

New York State College of Human Ecology

Administration

Francille Firebaugh, dean
 Jean Robinson, associate dean; assistant director,
 Cornell University Agricultural Experiment Station
 Lucinda A. Noble, associate dean; director of Cornell
 Cooperative Extension
 Carol L. Anderson, assistant dean; associate director
 of Cornell Cooperative Extension
 Brenda Bricker, director, admissions
 Joyce McAllister, registrar
 Lynne M. Wiley, 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; woodworking shops; a children's creative-art laboratory; 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 of admissions
 W. Graham, director of institutional studies
 J. McAllister, college registrar
 L. Wiley, director of student services

Persons interested in undergraduate study in human ecology should contact the Office of Admissions, 172 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 on subsequent pages 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, 146 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 1,260, with 52 percent in the upper division. About 325 students are graduated each year, and last year 274 freshmen and 161 transfer students matriculated. One hundred faculty members serve as advisers for undergraduates. About 175 graduate students have members of the college's faculty chairing their special committees.

The college admissions committee selects applicants who are academically well prepared and appear most likely to profit from the college's various curricula. About forty master's degrees and twenty-five doctorates are awarded each year. Admission is selective. More than three out of four freshmen were in the top 10 percent of their high school graduating classes. Mean Scholastic Aptitude Test (SAT) scores for freshmen accepted in fall 1987 were 587 verbal and 647 mathematics.

Approximately 75 percent of the student body comes from New York State, with the remainder from other parts of the United States and abroad. Sixteen percent were identified as members of minority or ethnic groups in 1986.

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 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, personality, and social development; infant through adolescent development; atypical development; and family studies.

Human Service Studies (HSS): does not have separate options. Courses focus on 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): experimental and consumer food studies, nutrition, nutritional biochemistry, clinical nutrition, community nutrition. (By careful planning, students may also meet the minimum academic requirements of the American Dietetic Association.)

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

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

Interdepartmental Major in Policy Analysis.

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 the College Registrar, 146 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 Valerie Sellers, the director of the Continuing Education Information Center, B12 Ives Hall, for information on services 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 the private and public sectors of the economy have become increasingly important as the United States shifts to a service-based economy. One result has been an increasing demand from business and government for trained individuals who understand consumers and families, how they interact with private markets, and how public policies affect those markets, and through them, consumers. The demand has been sufficient to elevate salaries for well-trained individuals.

The consumer economics and housing (CEH) and the interdepartmental policy analysis majors provide such training. The majors combine economics with statistics, sociology, and political science. CEH majors study how consumer markets work; how firms and consumers behave; what role government plays in protecting consumers; how functions shift between household and marketplace as prices, incomes, social values, and legislation change; and how changes in the family impact on 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, and elsewhere. Students can specialize within the major in a number of areas, including consumer affairs and policy, housing, and financial advising.

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

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.

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, and the health-care industry. 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. 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. 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 E410 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 green 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 medicine, law, counseling, clinical psychology, special education, or university teaching and research, which require some graduate study. Others may take bachelor's-level positions as youth counselors, day-care workers, personnel assistants, research technicians, social program assistants, etc. The department does not offer programs leading to teaching certification at any level.

Academic Advising

Every HDFS major is assigned a faculty adviser from the department, and advising conferences are required at least twice a year. An adviser helps plan the course work and can also help students find special opportunities for individual study or for experience outside the classroom. Although advisers must sign green 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 to match changing academic interests 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: Infancy and Childhood) and HDFS 150 (Families in Modern Society), and two of the following four courses: HDFS 216 (Adolescence and Youth: Biological and Cognitive Development), HDFS 217 (Adolescence and Youth: Personality and Social Development), HDFS 218 (Adulthood and Aging: Personality and Social Development), and HDFS 219 (Adulthood and Aging: Biological and Cognitive Development). 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 upper-level courses in areas to be selected. Additional information is available in the HDFS Office of Undergraduate Education, 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 notify the coordinator of the honors program as early as possible in their academic career, preferably before their junior 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 a 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.

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 as, for instance, counselors, schoolteachers, 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, (2) human service programs, and (3) human service processes and take a professional internship and an integrative senior seminar. Regardless of their specific career goals, students acquire a broad understanding of the 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, and 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 green schedule card during course enrollment each term, it is the student's responsibility to keep track of courses and to 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. Students who complete all requirements are eligible to apply for beginning-level employment as professional social workers.

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, 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 development.

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 green 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.

Options

Students may select options in apparel design, apparel-textile management, or textile 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 arts, 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 (Textile Science).

Option III: Textile 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 textile 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 all 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*.

Policy Analysis

Advanced technology, increased wealth, and other social changes have caused interactions between government and individuals and between government and business to become more numerous and complex. This phenomenon has occurred at all levels of government and has generated a pronounced need—in both the public and private sectors—for specialists skilled in developing and analyzing public policy. Organized and managed by the Department of Consumer Economics and Housing, the policy analysis major uses the resources of the college and the rest of the university to build the knowledge and the analytical skills required to understand the process by which public policies are developed and to evaluate the impacts and desirability of these policies.

The policy analysis major gives students a basic understanding of the economic and political roles governments play along with the program-analysis and evaluation skills necessary to comprehend the quantitative and qualitative importance of governmental influence. In addition, students make in-depth studies of two policy areas (e.g., health policy, consumer policy, environmental policy, and foreign policy) of their choice. Because experience in legislative, regulatory, and public administration activities is very helpful, involvement in field-study, Cornell-in-Washington, and Cornell Abroad programs is encouraged. The specific requirements for the policy analysis major are listed under the interdepartmental majors.

Graduates in policy analysis are attractive to businesses and industries as well as to governmental agencies because of their economics and political science background and their analytical skills. Students also use the major to prepare for further work in policy studies, law, and business administration.

The policy analysis major is flexible and allows individual program planning. All students majoring in policy analysis are assigned a faculty adviser by the advising coordinator. The earlier a student decides to major in the department, the greater the opportunity to develop a program that will meet individual educational or career goals. Transfer students are urged to discuss their plans with a faculty adviser as soon as possible.

An appointment to talk with either an adviser or the advising coordinator, James Reschovsky, may be made directly.

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, Barbara Morse, in the Office of Student Services, will provide direction in formally developing a program of study. Although the individual curriculum coordinator must sign the green 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 a community and organizational setting and from reflection on that experience through discussion, reading, and writing. This process of integrating theory with practice distinguishes field study from work experience and provides the rationale for granting academic credit.

The Human Ecology Field and International Study Office, 159 Martha Van Rensselaer Hall, offers interdepartmental, 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 and in the Office of the College Registrar.

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.

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, 146 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 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 green 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 the College Registrar. 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 the College Registrar. 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 overseas 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 101 and Education 110; 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; and selected ASRC courses (list available in the Counseling Office, 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. *Course work in at least two departments outside the major* (15 credits), including 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 a 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 receive credit from the advanced placement examination in English are still held for the freshman writing seminar requirement.

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 against 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 against 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 freshman 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:

- 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:

<i>Status at Matriculation</i>	<i>Cornell Human Ecology Credits to Satisfy Work outside the Major</i>
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, Joyce McAllister, in 146 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 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

Students are expected to complete course enrollment during a designated period 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.

Before or during course enrollment, students talk to a department adviser or college counselor, or both, about their program plans. Students must have their course enrollment schedule signed by their departmental major faculty adviser or by a college counselor if they have not declared a major. A listing of course changes plus directions for course enrollment is issued by the Office of the College Registrar before the start of course enrollment. Last-minute course changes are posted in that office as well as in the Counseling Office, N101 Martha Van Rensselaer Hall. Students will also need the *Course and Time Roster*, issued by the Office of the University Registrar each semester before course enrollment.

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. A specified time for enrolling in such courses is listed on the orientation schedule given to all new students. 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.

Freshmen and transfer students registering 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 courses for fall semester in March or April; for spring semester in October or November preceding the beginning of the term. Course enrollment materials are mailed to each new student; continuing students are notified of course enrollment dates by posters and notices in the *Cornell Daily Sun*. Course enrollment materials are available from the Office of Student Services and must be completed and filed in the Office of the College Registrar by the announced deadline.

Permission of the Instructor

Certain courses may be taken only with the permission of the instructor, as indicated in the course descriptions. The instructor's permission must be obtained before the student enrolls in the course. After giving permission, the instructor initials the green course enrollment schedule or signs the course-enrollment form, which can be obtained from the Office of the College Registrar or the Office of Student Services.

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 an opportunity 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 to enroll in the appropriate course number (300, 400, 401, or 402) for a special project.

Students who want to take a special studies course must talk with the faculty member under whose supervision the study would be done and then prepare a plan of work. If the faculty member agrees to supervise the study, a multicopy special studies form must be filled out, describing the study to be pursued. Signatures of the instructor and the department chairperson as well as the student's departmental adviser must be on the form before it is taken to the Office of the College Registrar, where the student will officially register for the course by filling out a course-registration form. Forms and instructions are available in the Office of Student Services.

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 green course schedule, citing reason(s) for carrying a heavier load, before handing it in to the Office of the College Registrar.

Credits beyond 15 may be added during the change-of-registration period at the beginning 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.

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 the College Registrar, 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 overenrolled, students are generally assigned on the basis of seniority. Students' professional goals may be considered. Those students not admitted to a course may be placed on a waiting list and will find a note to that effect attached to the course enrollment printout.

Late Course Enrollment

Students who fail to enroll in courses by a deadline must normally wait until the beginning of a semester to enroll and must pay a \$10 fee. Extensions are sometimes granted if requested from the college registrar before the end of course enrollment. In general, such extensions are only granted for medical reasons supported by a doctor's statement. Students who fail to meet the deadline for any reason should see the college registrar as soon as possible. In some cases, if the delay was absolutely unavoidable, the student may be allowed to enroll in courses late, and it is sometimes possible to have the fee waived.

University Registration

The time and place of university registration is announced by the Office of the University Registrar. At registration, students fill out and return materials that are given to them, and their IDs are validated.

Students also receive a printout of courses for which they are officially enrolled. It is the student's responsibility to check the listing for accuracy of course numbers, credits, and other data. If there are errors, they should be corrected immediately. Procedures for making changes because of errors in the printout, as well as for other reasons, are described below.

During university registration for the fall semester, each continuing student receives a copy of his or her summary of record from the Office of the College Registrar. The summary shows which graduation and major requirements have been completed. Students who have any questions about the summary's accuracy should see an appropriate person in the Office of the College Registrar.

Late university registration. A student who fails to pay his bursar's bill by the announced time will have finance charges added to that bill during the first three weeks of the term. Starting with the fourth week of the term there will be an \$85 late charge, which will increase by \$10 a week for weeks five and six. Starting with the seventh week of the term an additional \$25-a-week charge is added until the end of the term. After completing late university registration, students must take their college registration cards to the Office of the College Registrar, where they will then receive computer printouts of the courses for which they are officially registered. Students who fail to register by the seventh week of the term will be withdrawn from the university by the Office of the College Registrar. Students who want to return 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 \$10 processing fee.
- 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.

- Also, a student submitting a petition after the seventh week of the term requesting permission to drop a course must have his or her faculty advisor write a statement to accompany 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.
- 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.

Procedures

Students who need to make course enrollment changes should make them as soon as possible. It is to the student's advantage to add the desired courses as soon as possible, and it is helpful to other students if unwanted courses are dropped promptly.

Students should assess their work loads carefully at the beginning of each term. If in the first week or two the instructors do not discuss the amount of material to be covered and the extent of assignments, students are advised to ask about course requirements.

Some of the same procedures are required for course enrollment changes as were necessary for course enrollment—for example, permission of the instructor must be obtained for a course requiring it, and the same forms must be filled out for special studies courses. In addition to the procedures listed below for course enrollment changes, all course change forms for nutritional sciences majors must be signed by the departmental faculty adviser.

Specific procedures for making course changes during the change-of-enrollment period (first three weeks of classes) are listed below. The student should:

- 1) Obtain a course-change form from the Office of the College Registrar or from the Office of Student Services.
- 2) Fill the form out and take it to the appropriate office for signature: for human ecology courses, the forms should be taken to the Office of the College Registrar; for courses outside the college, the forms should be taken to the appropriate departmental offices.
- 3) Ask the person handling the class lists to add the student's name to the list of enrolled students for a course being added or to remove his or her name from the class list for a course being dropped. That person should sign the course-change form in the appropriate place.
- 4) Turn all signed forms in to the Office of the College Registrar, including the forms for out-of-college courses. Enrollment cannot be officially changed until the signed forms are filed in the registrar's office. For example, students who fail to "cancel" a course they are no longer attending are in danger of receiving an F in the course, because they are still officially enrolled. There is no charge for course changes during the first three weeks of classes.
- 5) Receive carbon copies of each course-change form at the time it is turned in. These copies are stamped with the date of receipt. It is important to keep these copies in case they are needed to verify later that the forms were filed.

A student who wants to have his or her name placed on a waiting list for a human ecology course should be aware that such lists are compiled during the change-of-course-enrollment period on a first-come-first-served basis, without regard to seniority or other factors. Students must check their status on the waiting lists in person every forty-eight hours, and if space has not opened up, request that their names be kept on the list. Names are automatically dropped if they are not updated.

If a student is enrolled in a human ecology course with a limited enrollment and has not attended the first two class sessions, he or she will be dropped from the course unless circumstances have prevented him or her from attending class and the instructor has been notified.

After the third week and through the seventh week of a term, the procedures outlined above for changes made during the first three weeks of a semester are followed, except that the instructor must sign the course-change form for human ecology courses, and a \$10 fee must be paid.

After the seventh week of classes, a student may not make course changes without petitioning for approval. Students should realize that they are expected to attend classes and do assigned work until a petition has been formally approved.

Study in Absentia

Under certain conditions, credit toward a Cornell degree may be given for study in absentia, that is, study a student undertakes at an accredited institution away from Cornell, after entering the College of Human Ecology. To be eligible for credit for such 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 return to good standing.

In absentia petition forms are available in the Office of Student Services. The petition form should be filled out and catalog descriptions attached for the courses the student wants to take, and then it should be filed in the Office of the College Registrar.

Students whose petitions are granted receive a letter giving them permission from the college registrar to study in absentia. Credit may be granted for study in absentia after the work has been done, but there is no guarantee that such credit will be awarded if permission has not been obtained in advance.

A \$15 fee is charged to bind a student's 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 credits. A form is included with the letter sent to the student, giving permission to study. This form must be completed and returned to the Office of the College Registrar, 146 Martha Van Rensselaer Hall, along with a check for \$15, before the student is officially registered in absentia.

Up to 15 credits may be taken in absentia as long as the work done does not duplicate courses already taken and the study is relevant to the student's program and the requirements of the college. More than 15 credits of work 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) that goal is consistent with the focus of the college. To take more than 15 credits in absentia, a student must also have the petition approved by the college registrar, who will evaluate the proposed program. (Forms are available in the Office of Student Services.)

If part of the work for which credit is sought is to be applied to requirements of the major, the petition will be sent to the appropriate department for approval. If credit is sought for work to be done in a modern foreign language that the student has previously studied, the approval of the Department of Modern Languages and Linguistics in the College of Arts and Sciences must be obtained.

Students are responsible for having the registrar of the institution where they study in absentia send transcripts of grades to the Office of the College Registrar at the College of Human Ecology. Credit can then be officially assessed and applied toward the Cornell degree. Only credits (not course names and grades) for study in absentia 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

Students may request a leave of absence before the beginning of the semester for which a leave is desired or during the first seven weeks of the semester. A leave may be extended for a second semester by requesting an extension in writing from the Office of the College Registrar. Students who are contemplating taking a leave of absence are urged to discuss plans with a counselor. If the student decides to take a leave of absence, a counselor will provide the necessary forms to complete, which should be taken to the Office of the College Registrar, where the official leave will be processed.

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.

If a leave of absence is requested after the first seven weeks, students are advised to attend classes until action is taken on their petitions. 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 and the Office of the College Registrar. Students contemplating such an action are urged to discuss their plans with a counselor.

There are instances in which a student may be given a withdrawal by the Office of the College Registrar. If a student leaves the college without an approved leave of absence or does not return after the leave has expired, the student will be given a withdrawal after the seventh week of the term in which he or she failed to register.

A student who has withdrawn from the college or who has been given a withdrawal by the Office of 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

There are two kinds of petition forms: the general petition form, which is multicopied, and the in-absentia petition form, which is a single sheet and has no copies

attached. Both types of forms are available from the Office of Student Services, N101 Martha Van Rensselaer Hall.

The use of the general petition form is described in the human ecology *Student Guide*. After completing them, students should file general petition forms in 146 Martha Van Rensselaer Hall. They will find out if a petition has been granted or denied by checking their mail folders in the foyer.

The in absentia petition form is used when a student wishes to study at another institution. (See the human ecology *Student Guide* for regulations concerning in absentia study.) This form is also used for students who wish to take more than 15 credits in absentia during their college career. Catalog descriptions of the courses the student wishes to take at the other institution must be attached to the petition form. After completing the petition, the student should file the in absentia petition form in 146 Martha Van Rensselaer Hall. A letter in the mail will inform the student of the decision.

It should be noted that although many kinds of requests are petitionable in the college, some kinds of situations are governed by college faculty legislation and cannot be altered by filing a petition. If a student is in doubt about whether a request could be considered by petition, he or she may discuss the problem with the college registrar.

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 course description. 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 can 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 freshmen writing seminar requirement.

To take a course for an S or U, a student must first make sure, by checking the course description, that the course is offered on that basis, then obtain the permission of the instructor and file a special S-U form with the instructor's signature and the add/drop/change form in the Office of the College Registrar 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 S-U grading status, but such petitions may not be granted. Forms are available in the Office of the College Registrar and in the Office of Student Services.

Grades of Incomplete

A grade 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 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, a conference should be arranged 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. 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 the College Registrar with the grade sheet. Before a student will be allowed to register for succeeding semesters, he or she must go to the Office of the College Registrar 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 the College Registrar (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.

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.

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 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.

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

D. Giles, J. Kugelmass, F. McCarthy, K. Reardon

Field Study

100 Skills for Learning in the Field Fall or spring. 2 credits. Prerequisites: permission of instructor. S-U grades optional.

First 7 weeks of semester; W 1:30–4:25.

J. Kugelmass.

Workshops train students in skills that will help them become more effective field learners and better able to cope with the complex demands of a field placement. Topics include cross-cultural communication, participant observation, investigative interviewing, understanding nonverbal communication, identifying sources of information in the community, and analyzing verbal presentations. All of the concepts are applied to assignments in the field.

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 field study in the College of Human Ecology for interdepartmental credit.

T R 10:10–12:05 or 2:30–4:25. J. Kugelmass.

Introduces students to skills essential for enrichment of field study, internships, and other experiential learning courses. This course focuses on the various cultural settings—small group, organizational, and community—that students will encounter during field study. Through a cycle of active learning and reflection, students gain experience in analysis of assumptions and biases, participant observation and interviewing skills, self-directed learning skills, effective verbal and nonverbal communication, and group dynamics. Working in small task groups, students then apply and synthesize these skills in community-based field projects. Previous semesters' projects included "Collegietown Redevelopment," "The Culture of Ithaca Commons," and "Long-term Health Care."

400 Directed Readings

For study that predominantly involves library research and independent reading.

401 Empirical Research

For study that predominantly involves data collection and analysis.

402 Supervised Fieldwork Fall, spring, or summer. 3–15 credits. S-U grades optional for up to 12 credits. Limited to 20 students. Prerequisite: FIS 200. Enrollment by permission of instructor. Applications due in the Field Study Office during the preceding semester's course enrollment period.

Hours to be arranged. Staff.

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 theory and 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.

403 Teaching Apprenticeship

For study that includes assisting faculty with instruction.

406 Sponsored Field Learning or Internships

Fall or spring. 6–15 credits. S-U grades optional for up to 12 credits. Limited to 15 students; intended for juniors and seniors. Prerequisite: FIS 200. Enrollment by permission of instructor. Applications are due in the

Field Study Office during the preceding semester's course enrollment period.

Hours to be arranged. Staff.

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. Examples include the New York State Assembly Internship Program, the Washington Center, and internships arranged independently by students with individual public or private organizations or institutions. Field supervision, carried out through correspondence, phone calls, and site visits, is aimed at complementing students' work and study assignments while they are on their internships and at enabling students to gain an in-depth understanding of how their internship organization operates and the internal and external social ecological forces that influence it. 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.

[407] Field Experience in Community Problem Solving

Fall or spring. 6–15 credits. Limited to 25 students; intended for juniors or seniors. Prerequisite: FIS 200. Enrollment by permission of instructor. Applications due in the Field Study Office during the preceding semester's course enrollment period. Not offered 1988–89.

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

A course designed to provide students with a structured, closely supervised field experience encompassing an ecological approach to human problem solving. Interdepartmental teams of from two to five students will contract with community businesses, agencies, and organizations as special-projects staff members delegated primary responsibility for problem solving in a designated area of agency need. Students spend twenty hours each week working directly on the projects, 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 in upstate community settings. Set in this context, the field placement is viewed as a case study in the ecology of organizational decision making.

Supervision of all projects is provided jointly by the course instructor and appropriate agency personnel. In addition, each project is subject to review twice during the semester by an oversight committee composed of community and faculty representatives with relevant expertise. Completion of the course is signified by formal presentation of project results to the contracting organization's staff, board of directors, or other appropriate administrative units and to members of the oversight committee, together with submission of an academic analysis of the implementation process to 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 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.]

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 Study Office during the preceding semester's course enrollment period. Students may enroll in FIS 408 for 9 to 15 FIS credits and for 0 to 6 departmental credits, depending on departmental regulations. Information on these policies and on placements is available in 159 Martha Van Rensselaer Hall. Students should begin planning at least one semester before they apply to this course.

K. Reardon.

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, communication, 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.

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

Fall or spring. 3–15 credits. Limited to 25 students. Prerequisite: FIS 200 and permission of instructor. Applications are due in the Field Study Office during the preceding semester's course enrollment period.

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

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 that provides the skills, concepts, and theories necessary for understanding organizations and the critical issues they face. Students can arrange for combined interdepartmental and departmental 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.

International Study

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 class and gender exploitation; the second is to link social factors to the use and distribution of natural resources and provide a framework for understanding the social control of resources and its effects 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 ID 410.

410 Advanced Seminar: Analysis of International Experience

Fall or spring. 3 credits. Prerequisite: 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. Building on an understanding of international processes shaping and directing an interdependent world, the course relates personal experience to socioeconomic factors structuring living situations at home and abroad. Among the issues to be pursued are reentry and (re)acculturation, patterns and conditions of work, relationships and patterns of exchange, ideology and social explanation, personal autonomy and institutional contexts, power and authority, gender exploitation and oppression, and forms of response. The course will feature 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 encourage the analysis and integration of cross-cultural experience in relation to international processes, academic interests, and personal concerns of students.

Consumer Economics and Housing Courses

J. Robinson, chairperson; J. Gerner, graduate faculty representative; P. Chi, J. Reschovsky, undergraduate advising coordinators; R. Avery, H. B. Biesdorf, W. K. Bryant, M. Coughlan, L. Gosse, R. Heck, J. Hogarth, L. Jacobsen, R. Key, E. S. Maynes, P. Pollak, J. Reschovsky, N. C. Saltford, J. Swanson, S. White-Means, P. Zorn

110 Introduction to Consumer Economics I

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. Staff.

Principles of microeconomics with an emphasis on 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.

111 Introduction to Consumer Economics II

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. Two evening prelims. J. Robinson.

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.

148 Sociological Perspectives on Households

Fall. 3 credits. S-U grades optional.

M W F 11:15. L. Jacobsen.

An introductory sociology course analyzing the composition and distribution of families and households in the United States. Students focus on the social, economic, and demographic processes underlying changes in family and household structure as well as on the effects of those changes on basic social institutions. Topics include trends in marriage, divorce, and childbearing; the interactions between household structure and labor supply, living arrangements, and housing consumption; social stratification and inequality; poverty; population growth and geographic distribution; and trends in the age and sex structure of U. S. society.

233 Marketing and the Consumer Spring.

3 credits. Prerequisite: CEH 110 or equivalent.

T R 8:40–9:55. Staff.

This course introduces students to marketing—the processes and institutions by which products are conceived, tested, priced, advertised, distributed, and evaluated. Case studies and outside lecturers are used to impart reality to the course. Emphasis is given to the viewpoint of both the seller and the consumer. Students are required to undertake a paper involving a marketing problem.

247 Housing and Society Fall. 3 credits. S-U

grades optional.

M W F 11:15. 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.

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.

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. Six 1½ 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.

310 Intermediate Microeconomics Fall. 4 credits.

Prerequisite: CEH 110 or equivalent.

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.

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.

312 Family Resource Management Spring.

3 credits. Not open to freshmen. S-U grades optional.

M W F 2:30. R. Key.

Identifies and analyzes basic management concepts. The focus is on the use of resources to attain goals and meet demands.

315 Personal Financial Management Fall or

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. Fall: J. Robinson; spring: 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.

325 Economic Organization of the Household

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

S-U grades optional. Class notes for sale at the Campus Store.

M W F 9:05. Midterm exams: 7:30 p.m. Sept. 27 and Nov. 1. 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.

[332 Consumer Decision Making Spring.

3 credits. Prerequisite: CEH 110 or permission of instructor. Not offered 1988–89.

T R 2:30–3:45. 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.]

[341 Fundamentals of Housing Economics

Spring. 3 credits. Prerequisite: CEH 110 or equivalent. S-U grades optional. Not offered 1988–89.

T R 1–2:15. P. Zorn.

This course is designed to provide students with the economic skills required to understand housing markets, problems, and policies. Microeconomic theory will be used to develop a model of household and firm behavior. This model provides the framework for an analysis of empirical studies by housing economists. Topics will include the tenure-mobility decision, estimation of the supply and demand for housing, the effects of inflation and the income tax system on the housing market, and the treatment of housing as a heterogeneous durable good.]

[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. Not offered 1988–89.

M W F 10:10. 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.]

356 The Economics of Welfare Policy Spring.

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

M W F 9:05. Staff.

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.

400–401–402 Special Studies for Under-

graduates 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 chairman 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 chairman is necessary. Students, in consultation with their faculty supervisor, should register for one of the following subdivisions of independent study:

400 Directed Reading

For study that predominantly involves library research and independent reading.

401 Empirical Research

For study that predominantly involves data collection and analysis.

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.

411 Time as a Human Resource Fall. 3 credits.

Prerequisites: one course in sociology. Recommended: one course in microeconomics. S-U grades optional.

T R 10:10–11:25. R. Heck.

A seminar based on historical and contemporary readings. Examines and explores 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 activities and production.

430 The Economics of Consumer Policy Fall.

3 credits. Open to juniors, seniors, and graduate students. Prerequisites: CEH 110–111 or permission of instructor. Offered alternate years.

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. Consumer sovereignty, the consumer interest, and consumer representation are all dealt with, along with economic analyses of current and enduring consumer policy proposals and programs.

[431 Consumer Behavior Fall. 3 credits. Open to seniors and graduate students. Prerequisite: CEH 110 or equivalent. Not offered 1988–89.

T R 12:20–2:15. E. S. Maynes.

This course applies the concepts, models, and research techniques of the behavioral sciences to the explanation and prediction of consumer behavior. The student is exposed to representative theories, models, problems, and research techniques. Special efforts are made to insure that students encounter problems approached from both seller and consumer viewpoints as well as from the disciplines of economics and social psychology. Once a week graduate students and undergraduates meet in separate sessions to review and appraise representative pieces of consumer behavior research.]

[433 Consumerism and the Consumer Affairs

Professional Fall. 3 credits. Prerequisite: junior or senior status. Offered alternate years. Not offered 1988–89; next offered 1989–90.

T R 12:20–1:45. E. 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.]

434 Financial and Credit Markets and Policy

Spring. 3 credits. Prerequisites: CEH 110 or 111. S-U grades optional.

T R 8:40–9:55. R. Avery.

An examination of the economic forces at work in the nation's financial markets. The roles played by government and regulatory bodies in shaping money and credit markets.

438 Demographic Analysis in Consumer

Economics and Housing Spring. 3 credits. Not open to freshmen; open to sophomores with permission of the instructor. S-U grades optional.

TR 12:20–1:35. L. Jacobsen.

This course provides an introduction to the methods, measures, and data used in the analysis of human populations, with applications to consumer demand and market trends. 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.

444 Housing for the Elderly Spring. 3 credits.

Prerequisite: CEH 247 or permission of instructor. S-U grades optional. Offered alternate years.

TR 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. Extra work is required for graduate credit.

[445 Housing, Neighborhood, and Community

Spring. 3 credits. Prerequisite: CEH 247 or permission of instructor. S-U grades optional. Offered alternate years. Not offered 1988–89; next offered 1989–90.

TR 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. Extra work is required for graduate credit.]

448 Housing Programs and Policy Fall. 3 credits.

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

MWF 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. Economic theory will be used to evaluate these policies.

[450 Economics of Health, Health-care

Expenditures, and Health Policy Fall. 3 credits. Prerequisite: CEH 110 or equivalent. Not offered 1988–89.

TR 1–2:15. S. White-Means.

A study of the health-care market as distinguished from other markets by consumers' relative information disadvantage. Topics include a theoretical and institutional analysis of the health-care system and its role in the consumer decision making process, conflicts of interest between institutional objectives of health-care providers and public and private health-care insurers as they relate to inefficient provision of medical services, and the role of government intervention and alternative systems of medical care provision in reducing medical costs and increasing accessibility.]

[465 Economics of Consumer Law Fall. 3 credits.

Prerequisite: CEH 110 or equivalent. S-U grades optional. Not offered 1988–89.

MWF 1:25. J. Gerner.

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.]

485 Evaluation of Public Policies Fall. 3 credits.

Prerequisites: CEH 110 or equivalent and an introductory statistics course. Recommended: CEH 310 or equivalent.

MWF 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.

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 chairperson and approved by the head of the department and the instructor.

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.

602 Family Resource Management Concepts

Fall. 3 credits. Prerequisite: graduate standing.

TR 2:30–3:45. R. Key.

A study of the basic concepts and the development of conceptual frameworks in family management.

603 Economics of Consumer Demand Fall.

3 credits. Prerequisite: CEH 310, or Economics 311 or 313 or concurrent enrollment in one of the three. S-U grades optional.

TR 10:10. J. Gerner.

Introduction at the graduate level to theory and empirical research on household demand, consumption, and savings. Particular attention is paid to problems associated with the demand for consumer durables, with applications to housing.

[604 Economics of Household Behavior Fall.

3 credits. Prerequisite: Economics 311. S-U grades optional. Not offered 1988–89.

MWF 1:25. Staff.

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

605 Information and Regulation Spring. 3 credits.

Prerequisite: CEH 603.

W 2–4:25. 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.

640 Fundamentals of Housing Fall. 3 credits.

Prerequisite: graduate standing or permission of instructor. S-U grades optional. Offered alternate years.

MW 2:30–3:45. P. Chi.

An introductory 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.

648 Household and Family Demography Spring.

3 credits. Prerequisite: graduate standing or permission of instructor. S-U grades optional. Offered alternate years.

T 3–5:25. L. Jacobsen.

This course is concerned with the size and composition of households and families; their variation among nations and between subgroups within the nation; changes over time, including both secular trends and change over the life cycle; the determinants of change and variation; and socioeconomic consequences of household variation and change, such as influences on residential mobility and housing adjustments, impacts of family structure on fertility, implications of family composition for female labor-force participation, and effects of household and family structure on economic behavior.

[714 Readings in Family Decision Making Fall

and spring. 3 credits. Recommended: a course in family management (preferably CEH 602) and a course in family sociology. S-U grades only. Not offered 1988–89.

Hours to be arranged. Staff.

Family decision making is studied from the perspective of decision processes, behavior of decision makers, and decision context. The relationship of decision making to family management is also explored.]

[715 Family Financial Management Spring. 3

credits. Prerequisites: an introductory statistics course, CEH 315 or equivalent, and CEH 602. S-U grades optional. Offered alternate years. Not offered 1988–89; next offered 1989–90.

W 2–4:25. R. Heck.

The study of management theory applied to the financial dimension of the household. 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.]

[726 Consumption and Demand Analysis Spring.

3 credits. Prerequisite: intermediate microeconomics, CEH 603, and CEH 604; or permission of instructor. S-U grades optional. Offered alternate years. Not offered 1988–89; next offered 1989–90.

MWF 8. 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.]

727 Family Economics Fall. 3 credits. Prerequisite:

permission of instructor. Recommended but not required: CEH 411. S-U grades optional. Offered alternate years.

Hours to be arranged. J. Gerner.

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. Family demography is also examined.

730 Consumer Policy Spring. 3 credits.

Prerequisite: intermediate microeconomics. S-U grades optional. Offered alternate years.

T R 2-4:25. J. Reschovsky.

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.

899 Master's Thesis and Research Fall and

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

Graduate faculty.

999 Doctoral Thesis and Research Fall and

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

Graduate faculty.

Design and Environmental Analysis Courses

W. R. Sims, chairperson; 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, G. C. Millican, E. R. Ostrander

101 Design I: Fundamentals Fall or spring.

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; spring: M W 1:25-4:25. M. Boyd.

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

102 Design II: Fundamentals Spring. 3 credits.

Each section limited to 18 students. Permission of instructor required. Priority given to Option 1 DEA majors. B- or higher in DEA 101 required to register for this course. Option 1 majors must take DEA 102 and 115 concurrently. Approximate cost of materials, \$125; shop fee, \$10.

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

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

111 Introduction to Design Spring. 3 credits.

M W F 12:20. 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.

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

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

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.

115 Drawing for Interior Design Spring. 3 credits. Priority given to DEA majors. Option 1 majors must take DEA 102 and DEA 115 concurrently. Minimum cost of materials, \$50.

T R 1:25-4:25. 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.

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 9:05-11. 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.

150 Introduction to Human-Environment Relations Fall. 3 credits.

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

E. Ostrander, 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 postoccupancy evaluation.

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. Corequisite in DEA 203 is required. Minimum cost of materials, \$120; shop fee, \$10; optional field trip, approximately \$60; diazo machine fee, \$8.

M 3:30-5:25, W 1:25-4:25, and T R 10:10-1:10.

A. Bushnell.

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.

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 3:30-5:25 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.

203 Design Communications Fall. 1 credit. Priority given to DEA majors.

M 1:25-3:20. S. Danko.

Communication techniques for architectural and interior designers. Using a case-study analysis of a major interiors project, 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.

204 Introduction to Building Technology Spring. 1 credit.

M 1:25-3:20. 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.

250 The Environment and Social Behavior Fall. 3 credits. Prerequisite: DEA 150 or permission of instructor.

M W 10:10-12:05. 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.

251 Historic Design I: Furniture and Interior Design Spring. 3 credits.

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

M W F 9:05. G. C. Millican.

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.

252 Historic Design II: Furniture and Interior Design Fall. 3 credits.

Prerequisite: DEA 101. Corequisite: DEA 111. Recommended sequence: DEA 251, 252, and 353.

M W F 9:05. G. C. Millican.

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.

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.

T R 1:25-4:25. G. C. Millican.

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.

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.

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, \$120; shop fee, \$10; optional field trip, approximately \$60; diazo machine fee, \$8.

T R 10:10–1:10, M 1:25–4:25, or W 3:30–5:25.

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.

302 Design VI: Intermediate Interior Design

Spring. 5 credits. Prerequisites: DEA 301 and 303. Corequisite: DEA 304. Minimum cost of materials, \$120; shop fee, \$10; diazo machine fee, \$8.

T R 10:10–1:10, M 1:25–4:25, and W 1:25–3:25. S. Danko.

Second-semester, intermediate-level interior design studio. Continued emphasis on development of design skills and exposure to generic problem types.

303 Introduction to Furnishings, Materials, and Finishes

Fall. 1 credit.

W 1:25–3:20. 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.

304 Introduction to Professional Practice of Interior Design

Spring. 1 credit.

W 3:30–5:25. 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, legal responsibilities and concerns, contracts, basic contract documents such as working drawings and specifications, supervision of construction and installation, and cost estimation.

325 Human Factors: Ergonomics-Anthropometrics

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

T R 10:10–11:30. 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, work physiology, and motor performance. Attention is given to the needs of special populations such as the physically handicapped.

[348 Environmental Graphics and Signing

Spring. 3 credits. Recommended: design background. Limited to 20 students. Approximate cost of materials, \$50. Not offered 1988–89.

M W 10:10–1:10. M. Boyd.

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

349 Graphic Design

Spring. 3 credits. Enrollment limited to 20 students. Recommended: design background. Priority given to DEA majors. Approximate cost of materials, \$50.

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.

350 Human Factors: The Ambient Environment

Fall. 3 credits. Recommended: DEA 150.

T R 10:10–11:30. 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.

353 Historic Design III: Contemporary Design

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

M W F 11:15–12:05. G. C. Millican.

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.

361 Residential Design

Spring. 3 credits.

Approximate cost of materials, \$30.

T R 8–11. G. C. Millican.

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.

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

400 Directed Readings

For study that predominantly involves library research and independent reading.

401 Empirical Research

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

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.

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.

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 2:30–5:30. 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.

455 Research Methods in Human-Environment Relations

Spring. 3 credits. Prerequisite: DEA 150 or permission of instructor, and a statistics course.

M W F 11:15. 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.

459 Programming Methods in Design

Fall. 3 credits.

M W F 11:15. 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.

499 Design VII: Advanced Interior Design

Fall and spring. 6 credits. Option 1 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. Minimum cost of materials, \$120; diazo machine fee, \$8 per semester.

M T W R 1:25–4:25. Department faculty.

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.

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 chairperson and approved by the head of the department and instructor.

645 Design Process and Methods

Spring. 3 credits. Limited to 15 graduate and advanced undergraduate students. Prerequisite for undergraduates: permission of instructor.

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.

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 9:05–10:10; lab, R 10:10–12:20.
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.

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.

651 Human Factors: Ergonomics Anthropometrics Spring. 3 credits. Prerequisite: a 3-credit statistics course. Recommended: DEA 150.
T R 10:10–11:30 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.

652 Human Factors: The Ambient Environment Fall. 3 credits. Recommended: DEA 150.
T R 2:30–3:15 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.

653 Psychology of Workplace Design Spring.
3 credits. Prerequisite: DEA 250/660 or permission of instructor.

M W 8:30–9:55. 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.

654 Facility Planning and Management Studio Spring. 4 credits. Prerequisite: permission of instructor. Letter grades only. Minimum cost of materials, \$100.
T R 2:30–5:30 and a one-hour seminar to be arranged. W. Sims.

For graduates 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.

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 11:15, 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.

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.

660 The Environment and Social Behavior Fall.
4 credits. Prerequisite: DEA 150 or permission of instructor.
M W 10:10–12:05, 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.

668 Design Theory Seminar Fall. 3 credits.
Enrollment limited to 15 students.
T R 10:10–12:20. 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.

899 Master's Thesis and Research Fall or spring.
Credits to be arranged. Prerequisite: permission of the chairperson 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, chairman; S. Cornelius, graduate faculty representative; H. T. M. Bayer, D. Blyth, U. Bronfenbrenner, J. Brumberg, S. Ceci, M. Cochran, J. Condry, J. Doris, J. Eckenrode, J. Gebhardt, S. Hamilton, J. Harding, B. Koslowski, L. C. Lee, M. Lenzenweger, B. Lust, P. Moen, M. Potts, H. Ricciuti, R. Savin-Williams, P. Schoggen, M. Thornton, S. West, E. Wethington

111 Observation Spring. 3 credits.
M W F 10:10. P. Schoggen.

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.

115 Human Development: Infancy and Childhood Fall or summer. 3 credits. S-U grades optional.

M W F 11:15. Staff.
Provides a broad overview of theories, research methods, and the status of scientific knowledge about human development from infancy through childhood. Attention is focused on the interplay of psychological

factors in changing behavior and shaping individuals' perceptual, linguistic, neurophysiological, social, and cognitive development.

150 Families in Modern Society Spring or summer.
3 credits. S-U grades optional. Students cannot receive credit for both HDFS 150 and Sociology 243.
M W F 1:25. E. Wethington.

Contemporary family roles and functions are considered as they appear in United States history, as they change over the life course, and as they are influenced by cultural and economic forces that impinge on them.

216 Adolescence and Youth: Biological and Cognitive Development Spring, weeks 1–7.
2 credits. Prerequisite: a psychology or a sociology course. Not open to freshmen. S-U grades optional.
M W F 12:20. Staff.

A course giving an overview of basic research and theory on pubescence and cognitive development during adolescence and youth and how they affect an individual's personality and social development. Major issues discussed include the psychosocial significance of pubescence, the nature of adolescence as a point in the life course, and adolescent identity.

217 Adolescence and Youth: Personality and Social Development Spring, weeks 8–15. 2 credits.
Prerequisite: a psychology or a sociology course. Not open to freshmen. S-U grades optional.
M W F 12:20. Staff.

A course giving an overview of basic research and theory on an individual's personality and social development during adolescence and youth. The role of family, peers, school, and work contexts during adolescence is emphasized. Major issues discussed include autonomy, intimacy, achievement, and problem behavior.

218 Adulthood and Aging: Personality and Social Development Fall, weeks 1–7. 2 credits.
Prerequisites: HDFS 115 or an introductory developmental psychology course and HDFS 150 or an introductory sociology course. Not open to freshmen. S-U grades optional.

M W 2:30. Weekly discussion sections to be arranged. Staff.
This course provides a general introduction to theories and research on adult development and aging. Change and continuity in personality from youth through late adulthood are discussed. Transitions in familial and occupational roles and interpersonal relationships are examined from a life-course perspective.

219 Adulthood and Aging: Biological and Cognitive Development Fall, weeks 8–15. 2 credits.
Prerequisites: HDFS 115 or an introductory developmental psychology course and an introductory biology course. Not open to freshmen. S-U grades optional.

M W 2:30. Weekly discussion sections to be arranged. Staff.
This course provides a general introduction to theories and research on adult development and aging. The course emphasizes biological and cognitive changes during adulthood. Topics examined include physical health, disease, and longevity; issues in long-term care and institutionalization; and changes in cognitive processes involving sensation, perception, memory, thinking, and intelligence.

242 Participation with Groups of Children in the Early Years Fall or spring. 4 credits (3 credits with permission of instructor). Limited to 20 students (limit depends on availability of placements and of supervision). Prerequisite: HDFS 115. Recommended: HDFS 111 or Interdepartmental 100. S-U grades optional.

W 10:10–12:05, plus 2 half-days of fieldwork (for 4 credits) or 1 half-day of fieldwork (for 3 credits). S. West.
A field-based course designed to combine experience in child-care centers with theory and supervision,

intended to develop the student's ability to understand and relate effectively to young children. Course structure integrates lectures and discussions, workshops, films, projects, reading, writing, and sharing of field experiences. Students are placed in local nursery schools, day-care centers, Head Start programs, and kindergartens.

[243 Participation with Groups of Children Ages Six through Twelve] Fall. 4 credits Limited to 20 students (limit depends on availability of placements). Permission of instructor required. Prerequisites: HDFS 115. Recommended: HDFS 111. Not offered 1988-89.

R 10:10-12:05, plus 2 half-days of fieldwork. Staff. A field-study course structured to integrate knowledge from practicum, lectures, discussions, and readings to provide a better understanding of child development in school settings. Each student will work in one classroom with an experienced teacher.]

[258 Historical Development of Women as Professionals, 1800-1980 (also Women's Studies 238 and Sociology 238)] Fall. 3 credits. S-U grades optional. Human ecology students must register for HDFS 258. Not offered 1988-89.

T R 10:10-11:40. J. Brumberg. The historical evolution of the female professions in America (midwifery, nursing, teaching, librarianship, prostitution, home economics, and social work) as well as women's struggles to gain access to medicine, law, the clergy, and the academy. Consideration of history of women in medicine and law as well. 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.]

270 Abnormal Development 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. An introduction to the cognitive, emotional, and biological aspects of abnormal development across the life span. The major mental illnesses will be covered, including schizophrenia, affective disorders, and personality disorders. The course also addresses problems in adjustment, such as delinquency, and abnormalities in intellectual development (e.g., mental retardation, attention deficit disorder, and learning disabilities). Emphasis will be placed on the developmental antecedents of maladaptation, current theories of etiology, and intervention strategies.

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.

313 Problematic Behavior in Adolescence Fall. 3 credits. Prerequisites: HDFS 216 or 217. Offered alternate years.

M W F 9:05. Staff. This course focuses on (1) various biological, psychological, and sociological theories that attempt to explain deviant behavior among adolescents; (2) research that addresses issues of problematic behavior; and (3) presentations by human services personnel and agencies concerning their programs and policies toward problematic adolescents. These will be integrated during class discussions.

[333 Cognitive Processes in Development] Fall. 3 credits. Prerequisite: HDFS 115 or equivalent. Not offered 1988-89.

M W F 11:15. Staff. A survey of the 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.]

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. Gebhardt. 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.

[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 1988-89.

M W F 1:25. J. Haas, H. Ricciuti. A review of major patterns of physical growth from the fetal period through adolescence, with consideration given to biological and socioenvironmental determinants of growth, as well as to physical and psychological consequences of variations in growth patterns. Normal patterns of growth are examined; an analysis of major sources of variations in growth (normal and atypical) follows.]

348 Advanced Participation in Preschool Settings 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. Staff.

An advanced, supervised fieldwork experience with a focus on helping children build relationships to support learning and personal development. Students are expected to define their own goals and assess progress with supervising teacher and instructor; to keep a journal; and to plan, carry out, and evaluate weekly activities for children in a variety of curriculum areas.

352 Afro-American and Asian-American Families Fall. 3 credits. Limited to 25 students. Prerequisites: a sociology or a family-studies course.

M W F 1:25. M. Thornton. This course provides an introductory survey to the study of Afro-American and Asian-American family life. During the semester we will review and evaluate theories, methods, and findings commonly cited in discussions of minority family organization and functions.

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 F 11:15. M. Thornton. 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.

358 Theories of Adult Interpersonal Relationships Fall. 3 credits. Prerequisite: HDFS 150. S-U grades optional.

Hours to be arranged. Staff. Selective theories of the basic disciplines in social psychology, sociology, and psychology are reviewed and their pertinence to understanding of adulthood examined. Students generate hypotheses about these

theories and test one of them through a paper based on either library or empirical research. A journal is kept to interrelate the concepts and to suggest practical applications.

[359 American Families in Historical Perspective (also Sociology 359 and Women's Studies 357)]

Spring. 3 credits. Prerequisites: HDFS 150 or one 200-level social science or history course. S-U grades optional. Human ecology students must register for HDFS 359. Not offered 1988-89.

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.]

360 Personality Development in Childhood Spring. 3 credits. Prerequisites: HDFS 115 or Psychology 101, plus one other course in HDFS or psychology.

T R 2:30-4. Staff. Study of relevant theoretical approaches to, and empirical findings regarding, the development of the child's personality. The influence of parents and other environmental factors on the child are examined. Topics covered include attachment, autonomy, identification, moral development, and social behavior.

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. Staff. 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, childbearing, 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.

[364 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. S-U grades optional. Offered alternate years. Not offered 1988-89.

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.]

365 The Study of Lives Spring. 3 credits. Prerequisites: HDFS 115, 216, and 217.

M W F 9:05. J. Harding. The study of personality development through the analysis of individual life histories. Biological, sociological, and psychodynamic influences are given approximately equal emphasis. There is extensive discussion of the development of motives, decision

making, and personal relationships. The term paper is a psychological analysis of a specific individual based on a published biography or autobiography.

[371 Behavioral Disorders of Childhood] Fall. 3 credits. Prerequisites: Psychology 101 or Education 110, and a course in personality development (such as HDFS 270 or an equivalent). Not offered 1988–89. M W F 12:20. Staff.

Considers the psychological disorders of childhood ranging from transient adjustment reactions to psychoses. The disorders will be studied in view of theories regarding etiology, treatment, and primary prevention.]

[372 Typical and Atypical Intellectual Development] Spring. 3 credits. Prerequisites: HDFS 115, a course in statistics, and a course in biology. Not offered 1988–89. M W F 12:20. 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 bioecological theory.]

[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 1988–89. 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.]

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.

W 2:30–4:10. P. Schoggen.
Reports and discussion of research and selected thesis topics by faculty and honors students.

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 HDFS not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multiparty 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, the student's faculty adviser, and the coordinator of undergraduate education (NG21 Martha Van Rensselaer Hall) 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 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 NG21 Martha Van Rensselaer Hall):

400 Directed Readings

For study that predominantly involves library research and independent study.

401 Empirical Research

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

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.

403 Teaching Apprenticeship

For study that includes assisting faculty with instruction.

404 Projects in Public Policy (also Government)

500 Fall or spring. 4–6 credits. Limited to juniors, seniors, and graduate students. Enrollment by permission of instructor and HDFS faculty sponsor.

Hours to be arranged. Chairman, Cornell-in-Washington Program, and staff.

A full-semester internship in Washington, D.C., designed to afford students an opportunity to study the formulation and implementation of public policy. Types of placement include assignment in a congressional office, in an executive department or agency, with a political campaign organization, or with a lobby or interest group. Students spend at least twenty-five hours each week in their placement and two hours biweekly in group seminar and have a weekly conference with the instructor, who is a member of the Cornell-in-Washington staff. Because enrollment is limited and students must apply to agencies with openings and be accepted by them, students desiring to participate in this program should contact the course instructor, indicating their interest by the middle of the semester preceding the semester of desired participation. Prior to enrollment in this course, students must also identify an HDFS faculty sponsor who is knowledgeable in the subject area in which they want to do the required research report.

414 Policies and Programs for Adolescents

Spring. 3 credits. Prerequisites: HDFS 216 and 217, or permission of instructor. S-U grades optional. Offered alternate years.

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.

431 Learning in Children

Fall. 4 credits.

Prerequisite: HDFS 115 or equivalent.

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

Consideration of the theoretical and research literature in processes of learning. Includes the interrelations of learning and development and of learning and intelligence. Examines theories and models of learning as well as variables that affect the learning process. Application is made to the assessment of cognitive and social learning through laboratory and fieldwork.

432 Cognitive Development and Education

Spring. 3 credits. Prerequisite: HDFS 115 or equivalent.

T 10:10–12:05; field experience to be individually assigned. 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; and perceptual processes that underlie reading) and reviews basic and current research on the development and learning of these processes in young children. In addition, the course considers the implications of theories of development for various approaches to education (for example, the relevance of Piagetian developmental theory to standard and alternative education models). A laboratory component focuses on assessment and facilitation of cognitive development as it bears on one educational subject.

[434 The Growth of the Mind: A View From Piaget's Theory]

Spring. 4 credits. Open to undergraduate and graduate students. Prerequisites: A course in human experimental psychology, statistics,

and HDFS 115 or equivalent; or permission of the instructor. S-U grades optional. Not offered 1988–89.

Lecs, M W F 1:25. B. Lust.

In this course the fundamental issues of cognition are introduced through the framework of Piaget's comprehensive theory of cognitive development. 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 and how does it exist in the initial state? What are the cognitive characteristics of the initial state? What is the relation of the acquisition of knowledge and understanding to their final representation? In the study of those issues, how can epistemology and experimental psychology be related through the experimental method?

Basic issues 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.

Although the course will focus on Piaget's theory and experimental results, current research in cognitive development will be introduced and contrasted.]

436 Language Development (also Psychology)

436 and Linguistics 436 Spring. 4 credits. Open to undergraduate and graduate students. Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive development, or linguistics. S-U grades optional. Offered alternate years.

T R 10:10–11:25. B. Lust.

This course is a survey of 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.

[438 Thinking and Reasoning]

Fall. 3 Credits.

Prerequisite: HDFS 115. Not offered 1988–89.

W 2:30–5:00. 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, causal reasoning, and scientific 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.]

440 Internship in Cornell Nursery School

Fall or spring. 10–12 credits. Prerequisites: HDFS 115 and 242. Recommended: HDFS 346 and 348. Permission of instructor required.

M–F 8–1 or 10:30–4:30. Staff.

Internship in Cornell Nursery School. Opportunity to integrate theory with practice and to develop understanding of preschool children and their families. Placement as assistant teacher in the morning or afternoon program and participation in curriculum planning, evaluation, staff meetings, home visits, parent conferences, and parent meetings. Supervision by head teacher and director.

[456 Families and Social Policy]

Fall. 3–4 credits. In Washington, D.C. Prerequisite: one course in the area of the family or in sociology. S-U grades optional. Not offered 1988–89.

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.]

464 Developmental Theory and Research on Homosexuality Fall. 4 credits.

T R 12:20–2. R. Savin-Williams.

The course will address a sensitive and controversial subject in a scientific fashion. The theoretical and empirical literatures that focus on the development and maintenance of a homosexual identity, homosexual behavior, and cultural responses to homosexuality will be covered. Although the issue, homosexuality, is specific, it reflects the larger issues of sexual identity, personality/social development, and environmental and biological influences on human development. The time span considered is not limited to a specific developmental sequence; it reflects a life-course perspective. A major review paper on a topic selected by the student is required.

481 Introduction to Ecological Psychology

Spring. 3 credits. Limited to graduate and upper-division undergraduate students. Prerequisite: permission of instructor. Letter grades only.

T R 2:30–4:25. P. Schoggen.

A broad survey of the theory, concepts, methods, and empirical research in ecological psychology, the study of molar human behavior in relation to the naturally occurring molar environment of everyday life. The first part of the course examines the problem of observing, recording, and analyzing the continuous stream of individual behavior under natural conditions, with special concern for child behavior and development. The rest of the course is devoted to the study of behavior settings, the immediate environmental contexts of molar human behavior. We will be particularly concerned with the usefulness of behavior settings in empirical studies of person-environment interaction at all stages of the life course from infancy through old age. A course description with typical readings is available from the instructor.

[485 (01) Human Development in Post-Industrialized Societies Spring. 4 credits. Not offered 1988–89. Enrollment limited to 20 juniors and seniors from various schools and colleges. This is one of a series of Common Learning Courses specially designed to contribute to general education at the upperclass level. Each course focuses on a topic of significance to contemporary society and has been developed by a faculty team from different disciplines, with one instructor taking primary responsibility for the integration and teaching of the course.

T R 2:30–4:25. U. Bronfenbrenner.

The course analyzes the implications for human development of the profound economic, technological, and social changes that have been taking place in modern societies. Particular emphasis is placed on the effect of these changes on the family; health, child-care, and social services; the school; the workplace; the community; and the relations between these domains as they influence processes of biological and psychological development throughout the life course. The topic will be treated from the perspective of several relevant disciplines, including economics (Robert H. Frank), developmental psychology (Steve Ceci), social anthropology (Robert J. Smith), human biology (Virginia Utermohlen), sociology (Phyllis Moen), and the law (Peter W. Martin).]

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.

T R 2:30–4:25. U. Bronfenbrenner.

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.

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

Hours to be arranged. P. Schoggen.

This seminar is devoted to discussion and presentation of honors theses being completed by the senior students.

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.

415 Topics in Adolescent Development

435 Topics in Cognitive Development

445 Topics in Early-Childhood Education and Development

455 Topics in Family Studies

465 Topics in Social and Personality Development

475 Topics in Atypical Development

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

[617 Adolescence Spring. 3 credits. Not offered 1988–89.

Hours to be arranged. D. Blyth.

Critical examination of some seminal theoretical writings on adolescent development, along with recent

work relevant to intellectual development, ego development, and social development during early and late adolescence. Empirical research on specific questions chosen by students is considered in the light of these approaches.]

631 Cognitive Development Fall. 3 credits. Letter grades only. Offered alternate years.

R 1:30–4:30. S. Ceci, S. Cornelius, B. Koslowski, B. Lust, M. Potts, G. Suci.

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.

640 Infancy Fall. 3 credits.

R 10:10–12:35. H. Ricciuti.

Critical review of major issues of contemporary concern in the field of infant behavior and development, based on readings of selected research papers and review articles. The overall intent is to develop an analytic understanding of where the field stands at present with respect to various topical issues and to identify directions for future research.

641 Early-Childhood Education Fall. 3 credits.

M 12:20–2:50. M. Potts.

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

[650 Contemporary Family Theory and Research

Fall. 3 credits. Not offered 1988–89.

T 9:30–12. P. Moen.

The uses of sociological theories and research in the study of the family are studied with particular reference to the relationship between the family and society and between the family and its individual members.]

651 Family Theory and Research 1865–1965: Sociological and Historical Perspectives Spring. 3 credits. Offered alternate years.

Hours to be arranged. M. Thornton.

This course provides a foundation in family theory and research from the inception of the scientific study of families in the nineteenth century through 1965. Students will read classic papers and major monographs in the field, drawing from the disciplines of anthropology, demography, history, psychology, social psychology, and sociology. The major emphasis is on work in sociology.

[660 Personality and Socialization Spring.

3 credits. Not offered 1988–89.

Hours to be arranged. J. Condry.

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

670 Abnormal Development Fall. 3 credits.

Prerequisite: an undergraduate course in abnormal psychology or psychopathology.

Hour 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, neuroses, and personality disorders. Focus is on developmental aspects of abnormal behavior.

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.

618 Seminar in Adolescence

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

633 Seminar on Language Development

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

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.

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.

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.

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.

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.

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.

685 Seminar in Human Development and Family Studies

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

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**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 chairperson with approval of the instructor.

700 Directed Readings

For study that predominantly involves library research and independent study.

701 Empirical Research

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

702 Practicum

For study that predominantly involves field experience in community settings.

703 Teaching Assistantship

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

704 Research Assistantship

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

705 Extension Assistantship

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

706 Supervised Teaching

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

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.

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

101 Human Services in Contemporary Society Fall. 3 credits.

M W F 12:20. A. Parrot.

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 which impact on service delivery will also be discussed, including civil rights, structure of the family, employment, and equal opportunity. Students will apply this knowledge and a theoretical framework to evaluate human service agencies in Tompkins County.

202 Introduction to Program Planning and Planning 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.

203 Groups and Organizations Spring. 3 credits.

M W F 10:10. D. Barr.

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).

225 Education as a Human Service Fall. 3 credits.

M W F 11:15. M. Minot.

This course is 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 services delivery systems and settings. Emphasis is placed upon the competencies and responsibilities of professionals assuming the educative role.

246 Ecological Determinants of Behavior Fall.

3 credits. Prerequisites: introductory sociology and 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).

280 Racism in American Society Fall. 3 credits.

T R 10:10–12:05. 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.

292 Research Design and Analysis Fall. 3 credits.

W 7:30–10 p.m. J. Greene.

Students should develop skill in analyzing and evaluating research reports. Readings and periodic assignments and exercises focus on stating hypotheses, designing studies to test hypotheses, measuring variables, and interpreting findings.

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 or during the change-of-registration period.

315 Human Sexuality Spring. 3 credits.

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.

M W 10:10; 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.

[325 Health-care Services and the Consumer

Fall. 3 credits. S-U grades optional. Not offered 1988–89; next offered 1989–90.

T R 10:10–11:25. 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.]

330 Ecology and Epidemiology of Health Fall. 3 credits. S-U grades optional. Offered alternate years. TR 2:30–3:45. A. Parrot.

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, and herpes.

340 The Politics of Public Budgeting Spring. 3 credits.

MW 3:35, and section to be arranged. R. Buchanan. 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.

370 Social Welfare as a Social Institution Fall. 3 credits.

MWF 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.

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

400 Directed Readings

For study that predominantly involves library research and independent readings.

401 Empirical Research

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

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.

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.

Hours to be arranged. R. Bounous. Students intern for a minimum of 16 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.

[416 The Helping Relationship] Spring. 3 credits. Each section limited to 20 students. S-U grades optional. Offered alternate years. Not offered 1988–89; next offered 1989–90.

TR 10:10–12:05. D. Barr. A critical analysis of the meaning of help in American society from the perspectives of power, alienation, sexism, and racism.]

417 The Politics of Power in the Human Services Spring. 3 credits. Offered alternate years.

W 7:30–10 p.m. D. Barr. The framework of the course will take an analytical worldview with some understanding of a capitalist political economy and the historically colonial relationship between the American ruling class and peoples of color, the poor, and the powerless. In addition, the course will analyze the effects of these structural and historical facts on people's lives today. The relationship between a classed, racist, and sexist society and the human services will also be included by exploring the nature of empowerment. The course will focus systematically on both micro and macro levels.

[460 Human Service Planning Methods] Spring. 3 credits. Prerequisite: HSS 292. Not offered 1988–89. MWF 11:15. L. Street.

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.]

465 Community Decision Making Fall. 3 credits. S-U grades optional.

TR 12:20–2:15. 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.

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. Microcounseling skills are taught using role playing. Class content is integrated with concurrent supervised fieldwork. Placements are made in social agencies in Tompkins, Tioga, Chemung, Cortland, and Schuyler counties. Students are encouraged to provide their own transportation, but car pools will be arranged for those who cannot. The department reimburses transportation costs when funds are available, but students may have to pay their own expenses. 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.

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.

Lecs, MW 10:10–12:05; fieldwork, TR for 8 hours each day. C. Shapiro, R. Bounous.

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.

Lecs, MW 10:10–12:05; fieldwork, TR for 8 hours each day. C. Shapiro, R. Bounous.

473 Section 01 Senior Seminar in Social Work Spring. 3 credits. Prerequisites: HSS 471–472. (HSS 472 may be taken concurrently.)

MW 1:25–2:40. C. Shapiro. The course integrates and expands on learning from courses in human behavior, planning and policy analysis, and social work methods (counseling, group work, community organization) and examines recurring themes in professional practice.

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.

MW 2:30–4:25. A. Hahn. 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.

475 Social Policy Spring. 3 credits. Prerequisite: HSS 370 or Government 111 or Sociology 141. S-U grades optional. Students should have field or work experience in a human-service program before or while taking this course.

W 7:30–10 p.m. 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.

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.

613 Seminar in Health and Mental Health Services Fall. 3 credits. S-U grades only.

Hours to be arranged. I. Lazar. Topics include the effects of new knowledge and problems on the organization and delivery of health and mental health services, developments in health and mental health policies and legislation, and the planning of community mental health services. Current challenges to the delivery of health services, including alcohol and drug problems, AIDS, stress-related disabilities, and depression, will be examined.

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.

699 Seminar in Program Evaluation and Evaluative Research Spring.

W 12:20–1:10. W. Trochim. The seminar is topically 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.

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).

600 Special Problems for Graduate Students Fall or spring. Credits to be arranged. For students recommended by their chairperson and approved by the instructor in charge for independent advanced work. S-U grades optional. Department faculty.

622 Health and Human Services Management Fall. 3 credits.

T R 12:20-2:15. D. Brown.
Designed as an integrating seminar for students interested in health-services administration and consulting, the course focuses on the management process and attempts to develop students' problem-solving and decision-making skills through the analysis of cases. The case method is particularly suited to strengthen diagnostic, analytical, and conceptual processes as well as 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 relationships, organization culture, change and leadership, motivation, group processes, and conflict management.

627 Legal Aspects of Health-Services Delivery Spring. 3 credits.

M W 10:10-11:30. J. Ogden.
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.

628 Medical-Service Issues in Health Administration (also Biology and Society 428) Spring. 3 credits.

M W F 2:30-3:20. 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.

629 Strategic Planning and Marketing in Health Care Spring. 3 credits.

T R 12:20-2:15. D. Brown.
The course is designed for students interested in the strategic planning process who may be pursuing careers in health-care management, health planning, and management consulting. It attempts to integrate and apply students' knowledge, skills, and analytical abilities in the planning and implementation of health services at the institutional level. The strategic planning process is viewed as an essential part of corporate management, a dynamic endeavor that enables organizations to cope with change and meet community health-care needs in an increasingly competitive environment. Useful concepts and methods for assessing internal and external opportunities are stressed. Cases, visiting discussion leaders, and student reports help to focus and synthesize the course sessions and materials. The cases include analyses of organization and strategies for planning, environmental assessment, marketing approaches, political strategy formulation, diversification and corporate restructuring, and hospital systems.

[630 Comparative Health-Care Systems: Canada, the United States, and Third World Countries] Fall. 3 credits. Open to all juniors and seniors. Not offered 1988-89; next offered 1989-90.

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.]

631 Primary Health-Care Services: Policy and Planning Fall. 3 credits. S-U grades optional.

W 7-10 p.m. I. Lazar.
Part one of the course concentrates on techniques for estimating supply requirements for personnel and facilities. In part two the consumer-behavior literature is reviewed with respect to the interpretation of disease and the exercise of choice in the initiation of first-contact medical care. The organization of primary health-care services is described in part three. Some of the topics include hospital outpatient services, private group practice, and health maintenance organizations. The remainder of the course provides a critique of community power structure theory and popular models for managing social change.

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. Films are also used. Students have the option of taking a final examination or submitting a short research paper.

633 HMO Development and Management Spring. 1 credit.

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

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.

636 Financial Management of Health and Human Service Organizations Spring. 3 credits.

Prerequisites: a financial accounting course or permission of instructor.
T R 12:20-2:15. R. Buchanan.
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.

652 Preparing Professionals in the Human Services Spring. 3 credits. S-U grades optional. Offered alternate years.

T R 10:10-11:25. 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, adult and continuing education, health, home economics, and social work education). 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.

[653 Consulting and Supervisory Roles in Human Services] Spring. 3 credits. S-U grades optional. Offered alternate years. Not offered 1988-89; next offered 1989-90.

T R 10:10-11:25. M. Minot.
Analysis of theories and practices of consulting and supervision and their application in higher education and in human service agencies at the national, state, and local levels. Students make observations and apply consulting and supervisory skills in settings related to their professional goals.]

655 Leadership in Human Services Spring. 3 credits.

Hours to be arranged. 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.

660 Social Policy and Program Planning in Human Services Fall. 3 credits. S-U grades optional. M W 11:15–12:30. 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.

661 Designing and Implementing Health and Human-Service Programs Fall. 3 credits. 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.

664 The Intergovernmental System and Human Service Program Planning Spring. 3 credits. S-U grades optional.

Hours to be arranged. J. Ziegler.
An in-depth review of intergovernmental systems in America and their relevance to the formulation of human service policy 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 those and other issues that review the relationships within and between various governmental levels.

[665 Human-Service Politics in the Local Arena] Spring. 3 credits. Not offered 1988–89.

T R 10:10–11:25. 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; the behavior of local elected officials, administrative personnel, business leaders, state and federal governments, and other participants in local decision making; and citizen participation, with special reference to social movements and social movement organizations. Implications for both practice and research will be emphasized.]

670 Management in Public and Nonprofit Organizations Fall. 3 credits.

W 7:30–10 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.

671 Decision Tools for Administrators and Planners Spring. 3 credits.

M 2:30–5. 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.

672 Management Information Systems in Health and Human Services Spring. 3 credits.

T R 8:30–9:55. 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.

690 Measurement for Program Evaluation and Research Fall. 3 credits.

T R 10:10–11:25. W. Trochim.
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 methods of data collection, including interviewing strategies, testing, self-reports, observation and content analysis, and data coding. Attention is given to issues such as ethical and managerial concerns that arise in applied settings.

691 Program Evaluation and Research Design Spring. 3 credits. Prerequisite: an introductory statistics course strongly recommended.

T R 2:30–3:45. W. Trochim.
This course reviews research design and its application to the evaluation of human service programs. Major topics include experimental, quasi-experimental, cross-sectional, and exploratory research designs; basic sampling theory; and use of qualitative and quantitative methods. 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. Skills covered include stating and testing hypotheses, critical analysis of research reports, computer simulation, and development of a research proposal.

[692–693 Program Evaluation in Theory and Practice] 692, fall; 693, spring. 4 credits each semester. Prerequisites for HSS 692: 690 and 691, or permission of instructor. Prerequisite for HSS 693: 692. Students must register for both semesters. Offered alternate years. Not offered 1988–89; next offered 1989–90.

Fall, T R 2:30–3:45. Spring, M W F 2:30–3:20. C. McClintock.
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).]

695 Strategies for Policy and Program Evaluation Fall. 3 credits. Prerequisites: HSS 690 and 694 or equivalent. Offered alternate years.

T R 2:30–3:45. J. Greene.
This course examines a wide range of approaches to the evaluation of policies and programs in the human services. Traditional social science methods are reviewed as well as investigative and evaluative methods from other disciplines (e.g., auditing, law, history, criminology, philosophy). Analysis of the common and divergent tactics among different approaches to evaluation will be used to judge the appropriateness of a given strategy for a particular type of setting.

696 Qualitative Methods for Program Evaluation Spring. 3 credits. Prerequisites: HSS 690 and 691 or equivalent. Offered alternate years.

T R 1:25–2:40. J. Greene.
This course explores the issues related to qualitative research methodology and the evaluation of human service programs. Topics include the underlying epistemological assumptions, questions of entry into setting, data collection, data analysis, confidentiality of participants, and the ethics of qualitative research approaches. It is the aim of the course to identify those settings and researchable questions where such a methodology is most appropriate.

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.

790 Advanced Seminar in Program Evaluation Spring. 3 credits. S-U grades optional. Prerequisite: permission of instructor.

T R 9–10:15. W. Trochim.
This course is intended for students with at least 3 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.

899 Master's Thesis and Research Fall and spring. Credit to be arranged. Prerequisite: permission of the chairperson of the graduate committee and the instructor. S-U grades optional.

Hours to be arranged. Department graduate faculty.

999 Doctoral Thesis and Research Fall and spring. Credit to be arranged. Prerequisite: permission of the chairperson 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, chairperson and undergraduate advising coordinator; P. Schwartz, graduate faculty representative; G. Atkin, C. C. Chu, G. DeWeese, S. Hester, F. Kozen, A. T. Lemley, A. Netravali, A. Racine, N. Saltford, S. S. Watkins, B. Ziegert

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.

135 Introduction to Textiles Fall. 3 credits. Each lab limited to 15 students. Prerequisite or corequisite: Chemistry 103 or 207. Maximum cost of supplies and textbook, \$40; lab fee, \$10.

Lecs, T R 1:25–2:15; lab, T 2:30–4:25, R 2:30–4:25, or F 1:25–3:20. A. Netravali.

An introduction to the basic properties of textile materials, with consideration of their technology, consumer uses, and economic importance. Behavior of textile materials is observed in a variety of environmental conditions that influence aesthetics, comfort, and performance. This course is designed to provide a basis for further study in textiles, but it also contains sufficiently broad coverage of the subject to be used as an elective course.

145 Apparel Design I Spring. 4 credits. Limited to 15 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 F 1:25–4:25. B. Ziegert.

Intensive study of principles and processes of flat pattern design and fitting techniques, with emphasis on development of creative expression in fashion apparel.

146 Clothing: The Portable Environment Fall. 3 credits. Average cost of materials, \$30; lab fee, \$10. Lec, T R 10:10–11:40. 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.

238 Textiles for Interiors and Exteriors Fall. 3 credits. S-U grades optional. M W F 9:05. F. Kozen.

This course reviews developments and trends in textiles for the home and for contract interiors. Consideration is given to end-use requirements, to performance and test method standards and specifications, and to the environments in which these textiles are used. Field trips are arranged when feasible.

241 Assessment of Product Quality Spring. 3 credits. Each section limited to 15 students. Lec, M 2:30; sec, W 10:10–12:05 or R 10:10–12:05. A. Racine.

Lectures and discussions will focus on analyzing the quality of sewn products with a variety of end-uses such as apparel, accessories, and home furnishings. Students will review the overall process involved in manufacturing mass-produced items, develop an awareness of product construction, and become familiar with standards used in industry to determine quality.

[242 Apparel Industry: Field Experience] Spring-term break. 1 credit. S-U grades only. Approximate cost, \$300–\$350. \$150 deposit required before spring semester begins; remainder required by February 15. Offered alternate years. Not offered 1988–89.

B. Ziegert.

A five-day field trip to a major apparel center such as New York City. Cost includes accommodation and museum visits. Tours cover fiber, fabric, and design firms; manufacturers; retailers; and promotion and media establishments of the multifaceted apparel and textile industry.]

245 Dress: A Reflection of American Women's Roles Fall and summer. 3 credits. Enrollment limited to 40 students. 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 and film clips from 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.

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. T R 1:25–4:25. B. Ziegert.

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.

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 chairperson, is filed at course registration or during the change-of-registration period.

331 The Textile and Apparel Industries Fall. 3 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, \$10.

T R 8:30–9:55. S. Hester. 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.

337 Formation and Structure of Textile Fabrics Spring. 3 credits. Prerequisite: TXA 135. Recommended: college algebra.

Lecs, M W F 9:05. P. Schwartz. 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.

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, \$100; lab fee, \$10.

T R 1:25–3:20. A. Racine. Advanced apparel students prepared to challenge and refine their design skills will be presented with a variety of complex studio problems in apparel design. The Cornell Costume Collection is used for illustration and inspiration.

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

400 Directed Readings

For study that predominantly involves library research and independent reading.

401 Empirical Research

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

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.

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 chairman. S-U grades only.

Apprenticeship includes both a study of teaching methods in the field and assisting the faculty with instruction.

431 The Textile and Apparel Industries—Field Experiences

Spring-term break. 1 credit. Prerequisite: TXA 331. S-U grades only. Offered alternate years. Students are responsible for trip expenses, approximately \$350.

S. Hester.

A one-week field experience in the textile regions of the South. Students have the opportunity to see various textile processes, including fiber production, knitting, weaving, dyeing and finishing, and designing. In addition, seminars with executives of each participating firm relate theory to current practice.

432 Textile Testing and Evaluation Fall. 3 credits. Prerequisites: TXA 337 and statistics. Offered alternate years. Lab fee, \$10.

Lec, M 2:30; lab, W 1:25–4:25. A. Netravali. This course covers the physical and performance evaluation of textile fabrics. Lectures will cover the theory and philosophy of textile testing methods related to fabrics and will include statistical procedures for the evaluation of test data. Students will use textile testing equipment in a laboratory setting. MINITAB will be used for the analysis of test data.

433 Textile Structure and Properties Spring. 4 credits. Prerequisites: TXA 436 and Physics 101, 112, or 207. Offered alternate years. Lab fee, \$10.

Lecs, M W F 9:05; lab, W 1:25–4:25. C. C. Chu. An in-depth study of the structure of textile materials and their component parts, from polymer molecules through fibers and yarns to fabrics, and the techniques of controlling structure to achieve desirable end-use properties. Emphasis is on properties important to the consumer, including easy care, elasticity, durability, comfort, and aesthetics. Laboratory experimentation illustrates the important interrelationships among structures and properties of polymers, fibers, yarns, and fabrics.

436 Textile Chemistry Fall. 4 credits. Prerequisites: TXA 135, and Chemistry 253 and 251 or Chemistry 357–358 and 251. Offered alternate years. Lab fee, \$10.

Lecs, M W F 10:10; lab, M 12:20–3:20. C. C. Chu. A study of polymer structure and organic polymerization reactions of the major classes of textile fibers. Laboratories include considerations of the reactions and properties of textile fibers and the application of instrumentation to the characterization of textile substrates.

[438 Apparel Textiles] Spring, 3 credits. Prerequisites: TXA 337 or permission of instructor. S-U grades optional. Offered alternate years. Not offered 1988–89.

T R 10:10–11:20. Field trips will be arranged when feasible. S. Watkins.

A study of the interrelationship of human physiology, apparel design, and textiles. Consideration of communication between the consumer, government, and the apparel-textile industries. Individual or team projects. Seminars and lectures will require readings.]

439 Textile Materials for Biomedical Use Spring, 2 credits. S-U grades optional for non-TXA majors. Prerequisites: TXA 432 or permission of instructor. T 2:30–4:25. C. C. Chu.

Focuses on chemical, physical, and biological properties of textiles and the performance of textile materials (including structures for general hospital use and internal or external body use) clinically and in the laboratory. Typical materials include sutures, surgical dressings, elastic stockings, surgical apparel, and prosthetic materials. The impact of governmental regulations is also examined.

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. 1 field trip, approximate cost \$125; minimum cost of materials, \$50; lab fee, \$10.

Lecs, T R 10:10–11:40. 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 individual, semester-long research projects that result in the design and development of an apparel item. A field trip to an industry site is planned.

461 Issues in Management and Marketing Fall, 3 credits. Prerequisites: TXA 331 or permission of instructor. Course fee, \$10.

Lecs, T R 1:25–2:55. S. Hester. 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.

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.

M W 1:25–4:25. B. Ziegert. 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.

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 chairperson and approved by the department chairperson and instructor.

[621 Textile-Fiber Evaluation] Fall, 3 credits. Prerequisites: TXA 433 or 436 or permission of instructor. S-U grades optional. Offered alternate years. Not offered 1988–89.

M W F 12:20. P. Schwartz.

Study of analytical methods, such as electron spectroscopy, scanning and transmission electron microscopy, X-ray analysis, microprobes, X-ray diffraction and stress-strain analysis. Evaluation of the application of these techniques in textile and polymer science.]

[631 Textiles and Apparel: International Production and Trade] Spring, 3 credits. Prerequisites: TXA 331, Econ 361, or permission of instructor. Offered alternate years. Not offered 1988–89. T R 8:30–9:55. S. Hester.

The course will focus on worldwide patterns of production and trade in the textile and apparel industries. Reasons for international trade will be examined, as well as the international environment that underlies trade in those commodities. Other topics include the international organizations and agreements relevant to textiles and apparel and the resulting protective trade policies on the part of developed and developing nations.]

[635 Special Topics in Textiles] Fall or spring, 1–3 credits. Prerequisite: permission of instructor. Not offered 1988–89.

An in-depth study of one or more selected topics in polymers, fibers, or textiles. The course content will vary; consult instructor for more details.]

[636 Advanced Textile Structure and Properties] Fall, 3 credits. Limited to first-year graduate students. Prerequisite: TXA 436 or permission of instructor. Offered alternate years. Not offered 1988–89.

M W F 10:10. C. C. Chu. The chemistry and physicochemical properties of natural and synthetic fibers, elastomeric materials, high-performance polymers, and inorganic materials used as textile fibers, and the relationship between their chemistry and functional properties as textile materials. Other topics will include polymerization processes, textile-finishing processes, dyes and dyeing, and degradation of textile materials under environmental conditions.]

637 Graduate Seminar in Textiles and Apparel Fall and spring. No credit.

T 12:20–1:10. G. DeWeese, fall; A. Netravali, 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.

639 Mechanics of Fibrous Structures Fall, 3 credits. Prerequisites: TXA 433 or permission of instructor. Offered alternate years.

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.

899 Master's Thesis and Research Fall or spring. Credits to be arranged. Prerequisite: permission of the chairperson of the graduate committee and the instructor. S-U grades optional.

Hours to be arranged. Field graduate faculty.

999 Doctoral Thesis and Research Fall or spring. Credit to be arranged. Prerequisite: permission of the chairperson 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
 Babcock, Robert J., Ed.D., Cornell U. Assoc. Prof., Human Service Studies
 Barr, Donald J., Ph.D., Indiana U. Assoc. Prof., Human Service Studies
 Battistella, Roger M., Ph.D., U. of Michigan. Prof., Human Service Studies
 Bayer, Helen T., Ph.D., Cornell U. Prof., Human Development and Family 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., Consumer Economics and Housing
 Blyth, Dale A., Ph.D., U. of Minnesota. Asst. Prof., Human Development and Family Studies
 Boegly, Carolyn O., M.S., U. of Wisconsin. Assoc. Prof., Cooperative Extension
 Boyd, D. Michael, B.A., U. of North Iowa. Assoc. Prof., Design and Environmental Analysis
 Broadwell, George J., Ph.D., Cornell U. Assoc. Prof., Cooperative Extension
 Bronfenbrenner, Urie, Ph.D., U. of Michigan. Jacob Gould Schurman Professor, Human Development and Family Studies
 Brumberg, Joan J., Ph.D., U. of Virginia. Asst. 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
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 Ceci, Stephen J., Ph.D., U. of Exeter (England). Assoc. Prof., Human Development and Family Studies
 Chi, Peter S., Ph.D., Brown U. Assoc. Prof., Consumer Economics and Housing
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 Gerner, Jennifer L., Ph.D., U. of Wisconsin. Assoc. Prof., Consumer Economics and Housing
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 Harding, John S., Ph.D., Harvard U. 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
 Hester, Susan B., Ph.D., Virginia Polytechnic Institute and State U. Asst. Prof., Textiles and Apparel
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- Lazar, Irving, Ph.D., Columbia U. Prof., Human Service
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- Lee, Lee C., Ph.D., Ohio State U. Assoc. Prof., Human
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- McClintock, Charles C., Ph.D., SUNY at Buffalo. Assoc.
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- Pollak, Patricia B., Ph.D., Syracuse U. Assoc. Prof.,
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- Potts, Marion H., Ph.D., Penn State U. Prof., Human
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- Reschovsky, James D., Ph.D., U. of Michigan. Asst.
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- Ricciuti, Henry N., Ph.D., Fordham U. Prof., Human
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- Robinson, Jean R., Ph.D., Radcliffe C. Prof., Consumer
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- Schwartz, Peter, Ph.D., North Carolina State U. Asst.
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