permission of instructor. S-U grades optional. Offered alternate years. Offered first 7 weeks of term.

W 2-4:25. D. Mont.

This course examines the public sector policies that influence family time-allocation decisions. Particular attention will be given to the time allocated by female family members to non-household activities and how these activities are influenced by outside economic forces and by internal family characteristics.

[CE&H 705 Consumer Policy]

Fall. 2 credits. Prerequisite: intermediate microeconomics. S-U grades optional. Offered alternate years. Not offered 1991-92. Next offered 1992-93.

Offered first 7 weeks of term. W 2-4:25. Staff.

An examination of consumer policy in the United States. An interdisciplinary approach will be used in which the theoretical rationale for consumer protection laws, the political processes that mold the shape of current consumer policy, and the administrative, legal, and organizational constraints under which consumer policies operate are explored. In addition, techniques for the economic

evaluation of government programs and regulations will be taught and applied to current consumer-protection policies.]

CE&H 706 Fundamentals of Housing
Fall. 2 credits. Prerequisite: graduate standing or permission of instructor. S-U grades optional. Offered alternate years. Offered second 7 weeks of term.

W 2-4:25. P. Chi.

A survey of housing as a field of graduate study. Consideration of the spatial context and institutional setting of housing, the structure and performance of the housing market, housing finance, the house-building industry, the nature and impact of government housing programs, and the social and economic effects of housing regulations.

CE&H 707 Advanced Demography
Spring. 2 credits. Prerequisite: CEH 606 or equivalent. S-U grades optional. Offered alternate years. Offered first 7 weeks of term.

M W 2-3:45. L. Jacobsen.

This course examines the size and composition of households and families in the United States, variations in family and household structure among major subgroups, and changes in family and household structure over time and over the life cycle. The demographic processes underlying changes in families and households are examined separately, including marriage, fertility, mortality, and divorce. The determinants of changes in these underlying processes and in family and household structure are analyzed, along with the consequences of these changes for housing demand and consumption, women's labor force participation, household divisions of labor, living arrangements, and economic well-being and poverty.

[CE&H 708 Family Finance]
Fall. 2 credits. Prerequisites: an introductory statistics course, CEH 315 or equivalent, and CEH 602. S-U grades optional. Offered alternate years. Not offered 1991-92. Next offered 1992-93.

W 2-4:25. R. Heck.

This course examines the financial dimension of the household with emphasis on asset and debt formation. Resource use is examined, emphasizing financial resources such as income, expenditures, savings, credit, and investments. A critical examination of current theories in the area of management and a survey of literature in the fields are included.]

[CE&H 709 Income Distribution Analysis]
Spring. 2 credits. Prerequisites: CEH 603 and CEH 604. S-U grades optional. Offered alternate years. Not offered 1991-92. Next offered 1992-93. Offered first 7 weeks of term.

R 1-4. R. Avery.

This course examines the economics of income distribution, focusing on measurement, and policy issues.]

CE&H 899 Master's Thesis and Research
Fall and spring. Prerequisite: permission of the chair of graduate committee and instructor. S-U grades optional.

Graduate faculty.

CE&H 999 Doctoral Thesis and Research
Fall and spring. Prerequisite: permission of the chair of graduate committee and instructor. S-U grades optional.

Graduate faculty.

DESIGN AND ENVIRONMENTAL ANALYSIS COURSES

W. R. Sims, chair; F. D. Becker, graduate faculty representative; M. Boyd, undergraduate advising coordinator; A. Basinger, R. Beckman, A. Bushnell, S. Danko, P. Eshelman, C. E. Garner, A. Hedge, J. Laquatra, J. A. McCarty, E. R. Ostrander

Note: A minimal charge for photocopied course handouts may be required.

DEA 101 Design I: Fundamentals
Fall. 3 credits. Each section limited to 18 students. Permission of instructor required. Priority given to interior design majors. Option I majors must take DEA 101 in fall. Approximate cost of materials, \$60.

Fall: M W 1:25-4:25, T R 10:10-1:10.
M. Boyd.

A studio course introducing the fundamental vocabulary and principles of two-dimensional design. Students experiment with the development of form through problem-solving approaches.

DEA 102 Design II: Fundamentals
Spring. 3 credits. Interior design students only. Permission of instructor required. Priority given to Option I DEA majors. B- or higher in DEA 101 required to register for this course. Option I majors must take DEA 102 and 115 concurrently. Approximate cost of materials, \$200; shop fee, \$10.

T R 1:25-4:25. A. Bushnell.

A studio course in three-dimensional design with an interior design emphasis. Problems in spatial organization are explored through drawings and models.

DEA 111 Introduction to Design
Spring. 3 credits.

M W F 9:05. R. Beckman.

Introduction to the field of design for students in any academic area. The course reviews the spectrum of design activities, examining various movements in the visual arts and differences among designers in philosophical premises, social and functional roles, and cultural positions. Also examined are how requirements in the built environment are affected by the interaction of people, design, and materials. Lectures and visual material are presented by DEA faculty members and visiting design professionals.

DEA 114 Drawing
Spring. 3 credits. Each section limited to 18 students. Priority given to DEA majors. Minimum cost of materials, \$50.

M W 1:25-4:25. Staff.

A studio drawing course open to students without previous drawing experience. Focus is on descriptive, design-oriented drawing to improve abilities of visual analysis, develop visual communication skills, and enhance general visual awareness.

DEA 115 Drawing for Interior Design
Spring. 3 credits. Interior design students only. Priority given to DEA majors. Option I majors must take DEA 102 and DEA 115 concurrently. Minimum cost of materials, \$100.

T R 1:10-4:10. A. Bushnell.

A studio drawing course for interior designers. Discussion groups on drawing techniques are held to develop a visual understanding and vocabulary. Students are introduced to the functions of line, shape, and value. Perspective, spatial, and conceptual drawing are emphasized.

DEA 117 Drawing the Clothed Figure
Spring. 3 credits. Enrollment limited to 18 students. A basic drawing course is highly recommended. Priority given to TXA Option I students. S-U grades optional. Approximate cost of textbook, \$30; minimum cost of supplies, \$40.

M W 10:10-1:10. C. Garner.

To improve the student's ability to illustrate two-dimensionally the interaction of draped fabric and the human form and to develop awareness of clothing as a design medium. Emphasis is on development of techniques and skills in selected media necessary for the communication of design ideas.

DEA 150 Introduction to Human-Environment Relations

Fall. 3 credits.

M W F 12:20-1:10. F. Becker, A. Hedge, W. Sims.

Introduction to the influence of physical environment on human behavior. Topics include environmental influences on crowding, community, crime, and friendship; environmental needs associated with characteristics such as stages in life cycle, life styles, social class, family structures, and handicaps; person-environment fit for lighting, acoustics, indoor air quality and ventilation, and thermal comfort; introduction to human factors and systems analysis; effects of environment on perception-cognition; user-responsive design; participatory design programming; and post occupancy evaluation.

DEA 201 Design III: Basic Interior Design

Fall. 5 credits. Each section limited to 18 students. Prerequisites: DEA 101, 102, and 115 (minimum grades of B-). Recommended: DEA 111 and 150. Coregistration in DEA 203 is required. Minimum cost of materials, \$150; shop fee, \$10; optional field trip, approximately \$100; diazo machine fee, \$8.

T 10:10-1:10, R 1:25-4:25. Staff.

Beginning interior design studio. Focus is on development of basic proficiency in interior design skills. The course is structured around a series of elementary interior and interior-product design problems of 3 to 5 weeks in length.

DEA 202 Design IV: Basic Interior Design

Spring. 5 credits. Each section limited to 18 students. Prerequisites: DEA 201 and 203. Prerequisites or corequisites: DEA 111 and 204. Minimum cost of materials, \$120; diazo machine fee, \$8.

M 1:25-2:15 and T W R 1:25-4:25.

P. Eshelman.

Second interior design studio. Emphasis of the course is on continued development of basic proficiency in design skills through exposure to a selected set of interior and interior-product design problems of limited complexity. Each problem of 3 to 5 weeks duration is structured to emphasize different aspects of the design process.

DEA 203 Design Communications

Fall. 1 credit. Priority given to DEA majors. Lab fee \$10.

W 2:30-4:25. Staff.

Communication techniques for architectural and interior designers. Students study the various forms of communication used throughout the design process, from programming and conceptualization through construction documentation, and the most effective utilization of those forms. Both verbal and visual presentation methods are stressed.

DEA 204 Introduction to Building Technology

Spring. 1 credit.

M 2:30-4:25. W. Sims.

Introduction to building technology for interior designers and facility managers. Emphasis is placed on developing basic understanding of buildings and building systems and their implications for interior design and facility management. Covers basic building types; structural systems; construction materials and methods; HVAC systems; plumbing, electrical, lighting, fire, and security systems; and telephone, computer, and other communication systems.

DEA 210 Responsive Design for the Elderly

Spring. 2 credits. 7-week course. Prerequisite: DEA 150

F 12:20-2:15. E. Ostrander.

The course deals with the rationale, database, and design requirements for creating responsive designs that address elderly user's needs. The literature on conceptual models, theories, and research approaches used to create data-based design requirements and guidelines are investigated. This information should be understood by anyone who intends to design, plan, or manage physical environments that meet the needs of "old" people.

DEA 250 The Environment and Social Behavior

Fall. 3 credits. Prerequisite: DEA 150 or permission of instructor.

M W 9:05-11, R 11:15-12:20. F. Becker.

A combination seminar-and-lecture course for students interested in the social sciences, design, or facility management. Through projects and readings the influence of environmental form on social behaviors such as aggression, cooperation, communication, community, and crime is explored. Also covered are the influences of stage in life cycle, family structure, and social class on environmental needs and purposes. Implications for the planning, design, and management of complex environments such as offices, hospitals, schools, and housing are emphasized.

DEA 251 Historic Design I: Furniture and Interior Design

Spring. 3 credits. Prerequisites: DEA 101 and 111. Recommended sequence: DEA 251, 252, and 353.

T R 10:10-12:05. Staff.

A study of the patterns of historical development and change in architecture, furniture, and interiors from people's earliest expressions to mid-eighteenth century as they reflect the changing cultural framework of Western civilization, excluding America.

[DEA 252 Historic Design II: Furniture and Interior Design]

Fall. 3 credits. Prerequisite: DEA 101.

Corequisite: DEA 111. Recommended sequence: DEA 251, 252, and 353. Not offered 1991-92.

M W F 9:05.

A study of the patterns of historical development and change as revealed through American architecture, furniture, and interiors, 1650-1885. Design forms are considered individually, collectively, and in their historical context as they express the efforts, values, and ideals of American civilization.]

[DEA 261 Fundamentals of Interior Design]

Fall. 3 credits. Enrollment limited to 20 students. Intended for nonmajors but open to DEA majors. Minimum cost of materials, \$30. Not offered 1991-92.

T R 1:25-4:25.

A studio course that emphasizes the fundamental principles of design applied to the planning of residential interiors and coordinated with family and individual needs. Studio problems explore choices of materials, space planning, and selection and arrangement of furniture, lighting, and color. Illustrated lectures, readings, and introductory drafting and rendering techniques are presented.]

DEA 300 Special Studies for Undergraduates

Fall or spring. Credit to be arranged.

Hours to be arranged. Department faculty.

Special arrangement for course work to establish equivalency for courses not transferred from a previous major or institution. Students prepare a multicopy description of the study they want to undertake on a form available from the Student Services Office. The form, signed by both the instructor directing the study and the head of the department, is filed at course registration or during the change-of-registration period.

DEA 301 Design V: Intermediate Interior Design

Fall. 5 credits. Prerequisites: DEA 111, 150, 201, 202, 203, and 204. Corequisite: DEA 303. Recommended: DEA 459. Minimum cost of materials, \$150; shop fee, \$10; optional field trip, approximately \$100; diazo machine fee, \$8.

M W 10:10-1:10; T R 1:25-4:25.

R. Beckman.

Intermediate-level interior design studio. The course is organized around a series of interior and interior-product design problems of intermediate-level complexity, 3 to 5 weeks in duration. Focus is on development of design skills and on understanding of a selected set of generic problem types.

DEA 302 Design VI: Intermediate Interior Design

Spring. 5 credits. Prerequisites: DEA 301 and 303. Corequisite: DEA 304. Minimum cost of materials, \$150; shop fee, \$10; diazo machine fee, \$8.

M 1:25-4:25, T R 10:10-1:10, and

W 1:25-2:15. Staff.

Second-semester, intermediate-level interior design studio. Continued emphasis on development of design skills and exposure to generic problem types with an emphasis on communication and construction detailing. National design competitions form the basis for studio projects.

DEA 303 Introduction to Furnishings, Materials, and Finishes

Fall. 1 credit.

M 2:30-4:25. P. Eshelman.

Basic understanding of furniture types and systems; interior products and equipment such as work-stations; window, wall, and floor coverings; ceiling and lighting systems; and materials and finishes. Emphasis is placed on criteria for selection of furnishings materials and finishes for typical interior design and facility management problems.

DEA 304 Introduction to Professional Practice of Interior Design

Spring. 1 credit.

W 2:30-4:25. A. Basinger.

Introduction to organizational and management principles for delivery of interior design and facility management services. Covers basic organizational structures and basic management functions within interior design and facility management organizations, work flow and scheduling, business practices, legal and ethical responsibilities and concerns, contracts, basic contract documents such as working drawings and specifications, supervision of construction and installation, and cost estimation.

DEA 325 Human Factors: Ergonomics-Anthropometrics

Spring. 3 credits. Recommended: A 3-credit statistics course and DEA 150.

M W 10:10-12:05. A. Hedge.

Implications of human physical and physiological characteristics and limitations on the design of settings, products, and tasks. An introduction to engineering anthropometry, biomechanics, control/display design, work physiology, and motor performance. Course includes practical exercises and field project work.

[DEA 348 Environmental Graphics and Signing]

Spring. 3 credits. Recommended: design background. Limited to 20 students. Approximate cost of materials \$50. Not offered 1990. Next offered spring 1991.

M W 10:10-1:10. M. Boyd.

A studio course dealing with both the functional and visual aspects of environmental graphics. Includes projects in interior and exterior graphics, signing, and directional systems.]

[DEA 349 Graphic Design]

Spring. 3 credits. Enrollment limited to 20 students. Recommended: design background. Priority given to DEA majors. Approximate cost of materials, \$50. Not offered 1991-92.

M W 10:10-1:10. M. Boyd.

The fundamentals of lettering, typography, layout, and presentation techniques. Printing processes and the application of photography and illustration are also covered. A series of projects explores problems typical of the graphic design field.]

DEA 350 Human Factors: The Ambient Environment

Fall. 3 credits. Recommended: DEA 150.
T R 9:05–10:30. A. Hedge.

An introduction to human-factors considerations in lighting, acoustics, noise control, indoor air quality and ventilation, and the thermal environment. The ambient environment is viewed as a support system that should promote human efficiency, productivity, health, and safety. Emphasis is placed on the implications for planning, design, and management of settings and facilities. Course includes a field project.

[DEA 353 Historic Design III: Contemporary Design]

Spring. 3 credits. Recommended sequence: DEA 251, 252, and 353.
M W F 11:15–12:05.

A historical study of the emergence and development of contemporary design, 1885 to the present. Examines the social, economic, technical, and stylistic forces that shape the design forms of the present and includes a critical analysis of selected examples of architecture, interiors, and furniture.]

[DEA 361 Residential Design]

Spring. 3 credits. Approximate cost of materials, \$30. Not offered 1991–92.
T R 9:05–12:05.

An introduction to residential architectural design. While designing a solution for specific occupant needs, students consider site, orientation, climate, and materials. Drafting work consists of plans, elevations, perspectives, and presentation of solutions. Lectures, discussions, and required readings.]

DEA 400–401–402–403 Special Studies for Undergraduates

Fall or spring. Credits to be arranged. S-U grades optional.

Hours to be arranged. Department faculty.

For advanced independent study by an individual student or for study on an experimental basis with a group of students in a field of DEA not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake on a form available from the Counseling Office. This form must be signed by the instructor directing the study and the department head and filed at course registration or within the change-of-registration period after registration. To ensure review before the close of the course registration or change-of-registration period, early submission of the special studies form to the department head is necessary. Students, in consultation with their advisers and the instructor should register for one of the following subdivisions of independent study.

DEA 400 Directed Readings

For study that predominantly involves library research and independent reading.

DEA 401 Empirical Research

For study that predominantly involves data collection and analysis, or laboratory or studio projects.

DEA 402 Supervised Fieldwork

For study that involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of theory and practice.

DEA 403 Teaching Apprenticeship

For study that includes teaching methods in the field and assisting faculty with instruction. Students must have demonstrated a high level of performance in the subject to be taught and in the overall academic program.

DEA 454 Facility Planning and Management Studio

Spring. 4 credits. Prerequisite: DEA 459 or permission of instructor. Letter grades only. Minimum cost of materials, \$100.

T R 1:25–4:25. W. Sims.

For advanced undergraduates interested in facility planning and management. Purpose is to provide basic tools, techniques, and concepts useful in planning, designing, and managing facilities for large, complex organizations. Covers strategic and tactical planning for facilities, space forecasting, space allocation policies, programming, site selection, building assessment, space planning and design, furniture specifications, and moves. Sociopsychological, organizational, financial, architectural, and legal factors are considered.

DEA 455 Research Methods in Human-Environment Relations

Spring. 3 credits. Prerequisites: DEA 150 or permission of instructor, and a statistics course.
M W F 9:05. E. Ostrander.

The course develops the student's understanding and competence in the use of research and analytical tools to study the relationship between the physical environment and human behavior. Emphasis is placed on selection of appropriate methods for specific problems and the policy implications derived from research. Topics include research design, unobtrusive and obtrusive data-collecting tools, the processing of qualitative and quantitative data, and effective communication of empirical research findings.

DEA 459 Programming Methods in Design

Fall. 3 credits.

M W F 9:05–9:55. E. Ostrander.

Introduction to environmental programming. Emphasis on formulation of building requirements from user characteristics and limitations. Diverse methods for determining characteristics that will enable a particular environmental setting to support desired behaviors of users and operators. Methods include systems analysis, soft system, behavior circuit, behavior setting, and user characteristic approaches. Selection of appropriate methods to suit problems and creation of new methods or techniques are emphasized.

DEA 499 Design VII: Advanced Interior Design

Fall and spring. 6 credits. Option I majors must take 6 credits of DEA 499. They are strongly encouraged to satisfy the basic 6-hour DEA 499 requirement in the fall semester and to continue with an additional studio in the spring semester. Prerequisites: DEA 301, 302, 303, and 304. DEA 302 and 499 may not be taken concurrently. To balance class registration loads it may be necessary for the department to determine students' scheduling of this course for either fall or spring. Minimum cost of materials, \$150; diazo machine fee, \$8 per semester.

M W R 1:25–4:25. A. Bushnell.

A comprehensive design–problem-solving experience involving completion of an advanced interior design problem selected by the student and approved by the instructor. The course consists of five phases of three to four weeks each: programming; schematic design and evaluation; design development, including material and finish selection; design detailing; and in-process documentation and the preparation of a professional quality design presentation.

DEA 600 Special Problems for Graduate Students

Fall or spring. Credit to be arranged. S-U grades optional.

Hours to be arranged. Department faculty.

Independent advanced work by graduate students recommended by their special committee chair and approved by the head of the department and instructor.

[DEA 645 Design Process and Methods]

Spring. 3 credits. Limited to 15 graduate and advanced undergraduate students. Prerequisite for undergraduates: permission of instructor. Not offered 1991–92.

T R 8:30–9:55. S. Danko.

Focuses on thinking processes and techniques that support creative problem solving. Design methodologies of famous designers such as da Vinci, Ben Franklin, and Charles Eames will be examined through discussions and applications to short studio problems by the students. Topics include a historical overview of the design process and methods in both professional practice and education, creative problem solving in management and design, perceptual blocks to creativity, and the inherent merits and pitfalls in the four realms of thinking: analytical, intuitive, synthetic, and evaluative.]

DEA 648 Computer-Aided Space Planning and Design

Fall. 3 credits. Limited to 12 graduate and advanced undergraduate students. Prerequisites for undergraduates: DEA 201 and 202 or permission of instructor.

Lec, T R 9:05; lab 1, T R 10:10–12:05; lab 2, TR 12:20–2:15. P. Eshelman.

Familiarizes students with computer applications in the planning and design of spaces. Lectures and readings cover needs assessment, furniture and equipment inventory, affinity diagramming, block diagramming, space layout, and specification and schedule preparation for furniture, equipment, and finishes. Laboratories involve the application of computer-aided processes in planning and designing a variety of spaces.

DEA 650 Programming Methods in Design

Fall. 4 credits. Recommended: DEA 325, 350, and 455.

M W F 11:15 and an hour to be arranged. E. Ostrander.

A course intended for graduate students who want a more thorough introduction to environmental programming methods than is provided by DEA 459. Each student is required to attend DEA 459 lectures, meet with the instructor and other graduate students for an additional class each week, and do additional readings and projects.

DEA 651 Human Factors: Ergonomics-Anthropometrics

Spring. 4 credits. Recommended: DEA 150. M W 10:10-12:05 and an hour to be arranged. A. Hedge.

A course intended for graduate students who want a more thorough grounding in human factors than is provided by DEA 325. Each student is required to attend DEA 325 lectures, meet with the instructor and other graduate students for an additional class each week, and do additional readings and projects.

DEA 652 Human Factors: The Ambient Environment

Fall. 4 credits. Recommended: A 3-credit statistics course and DEA 150.

T R 9:05-10:30 and one hour to be arranged. A. Hedge.

A course intended for graduate students who want a more thorough grounding in human factors than is provided by DEA 350. Each student is required to attend DEA 350 lectures, meet with the instructor and other graduate students for an additional class each week, and do additional readings and projects.

DEA 653 Psychology of Workplace Design

Spring. 3 credits. Prerequisite: DEA 250/660 or permission of instructor.

M 7:30-10 p.m. F. Becker.

Intended for students interested in the planning, design, and management of facilities for complex organizations. The purpose of the course is to explore how characteristics of the workplace, including furniture and equipment and policies governing their use and allocation, affect individual and organizational effectiveness. Special topics, such as the human implications of new information technologies and work at home, are also covered.

DEA 654 Facility Planning and Management Studio

Spring. 4 credits. Prerequisite: permission of instructor. Letter grades only. Minimum cost of materials, \$100.

T R 1:25-4:25 and a one-hour seminar to be arranged. W. Sims.

For graduate students in facility planning and management. The purpose of the course is to provide basic tools, techniques, and concepts useful in the planning, design, and management of complex facilities. Covers strategic and tactical planning for facilities, space forecasting, space allocation policies, programming, site selection, building assessment, space planning and design, furniture specifications, and moves. Sociopsychological, organizational, financial, architectural, and legal factors are considered.

DEA 656 Research Methods in Human-Environment Relations

Spring. 4 credits. Prerequisites: DEA 150 or permission of instructor, and a statistics course. Letter grades only.

M W F 9:05, and an hour to be arranged. E. Ostrander.

The course develops the graduate student's understanding and competence in the use of research and analytical tools to study the relationship between the physical environment and human behavior. Students attend DEA 455 lectures but have more extensive readings and projects and meet an additional hour each week.

DEA 659 Seminar on Facility Planning and Management

Fall. 1 credit. For graduate students and advanced undergraduates interested in careers in facility planning and management. S-U grades only.

M 4:30-5:45. F. Becker.

Series of seminars led by Cornell faculty members and other professionals directly involved in facility planning and management. Topics include strategic space planning, space standards, office automation, project management, energy conservation, building systems, wire management, lighting, and acoustics.

DEA 660 The Environment and Social Behavior

Fall. 4 credits. Prerequisite: DEA 150 or permission of instructor.

M W 9:05-11; R 11:15-12:20, plus an hour to be arranged. F. Becker.

A combination seminar-and-lecture course for graduate students with interests in social sciences, facility management, or design. Graduate students attend DEA 250 lectures but have more-extensive readings and meet an additional hour each week.

DEA 668 Design Theory Seminar

Fall. 3 credits. Enrollment limited to 15 students.

R 4:30-7. R. Beckman.

Directed toward advanced undergraduate and graduate students with interest in the theory of design. The purpose is to provide an understanding of major theoretical ideas underlying design movements of the twentieth century. Explores these ideas through readings, lectures by faculty and visitors, student presentations of research papers, and seminar discussions.

DEA 899 Master's Thesis and Research

Fall or spring. Credits to be arranged.

Prerequisite: permission of the chair of the graduate committee and the instructor. S-U grades optional.

Hours to be arranged. Department graduate faculty.

HUMAN DEVELOPMENT AND FAMILY STUDIES COURSES

G. Suci, chair; S. Cornelius, graduate faculty representative; M. Potts, undergraduate advising coordinator; C. Anderson, U. Bronfenbrenner, J. Brumberg, R. Canfield, S. Ceci, M. Cochran, J. Condry, J. Doris, J. Eckenrode, S. Hamilton, J. Haugaard, C. Hazan, B. Koslowski, L. C. Lee, M. Lenzenweger, B. Lust, P. Moen, K. Pillemer, H. Ricciuti, S. Robertson, J. Ross-Bernstein, R. Savin-Williams, S. West, E. Wethington

[HDFS 111 Observation

Spring. 3 credits. Not offered 1991-92.

M W F 10:10. Staff.

An overview of methods of observing people and the settings in which they behave, in order to develop observational skills, increase understanding of behavior and its development, and acquaint students with basic methodological concepts underlying the scientific study of behavioral development with emphasis on children. Direct experience in applying observational methods in laboratory and real-life settings is emphasized. Discussion groups may accompany the observation experience.]

HDFS 115 Human Development

Fall or summer. 3 credits. S-U grades optional. M W F 11:15. R. Canfield.

Provides a broad overview of theories, research methods, and current knowledge of human development from conception into adulthood. Course material primarily covers infancy and childhood with somewhat less focus on adolescent and adult development. Topics include biological, intellectual, linguistic, social and emotional development as well as the cultural, social, and interpersonal contexts that affect developmental processes and outcomes in these domains.

HDFS 150 Families and the Life Course

Spring or summer. 3 credits. S-U grades optional. Students cannot receive credit for both HDFS 150 and Sociology 243.

M W F 11:15. E. Wethington.

This course provides an introduction to social scientific research on family roles and functions. Families are examined in regard to how they appear in U.S. history, how they change over the life course, and how they are influenced by cultural and economic forces.

HDFS 216 Human Development: Adolescence and Youth

Spring or summer. 3 credits. Prerequisite: HDFS 115. S-U grades optional.

M W F 12:20. Staff.

Provides a broad overview of theories, issues, and research in the study of human development from early adolescence to early adulthood (youth). Attention is focused on the interplay of biological and cognitive factors, interpersonal relationships, social structure, and cultural values in shaping the individual's development. The role of adolescence in both the individual's life course and the evolution of the culture as a whole is also considered. Familial, peer group, educational, and work contexts for development are discussed.

[HDFS 218 Human Development: Adulthood and Aging

Fall. 3 credits. Prerequisite: HDFS 115. S-U grades optional. Not offered 1991-92.

M W F 2:30. Staff.

Provides a general introduction to theories and research in adult development and aging. Psychological, social, and biological changes from youth through late adulthood are discussed. Both individual development within generations and differences among generations are emphasized.]

HDFS 242 Participation with Groups of Young Children

Fall or spring. 4 credits (3 credits possible, but not recommended). Limited to 20 students (limit depends on availability of placements and of supervision). Prerequisites: HDFS 115 and permission of instructor. S-U grades optional.

W 10:10-12:05, plus 2 half-days of field work (for 4 credits) or 1 half-day of field work (for 3 credits). In morning or afternoon. S. West.

This course is designed to integrate developmental theories with supervised experience in child care centers, with the intention of enhancing the student's abilities to understand and to relate effectively with young children. Participation, observation, reflection, reading, writing, and sharing of viewpoints are some of the means used to these ends. Placements are in local nursery schools, day care centers, Head Start programs, and kindergartens.

HDFS 258 Historical Development of Women as Professionals, 1800 to the Present (also Women's Studies 238 and History 238)

Fall. 3 credits. S-U grades optional. Human ecology students must register for HDFS 258.
T R 10:10-11:40. J. Brumberg.

The historical evolution of the female professions in America (midwifery, nursing, teaching, librarianship, home economics, and social work) as well as women's struggles to gain access to medicine, law, and the sciences. Lectures, reading, and discussion are geared to identifying the cultural patterns that fostered the conception of gender-specific work, and the particular historical circumstances that created these different work opportunities. The evolution of "professionalism" and the consequences of professionalism for women, family structures, and American society are also discussed.

[HDFS 259 Socialization, Social Control, and Deviance across the Life Course]

Spring. 3 credits. Prerequisites: HDFS 150 or Sociology 101 or Rural Sociology 101. Not offered 1991-92.

T R 8:30-9:55. E. Wethington.
Provides an overview of sociological theories and research on how normative social values and social relationships regulate individual behavior. Theories and research on social control, crime, delinquency, and creativity are emphasized, particularly those that focus on family process.]

HDFS 300 Special Studies for Undergraduates

Fall or spring. Credit to be arranged.

Hours to be arranged. Department faculty.

Special arrangement for course work to establish equivalency for courses not transferred from a previous major or institution. Students prepare a multicopy description of the study they want to undertake on a form available from the Student Services Office. The form, signed by both the instructor directing the study and the coordinator of undergraduate education, is filed at course registration or during the change-of registration period.

HDFS 313 Problematic Behavior in Adolescence

Spring. 3 credits. Prerequisite: HDFS 115 or Psychology 101; HDFS 216 recommended.

T R 12:45-2:15. J. Haugaard.

This course will explore several problematic behaviors of adolescence, including depression, drug abuse, eating disorders, and delinquency. Various psychological, sociological, and biological explanations for the behaviors will be presented. Appropriate research will be reviewed; treatment and prevention strategies will be explored.

[HDFS 331 Learning in Children]

Fall. 3 credits. Prerequisite: HDFS 115 or equivalent. Limited to 20 students. Not offered 1991-92.

T 10:10-12:05. Field experience to be individually arranged. M. Potts.

Examines diverse theories and models of learning and their differing implications for real-world situations that require learning or relearning. Considers the interrelations of learning and development and of learning and intelligence. Through fieldwork, application is made to the assessment of learning processes in the cognitive domain and to implementation of the variables which affect learning.]

[HDFS 333 Cognitive Processes in Development]

Fall. 3 credits. Prerequisite: HDFS 115 or equivalent. Not offered 1991-92.

M W F 11:15. Staff.

A survey of theories and problems in the development of selected cognitive processes: attention, perception, mediation processes, and language. The focus is on the first two years of life.]

HDFS 334 The Growth of the Mind

Spring. 4 credits. Open to undergraduate and graduate students. Graduate students should also enroll in HDFS 635, a supplemental graduate seminar. Prerequisites: A course in human experimental psychology, statistics, or HDFS 115 or equivalent; or permission of the instructor. S-U grades optional.

M W F 1:25. B. Lust.

In this course the fundamental issues of cognition are introduced. What is the nature of human intelligence? of logical and scientific reasoning? How are knowledge and understanding acquired and represented in the human mind? What is the nature of mental representation? What are the cognitive characteristics of the mind at birth? What is the relation of the acquisition of knowledge and understanding to their final representation? What are the relations between language and thought? In the study of those issues, how can epistemology and experimental psychology be related through the experimental method?

Basic debates in the study of cognition are introduced and discussed throughout: for example, the roles of innateness and learning, the distinction between competence and performance, and the relation between induction and deduction in the acquisition of knowledge. Those psychological issues are set in a context of basic epistemological issues involving the tension between rationalism and empiricism.

The course will analyze Piaget's comprehensive theory of cognitive development and experimental results. Current research in cognitive development will be introduced and contrasted.

HDFS 344 Infant Behavior and Development

Fall. 3 credits. Prerequisites: HDFS 115, a biology course, and a statistics course. Not open to freshmen.

T R 1:00-2:15. S. Robertson.

Behavior and development from conception through the first two years after birth will be examined in traditional areas (e.g., perception, cognition, socioemotional, language, motor). The fundamental interconnectedness of these aspects of development will be strongly emphasized, as well as their relation to the biology of fetal and infant development. Topics with implications for general theories of development will be emphasized (e.g., the functional significance of early behavior, the nature of continuity and change, the role of the environment in development). Conditions which put infants at risk for poor development (e.g., premature birth, exposure to environmental toxins, maternal depression) and topics with current social, ethical, or political implications (e.g., infant day care, fetal rights) will also be considered. An emphasis on research methodology in the study of early behavior and development will be maintained throughout the course.

HDFS 346 The Role and Meaning of Play

Spring. 2 credits. Limited to 30 juniors and seniors. Prerequisite: HDFS 115. Recommended: HDFS 111.

W 7:30-9 p.m. J. Ross-Bernstein.

The aim of this course is to examine the play of children ages three through seven. Through seminar discussions, workshops, films, and individualized research, the student will explore the meanings and validity of play in the lives of young children, the different ways that children play and the value of each, and the effect of the environment in enhancing and supporting play.

[HDFS 347 Human Growth and Development: Biological and Social Psychological Considerations (also Biology and Society 347 and Nutritional Sciences 347)]

Spring. 3 credits. Prerequisites: Biological Sciences 101 or 109 or equivalent, and HDFS 115 or Psychology 101. Offered alternate years. Not offered 1991-92.

M W F 1:25. J. Haas, S. Robertson.

This course is concerned with the interrelationships between physical and psychological growth and development in humans, particularly during infancy. Intrinsic and extrinsic causes of variations in growth, including various forms of stimulation, are considered. In addition, the consequences of early growth and its variations for current and subsequent behavioral, psychological, and physical development are examined. The interaction between physical and behavioral or psychological factors is emphasized throughout the course.]

HDFS 348 Advanced Participation in Early Childhood

Fall or spring. 3 or 4 credits. Prerequisites: HDFS 242 and permission of instructor. Recommended: HDFS 346.

Two or 3 half-days' participation (morning or afternoon) and an hour group conference each week.

J. Ross-Bernstein/S. West.

An advanced, supervised field-based course, designed to help students deepen and consolidate their understanding of children. Students are expected to define their own goals and assess progress with supervising teachers and instructor; to keep a journal; and to plan, carry out, and evaluate weekly activities for children in their placement. Conference group and readings focus on contexts of development and on ways to support children's personal and interpersonal learning.

HDFS 354 Families in Cross-cultural Perspective

Fall. 3 credits. Prerequisites: HDFS 115 and HDFS 150 or Rural Sociology 100, or equivalent. S-U grades optional.

M W 7:30-9 p.m. Staff.

The sociological study of families from a comparative perspective, looking at similarities and differences across cultures and across ethnic groups. A major focus is on the interdependence of the family system and social institutions.

HDFS 359 American Families in Historical Perspective (also Women's Studies 357)

Spring. 3 credits. Prerequisite: HDFS 150 or one 200-level social science or history course. S-U grades optional. Human ecology students must register for HDFS 359.

T R 10:10–11:40. J. Brumberg.

This course provides an introduction to and overview of problems and issues in the historical literature on American families and the family life cycle. Reading and lectures demonstrate the pattern of American family experience in the past, focusing on class, ethnicity, sex, and region as important variables. Analysis of the private world of the family deals with changing cultural conceptions of sexuality, sex roles, generational relationships, stages of life, and life events. Students are required to do a major research paper on the history of their family, covering at least two generations, and demonstrating their ability to integrate life-course development theory, data drawn from the social sciences, and historical circumstances.

[HDFS 360 Personality Development]

Spring. 3 credits. Prerequisites: HDFS 115 or Psychology 101, plus one other course in HDFS or psychology. Students cannot receive credit for both HDFS 360 and Psychology 275.

Offered alternate years. Not offered 1991–92.

T R 12:20–2. C. Hazan.

This course is designed as an introduction to theory and research in the area of personality development. It will include a detailed review of several major theories of personality and human behavior (e.g., psychoanalytic, learning, phenomenological). In addition, the course will cover some of the major developmental tasks and trends as they relate to personality development, including the development of emotions, gender identity, empathy, impulse control, and perceived competence. The influence of innate and environmental determinants of personality will also be examined.]

HDFS 361 The Development of Social Behavior

Spring. 3 credits. Limited to 100 students. Prerequisite: HDFS 115 or Psychology 128. Offered alternate years.

M W F 12:20. J. Condry.

Issues in the development of social behavior are viewed from the perspective of theory and research. An attempt is made to apply our understanding of social behavior to education, childrearing, and group behavior. Likely topics include bases of social behavior in early childhood, the role of peers, the development of aggressive behavior, the development and functioning of attitude and value systems, conformity and deviation, and the function and limits of experimental research in the study of social development.

HDFS 362 Close Relationships across the Lifespan

Fall. 3 credits. Prerequisite: HDFS 115 or equivalent. S-U grades optional.

T R 12:20–2. C. Hazan.

This course analyzes the nature and function of close relationships from infancy through adulthood. Special emphasis is given to the interplay between innate tendencies and social experience, and the effects of social cognitive development. The material presented is drawn from a wide variety of theoretical and empirical literatures. Topics include attachment in human infants, childhood relationships with parents and peers, interpersonal attraction, intimacy and commitment, marriage, divorce, and the role of close relationships in physical and mental health.

HDFS 370 Abnormal Development and Psychopathology

Spring. 3 credits. Limited to sophomores, juniors, and seniors. Prerequisites: HDFS 115, Psychology 101, or Education 110; a course in statistics (e.g., Psych 350, Soc 301, Educ 352 or 353, Ag Ec 310 or equivalent); and an introductory biology course.

M W F 11:15. M. Lenzenweger.

A research-based survey of the cognitive, emotional, and biological aspects of abnormal development across the life span. The major mental illnesses will be covered, including schizophrenia, anxiety disorders, affective disorders, and personality disorders as well as psychopathological disorders of childhood. Emphasis will be placed on the development of psychopathology, current theories and models of etiology, and intervention strategies. This course is intended to be a rigorous introduction to the scientific study of psychopathology and psychopathological development; minimal attention to psychotherapy.

[HDFS 397 Experimental Child Psychology]

Fall. 4 credits. Prerequisites: one course in statistics and permission of instructor. Intended primarily for students interested in entering graduate programs involving further research training. Not offered 1991–92.

T R 2:30–4; lab, hours to be arranged.

L. C. Lee.

A study of experimental methodology in research with children. Includes lectures, discussions, and practicum experiences covering general experimental design, statistics, and styles and strategies of working with children.]

HDFS 398 Junior Honors Seminar

Fall. 2 credits. Permission of the coordinator of the honors program required for registration. Enrollment limited to students in the honors program.

Hours to be arranged. R. Savin-Williams.

Reports and discussion of research and selected thesis topics by faculty and honors students.

HDFS 400–401–402–403 Special Studies for Undergraduates

Fall or spring. Credits to be arranged. Enrollment limited to juniors and seniors with a minimum 3.0 G.P.A. Permission required. Prerequisites: either HDFS 115, 150, and two intermediate level HDFS courses, or four courses in psychology or sociology. S-U grades optional.

Hours to be arranged. Department faculty.

For advanced independent study by an individual student or for study on an experimental basis with a group of students in a field of HDFS not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake, on a form available from the Student Services Office. This form must be signed by the instructor directing the study and the student's faculty adviser and submitted to NG14 MVR, the Office of Undergraduate Education. After clearance that all prerequisites are met, the student picks up the form in NG14 to file at course registration or within the change-of-registration period after registration. To ensure review before the close of the periods, early submission of the special studies form to the Office of Undergraduate Education is necessary. Students, in consultation with their supervisor, should register for one of the following subdivisions of independent study (guidelines for each are available in NG14 Martha Van Rensselaer Hall):

HDFS 400 Directed Readings

Prerequisites: In addition to the general prerequisite courses, a statistics or methods course and at least one course directly linked to the area of study.

For study that predominantly involves library research and independent study.

HDFS 401 Empirical Research

Prerequisites: In addition to the general prerequisite courses, a statistics or methods course and at least one course directly linked to the area of study.

For study that predominantly involves data collection and analysis, or laboratory or studio projects.

HDFS 402 Supervised Fieldwork

Prerequisites: In addition to the general prerequisite courses, an observation or participation course.

For study that involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of theory and practice.

HDFS 403 Teaching Apprenticeship

Prerequisites: In addition to the general prerequisite courses, must have taken the course or equivalent and received a grade of B+ or higher.

For study that includes assisting faculty with instruction.

[HDFS 414 Policies and Programs for Adolescents]

Spring. 3 credits. Prerequisite: HDFS 216, or permission of instructor. S-U grades optional. Offered alternate years. Not offered 1991–92.

T R 12:20–2:15. S. Hamilton.

Plans and practices intended to foster adolescent development are examined in the light of needs identified by theory and research. The key question is how societal and governmental institutions support or hinder the transition of adolescents to adulthood. Current issues, especially secondary school reform and youth employment, provide focal points for examining actual and proposed policies and programs. The course also addresses the nature of social policy and its relation to social science.]

HDFS 417 Female Adolescence in Historical Perspective (also Women's Studies 438 and History 458)

Spring. 3 credits. Limited to 20 students. Prerequisites: HDFS 258 or 359 or a 200- or 300-level history or women's studies course. Permission of instructor required.

W 2:30-5. J. Brumberg.

A reading, writing, and discussion course that will attempt to answer a basic historical question that has consequence for both contemporary developmental theory and social policy: How has female adolescence in the United States changed in the past 200 years? The focus will be on the ways in which gender, class, ethnicity, and popular culture shape adolescent experience. Although the required readings are primarily historical in nature, students are encouraged to think about the interaction of biology, psychology, and culture. Students are required to do a primary source research paper.

HDFS 432 Cognitive Development and Education

Spring. 3 credits. Prerequisite: HDFS 115 or equivalent. Limited to 20 students.

T 10:10-12:05; field experience to be individually arranged. M. Potts.

This course defines basic cognitive processes that underlie education (for example, linguistic processes that underlie language comprehension and production; numerical processes that underlie mathematics; perceptual processes that underlie reading) and reviews research on the development and learning of these processes in children. A laboratory component focuses on assessment and facilitation of cognitive competencies as they bear on one educational subject.

[HDFS 436 Language Development (also Psychology 436 and Linguistics 436)]

Spring. 4 credits. Open to undergraduate and graduate students. Graduate students should also enroll in HDFS/LING 633, a supplemental graduate seminar. Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive development, or linguistics. S-U grades optional. Offered alternate years. Not offered 1991-92.

T R 11:40-12:55. B. Lust.

This course surveys basic issues, methods, and research in the study of first-language acquisition. Major theoretical positions in the field are considered in the light of experimental studies in first-language acquisition of phonology, syntax, and semantics from infancy on. The fundamental issues of relationships between language and thought are discussed, as are the fundamental linguistic issues of Universal Grammar and the biological foundations for acquisition. The acquisition of communication systems in nonhuman species such as chimpanzees is addressed, but major emphasis is on the child.]

HDFS 438 Thinking and Reasoning

Fall. 3 Credits. Prerequisite: HDFS 115.

W 2:30-5. B. Koslowski.

The course will examine the areas of logical thinking (in formal as well as real-world contexts), the process of making logical and "natural" inferences, problem solving and transfer, causal reasoning, scientific reasoning, theories of evidence and expert vs. novice reasoning. Two general issues will run through the course: the extent to which children and adults approximate the sorts of reasoning that are described by various types of models, and the extent to which various models accurately describe the kind of thinking that is required by the types of problems and issues that arise and must be dealt with in the real world.

HDFS 440 Internship in Cornell Early Childhood Program

Fall or spring. 10-12 credits. (30-36 hours per week) Prerequisites: HDFS 115 and 242.

Recommended: HDFS 346 and 348. Permission of instructor required.

Hours to be arranged. S. West.

Opportunity to integrate theory with practice at an advanced level and to further develop understanding of preschool children and their families. Placement as assistant teacher in one of the preschool groups and participation in curriculum planning, evaluation, staff meetings, home visits, parent conferences, and parent meetings. Supervision by head teacher and instructor. Time commitment includes placement, journal, readings, meetings with supervisors, and special projects.

HDFS 456 Families and Social Policy

Spring. 3 credits. Prerequisite: one course in the area of the family or in sociology. S-U grades optional.

Hours to be arranged. P. Moen.

An examination of the intended and unintended family consequences of governmental policies, using case studies in areas such as social welfare, day care, and employment. The policy implications of changes in the structure and composition of families are also considered.

[HDFS 457 Health and Social Behavior

Fall. 3 credits. Prerequisites: HDFS 115 or 150 and a course in statistics. Letter grades only. Not offered 1991-92.

M W F 10:10. E. Wethington.

This course examines theories and empirical research which assert that social structure, family processes, social support, and social stress have important effects on physical health, mental health, and health behaviors.]

[HDFS 461 The Psychology of Television

Spring. 3 credits. Limited to 100 students.

Preference given to juniors and seniors.

Prerequisite: a developmental or psychology course; HDFS 115 or Psychology 101 preferred. Not offered 1991-92.

M W F 12:20. J. Condry.

This course offers a historical and topical survey of the research literature regarding the influence of television. Topics include (1) the introduction of television from 1950 to 1960 and its direct effects, (2) the audience for television, (3) the content of television, (4) behavioral mechanisms of influence: imitation, disinhibition, arousal/desensitization, (5) the psychological research of the 1960s and 1970s; cognitive mechanisms of influence; mainstreaming and resonance; formal features, comprehension, and perceived reality; current issues in research from 1980 on; the role of advertisements; government policies and advertisements; and television over the life span.]

[HDFS 462 Curiosity and Intrinsic Motivation

Fall. 3 credits. Limited to 20 students. Open to graduate students and advanced undergraduates with a strong background in developmental psychology. Prerequisites: HDFS 115 or Psychology 101 and HDFS 360 or 361. Letter grades only. Not offered 1991-92.

Hours to be arranged. J. Condry.

This course will cover a variety of issues in the study of Intrinsic Motivation. What is the nature of this motivational structure? How does it develop, and what is the role of the social environment in encouraging or discouraging it? What role does it play—or might it play—in the educational process? The course will be taught in a seminar format with weekly readings and class discussions.]

HDFS 464 Sexuality Minorities and Human Development

Spring. 3 credits.

Hours to be announced.

R. Savin-Williams.

The issue of human sexuality is one that is frequently ignored in higher education in the United States today. The first half of the course will cover topics of a fairly general nature regarding theoretical, research, and applied issues on sexual minorities. The course texts will provide a stimulus for various topics to be covered. In the second half of the course, students will determine the content through their selection of particular topics that interest them. The course will be responsive to the educational needs of the students who are enrolled each semester. Its success depends on students feeling personally engaged and committed to the course content. Because of the multidisciplinary nature of the course, it is hoped that students from a variety of backgrounds in disciplines, gender, sexual orientation, ethnicity, race, class, and religious affiliation will feel comfortable in the course.

[HDFS 472 Typical and Atypical Intellectual Development]

Spring. 3 credits. Prerequisites: HDFS 115, a course in statistics, and a course in biology. Not offered 1991-92.

T R 10:10-11:30. S. Ceci.

This course provides an intensive historical examination of both normal and abnormal intelligence, focusing on the antecedents of contemporary views of the heritability of intelligence, brain-behavior linkages, expertise, generality, and cognitive modifiability. It concludes with an examination of current theories, with an emphasis on the instructor's own bioecological theory.]

[HDFS 488 Development in Context (also Psychology 488)]

Spring. 4 credits. Open to juniors, seniors, and graduate students. Prerequisites: one course in statistics (which may be taken simultaneously) and two courses in social sciences, or one in human biology and one in social sciences. Letter grades only. Not offered 1991-92.

T R 2:30-4:25. Staff.

The course examines highlights of what is known about human development in the actual settings in which human beings live and grow. The material presented reveals how development in its various aspects—cognitive, emotional, and social—occurs through the progressive interplay between the maturing capacities and characteristics of an active, exploring, thinking human organism and the changing situational, cultural, and historical contexts in which the person lives. Particular emphasis is given to the role of family, peer group, school, workplace, community, and social structure and belief systems of the larger society. Course work is carried out primarily through the analysis of selected studies that shed light on critical issues in development. The main focus is not on the specific findings, but on key processes and principles of development to which the findings point. Students are offered guidance and experience in analyzing and evaluating research reports, with particular emphasis on the nature and intellectual excitement of the scientific process and on the implications of scientific knowledge for public policy and practice. The course is organized in terms of successive stages in the life course. At each stage the material presented will emphasize change and continuity in the two-way developmental processes taking place between a biologically maturing person and the progressively more complex environments into which the person moves through life.]

HDFS 498 Senior Honors Seminar

Fall and spring. 1 credit. Required for, and limited to, seniors in the HDFS honors program.

Hours to be arranged. R. Savin-Williams. This seminar is devoted to discussion and presentation of honors theses being completed by the senior students.

HDFS 499 Senior Honors Thesis

Fall or spring. Credit to be arranged. Prerequisite: permission of thesis adviser and coordinator of honors program. S-U grades optional.

Department faculty.

Topics Courses

Fall or spring. 2-4 credits. Prerequisites and enrollment limits vary with topic being considered in any particular term. Permission of instructor required.

Hours to be arranged. Department faculty.

This series of courses provides an opportunity for advanced undergraduates to explore an issue, a theme, or research in the areas of departmental concentration. Topics vary each time the course is offered. Descriptions are available at the time of course registration. Although the courses are usually taught as seminars, a subject may occasionally lend itself to lecture, practicum, or other format.

HDFS 415 Topics in Adolescent Development**HDFS 435 Topics in Cognitive Development****HDFS 445 Topics in Early-Childhood Education and Development****HDFS 455 Topics in Family Studies****HDFS 465 Topics in Social and Personality Development****HDFS 475 Topics in Atypical Development****HDFS 485 Topics in the Ecology of Human Development****The Graduate Program**

HDFS graduate courses are only open to undergraduates with instructor's permission.

General Courses**HDFS 610 Processes in Human Development**

Spring. 3 credits. Limited to 20 students. Open to graduate students and juniors and seniors in HDFS and related fields with recommendation from a faculty member and instructor's permission. Prerequisite: a minimum of one course in statistics. Letter grades only.

M 2:30-4:30. U. Bronfenbrenner.

This course focuses on research that illuminates processes of human development as a function of organism-environment interaction through the life course. Topics to be examined will be drawn from the following: the ecology of cognitive development, developmentally instigative characteristics of persons and environments; developmental processes in males and females; activity and work as developmental processes; intimate relationships as contexts of development; developmental processes in adulthood. The final selection will be responsive to student interests.

[HDFS 617 Adolescence]

Spring. 3 credits. Not offered 1991-92.

Hours to be arranged. Staff.

Critical examination of seminal theoretical and empirical writings on adolescent development. Empirical research on specific questions chosen by students is considered in the light of these approaches.]

HDFS 631 Cognitive Development

Fall. 3 credits. Letter grades only. Offered alternate years.

T 2:30-4:25. Staff.

Faculty members involved in the course will present their area of specialization in cognitive development. These areas will include perception, attention, memory, language, thinking and reasoning, learning, creativity, and intelligence.

[HDFS 640 Infancy]

Spring. 3 credits. Not offered 1991-92.

R 9-11:30. S. Robertson.

Development in infancy will be examined through a critical review of key research and theory in selected aspects of neurobehavior, perception, cognition, language, emotion, and social relationships. Theoretical issues to be considered include the role of experience in early development, sensitive periods, continuity and discontinuity in development, and the functional significance of early behavior. Some of the conditions that put infants at risk for poor development will also be considered, such as premature birth, perinatal medical complications, and exposure to environmental toxins. The course will combine perspectives from developmental psychology and psychobiology.]

[HDFS 641 Early-Childhood Education]

Fall. 3 credits. Not offered 1991-92.

W 1:25-4:00. M. Potts.

Survey of major issues in the theoretical and research literature of early-childhood education.]

[HDFS 650 Contemporary Family Theory and Research]

Fall. 3 credits. Not offered 1991-92.

T 9:30-12. E. Wethington.

Sociological and psychological theories and research in the area of the family are examined with reference to the relationship between the family and society, the processes of socialization and social control, the reproduction of gender and social class, and the development of deviance.]

HDFS 660 Personality and Socialization

Spring. 3 credits. Will be taught in conjunction with HDFS 361.

Hours to be arranged. J. Condry.

Major issues in personality development and socialization, with special emphasis on theoretical models and empirical issues.

HDFS 670 Developmental Psychopathology

Spring. 3 credits. Prerequisite: an undergraduate course in abnormal psychology or psychopathology; a course in multivariate statistics; and substantive course work in neurobiology or related biological science.

Hours to be arranged. M. Lenzenweger.

Overview of current theories and empirical research on functional and organically based psychological disorders. Topic areas to be covered include autism, schizophrenia, anxiety disorders, affective disorders, and personality disorders. Focus is on the developmental and etiology of psychopathology.

Topical Seminars

Seminars offered irregularly, with changing topics and instructors. Content, hours, credit, and instructors to be announced. Seminars offer concentrated study of specific theoretical and research issues.

HDFS 618 Seminar in Adolescence

Topics include peer relations, parent-teen relationships, self-esteem, youth and history, work, and moral development.

HDFS 633 Seminar on Language Development

Topics include acquisition of meaning in infancy, precursors of language in early infancy, and atypical language development.

HDFS 635 Seminar in Cognitive Development

Topics include early attention, perception, memory, and communication. Assessment and intervention in relation to these processes will be considered when possible.

HDFS 645 Seminar on Infancy

Topics covered in depth include the role of emotions in early development, infant stimulation and early experience, and the assessment of infant developmental competencies.

HDFS 646 Seminar in Early-Childhood Education

Topics include analysis of models and settings, design of assessment techniques, program evaluation, and early childhood in a cross-cultural context.

HDFS 655 Seminar in Family Studies

Topics include the sociology of marital status, the single-parent family, work-family linkages, women and work, and families and social change.

HDFS 665 Seminar in Personality and Social Development

Focuses on selected issues related to personality and social development. The issues selected vary each year according to current importance in the field and student interests.

HDFS 675 Seminar in Developmental Psychopathology

Topics include learning disabilities, therapeutic interventions in atypical development, child abuse and maltreatment, family factors in the etiology of functional disorders, and cognitive characteristics of atypical groups.

HDFS 685 Seminar in Human Development and Family Studies

Topics include development of self-concept, sex-role identity, observational methods, and interviews in developmental research.

HDFS 690 Seminar on Ecology of Human Development

Topics include the institutional setting as a determinant of behavior, the poor family, and the identification and measurement of ecological variables.

Individualized Special Instruction**HDFS 700-706 Special Studies for Graduate Students**

Fall or spring. Credits and hours to be arranged. S-U grades at discretion of instructor. Department faculty.

Independent advanced work by graduate students recommended by their Special Committee chair with approval of the instructor.

HDFS 700 Directed Readings

For study that predominantly involves library research and independent study.

HDFS 701 Empirical Research

For study that predominantly involves collection and analysis of research data.

HDFS 702 Practicum

For study that predominantly involves field experience in community settings.

HDFS 703 Teaching Assistantship

For students assisting faculty with instruction. Does not apply to work for which students receive financial compensation.

HDFS 704 Research Assistantship

For students assisting faculty with research. Does not apply to work for which students receive financial compensation.

HDFS 705 Extension Assistantship

For students assisting faculty with extension activities. Does not apply to work for which students receive financial compensation.

HDFS 706 Supervised Teaching

For advanced students who assume major responsibility for teaching a course. Supervision by a faculty member is required.

HDFS 899 Master's Thesis and Research

Fall or spring. Credit to be arranged. S-U grades only. Prerequisite: permission of thesis adviser.

Department graduate faculty.

HDFS 999 Doctoral Thesis and Research

Fall or spring. Credit to be arranged. S-U grades only. Prerequisite: permission of thesis adviser.

Department graduate faculty.

HUMAN SERVICE STUDIES COURSES

J. Ford, chair; B. L. Yerka, graduate faculty representative; C. Reed, undergraduate advising coordinator; J. Allen, R. J. Babcock, D. Barr, R. Battistella, R. Bounous, D. Brown, C. Crawford, J. Greene, A. Hahn, I. Lazar, C. McClintock, M. Minot, B. J. Mueller, L. A. Noble, A. Parrot, C. Shapiro, L. Street, D. Tobias, W. Trochim, J. Ziegler

HSS 101 Human Services in Contemporary Society

Fall. 3 credits. Limited to freshmen and sophomores or permission of instructor.

T R 10:10-12:05. D. Barr.

A lecture and discussion course designed as an introduction to the community base of services. Current and historical human services are examined. Emphasis is placed on social services, education, and health and mental health services. Barriers to service delivery are discussed, such as racism, sexism, classism, sexual preference, physical disability, and age. Issues that impact on service delivery will also be discussed, including civil rights, structure of the family, employment, and equal opportunity.

HSS 203 Groups and Organizations

Spring. 3 credits.

M W F 10:10. L. Street.

A basic course in the social psychology of small groups and human service organizations. Study of group processes includes self-perception and interpersonal perception of roles, norms, communication, power, and leadership. Students apply what has been learned about small groups to the study of issues in human service organizations (for example, goals, evaluation, structure, technology, relationships between organizations and clients, environment, and change).

HSS 210 The Elements of Helping

Spring. 3 credits. Limited to 20 students. Not recommended for social work majors. S-U optional.

M 7:30-10. R. Babcock.

An introduction to the theoretical and practical aspects of human service processes. Included is an overview of the helping relationship covering roles, characteristics, relationships, dilemmas, and career issues of helpers. The course focuses on understanding and development of helping skills. Through role playing and exercises, students deal with basics such as attending, listening, responding, empathy, respect, genuineness, and confronting. Other topics include self-awareness, learning, communication, and conflict management.

HSS 225 Education as a Human Service

Fall. 3 credits.

M W F 11:15. M. Minot.

An introductory course concerned with the role of the educator as a professional provider of preventive and remedial intervention through knowledge that results in intentional changes in cognitive, affective, or psychomotor skills of individuals. Educators, in collaboration with other human service professionals, facilitate human growth and development. The course includes an overview of educational programs that use human ecology content in selected human service delivery systems and settings. Emphasis is placed upon the competencies and responsibilities of professionals assuming the educative role.

HSS 246 Determinants of Behavior

Fall. 3 credits. Prerequisites: introductory sociology and introductory psychology and one course in human development.

M W F 2:30. J. Mueller.

Provides an interdisciplinary knowledge base for human service professionals. Examines social behavior in the human environment from ecological, ethological, historical, cultural, and social system perspectives. Applications are made to professional practice at the micro level (counseling with individuals and families or other small groups) and at the macro level (social planning for vulnerable groups in our society).

HSS 280 Racism in American Society (also ASRC 280)

Fall. 3 credits.

W 7:30-10 p.m. D. Barr, J. Turner.

The purpose of this course is to explore the historical, political, and sociological dimensions of racism in American society. A major goal will be to understand the presence and persistence of racial inequality and the relationship of human services to the problems of racism.

HSS 292 Research Methods

Spring. 3 credits.

W 7:30-10 p.m. C. McClintock.

Students will learn the logic and methods of social science research and develop skill in transforming issues of interest to them into researchable questions. Readings, written assignments, and in-class exercises focus on stating hypotheses, designing studies and samples to test hypotheses, measuring variables, and interpreting findings.

HSS 300 Special Studies for Undergraduates

Fall or spring. Credit to be arranged.

Hours to be arranged. Department faculty.

Special arrangement for course work to establish equivalency for training in a previous major or institution. Students prepare a multicopy description of the study they want to undertake on a form available from the Student Services Office. This form, signed by both the instructor directing the study and the head of the department, should be filed at course registration during the change-of-registration period.

HSS 315 Human Sexuality

Spring. 3 credits. Limited to 500 students. Prerequisite: an introductory course in human development and family studies, psychology, or sociology (or equivalent social science course). Recommended: one course in biology. S-U grades optional.

T R 2:30-3:45; sec to be arranged.

A. Parrot.

The aim of this course is to provide students with an understanding of the interactions and interrelationships of human behavior that influence sexual development and behavior. There will be a social policy orientation focusing on the evolution of sexual norms, customs, and legislation within changing sociopolitical systems. Biological developmental components of human sexuality will also be addressed. An underlying issue is the influence of our social and cultural system on the development of sexual needs, standards, and values. Research and theory in human sexuality will be explored in an interdisciplinary approach drawing on human and organizational behavior, biology, history, communication arts, education, research theory, law, sociology, and psychology.

HSS 325 Health-care Services and the Consumer

Fall. 3 credits. S-U grades optional. Offered alternate years.

T R 12:20-1:45. A. Parrot.

Developments in the health field that affect the availability and kinds of health services. Emphasis is placed on interrelationships between institutions and agencies and the part each can play in prevention, diagnosis, and treatment of disease and disability. Focus will include historical and current trends, quality health care, consumer issues, ethical issues, politics and policies, and the problems of health care.

HSS 330 Ecology and Epidemiology of Health

Spring. 3 credits. S-U grades optional. Offered alternate years.

M W F 11:15-12:05. J. Ford.

Ecological and epidemiological approaches to the problems of achieving human health within the physical, social, and mental environment. The course introduces epidemiological methods to the students and surveys the epidemiology of specific diseases such as AIDS, hepatitis, Legionnaires' disease, plague, cancer, herpes, and chlamydia. Application of epidemiology to health care will be discussed.

HSS 340 The Politics of Public Budgeting

Spring. 3 credits. Limited to 50 students:

juniors, seniors, or permission of instructor.

T R 10:10-11:25. Staff.

The course examines the theory and practice that have developed to plan and control raising and spending public funds. The study of public budgeting includes the examination of techniques for controlling spending and methods for raising revenues. Because these fiscal decisions are made in a political environment, the course will take a multidisciplinary approach, synthesizing both the political and economic aspects of budgeting. Students will assume the roles of the different actors in the budgetary process to learn both the institutional dynamics of the process and the political constraints involved.

HSS 360 Introduction to Program Planning and Development

Fall and spring. 3 credits.

M W F 9:05. M. Minot.

The course provides an introduction to program planning and development in the delivery of human services. Models of program planning, development, and delivery will be analyzed in relation to practice. The processes of conceptualizing a program and the context of planning and development (political, organizational, economic, and social) will be examined. Basic tools and techniques available to planners will be identified and selected skills developed. Issues related to ethics, power/authority, confidentiality, and accountability will be included. Professional roles and competencies needed will be highlighted throughout the course. Students will apply the planning and development process to individual projects.

HSS 370 Social Welfare as a Social Institution

Fall. 3 credits.

M W F 9:05. J. Allen.

A philosophical and historical introduction to social welfare services. The course reviews the social contexts from which programs and the profession of social work have evolved. It discusses the political and ideological processes through which public policy is formed and how policies are translated into social welfare programs. Basic issues in welfare are discussed in the context of present program designs, public concerns, and the interrelationships and support of services in the community.

HSS 400-401-403 Special Studies for Undergraduates

Fall or spring. Credits to be arranged. S-U grades optional.

Hours to be arranged. Department faculty.

For independent study by an individual student in advanced work in a field of HSS not otherwise provided in the department or elsewhere at the university, or for study on an experimental basis with a group of students in advanced work not otherwise provided in the department or at the university. Students prepare a multicopy description of the study they want to undertake on a form available from the Counseling Office. This form must be signed by the instructor directing the study and the department chair and filed at course registration or within the change-of-registration period after registration. To ensure review before the close of the course registration or change-of-registration period, early submission of the special-studies form to the chair is

necessary. Students, in consultation with their supervisor, should register for one of the following subdivisions of independent study.

HSS 400 Directed Readings

For study that predominantly involves library research and independent readings.

HSS 401 Empirical Research

For study that predominantly involves data collection and analysis or laboratory or studio projects.

HSS 403 Teaching Apprenticeship

Prerequisite: Students must have taken the course (or equivalent) in which they will be assisting and have demonstrated a high level of performance. For study that includes assisting faculty with instruction.

HSS 414 Professional Internship in Human Service Studies

Fall, spring, or summer. 4-7 credits. Limited to juniors and seniors majoring in human service studies. Prerequisite: FIS 100 or permission of instructor. Pre-course enrollment is required. Weekly seminar meets concurrently with FIS 409.

Sem, T 1:30-4:25. Placement hours to be arranged. Staff.

Students intern for a minimum of 10 hours a week in a human service organization and attend a weekly seminar with a focus on integrating classroom and field-based learning. The course is structured as an opportunity for students to learn experientially and, at the same time, provide meaningful services to human service organizations. Interns are expected to take active roles in structuring, monitoring, and assessing their learning under the guidance of a faculty instructor.

[HSS 417 Power and Empowerment in Human Services

Spring. 3 credits. Offered alternate years. Next offered 1992-93.

Hours to be arranged. D. Barr.

The framework of the course will take an analytical world view of power with some understanding of a capitalist political economy and the historically colonial relationship between the American ruling class and other people. The three dimensions of power will be used as the framework for analysis. The relationship between a classed, racist, and sexist society and the human services will also be included by exploring the nature of empowerment. In addition, new theories of power and empowerment will be studied. The course will focus systematically on both micro and macro levels.]

HSS 460 Human Service Planning Methods

Spring. 3 credits. Prerequisite: HSS 292.

Hours to be arranged. Staff.

The course is designed to bridge theory-oriented social planning courses and practicums. It is intended to introduce undergraduates to basic tools and techniques that social planners use. Five modules are included that explain and provide experience in how social planners collect, analyze, and synthesize information and data in planning and policy development in the human services and that take into account the political and social contexts of the process.

HSS 465 Community Decision Making

Fall. 3 credits. S-U grades optional.

T R 8:30-9:55. A. Hahn.

Identification and discussion of factors that influence the outcome of community issues. Topics include political participation, decision-making processes, the interests and resources of key decision makers, and community change. Concurrent participation in community activities is desirable but not required.

HSS 471-472 Social Work Practice I and II

Introduction to concepts and methods used in a generalist, task-centered model of social work practice. Examination of the values and ethics of professional practice. Students learn skills appropriate for working with individuals, groups, families, and communities. Class content is integrated with concurrent supervised fieldwork. Placements are made in social agencies in Tompkins and surrounding counties. Students are expected to arrange and to pay for their own transportation. A lab fee for field-related expenses will be charged to every student in the course. Each student must have a current driver's license.

HSS 471 Social Work Practice I

Fall. 9 credits. Limited to 25 social work students. Prerequisites: introductory psychology, introductory sociology, one course in human development, grades of C+ or better in HSS 246 and 370, and permission of instructor before registration.

Lees, M W 10:10-12:05; fieldwork, T R for 8 hours each day. C. Shapiro, R. Bounous.

HSS 472 Social Work Practice II

Spring. 9 credits. Limited to 25 social work students. Prerequisites: grade of B- or better in HSS 471 and satisfactory performance in fieldwork.

Lees, M W 10:10-12:05; fieldwork, T R for 8 hours each day. C. Shapiro, R. Bounous.

HSS 473 Section 01 Senior Seminar in Social Work

Spring. 3 credits. Prerequisites: HSS 471-472. (HSS 472 may be taken concurrently).

M W 1:25-2:40. C. Shapiro.

The course integrates and expands on learning from courses in human behavior, social policy, and social work methods. Topics will include professional ethics, human responses to loss, and lifestyle diversity, with an emphasis on integrating theory with issues in professional practice.

HSS 473 Section 02 Senior Seminar

Fall and spring. 3 credits. Prerequisite: field work or permission of instructor. Limited to 18 junior and senior HSS majors.

Hours to be arranged. Staff.

The course will focus on a particular problem, such as poverty, crime, illiteracy, teen pregnancy, and so forth. Solutions to the problem will be sought by applying an understanding of the areas of human service environments, programs, and processes. Specifically, those solutions will be sought via student analysis and definition of the problem, assessments of both current or existing and desired or ideal human services needed to address the problem, and identification of the desired outcomes of such services or of resolution of the problem. Through this process, students will also learn effective ways to create social changes. Work requirements include several individual short papers and a group project.

HSS 475 Social Policy

Fall. 3 credits. Prerequisite: HSS 370 or Government 111 or Sociology 141. S-U grades optional.

M W 11:15-12:30. J. Allen.

An examination of the policy-making process and the significance of national policies as they affect the distribution of social services. Frameworks for analyzing social policy are used to evaluate existing social programs and service-delivery systems. Implications for change in policies at the national, state, and local levels are discussed.

HSS 476 Housing and Feeding the Homeless (also Hotel Administration 490)

Fall and spring. Variable credit. Limited to juniors, seniors, and graduate students.

T R 10:10-11:25. J. Ford, J. Eyster, A. Hales.

Through lectures, class discussion, and a field placement practicum, students will explore the economic, social, and political issues of our country's growing problem of homelessness and the existing and proposed housing and feeding policies and delivery systems that are attempting to deal with homelessness. Students will study the history of homelessness, the description of the subgroups of the homeless population, and strategies to prevent and alleviate the problem. The fieldwork involved in this course will require approximately eight days spread over the semester at a project location.

Topical Seminars and Practicums

Seminars and practicums, offered periodically and reflecting faculty and student interest, with changing topics and instructors. Content, time, credits, and instructors to be announced. Seminars and practicums offer concentrated study in a specific human service area or in the education, planning, or evaluation processes within human services.

HSS 613 Seminar in Health and Mental Health Services

Fall. 3 credits. Open to undergraduates with instructor's approval. S-U grades only.

M W F 10:10-11. J. Mueller.

Administrative and clinical perspectives on the organization and delivery of health and mental health services. Current ethical concerns and policy issues related to the planning of health and mental health service systems. Assessment of several innovative program models for service delivery to persons who are physically ill or mentally impaired.

HSS 669 Seminar in Program Planning and Development

Topics include microlevel program planning, third-sector organizations, and intergovernmental influences on program planning, policy formation, program implementation, and mainstreaming. Two or more human services are examined.

[HSS 697 Seminar in Program Evaluation and Evaluative Research]

Spring. Not offered 1991-92.

W 12:20-1:10. J. Greene.

The seminar is typically organized according to student and faculty projects. Focuses on professional issues in evaluation practice, including consulting, ethics and standards, preparation of conference and publication materials, and various methodological issues.]

Continuing Education for Professionals

These courses are not a part of the department's regular graduate offerings but are designed to provide continuing education for professionals through the extramural division.

HSS 507-508 Professional Improvement I and II

Fall, spring, or summer. 3-6 credits. Enrollment is determined by various factors, including nature of content, funding, resources, facilities, and instructor. S-U grades optional. Intended for extramural (evening) and off-campus instruction. May be repeated with the permission of the instructor.

A series of special-problem seminars, classes, and activities designed for in-service and continuing education of practitioners in helping professions, such as home economics teachers, social workers, public health planners, and adult educators. Specific content of each course varies with group being served but includes work and class time appropriate to number of credits.

The Graduate Program

Human service studies graduate courses are open to undergraduates only with the instructor's permission.

The courses listed below will be taught regularly (annually or in alternate years).

HSS 622 Health and Human Services Management

Fall. 3 credits.

T 12:20-2:45. D. Brown.

Designed as an integrating seminar for students interested in health services administration and consulting, the course focuses on the application of organization theory and behavior for effective management practice and attempts to develop the students' problem-solving and decision-making skills through the analysis of cases. The case method is particularly suited to strengthen diagnostic, analytical, conceptual, and managerial skills by facilitating synthesis, integration, and the application of theory to actual situations. A number of major themes are explored, such as matrix organization, governance and corporate structure, professional values and relationships, organization culture, change and leadership, motivation, group processes, and management by negotiation.

[HSS 625 Health Care Services: Consumer and Ethical Perspectives]

Fall. 3-4 credits. Limited to 30 students; undergraduates with permission of instructor. Offered alternate years. Next offered 1992-93.

M W 2:30-3:45. A. Parrot.

The course will focus on consumer and ethical issues faced by the health care field today. Broad topics to be discussed include ethical standards and guidelines, health care costs and accessibility of services, government role in health care delivery, private industry role in health care, services for the medically indigent and elderly, practitioner burnout and training, ethics of transplant surgery and funding, reproductive technology, AIDS research and funding, animals in medical research, and baby and granny Doe cases. May be used as Biology and Society Senior Seminar option.]

HSS 627 Legal Aspects of Health-Services Delivery

Spring. 3 credits.

M 4:15-6:45. Staff.

This course introduces principles of the law that are specifically applicable to health-services delivery. Topics considered include the liability of hospitals and their staff and personnel for injuries to patients; medical records and disclosure of information; consent to medical and surgical procedures; responsibility for patients' personal property; collection of bills; medical staff privileges; and confidential communications.

HSS 628 Medical-Service Issues in Health Administration (also Biology and Society 428)

Spring. 3 credits. Limited to 50 students.

M 2:30-4:45. V. Utermohlen.

A survey of the issues that affect interactions between the health-care consumer and the medical team, including disease processes (how disease occurs and progresses), the health-care team and illness, third-party payment and illness, and resource allocation.

HSS 629 Strategic Planning and Marketing in Health Care

Spring. 3 credits.

T 12:20-2:45. D. Brown.

The course is designed for students interested in strategic management who may be pursuing careers in health-care administration, health planning, and management consulting. Students are expected to apply their knowledge, skills, and analytical abilities to the planning and implementation of health services at the corporate level. The strategic planning process is viewed as an essential part of management, a dynamic endeavor that enables the organizations to cope with change and meet community health-care needs in an increasingly competitive environment. Useful concepts and techniques for assessing internal and external opportunities are stressed. Cases, visiting case leaders, and student reports help to focus and synthesize the course sessions and materials. The cases include analyses of planning organization and strategies, environmental assessment, marketing techniques, political strategy formulation, product-line management, strategic negotiation, diversification, and corporate restructuring, and hospital systems.

[HSS 630 Comparative Health-Care Systems: Canada, the United States, and Third World Countries]

Fall. 3 credits. Open to graduate students and seniors. Offered alternate years. Not offered 1991-92.

W 1:25-3:45. J. Ford.

An overview of health services is given within the larger context of the social and economic development policies of Canada, the United States, and third world countries. Sociocultural, economic, and managerial factors are stressed as keys to the formulation of realistic strategies. Resource allocations for health services are assessed against the backdrop of changing rates of economic growth. The relevance of high-technology solutions in developing countries is examined.]

HSS 631 Managed Health Delivery Systems: Primary-Ambulatory Care

Spring. 3 credits. S-U grades optional.

T R 2:30-3:45. R. Battistella.

The concept of primary care is used to enhance understanding of the direction and purpose of ongoing changes in health services organization and financing. Pressures on indemnity insurance and solo fee-for-service medicine are examined in the context of the transition from unmanaged to managed delivery systems. The course is divided into two parts: Part 1 examines the development of health maintenance organizations and related forms of managed care against the backdrop of larger public policy concerns. Part 2 centers on administrative-financial topics associated with the design, marketing, and operation of managed delivery systems in highly competitive markets. Considerable attention is given to the relationship between physicians and management with respect to such subjects as medical practice styles, productivity, quality assurance, and outcome measurement. The consumer health care behavior literature is reviewed in the light of marketing strategies and utilization control objectives. Many of the managerial topics are amplified by field trips and a select group of visiting speakers.

HSS 632 Labor Relations in the Health Industry

Spring. 1 credit.

W 4-6:30 (course meets for 5 sessions only). W. Abelow.

This course provides an overview of major topics and current issues concerning unionization in the health industry. It emphasizes a practical, direct approach to dealing with union organizing and elections, collective bargaining, strikes, and labor contract administration in the health industry. The history of unionization in the field and an analysis of applicable laws are covered. Particular emphasis is placed on the role of government and other regulatory agencies in the negotiation process. Students work with current actual cases and materials. Students have the option of taking a final examination or submitting a short research paper.

HSS 633 HMO Development and Management

Spring. 1 credit.

T 4-6 (course meets for 4 sessions only). Staff.

The major goal of this course is to provide students with the conceptual framework for understanding the role of health maintenance organizations (HMOs) in today's health economy and to provide an introduction to the planning, development, and operation of HMOs.

HSS 634 Health Care Organization—Providers and Reimbursement

Fall. 3 credits. Limited to 30 students.

Prerequisite: graduate standing or permission of the instructor.

T R 12:20-1:45. Staff.

The course will provide an introduction at the graduate level to the organization of health providers in the United States, the interrelationships of health services, and major sources and methods of paying for care. The course will describe how health services are structured in the United States and how these different services interrelate along the continuum of care. The course will describe and analyze the different sources of payments and how reimbursement policies affect the type and

location of care provided. Innovations by the public and private sectors in the delivery and reimbursement of health care will also be presented.

HSS 635 Field Studies in Health Administration and Planning

Fall or spring. 1-4 credits.

Hours to be arranged. D. Brown.

Students interested in developing administrative and program-planning research skills are given an opportunity to evaluate an ongoing phase of health care agency activity in the light of sound administrative practice and principles of good medical care. In planning and carrying out the research, students work closely with a skilled practicing administrator and with members of the school's faculty.

HSS 636 Financial Management of Health and Human Service Organizations

Spring. 3 credits. Limited to 30 students.

Prerequisite: a financial accounting course or permission of instructor.

MW 11:15-12:30. Staff.

The objectives of the course are to provide students with a basic understanding of the financial environment surrounding health and human service administrators and to acquaint students with the financial tools necessary to manage health and human service organizations. The course presents an overview of the financial markets and the methods and techniques used in the financial management of health and human service organizations. It will focus mainly on health-care organizations, but the financial practices and approaches presented in the readings and class discussions will also be appropriate to other human service agencies. In addition to discussing acute-care hospitals, the course will present an understanding of the financial management of long-term-care facilities, HMOs, home health care, hospice programs, and other human-service programs.

[HSS 652 Preparing Professionals in the Human Services]

Spring. 3 credits. S-U grades optional.

Offered alternate years. Next offered 1992-93.

T R 12:20-1:35. M. Minot.

Students analyze the assumptions and concepts that underlie preprofessional and continuing professional education for volunteers, paraprofessionals, and professionals in the human services (for example, staff development, training programs, and adult and continuing education in the context of various human services). A variety of preservice and in-service programs will be analyzed in terms of goals, means of implementation, and evaluation. Factors that influence programs are examined, including educational setting, licensure, accreditation, legislation, evaluation of performance. Students have opportunities to participate in educational programs in human service professions and community education. Students may develop or modify a model for providing professional education at the preservice or in-service levels.]

[HSS 655 Leadership in Human Services] Spring. 3 credits. Limited to 20 students. S-U grades optional. Offered alternate years; next offered 1992-93.

W 7:30-10 p.m. R. Babcock.

The course surveys some classic and contemporary leadership theories and their associated theories of personality and motivation. Human service organizations are examined in terms of their unique leadership needs and responses to various leadership styles. Through lectures, case analyses, visiting speakers, and student presentations, the relationships between leadership theories and the special features of human service organizations are explored. Translating leadership theory into practice is emphasized. Special leadership topics, such as gender and race, volunteerism, ethics, and working with boards of directors, will be considered, according to class interest.]

HSS 658 Professional Ethics and Public Policy

Fall. 3 credits.

Hours to be arranged. J. Ziegler.

This course will explore current issues of ethics and public policy against a background of theories of ethical behavior. Questions of how public officials and managers of public and non-profit agencies and private enterprises act will be examined. How do standards of ethical behavior in the professions get established? How are public policy issues with ethical implications resolved? Readings will be drawn from political philosophy, contemporary social science, and imaginative writing. Class participation is essential. Open to seniors and graduate students.

HSS 660 Social Policy and Program Planning in Human Services

Fall. 3 credits. S-U grades optional.

M W 2:30-3:45. J. Allen.

A review of the public policy process in education, health, and social welfare services as it pertains to program development. The course includes the history, definitions, and boundaries of the policy process; the relationships of the policy process to political economy, social structure, intergovernmental relations, and cultural values and beliefs; theories of planning and program development in human services; the role of evaluation in program planning and implementation, with special emphasis on monitoring and feedback of effects into the policy and planning process; selected current issues in policy and planning processes, such as regulatory and legislative constraints; the respective roles of clients or consumers and professional planners and providers; and problems and prospects in the coordination among the various human services.

HSS 661 Designing and Implementing Health and Human Service Programs

Spring. 3 credits. Limited to graduate students. S-U grades optional.

M 4-7. I. Lazar.

The translation of legislation into programs will be described, and the major sources of support for health and human service agencies and projects will be examined. Students will learn to identify potential sources of program support and to develop applications and campaigns for such support. Grant-proposal writing, response to contract requests from governmental agencies, applications to foundations, and techniques of fund-raising will be described and practiced. Students will be expected to write several grant proposals

under conditions and time constraints simulating the actual processes. As part of the simulation there will be no grades of incomplete or late papers accepted in this course.

HSS 664 The Intergovernmental System and Human Service Program Planning

Fall. 3 credits. Open to seniors who have had a course in American government.

T R 2:30-4. J. Ziegler.

An in-depth review of the intergovernmental system in America and its relevance to the formulation of public policy issues including human service and urban/rural economic development policies and programs. Issues of decision making, fiscal arrangements, and public and private sector interactions are explored as they are affected by intergovernmental relationships. The course provides students with an analytic framework for understanding public policy issues in human services, education, and economic development among various governmental levels.

HSS 665 Human Service Politics in the Local Arena

Spring. 3 credits. Offered alternate years.

Hours to be arranged. A. Hahn.

This seminar investigates policy making in the local political arena, with special reference to human service programs and issues. (Graduate students who need an introduction to the local political arena should consider taking HSS 465 prior to this course.) Topics include community power and citizen participation, with special reference to social movements and social movement organizations. Implications for both practice and research will be emphasized.

HSS 670 Management in Public and Nonprofit Organizations

Fall. 3 credits.

T 6:30-9 p.m. C. Crawford.

This course presents an overview of the distinctive characteristics of organizations in public and private nonprofit sectors and their implications for managing human service organizations. Through a mixture of theoretical and case-study literature students will become familiar with the major conceptual and managerial issues that confront the administrator in health and human service agencies in the public and nonprofit sector.

HSS 671 Decision Tools for Administrators and Planners

Spring. 3 credits.

T 6:30-9 p.m. C. Crawford.

This is a decision course that will familiarize students with a variety of tools that can be used to conceptualize problems, decision alternatives, criteria, and futures and to essentially improve the decision-making process. Students will acquire a basic understanding of how people cope with decisional conflicts and the sources of error in decision processes. They will also be introduced to techniques that can be applied in making decisions.

HSS 672 Management Information Systems in Health and Human Services

Spring. 3 credits.

W 9-11:30. C. Crawford.

This course reviews how information systems can be developed and made useful for administrators and other professional staff in human services. Readings and assignments reflect a balance between technical and organizational or human aspects of information systems. Major topics include the organizational and managerial context for information systems in the human services, approaches to systems analysis and database development, data analysis for decision making, and presenting information for understanding programs and policies. Students will do computer assignments and case studies of management information systems issues in human service and other organizational settings.

HSS 674 Organizational Behavior in Human Services

Spring. 3 credits. Limited to 20 students. S-U optional. Offered alternate years.

W 7:30-10 p.m. R. Babcock.

The course surveys organizational behavior in human service organizations with emphasis on the micro dimensions. Similarities and differences among human service and other organizations are stressed. Individual behavior at the human service workplace is viewed in relation to topics such as personality, motivation, group dynamics, communication, leadership, power, and conflict. A seminar format is followed, including lectures, group discussions, student presentations, exercises, and case studies.

[HSS 685 Health and Welfare Policy]

Fall. 3 credits. Not offered 1991-92.

T R 10:10-11:25. R. Battistella.

Health and welfare issues are seen as reflecting alternate solutions to the broader institutional problems of allocation (economics), control (politics), and normative behavior (morality). A basic tenet is that health and welfare policy is deeply rooted in social values and the availability of economic resources. Health policy is interpreted from a multidisciplinary perspective in which change emanates from structural dynamics accompanying socioeconomic development such as the evaluation of the economy from the entrepreneurial to the managerial to the post-industrial stages, together with shifts in social and political ideology—libertarianism, welfare statism, and secular humanism.]

HSS 688 Long-Term Care and the Aged: Alternative Health and Social Service Delivery Systems

Spring. 3 credits.

T R 9-10:15. R. Battistella.

Alternatives for the organization and delivery of long-term care services are examined within the context of public-financing constraints. Progressive long-term care is viewed as a continuum encompassing medical and social services positioned to optimize independent living. Relevant experience from other highly developed countries is presented. Visiting speakers from the government and the private sector are featured, and field trips provide additional insights into the many challenges and opportunities in long-term care policy and management.

HSS 690 Measurement for Program Evaluation and Research

Fall. 3 credits.

M W 11:15–12:30. J. Greene.

The course reviews measurement theory and its application to the evaluation of human service programs. Topics include validity; reliability; scaling methods; basic principles of instrument design; and varied methods of data collection with an emphasis on structured questionnaires and interviews. Student work is focused around an applied course project. Attention is also given to ethical and managerial issues that arise in applied measurement settings.

HSS 691 Program Evaluation and Research Design

Spring. 3 credits.

M W 10:10–11:25. W. Trochim.

This course reviews research design and its application to the evaluation of human service programs. Major topics include experimental, quasi-experimental, and nonexperimental research designs; basic sampling and measurement theory; and the theory of validity in research. Attention is given to issues that arise in the application of research designs to the evaluation of programs, including problems of randomization, causal inference, replication, and utilization of results. The central role of the general linear model in the statistical analysis of outcome evaluation is presented through case examples and computer simulation. Students will encounter examples of outcome evaluations from a wide range of disciplines including health, mental health, social welfare, criminal justice, social policy, and education.

HSS 692–693 Program Evaluation in Theory and Practice

692, fall; 693, spring. 4 credits each semester. Prerequisites for HSS 692: 690 and 691 or 696, or permission of instructor. Prerequisite for HSS 693: 692. Students must register for both semesters. Offered alternate years.

M W 2:30–3:45. W. Trochim.

This course constitutes a one- or two-semester practicum in which the class designs and conducts a program evaluation in the human services. Students are involved in all phases of the evaluation from design through the production and dissemination of a final report. Emphasis is on research methods in the social sciences. Application of knowledge developed in prerequisite courses is stressed (for example, planning and managing an evaluation, ethics, methods of data collection, data processing, and strategies for analysis and feedback of results).

HSS 695 Strategies for Policy and Program Evaluation

Fall. 3 credits. Prerequisites: HSS 690 and 691 or 696, or equivalent. Offered alternate years.

T R 10:10–11:25. J. Greene.

This course examines a wide range of approaches to the evaluation of policies and programs in the human services. The approaches are examined with respect to their purposes, key audiences, and methodologies, as well as their philosophical, political, and value frameworks. Analysis of commonalities and differences across evaluation approaches is used to judge the appropriateness of a given strategy for a particular context.

HSS 696 Qualitative Methods for Program Evaluation

Spring. 3 credits. Prerequisites: HSS 690 and 691 or equivalent.

T R 10:10–11:25. J. Greene.

This course presents a qualitative approach to applied research and the evaluation of human service programs. Topics include the epistemological assumptions underlying this approach, questions of entry into setting, methods for data collection and data analysis, reporting, confidentiality of participants, and the ethics of qualitative inquiry. The course aims to help students understand how, when, and why a qualitative approach to social inquiry can be used appropriately and effectively and how qualitative and quantitative approaches might be mixed effectively.

HSS 699 MPS Problem Solving Project

Fall or spring. Credits to be arranged. For students recommended by their chair and approved by the instructor in charge for independent advanced work. S-U grades optional.

Field faculty.

HSS 704–705 Internship in Human Service Studies

Fall, spring, or summer. 1–15 credits. S-U grades optional.

Hours to be arranged. Graduate faculty.

Internship placement in human services is determined by availability and students' academic and professional goals. Opportunities are available in public and private, human service organizations at the national, state, and local levels in positions consistent with students' needs and desires. The duration of an internship is negotiated between the student and the agency, while course credit and residence units are arranged between the student and the Special Committee.

HSS 790 Advanced Seminar in Program Evaluation

Spring. 3 credits. S-U grades optional.

Prerequisite: permission of instructor.

T R 2:30–3:45. W. Trochim.

This course is intended for students with at least three courses in evaluation (HSS 690 series or equivalent) and statistics through multiple regression. The seminar focuses on analysis and appraisal of current literature on program evaluation and evaluative research, with emphasis on the links between program evaluation and program planning and administration. Attention is given to two or more service areas (education, health, social welfare) and to applications across those areas.

HSS 899 Master's Thesis and Research

Fall and spring. Credit to be arranged.

Prerequisite: permission of the chair of the graduate committee and the instructor. S-U grades optional.

Hours to be arranged. Department graduate faculty.

HSS 999 Doctoral Thesis and Research

Fall and spring. Credit to be arranged.

Prerequisite: permission of the chair of the graduate committee and the instructor. S-U grades optional.

Hours to be arranged. Department graduate faculty.

TEXTILES AND APPAREL COURSES

S. K. Obendorf, chair and undergraduate advising coordinator; P. Schwartz, graduate faculty representative; S. Ashdown, C. C. Chu, C. Coffman, M. Govindaraj, A. T. Lemley, A. Netravali, A. Racine, N. Saltford, L. Wagenet, S. M. Watkins

TXA 040 Apparel Studio

Fall. 1 credit. Limited to 12 students; open to TXA majors or students transferring into TXA. Minimum cost of materials, \$40; lab fee, \$5.

Lec, F 8–9:55. A. Racine.

An introduction to the concepts of shaping, reinforcing, joining, and detailing textile materials in a variety of apparel forms. A remedial course to help students reach the level of proficiency in construction skills necessary for further study in apparel design.

TXA 125 Art and Visual Thinking

Fall. 3 credits. S-U grades optional.

Lecs, T R 3–4:25. Staff.

An introduction to the visual arts and design that explores aesthetic and cross-cultural dimensions of visual experience. Augmented by slide presentations and films, lectures emphasize relationships between visual forms and technology and social, political, and cultural interpretations that distinguish works of art from other man-made objects. Museum and gallery visits arranged when feasible.

TXA 144 Introduction to Apparel Design

Summer only. 3 credits. Limited to 20 students. Prerequisite: permission of the instructor. Cost of supplies and materials, \$50.

A. Racine.

A studio course that focuses on designing apparel through the flat-pattern method. Students use original sketches as a basis for their designs and develop full-scale patterns for individual and group projects that are brought to various stages of completion. Emphasis is placed on creative expression and a thorough understanding of principles and techniques needed to produce apparel.

TXA 145 Apparel Design I

Spring. 4 credits. Limited to 14 students; priority given to TXA majors or students transferring into TXA. Prerequisite: TXA 040 or basic sewing skills. Recommended: an art or drawing course. Apparel design majors should take course during the first year. Minimum cost of materials, \$100; lab fee, \$10.

Lecs and labs, M W 1:25–4:25. A. Racine.

Intensive study of principles and processes of flat-pattern design and fitting techniques, with emphasis on development of creative expression in fashion apparel.

TXA 146 Clothing: The Portable Environment

Fall. 3 credits. Average cost of materials, \$30; lab fee, \$10.

Lec, T R 10:10–12:05. S. Watkins.

An introduction to the physical function of clothing for individuals of varying ages, for sports and recreation, for the physically handicapped, for a variety of occupations and climates, and for hazardous environments such as under water or outer space.

TXA 235 Introduction to Fiber and Textile Science

Fall. 3 credits. Each lab limited to 16 students. Prerequisite: Chemistry 103 or 207. Maximum cost of supplies and textbook, \$40; lab fee, \$10. Lects, T R 1:25-2:15; lab, T 2:30-4:25, or R 2:30-4:25. P. Schwartz.

An introduction to the basic properties of fibrous materials and structures. Special emphasis is given to the fundamental properties of fiber-forming materials, the processes involved in their conversion into fabrics, and their end uses. Laboratory exercises are used to examine the behavior of fibers and fibrous materials in a variety of conditions that influence performance, comfort, and aesthetics. This course is designed to provide a basis for further study in textiles, but it is also sufficiently broad to be appropriate as an elective course for students outside of the major.

TXA 238 Textiles for Interiors

Fall. 3 credits (2 credits with TXA 235 prerequisite; enter course 10/1/90). M W F 9:05. Staff.

An introduction to textile products for residential and contact interiors. Students learn to select fibers and fabrics based on their properties and product end-use requirements. Product performance evaluation and specification are stressed. Until October 1, course is an introduction to fiber, yarn, and fabric production and characteristics.

TXA 245 Dress: A Reflection of American Women's Roles

Fall. 3 credits. S-U grades optional. M W 12:20-2:15. A. Racine.

Historical survey of changing patterns of American women's dress from the colonial period to the present day and of cultural, economic, and political forces that affected changes and women's development. Slides, film clips, and the Cornell University Costume Collection will be used for lectures and discussion. Students will investigate various topics in fashion, etiquette, and the roles of women.

TXA 264 Apparel Design II

Fall. 4 credits. Each section limited to 10 students. Prerequisite: TXA 145. Recommended: two art or drawing courses. Apparel design majors should take TXA 264 and 367 in the same academic year, preferably during the sophomore year. Minimum cost of materials, \$100; lab fee, \$10.

M W 1:25-4:25. S. Ashdown. This studio course examines two interrelated methods of apparel design. Through exercises, principles and processes of draping, fitting, and advanced flat pattern making are studied. Assigned problems require the students to make judgments regarding the design process, the nature of materials, body structure, function, and fashion.

TXA 300 Special Studies for Undergraduates

Fall or spring. Credit to be arranged. Hours to be arranged. Department faculty.

Special arrangement for course work to establish equivalency for courses not transferred from a previous major or institution. Students prepare a multicopy description of the study they want to undertake on a form available from the Student Services Office. The form, signed by both the instructor directing the study and the department chair, is filed at course registration or during the change-of-registration period.

TXA 301 Investigative Research on the Social Impact of Science (also Biology and Society 300)

Spring. 4 credits. Prerequisite: one year of science. Limited to 20 students.

M W 2:30-4:25. P. Schwartz, P. Taylor. Students choose a current issue regarding the social impact of science and work through the steps of investigation: issue definition, background bibliographic and comparative research, making contacts and interviewing, making and revising written and spoken presentations, proposals for action. In a workshop setting students comment on and learn from each other's projects. Guest speakers, films, discussion of articles, and case studies illustrate themes of explanation, argument, modes of research, expertise, ways of knowledge, possibilities of research, action, and public participation.

TXA 331 The Textile and Apparel Industries

Fall. 4 credits. Prerequisites: Economics 101 and 102 or CEH 110 and 111 and an upper-division course in either apparel or textiles, excluding field experiences. Course fee, \$12.

Lecs, T R 8:30-9:55; rec, W 3:35 or W 7:30-8:20 p.m. Staff.

A critical review of the textile and apparel industries, including structure and marketing practices, and government policies that affect industry decisions and operations in such areas as energy, safety, and the environment. The role of labor unions is examined as well as the effects of international trade of textile and apparel products.

TXA 336 Fundamentals of Color and Dyeing

Fall. 4 credits. Prerequisite: College Natural Science Requirements. Lab fee, \$15.

Lecs, M W F 10:10-11; lab, M 1:25-4:25. C. C. Chu.

Color is an extremely important and useful factor in everybody's daily life, e.g., the clothes we wear, the food we eat, the house we live in. This course will emphasize theories and scientific principles of color, providing a framework for the use of colors in design, marketing, or research. How colorants are used to dye fabrics will be addressed. Although fabrics are chiefly used to illustrate color in the class, much of the information and knowledge will be useful to non-textile majors. Guest lecturers from industry will provide the practical aspects of color in business.

TXA 337 Formation and Structure of Textile Fabrics

Spring. 3 credits. Prerequisite: TXA 235. Recommended: college algebra.

Lecs, M W F 9:05. A. Netravali. This course covers (1) how fabrics are made (2) how the method of manufacture influences fabrics properties, and (3) how the method of manufacture limits potential applications of fabrics. The technical aspects of textile fabrics are covered in detail. Available production technologies are reviewed. Properties of woven, knitted, and nonconventional fabrics, methods of producing structural designs, and means of designing fabrics to specifications are covered.

TXA 367 Apparel Design III

Spring. 3 credits. Prerequisite: TXA 264. Recommended: 3 art or drawing courses. Apparel design majors should take TXA 264 and 367 in the same academic year, preferably during the sophomore year. Minimum cost of materials, \$150; lab fee, \$10.

M W 10:10-12:05. A. Racine. Advanced apparel students prepared to challenge and refine their design skills will be presented with a variety of complex studio problems including computer-aided apparel design. The Cornell Costume Collection is used for illustration and inspiration.

TXA 375 Visual Studies: Color and Surface Design

Spring. 3 credits. Minimum cost of materials, \$75; lab fee, \$10.

T R 1:25-4:25. Staff. This studio experience is augmented by slide presentations that demonstrate the use of decorative and repeat patterns as an applied textile art form; lecture materials reference both the history and current trends in surface design and color. Projects explore design problem-solving skills, systems of color classification, and principles of two-dimensional form; portfolio presentation skills are emphasized.

TXA 400-401-402-403 Special Independent Studies for Undergraduates

Fall or spring. Credits to be arranged. S-U grades optional.

Hours to be arranged. Department faculty.

For advanced independent study by an individual student or for study on an experimental basis with a group of students in a field of TXA not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake on a form available from the Counseling Office. This form must be signed by the instructor directing the study and the department chair and filed at course registration or within the change-of-registration period after registration. To ensure review before the close of the course registration or change-of-registration period, early submission of the special-studies form to the department chair is necessary. Students, in consultation with their supervisor, should register for one of the following subdivisions of independent study.

TXA 400 Directed Readings

For study that predominantly involves library research and independent reading.

TXA 401 Empirical Research

For study that predominantly involves data collection and analysis, or laboratory or studio projects.

TXA 402 Supervised Fieldwork

For study that involves both responsible participation in a community setting and reflection on that experience through discussion, reading, and writing. Academic credit is awarded for this integration of theory and practice.

TXA 403 Teaching Apprenticeships

Fall or spring. 2-4 credits. Prerequisites: student must have upperclass standing, have demonstrated a high level of performance in the subject to be taught and in the overall academic program, and have permission of the instructor and the department chair. S-U grades only.

Apprenticeship includes both a study of teaching methods in the field and assisting the faculty with instruction.

TXA 425 Computer-Aided Apparel Design

Fall. 3 credits. Prerequisites: TXA 367 and 3 art or drawing courses. Minimum cost of materials, \$80. Lab fee, \$10.

Lecs, F 12:20-2:15; labs, M W 9:05-10:10. A. Racine.

An advanced studio course that uses micro-computers and the AutoCAD software program for solving a variety of problems in apparel design. The computer is used in all stages of the design process from conception to presentation.

TXA 432 Product Quality Assessment

Spring. 3 credits. Prerequisites: TXA 235 and Statistics. Lab fee, \$15.

Lecs, M W 1:25-2:15; lab, M W 2:30-4:25. A. Netravali.

This course covers the testing and evaluation of textile fibers, yarns, fabrics, and garments, with emphases on the meaning and use of standards, the philosophy of testing, quality control, and statistical evaluation of test data. Common day-to-day tests done in textile and apparel industry will be reviewed and their significance discussed. Laboratory sections will be used to introduce students to various test methods and to generate data for analysis and evaluation.

TXA 439 Biomedical Materials and Devices for Human Body Repair

Spring. 2 credits. S-U grades optional. Prerequisites: College Natural Science Requirement. Juniors and seniors preferred. (Chem. 103-104, or Biol. 101-103).

Lecs, T 1:10-3:35. C. C. Chu.

Survey of materials and devices for repair of injured, diseases, or aged human tissues/organs. It includes properties of synthetic and biological materials, wound healing processes, medical devices for repair of wounds, blood vessels, hearts, joints, bones, nerves, male impotence, vision/hearing/voice, and drug control/release.

TXA 446 Apparel Design: Intermediate Functional Clothing Design

Spring. 3 credits. Prerequisites: TXA 146 and TXA 264 or permission of instructor. Not available to students who have taken DEA 445. Minimum cost of materials, \$100; lab fee, \$10.

Lecs, T R 9:05-12:05. S. Watkins.

Advanced physical theory concerned with the function of clothing. Special current topics in the field will be studied. Students will be engaged in both group and individual research projects that result in the design and development of apparel items.

[TXA 461 Issues in Management and Marketing]

Spring. 3 credits. Prerequisite: TXA 331 or permission of instructor. Course fee, \$12. Not offered 1991-92.

Lecs, T R 1:25-2:55. Staff.

The course will focus on management and marketing issues of concern to the textile and apparel sector. Management topics will include labor and productivity issues, governmental interaction, adoption of technology, and the problem of foreign competition. Topics in distribution and marketing will address the importance of industry-consumer interaction, changes in the domestic and international marketplace, and the role of trade and consumer associations.]

TXA 465 Apparel Design: Product Development and Presentation

Fall. 3 credits. Prerequisites: minimum of three drawing or art courses and TXA 367 or permission of instructor. Minimum cost, \$100; lab fee, \$10.

T R 1:25-4:25. S. Ashdown.

Through studio problems in apparel design, students examine the influence of manufacturing technology and cost on apparel products. Lines of garments are developed to various stages from sketches to finished samples.

TXA 600 Special Problems for Graduate Students

Fall or spring. Credit to be arranged. S-U grades optional.

Hours to be arranged. Department faculty.

Independent advanced work by graduate students recommended by their chair and approved by the department chair and instructor.

TXA 620 Physical Properties of Fiber-Forming Polymers and Fibers

Fall. 3 credits. Prerequisite: permission of instructor. Offered alternate years.

Lecs, M W 2:30-3:45. A. Netravali.

Formation and properties of fiber-forming polymers, rubbery, glassy, and crystalline states. Dynamics of network response. Fiber structure, relationship between chemical structure and physical properties of man-made and natural fibers. Mechanical, thermal, and viscoelastic properties of fibers and testing methods.

TXA 621 Characterization of Fibrous Materials

Spring. 3 credits. Prerequisite: TXA 620 or permission of instructor. S-U grades optional. Offered alternate years.

M W F 12:20. P. Schwartz.

A study of the principles of the major analytical characterization methods and the application of these methods to the study of fiber properties and structure. Topics include microscopy, x-ray diffraction, spectroscopy, magnetic resonance, and mass spectrometry. The student completing this course should be able to select methods and measurements that would best characterize a given structural property.

TXA 635 Special Topics in Textiles: Degradation Properties of Polymers and Fibers

Fall. 1-3 credits. Prerequisite: permission of instructor.

M W F 11:15-12:05. C. Chu.

An in-depth study of the degradation property of polymer fibers with emphasis on environmental effects. Stabilizers used to improve the performance of materials will also be discussed. Recently developed biodegradation polymers will be presented.

[TXA 636 Fiber Chemistry]

Fall. 3 credits. Offered alternate years.

Prerequisite: permission of instructor. Not offered 1991-92.

Lecs, M W F 11:15. C. C. Chu.

An in-depth coverage of the important natural and synthetic fibers currently being used in industry, agriculture, medicine, apparel, and engineering. They include cellulose, silk, wool, polyesters, polyamides, polypropylenes, and acrylics. In each fiber, the synthesis of polymer, fiber formation, and structure, chemical and physical properties, and applications will be discussed.]

TXA 637 Graduate Seminar in Textiles and Apparel

Fall and spring. No credit. S-U only.

R 12:20-1:10. A. Lemley, fall; S. Watkins, spring.

New developments, research, and topics of major concern to the field of textiles and apparel are discussed by faculty members, students, and speakers from industry, government, and academia.

[TXA 639 Mechanics of Fibrous Structures]

Spring. 3 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1991-92.

M W F 10:10. P. Schwartz.

A study of the mechanics of textile structures: creep phenomena and the dynamic properties of fibers and yarns; idealized yarn and fabric models and their relationship to research data; special topics in the deformation of yarns and fabrics in tensile, shear, and compression stress; fabric bending and buckling; and the mechanical behavior of nonwoven textile materials.]

TXA 899 Master's Thesis and Research

Fall or spring. Credits to be arranged.

Prerequisite: permission of the chair of the graduate committee and the instructor. S-U grades optional.

Hours to be arranged. Field graduate faculty.

TXA 999 Doctoral Thesis and Research

Fall or spring. Credit to be arranged. Prerequisite: permission of the chair of the graduate committee and the instructor. S-U grades optional.

Hours to be arranged. Field graduate faculty.

FACULTY ROSTER

- Allen, Josephine A., Ph.D., U. of Michigan.
Assoc. Prof., Human Service Studies
- Anderson, Carol L., Ph.D., Iowa State U. Assoc.
Prof., Human Development and Family
Studies
- Ashdown, Susan, Ph.D., U. of Minnesota. Asst.
Prof., Textiles and Apparel
- Avery, Robert B., Ph.D., U. of Wisconsin.
Assoc. Prof., Consumer Economics and
Housing
- Babcock, Robert J., Ed.D., Cornell U. Assoc.
Prof., Human Service Studies
- Barr, Donald J., Ph.D., Indiana U. Prof.,
Human Service Studies
- Battistella, Roger M., Ph.D., U. of Michigan.
Prof., Human Service Studies
- Becker, Franklin D., Ph.D., U. of California at
Davis. Prof., Design and Environmental
Analysis
- Beckman, Ronald H., M.S., Pratt Inst. Assoc.
Prof., Design and Environmental Analysis
- Biesdorf, Heinz B., Ph.D., U. of Innsbruck
(Austria). Prof. Emeritus, Consumer
Economics and Housing
- Boegly, Carolyn O., M.S., U. of Wisconsin.
Assoc. Prof., Cooperative Extension
- Boyd, D. Michael, B.A., U. of North Iowa.
Prof., Design and Environmental Analysis
- Bronfenbrenner, Urie, Ph.D., U. of Michigan.
Jacob Gould Schurman Professor, Human
Development and Family Studies
- Brumberg, Joan J., Ph.D., U. of Virginia. Assoc.
Prof., Human Development and Family
Studies
- Bryant, W. Keith, Ph.D., Michigan State U.
Prof., Consumer Economics and Housing
- Buchanan, Robert J., Ph.D., U. of Virginia.
Asst. Prof., Human Service Studies
- Bushnell, Allen R., M.F.A., Cranbrook Acad. of
Art. Assoc. Prof., Design and Environmental
Analysis
- Ceci, Stephen J., Ph.D., U. of Exeter (England).
Prof., Human Development and Family
Studies
- Chi, Peter S., Ph.D., Brown U. Prof., Consumer
Economics and Housing
- Chu, Chih-Chang, Ph.D., Florida State U.
Assoc. Prof., Textiles and Apparel
- Cochran, Moncrieff, Ph.D., U. of Michigan.
Assoc. Prof., Human Development and
Family Studies
- Condry, John C., Ph.D., U. of California at Los
Angeles. Prof., Human Development and
Family Studies
- Cornelius, Steven W., Ph.D., Pennsylvania State
U. Assoc. Prof., Human Development and
Family Studies
- Crawford, Catherine M., Ph.D., SUNY at
Albany. Asst. Prof., Human Service Studies
- Danko, Sheila, M.I.D., Rhode Island School of
Design. Asst. Prof., Design and Environ-
mental Analysis
- Doris, John L., Ph.D., Yale U. Prof., Human
Development and Family Studies
- Eckenrode, John J., Ph.D., Tufts U. Asst. Prof.,
Human Development and Family Studies
- Eshelman, Paul E., M.F.A., U. of Illinois. Assoc.
Prof., Design and Environmental Analysis
- Firebaugh, Francille M., Ph.D., Cornell U.
Prof., Consumer Economics and Housing
- Ford, John L., Ph.D., U. of Michigan. Assoc.
Prof., Human Service Studies
- Garner, Clark E., M.F.A., U. of Kansas. Assoc.
Prof., Design and Environmental Analysis
- Gerner, Jennifer L., Ph.D., U. of Wisconsin.
Assoc. Prof., Consumer Economics and
Housing
- Govindaraj, Muthu, C.Sc., C. of Mechanical and
Textile Engineering (Czechoslovakia). Asst.
Prof., Textiles and Apparel
- Greene, Jennifer C., Ph.D., Stanford U. Assoc.
Prof., Human Service Studies
- Hahn, Alan J., Ph.D., Indiana U. Assoc. Prof.,
Human Service Studies
- Hamilton, Stephen F., Ed.D., Harvard U.
Assoc. Prof., Human Development and
Family Studies
- Hazan, Cindy, Ph.D., U. of Denver. Asst. Prof.,
Human Development and Family Studies
- Heck, Ramona K.Z., Ph.D., Purdue U. Assoc.
Prof., Consumer Economics and Housing
- Hedge, Alan, Ph.D., U. of Sheffield (England).
Assoc. Prof., Design and Environmental
Analysis
- Hogarth, Jeanne M., Ph.D., Ohio State U.
Assoc. Prof., Consumer Economics and
Housing
- Jacobsen, Linda A., Ph.D., U. of Wisconsin.
Asst. Prof., Consumer Economics and
Housing
- Key, Rosemary J., Ph.D., Ohio State U. Asst.
Prof., Consumer Economics and Housing
- Koslowski, Barbara, Ed.D., Harvard U. Assoc.
Prof., Human Development and Family
Studies
- LaQuatra, Joseph Jr., Ph.D., Cornell U. Asst.
Prof., Design and Environmental Analysis
- Lazar, Irving, Ph.D., Columbia U. Prof., Human
Service Studies
- Lee, Lee C., Ph.D., Ohio State U. Assoc. Prof.,
Human Development and Family Studies
- Lemley, Ann T., Ph.D., Cornell U. Assoc. Prof.,
Textiles and Apparel
- Lenzenweger, Mark F., Ph.D. Yeshiva U. Asst.
Prof., Human Development and Family
Studies
- Lust, Barbara C., Ph.D., City U. of New York.
Assoc. Prof., Human Development and
Family Studies
- McClintock, Charles C., Ph.D., SUNY at Buffalo.
Assoc. Prof., Human Service Studies
- Maynes, E. Scott, Ph.D., U. of Michigan. Prof.,
Consumer Economics and Housing
- Millican, G. Cory, M.F.A., U. of Florida. Assoc.
Prof., Design and Environmental Analysis
- Minot, Marion E., Ph.D., Cornell U. Prof.,
Human Service Studies
- Moen, Phyllis, Ph.D., U. of Minnesota. Assoc.
Prof., Human Development and Family
Studies
- Mont, Daniel M., Ph.D., U. of Wisconsin at
Madison. Asst. Prof., Consumer Economic
and Housing
- Mueller, B. Jeanne, Ph.D., U. of Wisconsin.
Prof., Human Service Studies
- Netravali, Anil, Ph.D., North Carolina State U.
Asst. Prof., Textiles and Apparel
- Noble, Lucinda A., Ph.D., U. of North Carolina.
Prof., Human Service Studies
- Obendorf, Sharon K., Ph.D., Cornell U. Prof.,
Textiles and Apparel
- Ostrander, Edward R., Ph.D., U. of Illinois.
Assoc. Prof., Design and Environmental
Analysis
- Parrot, Andrea, Ph.D., Cornell U. Asst. Prof.,
Human Service Studies
- Pollak, Patricia B., Ph.D., Syracuse U. Assoc.
Prof., Consumer Economics and Housing
- Potts, Marion H., Ph.D., Penn State U. Prof.,
Human Development and Family Studies
- Reschovsky, James D., Ph.D., U. of Michigan.
Asst. Prof., Consumer Economics and
Housing
- Ricciuti, Henry N., Ph.D., Fordham U. Prof.
Emeritus, Human Development and Family
Studies
- Robertson, Steven S., Ph.D., Cornell U. Assoc.
Prof., Human Development and Family
Studies
- Robinson, Jean R., Ph.D., Radcliffe C. Prof.,
Consumer Economics and Housing
- Saltford, Nancy C., Ph.D., Purdue U. Prof.,
Textiles and Apparel
- Savin-Williams, Richard C., Ph.D., U. of
Chicago. Assoc. Prof., Human Development
and Family Studies
- Schoggen, Phil, Ph.D., U. of Kansas. Prof.,
Human Development and Family Studies
- Schwartz, Peter, Ph.D., North Carolina State U.
Assoc. Prof., Textiles and Apparel
- Shapiro, Constance H., Ph.D., Cornell U.
Assoc. Prof., Human Service Studies
- Sims, William R., Ph.D., Massachusetts Inst. of
Technology. Prof., Design and Environ-
mental Analysis
- Street, Lloyd C., Ph.D., U. of California at
Berkeley. Assoc. Prof., Human Service
Studies
- Suci, George J., Ph.D., U. of Illinois. Prof.,
Human Development and Family Studies
- Trochim, William M. K., Ph.D., Northwestern
U. Assoc. Prof., Human Service Studies
- Trzcinski, Eileen, Ph.D., U. of Michigan. Asst.
Prof., Consumer Economics and Housing
- Watkins, Susan M., M.S., Pennsylvania State U.
Prof., Textiles and Apparel
- Wethington, Elaine, Ph.D., U. of Michigan.
Asst. Prof., Human Development and Family
Studies
- Yerka, Bettie L., Ph.D., Syracuse U. Assoc.
Prof., Human Service Studies
- Ziegler, Jerome M., M.A., U. of Chicago. Prof.,
Human Service Studies
- Zorn, Peter M., Ph.D., U. of California at Davis.
Assoc. Prof., Consumer Economics and
Housing