

## COLLEGE OF HUMAN ECOLOGY

### ADMINISTRATION

Francille M. Firebaugh, dean

Charles McClintock, associate dean

William Lacy, associate dean; director of Cornell Cooperative Extension

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

Jennifer Gerner, assistant dean; assistant director, Cornell University Agricultural Experiment Station

Brenda Bricker, director, admissions

Mary Rhodes, director, student services college registrar

### FACILITIES

The College of Human Ecology anticipates and responds to human needs in the areas of nutrition and health, economic and social well-being, environmental design and technology, and human development through education, basic and applied research, and the extension of knowledge. The college is distinctively characterized by the quality of its research in the natural and social sciences and the design arts, a global perspective in academic programs, a preventive approach to contemporary societal problems, multidisciplinary departments and programs, development of leadership in students and citizens, and a commitment to diverse populations. 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 the College of Human Ecology and the College of Agriculture and Life Sciences, has space in Savage Hall and in Martha Van Rensselaer Hall.

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

Specialized equipment for teaching and research includes biochemical and chemical instruments for spectroscopy, chromatogra-

phy, 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.
Policy Analysis and Management	B.S.
Textiles and Apparel	B.S.
Individual Curriculum	B.S.

### DIVISION OF STUDENT SERVICES

Brenda Bricker, director, Office of Admissions

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

Persons interested in undergraduate study in human ecology should contact the Office of Admissions, 170 Martha Van Rensselaer Hall. Those interested in graduate study should contact the graduate field representative identified among the faculty of each department. Department faculty are listed at the beginning of the course descriptions for each department.

Matriculated students can find assistance with matters of academic credit, graduation requirements, academic advising, minority student advising, study abroad advising, career planning and placement, and personal counseling from the Office of Student Services, N101 Martha Van Rensselaer Hall. International students should contact their student counselor in the Office of Student Services.

### The Students

The College of Human Ecology undergraduate enrollment is 1,326 with 56 percent in the upper division. About 350 students are graduated each year, and last year 291 freshmen and 113 transfer students matriculated. One hundred faculty members serve as advisers for undergraduates.

The college's undergraduate admissions committee selects applicants who are academically well prepared and appear most likely to profit from the college's various curricula. Admission is selective.

Approximately 73 percent of the student body comes from New York State, with the remainder from other parts of the United States and abroad. Twenty-nine percent were

identified as members of minority groups in 1996.

Approximately 243 graduate students have members of the college's faculty chairing their special committees. The college awarded 59 master's degrees and 24 doctorates last year.

### ACADEMIC PROGRAMS

#### Majors

Selection of a major begins with selection of career goals. In their freshman and sophomore years, students can explore ways to relate their personal interests and capabilities to their career goals. As a result, they sometimes decide to change their major. The director of career services and the counselor for career development in the Office of Student Services (N101 Martha Van Rensselaer Hall) and resources in the Student Resource Center (N139 MVR) can help students through their career exploration process.

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. A student may satisfy the requirements of more than one major option. (The college urges students who satisfy more than one major or option to make note of this in the credentials they file in the university's Career Center and to seek recommendations from faculty associated with the options completed.) Majors include the following options:

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

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

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

*Policy Analysis and Management (PAM):* The department supervises four majors: policy analysis and management, consumer economics and housing, human service studies, and policy analysis. Students majoring in human service studies may also meet the requirements of an accredited bachelor's degree program in social work. The consumer economics and housing, human service studies and the policy analysis majors will be terminated after spring, 2000.

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

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

**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. It is important for a student to discuss a possible change of major with her or his faculty adviser or counselor. If the student decides to make a change, a completed change-of-major form (available from the Office of Student Services, N101 Martha Van Rensselaer Hall) will officially record the change so that a new 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 younger undergraduates. To facilitate the education of mature students, defined as those twenty-four years old or older at first matriculation, the college has adopted certain procedures specifically for that group. The counselor for mature students in the Office of Student Services (N101 MVR) can provide information of interest to mature students.

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

Mature students are encouraged to contact the director of the Continuing Education Information Service, B20 Day Hall, for information on resources available through that office.

### Special Students

Students eligible for special status are those visiting from other institutions and interested in particular programs in the college; those with a bachelor's degree preparing for graduate study or jobs and careers in human ecology-related fields; or those who have interrupted their education and are considering completing degree programs. Students accepted in the non-degree status of special student may enroll for a maximum of two semesters. During the second semester of attendance, a special student must either apply for admission as a transfer student 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, B20 Day 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.

## DESIGN AND ENVIRONMENTAL ANALYSIS

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

Diverse faculty backgrounds and teaching approaches help students to develop their multidisciplinary problem-solving and creative abilities, aesthetic judgment, and analytical thinking. Excellent laboratory, shop, studio, and computer facilities permit exploration of innovative concepts for the design and management of interior environments. The relationship between people and their physical surroundings is explored through a combination of academic courses, field experience, and applied research. Examples of student class projects and faculty work are frequently on display in the department's gallery. The DEA Resource Center includes books, journals, newsletters, and materials samples for student use.

### Options

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

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

#### Option I: Interior Design

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

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

#### Option II: Facility Planning and Management

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

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

#### Option III: Human-Environment Relations

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

### Academic Advising

All DEA majors are matched with a faculty adviser during their first semester by the director of undergraduate studies, Paul Eshelman, in E304 Martha Van Rensselaer Hall.

Consultation with faculty advisers about future goals, departmental requirements, sequences of courses, and electives inside or outside the

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

### Ownership and Exhibition of Student Work

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

## HUMAN DEVELOPMENT AND FAMILY STUDIES

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

Major social science disciplines concerned with the development of individuals and with the structure and function of families are represented among faculty members with backgrounds in psychology, sociology, history, and education. The department's programs of instruction, extension, and research provide diverse opportunities for students to prepare for career development or to acquire the bases for graduate study. Many of the department's majors are interested in clinical psychology, counseling, law, medicine, special education, or university teaching and research that require some graduate study. Others may go directly into employment in business or industry or take bachelor's-level positions such as youth counselors, day-care workers, personnel assistants, research technicians, and social program assistants.

### Academic Advising

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

department office, in NG14 Martha Van Rensselaer Hall.

### Curriculum

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

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

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

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

### Math Requirement

HDFS majors are required to fulfill a math requirement by passing Education 115 or demonstrating equivalent competency by scoring 650 or higher on the math SAT examination.

### Teaching Certification Option

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

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

Course work at Cornell must be carefully planned. Elective options will be somewhat limited because it will be necessary to consider the twenty-seven Cortland credits

plus three education courses at Cornell as electives. The teaching certification program is not an option for external transfers entering as late as upper sophomore or junior year. More information is available in the HDFS Office, NG14 Martha Van Rensselaer Hall.

### Honors Program

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

A grade-point average of 3.3 is required for entry into the program. Honors students must take an approved course in research design, preferably in the sophomore or junior year.

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

### Language Competency

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

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

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

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

### Language Course Placement and Credit

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

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

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

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

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

### POLICY ANALYSIS AND MANAGEMENT (FORMERLY CONSUMER ECONOMICS AND HOUSING AND HUMAN SERVICES STUDIES)

The Policy Analysis and Management (PAM) major produces graduates skilled in policy analysis, program planning, and evaluation and possessing management skills applicable in the public, nonprofit, and private sectors. In addition, the Policy Analysis and Management graduate will have concentrated knowledge in one of three areas: family/social welfare, health, and consumer policy. Graduates are well-qualified for a wide variety of public, not-for-profit, and private sector employment emphasizing either program analysis and evaluation or management. The major also attracts large numbers of pre-law students, pre-MBA students, and students intending to pursue graduate education in public affairs and policy analysis programs. The potential exists to pursue a five-year program resulting in a BS and a Master of Health Administration.

The PAM major combines theoretical underpinnings from economics, sociology,

psychology, and government to critique and analyze our society's values, laws, policies, and programs as well as knowledge to build management skills for use in public, nonprofit, and for-profit settings. Ideas of social justice, equity, and efficiency will be studied concurrently with strategic planning, human resources, supervision, and organizational development. Research methods, statistics, and planning and evaluation concepts will be learned and used to direct and aid in program planning, policy analysis, program evaluation, and management.

In addition to learning basic policy analysis and management skills, the student will be expected to apply them to a particular concentration—social welfare/family, health, or consumer policy. Social welfare/family policy and management includes a panoply of governmental and private sector income maintenance, social, and human service delivery programs and policies that range from child adoption and child neglect and abuse policies and programs through income maintenance and antipoverty programs to policies and programs that impinge on or regulate marriage, divorce, and fertility. Health programs and policies include such politically sensitive programs and issues as health care access, Medicare, Medicaid, long-term care, health maintenance organizations, public health issues, and substance abuse policies. Consumer programs and policies include the regulation and laws governing advertising, product safety, food and drug safety, nutrition policies, the regulation of credit, insurance, telecommunications, mortgage, housing issues, and public utility markets and also deal with issues such as the invasion of privacy, internet security, and children's TV. A specific focus in the consumer concentration is the role of marketing and its relationship to consumer well-being and consumer behavior.

In addition to college requirements, all PAM majors are expected to take core courses: Introduction to Management, Introduction to Policy Analysis, Research Methods, Multivariate Statistics, Intermediate Microeconomics, and Public Finance. Students will also be expected to develop a concentration of three courses in either social welfare/family, health, or consumer. These concentrations may emphasize either policy analysis or management skills. Finally, PAM majors will have the opportunity to participate in a departmentally approved experiential learning. Please check with the undergraduate advising coordinator, Professor Alan Mathios, for further details.

### Consumer Economics and Housing, Human Service Studies, and Policy Analysis

The program in Policy Analysis and Management has been formed from three previous majors: Consumer Economics and Housing (CEH), Human Service Studies (HSS), and the interdepartmental major in Policy Analysis. The Department of Policy Analysis and Management is committed to maintaining these programs for students currently enrolled in them. PAM will offer majors in Consumer Economics and Housing, Policy Analysis, and Human Service Studies to students matriculating in spring 1997 or before and to transfer students who can complete the program by no later than spring 2000. Such students also have the choice of switching to the Policy

Analysis and Management major. The department is not obligated to continue teaching courses required for the CEH, HSS, and PA majors or those required for accreditation in Social Work after spring semester 2000. Please see the Human Ecology Student Guide, 1997-98 and PAM director of undergraduate studies Alan Mathios, for further information.

### TEXTILES AND APPAREL

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

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

### Academic Advising

All TXA majors are matched with a faculty adviser by the director of undergraduate studies, Peter Schwartz (201 Martha Van Rensselaer Hall). Students are strongly urged to discuss their goals, course selection and sequence, electives, and career plans with their faculty adviser. Students in apparel design must begin early to work with their advisers to develop a professional portfolio of their work. Students are free to change advisers; changes must be recorded with the advising coordinator. Although advisers must sign the schedule card during course enrollment each term, it is the student's responsibility to keep track of his or her courses and to make sure that the program meets graduation requirements for the major and the college.

### Ownership and Exhibition of Student Work

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

### Course Fees

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

### Key Policy for Apparel Design Studios

To allow design students access to studios for out-of-class work at any hour in which Van Rensselaer Hall is open, and to provide security for the studios, the department has



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

### Options

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

#### Option I: Apparel Design

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

#### Option II: Apparel-Textile Management

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

#### Option III: Fiber Science

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

### Career Opportunities

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

### INTERDEPARTMENTAL MAJOR IN BIOLOGY AND SOCIETY

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

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

Course work in the College of Human Ecology must be taken in two of the following three concentrations: human development and the environment, health, or social policy and human services. The other basic requirements of the college must also be met. Programs incorporating those required courses are designed in consultation with a faculty adviser to accommodate each student's individual goals and interests. For further information on the major, including courses of related interest, specific course requirements, and application procedures, see the Human Ecology Student Guide, available in the Office of Student Services, N101 Martha Van Rensselaer Hall. Academic advising is coordinated by the director of undergraduate studies, S. Kay Obendorf, 208 Martha Van Rensselaer Hall.

### INDIVIDUAL CURRICULUM

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

Such a program of study should encompass a substantial part of the student's undergraduate

education and must include at least three semesters. For this reason, a request to follow an individual curriculum should be made as early as possible and must be made before the second semester of the junior year.

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

### SPECIAL OPPORTUNITIES

Several programs allow students to receive academic credit for fieldwork and internship experience, study abroad, study in absentia, college-wide certificate programs, and joint programs with other schools and colleges at Cornell. Students may petition the college registrar to have concentrations that are formally recognized elsewhere within the university noted on their transcripts, when accompanied by appropriate documentation from the program.

#### International Study

Approximately 14 percent of the class of 1997 in Human Ecology studied abroad. Study abroad allows students to focus on international issues and intercultural understanding through sponsored programs of study abroad for which academic credit is available. Course work in a foreign institution will 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.

Students should begin planning for their study abroad experience in their freshman or sophomore year. Opportunities for study abroad are available for human ecology students in several ways: through Cornell Abroad, through other U.S. college-sponsored programs abroad, and through direct enrollment in a foreign university. In all cases, students remain registered at Cornell during the overseas study, and their study abroad will be credited as part of their Cornell degree program. Application packets for study abroad can be obtained from and should be submitted to the study abroad adviser in the Office of Student Services, N101 Martha Van Rensselaer Hall. The Student Resource Center, N139 Martha Van Rensselaer Hall, has catalogs and other information about study abroad opportunities. The study abroad adviser is Mary Rhodes, N101 Martha Van Rensselaer Hall.

#### Field Study, Internships, and Research Opportunities

Field study, internships, and research opportunities allow students to receive academic credit for work that extends and complements their course of study. Through structured experiences facilitated by faculty

members, students learn to test, deepen, and apply what they've learned in the classroom.

Students strengthen their ability to integrate theory and practice and learn to reflect critically on their experience while broadening their understanding of service and professional life and enhancing their understanding of diversity and complex societal issues. In existing courses and through individual and group projects, students develop an intellectual framework for understanding and solving problems in a variety of challenging settings.

Placement opportunities are available in business, health, law, medicine, environmental analysis, education, nutrition, government, laboratories, textiles and apparel, design, social service and community settings. Students are encouraged to plan early for these opportunities.

To learn more, students should consult with their faculty adviser, professor, or undergraduate advising coordinator. They can also visit the Student Resource Center in N-139 MVR and explore listings of opportunities on the "Human Ecology Field Study Computer Program" available on Bear Access. New initiatives are encouraged. For further information, contact Kris Deluca-Beach, director of career services, N-101 MVR.

### **Cornell in New York City The Urban Semester Program in Multicultural Dynamics in Urban Affairs**

**Cornell in New York City** provides students with many study options that focus on multicultural dynamics in urban affairs. Experiential learning practices inform all courses of study. The options available include internships, individual and group community service projects, research, independent study, collaborative learning, and mentorships. Students must enroll concurrently in the three courses, HE 470, HE 480, and HE 490. Students learn by doing and through reflection and action. Program options are possible throughout the academic year, during winter break, and in the summer.

Courses of study enable students to seek out the relationship between theory and practice, apply theory to practice, acquire professional practice skills, and learn about the impact of diversity on New York City. By applying ethnographic research techniques and methods, students learn to think conceptually, reflect on their actions, and learn how to be agents of change.

Several majors in the college require internships or encourage field study. Check with the advising coordinator of each major for more information. The Student Resource Center in N-139 MVR and the Field Study Coordinator in N-137 MVR can help you find internships and provide more information on department opportunities and enrolling in Cornell in New York City.

### **Multicultural Practice**

Fall and spring semesters: HE 470

Students immerse themselves in internship activities three days each week. During small group seminars, students reflect on their experiences in their internships with a focus on multicultural issues, professional practice, and organizational culture.

### **Multicultural Issues in Urban Affairs**

Fall and spring semesters: HE 480

This course is a study of multicultural issues in urban affairs as students enhance their academic foundations in career development. Students examine issues of diversity (e.g., race, ethnicity, religion, class, gender, sexual orientation) in relationship to (1) professional life in different sectors of the economy; (2) the development of neighborhoods and communities; and (3) the basis of a just and democratic society. Readings will reflect the focus on inner-city children and youth under a variety of multicultural-influenced conditions and contexts. Costs include travel to and from sites by public transportation at about \$3.00-6.00 each week.

### **Communities in Multicultural Practice**

Fall and spring semesters: HE 490

This course provides students with an understanding of community building processes and enables them to participate with children, youth, and their families in the South Bronx. Students immerse themselves in the history and community development efforts of the South Bronx. The South Bronx will be presented as a case study in successful community building with a focus on children and youth. Leaders will present their personal stories in the redevelopment of the South Bronx, creating over the course of the semester a tapestry of stories that make the abstract principles of economics, social, cultural, and political development come to life. Further grounding students in the real lives and conditions involved in the development of the South Bronx will be their participation in after-school programs involving children and youth in a variety of community-based settings. Students will mentor the children and learn about them and their needs, relating these to the content studied in the other two courses of the Urban Semester Program. Costs include public transportation costs to and from the various sites, about \$3.00-6.00 each week.

### **The Winter Intersession in Community Service and Mutual Learning: The South Bronx-Banana Kelly/Cornell University Project in Community Building**

Winter intersession: HE 402

Over the course of two intensive weeks, students participate in an ongoing community service project in the South Bronx. In carrying out community service, students participate in a research project with the director of the Cornell in New York City program. In the 1995 intersession, six students mentored 12 children in an after-school program by documenting the community with photographs and stories. A photography exhibit was produced that is presently circulating. Other projects with Banana Kelly are available to students throughout the year. Please contact Dr. Sam Beck in the Cornell in New York City program office.

### **Fieldwork in Diversity and Professional Practice**

Summer session: HE 406

Over the course of an eight-week summer session, students carry out research projects on the multicultural dynamics of professional practice by interning full time in settings of

their choice. Students meet weekly for three hours and discuss professional practice with New York City practitioners. A reflective seminar, led by Dr. Sam Beck, director of the Cornell in New York City program, follows each discussion.

### **Gerontology Concentration**

#### **Gerontology Certificate Program**

This program develops students' understanding of and competence in dealing with the processes and issues of aging. Study in gerontology provides practical experience and preparation for professional work. Students draw on resources of several departments and colleges at Cornell and Ithaca College to shape a curriculum suited to their professional goals and interests. Contact the Gerontology Coordinator, Life Course Institute, 259 Martha Van Rensselaer Hall.

#### **Teacher Certification in Home Economics**

Students can combine any major in the college with additional course work that leads to home economics teacher certification (kindergarten through twelfth grade) in New York State and a number of other states. Interested students should contact the Office of Student Services in N101 Martha Van Rensselaer Hall.

### **Double-Registration Programs**

#### **Johnson Graduate School of Management**

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

#### **Law School**

A small number of highly qualified applicants may be admitted to the Cornell Law School after only three years of undergraduate education. The requirements for admission under these circumstances are more stringent than for acceptance after four years of undergraduate study. Applicants must present outstanding qualifications and strong professional motivation. The junior-year applicant follows the ordinary application procedures for Cornell Law School admission. Interested students should contact the Law School director of admissions to discuss the extraordinary admissions criteria. Because students accepted to this program will spend 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 103 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. Intern applicants must be sophomores or higher and 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 Office of Student Services, N101 Martha Van Rensselaer Hall.

### Cornell-In-Washington

For information on Cornell-In-Washington, see the section, Interdisciplinary Centers, Programs, and Studies, in the front of the catalog.

### Ithaca College

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

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

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

### Wells College

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

Cornell students are eligible to register only in Wells College courses that are relevant to their program and that do not duplicate Cornell courses. Acceptance of Cornell students into Wells College courses is on a space-available

basis. Participation in this program is not guaranteed, and Wells College has the right to accept or reject students for any reason it deems appropriate. The program is available only during the fall and spring semesters.

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

## PLANNING A PROGRAM OF STUDY

### Academic Advising

Students who choose to major in a particular department are assigned to a faculty adviser by that department's director of undergraduate studies. The director of undergraduate studies can help match a student's needs with the special interests of a faculty member. Students may change advisers as their own interests change and should see the director of undergraduate studies to discuss such a change. Faculty advisers, and counselors in the Office of Student Services (N101 Martha Van Rensselaer Hall), are available to discuss course requirements and sequences, and electives inside or outside the college, as well as future goals and career opportunities. Although advisers must provide the adviser key number during course enrollment each term, it is the student's responsibility to make sure that her or his program meets graduation requirements for the major and the college. Directors of undergraduate studies in each department are available to answer questions about the advising system and the undergraduate major. Students who are exploring alternative majors should work closely with college counselors who are available for planning and referral to department resource faculty.

### Completing Graduation Requirements

A summary of record is kept for each student in the Office of Student Services, N101 Martha Van Rensselaer Hall. At the beginning of fall term each continuing student receives a copy showing which major and degree requirements have already been met. It is important to check this summary and to bring any questions to the attention of the faculty advisor and the staff members in the Office of Student Services. A student may complete the requirements of more than one major.

### 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 faculty advisers are available to discuss which courses may interest students and round out their educations.

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

### Foreign Language Study and Placement

Students who studied a foreign language before coming to Cornell and who want to continue must take either the College

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

## 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.

#### Category I General Distribution (37-41)

- A. *Natural Sciences* (6)
- B. *Social Sciences* (6)
- C. *Humanities* (4) Language credit cannot be used in this area (See: IV).
- D. *Written Communications* (6) Must be Freshman Writing Seminars. At least one seminar must be in the humanities.
- E. *Quantitative and Analytical* (3-7)
  1. Math competency equivalent to EDUC 115 (precalculus)
    - a. AP of 3 or higher on AB test
    - b. AP of 2 on BC test
    - c. Math assessment test score equivalent to EDUC 115
    - d. Pass a math course equivalent to or higher than EDUC 115
  2. Statistics, advanced math, logic (4)
    - ARME 310 Intro. Statistics (4)
- F. *Additional credits* (12)

**Category II Requirements in the Major  
(number of credits vary by major)****Category III HUMEC Credits Outside the Major 15**

May not include any HE 00 courses, HE 100, HE 101 or any 403 course. A maximum of three credits of special studies (400, 401, and 402), or of any internship credit may be used. A maximum of five credits of either HE 470 or HE 480 or HE 490 can be used.

Transfer students (external and internal) can combine transfer credit with credit earned in the college, or can prorate the number of credits to complete this requirement. (Refer to "Policies Related to College Requirements" in the *Human Ecology Student Guide* for details of the policy.)

**Category IV Electives****Credits to complete 120 credits overall,  
exclusive of physical education.**

Elective credits can be earned in Human Ecology or elsewhere. Students who earn more than 21 credits in endowed colleges will be billed for the excess credits at the endowed rate of tuition. Billable endowed credit includes endowed courses taken in Category II.

**Category V Physical Education 2****TOTAL credits (exclusive of PE) 120**

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

**Related Policies**

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

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

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

*Credits in the endowed divisions in this section may not exceed 21. Any course taken in an endowed division for which a grade of F or U is received will be counted as part of the 21 endowed credits allowed. Students are not required to take elective credit in the endowed units.*

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

Not more than 21 credits in Categories II and 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 fee per credit charge, students should call the Office of the Bursar.

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

**Category III.** External and internal transfer students can meet the requirement for course work outside the major in the College of Human Ecology by completion of either of the following:

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

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

**Status at Matriculation**

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

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

**Category 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.

**Category 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 Office of Physical Education in Teagle Hall.

**Related Policies for Freshmen**

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

**Residency Requirements**

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

Sometimes a student (particularly a transfer student) may need an additional semester to complete a program. To register for a semester beyond the eighth, the student submits a general petition to the college registrar in the Office of Student Services, N101 Martha Van Rensselaer Hall. 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 and Registration**

Students are expected to complete course enrollment during specified times each semester. It is the student's responsibility to learn the dates of course enrollment.

Freshmen and transfer students enrolling in the university for the first time in the fall term request their courses during the summer before they arrive on campus. Enrollment materials are mailed to new students in May. Because new students starting at midyear do not have an opportunity to enroll in courses until after they arrive on campus, the college tries to reserve places for them in human ecology courses. The orientation schedule given to all new students lists a specified time to enroll in such courses.

Continuing students enroll for fall semester in March–April, and enroll for spring semester in October–November preceding the beginning of the term. They are notified of course



enrollment dates by poster, e-mail, and by notices in the *Cornell Daily Sun*. Course enrollment materials are available for continuing students via computer access to Just the Facts and in the Office of Student Services, N101 Martha Van Rensselaer Hall. For the first three weeks of the term, students have an opportunity to add courses in other divisions of the university as well as in human ecology.

## Enrollment

Before or during course enrollment, students discuss their program plans with a faculty adviser or a college counselor in the Office of Student Services. For their advising sessions, students need the *Course and Time Roster* issued by the university registrar which also is available via computer on CUINFO. Students must obtain an adviser key number from their departmental major faculty adviser, or if they have not declared a major, from a college counselor in N101 MVR.

Students complete their enrollment course requests by the deadline announced by the university registrar.

The following policies and procedures apply to course enrollment.

## Permission of Instructor

Certain courses may be taken only with the permission of the instructor as indicated in *Cornell University: Courses of Study*. For such courses, students must request the instructor's permission during the CourseEnroll period by placing their name on a list maintained by the departmental advising assistant.

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 (100 Olive Tjadan Hall) 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 (DEA, HDFS, DNS, PAM, and TXA) offers special studies courses that provide opportunities for students to do independent work not available in regular courses. One of those courses, designated 300, Special Studies for Undergraduates, is intended primarily for students who have transferred from another institution and need to make up certain course work.

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

A student who wants to take special studies courses talks with the faculty member under whose supervision the study would be done and then prepares a plan of work. If the faculty member agrees to supervise the study, the student completes a multicopy special studies form, a multicopy description of the

study to be pursued. The student obtains the signatures of the instructor and the department chair as well as the student's department adviser before submitting it to the Office of Student Services. The student also must complete a course registration form in the Office of Student Services. Special studies forms and instructions are available in the departmental offices.

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.*

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

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

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

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

Students of mature status may carry 6 to 11 credits without petitioning and may have their tuition prorated. However, at the beginning of each term, mature students planning to take a light course load should pick up a proration of tuition form from the Office of Student Services, fill it out, have it signed by the college registrar, and return it to the bursar's office in Day Hall.

## Oversubscribed Courses

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

## Late Course Enrollment

Students who do not complete course enrollment during the course enrollment period usually must wait until the beginning of the semester to enroll. Extensions are rarely granted and usually only for documented illness.

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

**Important:** Students can review their course schedule via computer using Just the Facts. Students are responsible for checking their course schedule for accuracy of course numbers, credit hours, grade option and other data. Students must correct errors immediately. Procedures for correcting enrollment errors as well as making changes for other reasons are described below under **Course Enrollment Changes**.

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

## Late University Registration

A student clearing his or her financial obligations **after** the deadline date on the bursar's bill is considered late. **Late registrants are assessed a finance charge on the bursar's bill starting from the date the bill is due.**

All students must be registered according to university policy before the end of the third week of classes. If for any reason a student registers after that time, the Bursar's Office will charge a late fee.

*Students who fail to register by the third week of the term will be withdrawn from the university. Should withdrawn students wish to return, they must reapply through the admissions committee.*

## Course Enrollment Changes

### Deadlines

- During the first three weeks of the term, courses may be added or dropped.
- From the fourth through the seventh week of the term, course changes may be made with the permission of the instructor (instructor's signature on the add/drop form).
- From the fourth 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.
- From the eighth week of the term, no course change may be made without petitioning for approval. Petitions are usually granted only in circumstances beyond a student's control (for example, illness). A student petitioning for medical reasons should provide substantiating medical evidence with the petition.
- A student who submits a petition after the seventh week of the term requesting permission to drop a course must attach a statement from his or her faculty adviser to that petition indicating whether or not the advisor supports the request.

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

### Deadlines for Half-Term Courses

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

### Procedures

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

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

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

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

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

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

- 1) Obtains a course-change form from the Office of Student Services, N101 MVR.
- 2) Completes the form and takes it to the appropriate office for signature: for human ecology courses, the forms should be taken to the Office of Student Services; for courses outside the college, the forms should be taken to the appropriate departmental office in the other college.
- 3) Makes sure that his or her name is added to the list of enrolled students for a course

being added, or removed from the class list for a course being dropped. Asks the person recording the change to sign the form.

- 4) **Submits all signed forms to the Office of Student Services, including the forms for out-of-college courses.** Changes are not completed until the signed forms are filed in that office. If a student does not drop a course that he or she no longer attends, the student is in danger of receiving an **F** in the course.
- 5) Receives carbon copies of each course change form at the time it is submitted. It is **important** for students to keep these copies to verify later that the forms were filed.

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

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

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

### In absentia Study

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

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

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

Students receive notice of the petition decision by means of a letter from the college registrar.

A student may take up to 15 credits in absentia as long as the courses do not duplicate courses already taken and the in absentia courses are applicable to the requirements of the college. A student's petition for more than 15 credits in absentia may be allowed under the following conditions: (1) the work taken represents a special educational opportunity not available at Cornell, (2) it relates to the student's particular professional goals, and (3) those

goals are consistent with the focus of the college. The in absentia petition form is used to request more than 15 credits in absentia.

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

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

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

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

### Leaves of Absence

A student may request a leave of absence before the beginning of the semester or during the first seven weeks of the semester for which a leave is sought. A leave may be extended for a second semester by requesting an extension in writing from the Office of Student Services. Note that in absentia study and leave of absence status are mutually exclusive.

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

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

A student who requests a leave of absence after the first seven weeks is advised to attend classes until action is taken on the petition. A student whose petition for a leave of absence

is denied may choose to withdraw or to complete the semester.

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

### Withdrawal

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

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

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

### Petition Process

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

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

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

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

## GRADES

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

### S-U Grades

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

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

To take a course for an S-U grade, a student must check the course description to make sure that the course is offered on the S-U basis; then either sign up for S-U credit during course enrollment, or file an add/drop/change form in the Office of Student Services before the end of the third week of the term. Forms are available in the Office of Student Services. After the third week of the term, students can not change grade options.

### Grades of Incomplete

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

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

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

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

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

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

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

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

## ACADEMIC HONORS

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

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

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

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

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

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

department or division. Students in other departments who wish to qualify for honors should contact Gret Atkin, N115A Martha Van Rensselaer Hall, their sophomore year or the first semester of their junior year.

**Bachelor of Science with Distinction** recognizes outstanding scholastic achievement. Distinction is awarded to students in the top 10 percent of the graduating class based on the last 60 credits earned at Cornell. The graduating class includes students who will complete requirements for Bachelor of Science degrees in August, January or May of the same academic year.

Names of seniors who meet these requirements are presented to the faculty of the college for approval.

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

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

## INTERDEPARTMENTAL COURSES

### HE 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.

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.

### HE 101 College Achievement Seminar

6-week summer session. 2 credits.  
Enrollment limited to and required of Prefreshman Summer Program students. S-U grades only.

The objective of this course is to improve the study and learning skills of incoming freshmen. Emphasis is placed on acquisition of skills necessary to achieve academic success. Topics include time management, note-taking, mapping, textbook comprehension, exam preparation, and exam strategies. The application of theory to the demands of Cornell course work is stressed. In addition, students are introduced to library and computing resources through hands-on projects.

## THE URBAN SEMESTER PROGRAM IN NEW YORK CITY

Sam Beck, Ph.D., director

The Urban Semester Program is a set of courses spanning the entire year. During either fall or spring semester students enroll in three classes focusing on the opportunities and barriers that a multicultural society presents and their articulation with professional, community, or public policy settings (15-credit residential program). Students intern three to four days each week and are encouraged to live in the Olin Hall dormitory of the Cornell University Medical College.

The three-week winter intercession course (1 credit) enables students to do fieldwork in New York City by working full time in community-based organizations or through research supervised by the director. In the eight-week summer semester (3 credits), students carry out research projects on the nature of professional practice by interning full time in settings of their choice. Students who seek to contribute to their own communities are encouraged to participate in any of the program offerings. Most students work with the program staff to locate internships. For further information, contact the Urban Semester Program at (212) 746-2273 or the Student Resource Center, N-139 Martha Van Rensselaer Hall.

New York City offers a wide variety of internship settings. Many bilingual and bicultural internship settings are available in Chinese, Spanish, Creole, Russian, Yiddish, and other languages. Examples of internships follow:

- **Health and medicine**—New York Hospital/Cornell Medical Center, Chinatown Health Clinic, New York City Department of Public Health, Bellevue Hospital, Queens Medical Center for Women and Children, Community Health Project
- **Private and public law**—NOW Legal Defense and Education Fund, Neighborhood Defender Service of Harlem, Legal Aid, Puerto Rican Legal Defense and Education Fund, NAACP Legal Defense and Education Fund, Gay and Lesbian Anti-Violence Project, Kane Kessler, P.C.
- **Government and community agencies**—Women's Action Alliance, The Center for Puerto Rican Studies, New York City Commission on the Status of Women, New York City Council offices, Cornell University Cooperative Extension, New York City Department of Consumer Affairs
- **Wall Street firms and other private businesses**—Bloomingdales, Prudential Securities, Oppenheimer, Inc., The Advertising Council, GKN Securities, Rogers and Cowan, Inc., Kidder Peabody, Co., Hill and Knowlton, Young and Rubican, Altschiller Reitzfeld, Terry Williams Agency
- **Private not-for-profit organizations**—Grant Street Settlement House, Neighborhood Housing Services, Abyssinian Baptist Church Development Corporation, University Settlement Society of New York, Urban Development Corporation, Greater Chinatown Community Association, Lesbian and Gay Community Services Center
- **Private and public schools**—United Federation of Teachers, Central Park East, River East, Manhattan Center for Math and

Science, PS 41, City and Country, Churchill School, Little Red School House, St. Ann's School

• **Design and arts organizations**—Harlem Textile Works, Perry Ellis International, Caribbean Cultural Center, Delacour & Ferrara, Architects, P.C., New York Shakespeare Festival Theatre, New York Theatre Workshop, Cynthia Rowley Company, SOHO20 Gallery, Museum of African Art, Lower East Side Tenement Museum

• **Communication and media**—Good Housekeeping, Mirabella, William Morrow Co., MTV, NBC-TV, ABC-TV, Good Morning America, WBAI-Radio, *The Village Voice*, *The New Yorker*, Telemundo Group, Inc., *Essence*, McNeil-Lehrer News, Ad Council, *McCalls*, *Child*, Children's Television Workshop, Time Warner, Inc.

### HE 401 Empirical Research

Fall, spring, winter, and summer. 1-15 credits. Permission of instructor. S. Beck. This course is available to juniors and seniors who wish to pursue a well-defined, independent research project sponsored by one or more faculty members. Honors projects are welcome. Such students must participate in the course work of HE 402, HE 406, or HE 408. Students must provide a project proposal no longer than five pages, an annotated bibliography representing the fields of interest to be researched or explored, and a letter of approval from one faculty member who will sponsor the investigation.

### HE 402 Supervised Fieldwork in Urban Affairs

Winter. 1 credit. Limited to 12 students. Permission of instructor.  
This course allows students to participate in Urban Semester Program research or internship opportunities in New York City. Research projects are carried out under the supervision of the program director and will include opportunities for field observation, interviewing, and library and archival inquiry, focused on socioeconomic processes in urban settings. Students interested in internships locate their own placements with assistance from the Urban Semester Program staff. Students keep a journal that reflects on their community service experiences with a focus on specific learning objectives. Applications and placement information are available in the College of Human Ecology Student Resource Center, N-139 Martha Van Rensselaer Hall. Applications must be accompanied by a résumé, a statement of learning objectives, a letter from the placement supporting the student's plan, and a rationale for participating in this activity. The research or community service must take place during the Cornell winter session period.

### HE 403 Teaching Apprenticeship

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

### HE 406 Fieldwork in Professional Practice: Summer in the City

Summer. 1-3 credits. 8-week session. Limited to 12 students.  
This is a seminar that examines the culture of professional practice, how professionals think and behave, and the role of professionals in society through internships and weekly



discussions with practitioners in a variety of fields. Students will carry out fieldwork in internship placements by researching professional practice in New York City. They will intern for a minimum of eight weeks in organizations and fields such as business, government, private not-for-profit services, education, medicine and health, law, media and communications. Students locate their own internships with assistance from the Urban Semester Program staff. Applications and placement information are available in the College of Human Ecology Student Resource Center, N-139 Martha Van Rensselaer Hall.

#### HE 470 Multicultural Practice

Fall and spring semesters. Students immerse themselves in internship activities three days each week. During small group seminars, students reflect on their experiences in their internships with a focus on multicultural issues, professional practice, and organizational culture.

#### HE 480 Multicultural Issues in Urban Affairs

Fall and spring semesters. This course is a study of multicultural issues in urban affairs as students enhance their academic foundations in career development. Students examine issues of diversity (e.g., race, ethnicity, religion, class, gender, sexual orientation) in relationship to (1) professional life in different sectors of the economy; (2) the development of neighborhoods and communities; and (3) the basis of a just and democratic society. Readings will reflect the focus on inner-city children and youth under a variety of multicultural-influenced conditions and contexts. Costs include travel to and from sites by public transportation at about \$3.00–6.00 each week.

#### HE 490 Communities in Multicultural Practice

Fall and spring semesters. This course provides students with an understanding of community building processes and enables them to participate with children, youth, and their families in the South Bronx. Students immerse themselves in the history and community development efforts of the South Bronx. The South Bronx will be presented as a case study in successful community building with a focus on children and youth. Leaders will present their personal stories in the redevelopment of the South Bronx, creating over the course of the semester a tapestry of stories that make the abstract principles of economics, social, cultural, and political development come to life. Further grounding students in the real lives and conditions involved in the development of the South Bronx will be their participation in after-school programs involving children and youth in a variety of community-based settings. Students will mentor the children and learn about them and their needs, relating these to the content studied in the other two courses of the Urban Semester Program. Costs include public transportation costs to and from the various sites, about \$3.00–6.00 each week.

## DESIGN AND ENVIRONMENTAL ANALYSIS COURSES

F. Becker, chair; P. Eshelman, undergraduate advising coordinator; A. Hedge, director of graduate studies; A. Basinger, S. Danko, G. Evans, K. Gibson, R. Gilmore, J. Jennings, J. Laquatra, L. Maxwell, E. Schrank, W. Sims

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

**NOTE: Class meeting times are accurate at the time of publication. If changes are necessary, the department will provide new information as soon as possible.**

#### DEA 101 Design Studio I

Fall. 3 credits. Each section limited to 18 students. Permission of instructor required. Priority given to interior design majors. Option I majors must take DEA 101 in fall of their first year. Approximate cost of materials, \$60. M W F 1:25–4:25; or T R 10:10–1:10. J. Mercer.

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

#### DEA 102 Design Studio II

Spring. 3 credits. Permission of instructor required. Option I DEA majors only. B– or higher in DEA 101 required to register for this course. Option I majors must take DEA 102 and 115 concurrently. Approximate cost of materials, \$200; shop fee, \$10. T R 1:25–4:25. P. Eshelman.

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

#### DEA 111 Making a Difference: By Design

Fall. 3 credits. Limit 285. Lab Fee: \$25. M W F 11:15–12:05. S. Danko.

Students in any academic area examine how design affects their daily life and future profession. Course focuses on issues of leadership, creative problem-solving, and risk-taking through case study examination of leaders in business, education, medicine, human development, science, etc., who have made a difference using design as a tool for positive social change. Utilizing a micro to macro framework, students explore the impact of design from the person to the planet. Additional topics: nurturing innovation, visual literacy, design criticism, design and culture, semiotics, proactive/reflective decision-making, and ecological issues.

#### DEA 115 Design Graphics

Spring. 2 credits. Option I DEA majors only. Prerequisite: DEA 101; must take DEA 102 and DEA 115 concurrently. Minimum cost of materials, \$100. Permission of instructor only. M W F 8:00–11:00. K. Gibson.

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

#### DEA 150 Introduction to Human-Environment Relations

Spring. 3 credits. M W F 12:20–1:10. G. Evans.

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

#### DEA 201 Design Studio III

Fall. 4 credits. Limited to 18 students. Prerequisites: DEA 101, 102, and 115 (minimum grades of B–) Recommended: DEA 111 and 150. Coregistration in DEA 203 and DEA 251 is required. Minimum cost of materials, \$150; shop fee, \$10; optional field trip, approximately \$100; diazo machine fee, \$8. M W F 1:25–4:25. J. Jennings.

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

#### DEA 202 Design Studio IV

Spring. 4 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; field trip fee. T R 12:20–4:25. R. Gilmore.

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 design problems of limited complexity. Each problem of 3 to 5 weeks duration is structured to emphasize different aspects of the design process.

#### DEA 203 Design Communications

Fall. 1 credit. Priority given to DEA majors. Lab fee \$10. M 7:30–9:55. J. Mercer.

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

#### DEA 204 Introduction to Building Technology

Spring. 2 credits. M 2:30–4:25. W. Sims. Introduction to building technology for interior designers and facility managers. Emphasis is placed on developing basic understanding of buildings and building systems and their implications for interior design and facility management. Covers basic building types; structural systems; construction materials and methods; HVAC systems; plumbing, electrical, lighting, fire, and security systems; and telephone, computer, and other communication systems.

**DEA 243 Inside Out: The American Everyday Interior (also Women's Studies 243)**

Spring (odd-numbered years). 3 credits. Limited 65. S-U option. T R 10:10-11:15. J. Jennings.

A study of late nineteenth- and twentieth-century everyday interiors in socio-cultural contexts, with an emphasis on design dissemination, consumer patterns, and gender issues. Topics include women's walls, power in the parlor, photographs as a mirror, the love of the colonial.

**DEA 250 The Environment and Social Behavior**

Fall. 3 credits. Limited to 16. Priority order: DEA seniors, juniors, sophomores, freshmen. Prerequisite: DEA 150 or permission of instructor. Field trip fee \$65. T R 2:55-4:10. G. Evans.

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

**DEA 251 History and Theory of the Interior**

Fall. 3 credits. Limited 65. Prerequisites: priority given to DEA majors. M W F 9:05-9:55. J. Jennings.

An historic study of interior architecture and design with an emphasis on the concepts of design theory. Overarching themes encompass several time periods from the classical to the twentieth century and isolate cultural patterns, spatial ideas, dialectics, design elements and theorists. Reading, discussion, analytical exercises, essays, examinations. Field trip.

**DEA 300 Special Studies for Undergraduates**

Fall or spring. Credit to be arranged. Department faculty.

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

**DEA 301 Design Studio V**

Fall. 4 credits. Prerequisites: DEA 111, 150, 201, 202, 203, and 204. Corequisite: DEA 303 and 459. Minimum cost of materials, \$150; shop fee, \$10; optional field trip, approximately \$100; diazo machine fee, \$8. T R 12:20-4:25. P. Eshelman.

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

**DEA 302 Design Studio VI**

Spring. 4 credits. Prerequisites: DEA 301 and 303 or permission of instructor. Corequisites: DEA 304 and DEA 305. Minimum cost of materials, \$150; shop fee, \$10; diazo machine fee, \$8. M W F 1:25-4:25. K. Gibson.

Intermediate-level interior design studio with an introduction to computer applications. Emphasis on using the microcomputer as a design tool in the process of creating and planning interior spaces. Continued development of design skills and problem solving in relation to a selection of problem types.

**DEA 303 Introduction to Furnishings, Materials, and Finishes**

Fall. 2 credits. W 7:30-9:25 p.m. R. Gilmore.

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

**DEA 304 Introduction to Professional Practice of Interior Design**

Spring. 1 credit. T 2:30-4:25. A. Basinger.

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

**DEA 305 Construction Documents and Detailing**

Spring. 1 credit. Prerequisites: DEA 301 and DEA 303. Corequisites: DEA 302 and DEA 304. Minimum cost of materials \$50. Field trips, \$50. W 7:30-9:55 p.m. R. Gilmore.

Comprehensive study of drafting, detailing, schedules and specifications. Emphasis on drawing conventions, symbols, dimensioning, detailing of interior elements, terminology, construction methods and materials.

**DEA 325 Human Factors: Ergonomics-Anthropometrics**

Fall. 3 credits. Recommended: DEA 150. T R 8:40-9:55. A. Hedge.

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

**[DEA 349 Graphic Design**

Summer or spring. 3 credits. Enrollment limited to 18 students. Recommended: design background. Priority given to DEA majors. Approximate cost of materials, \$50. M W 1:25-4:25. Not offered spring 1999. Staff.

The fundamentals of lettering, typography, layout, presentation techniques and the functional and visual aspects of environmental graphics. Printing processes and the

application of photography and illustration are also covered. A series of projects explores problems typical of the graphic design field, and in interior and exterior graphics, signing, and directional systems.]

**DEA 350 Human Factors: The Ambient Environment**

Spring. 3 credits. Recommended: DEA 150. T R 8:40-9:55. A. Hedge.

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

**DEA 374 Elements of Business for Non-Business Majors (also Hotel Administration 104)**

Spring. 1 credit. Limited to 36. Weekend course. P. Rainsford.

Focus will be to provide hands-on skills and knowledge about how to start or run a small business. Especially appropriate for students interested in professional careers such as architecture, design, writing, art, engineering, law, and other service businesses. Course structure will use a computer-based management simulation game and will require students to work in management teams of six to start and operate a hotel. Introductory-level course. No previous business experience or computer knowledge required. Students are required to attend all sessions and complete a paper, which will be due a week after conclusion of the course.

**DEA 400-401-402-403 Special Studies for Undergraduates**

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

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

**DEA 400 Directed Readings**

For study that predominantly involves library research and independent reading.

**DEA 401 Empirical Research**

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

**DEA 402 Supervised Fieldwork**

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

**DEA 403 Teaching Apprenticeship**

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

**DEA 404 Design Studio VII**

Fall. 4 credits. Prerequisites: DEA 302, DEA 303, DEA 304, and DEA 305. Minimum cost of materials, \$150. Diazo machine fee \$8. Field trip \$50. M W F 1:25-4:25. R. Gilmore.

Advanced interior design studio organized around a series of interior design problems, 3 to 5 weeks in duration. Focus is on development of design skills and on competence in solving a selected set of generic interior design problem types.

**[DEA 405 Portfolio Preparation]**

Spring. 3 credits. Enrollment limited to 18. Prerequisites DEA 301 or permission of instructor. S-U option. Minimum cost of materials, \$200. Required field trip \$20. M W 10:10-1:10. Not offered 1997-98. Staff.

Students apply graphic design principles to develop a professional portfolio of their work. Also covered are resume writing and planning the job search, and the use of appropriate computer software and computer-aided graphic tools.]

**DEA 430 Furniture as a Social Art**

Spring. 3 credits. Limited to 15. Permission of instructor. Cost of building materials: \$150. Students must also sign up for 2 hours of DEA shop time each week for model building. M W 10:10-12:05. P. Eshelman.

This course examines furniture as a design process that emphasizes support of human behavior. Information about specific social issues including health care, aging, child care, and education is the starting point for assignments. Students analyze products currently available and design new furniture. Also covered are furniture materials, fabrication processes, and manufacturing techniques.

**[DEA 443 Cultural Construction: The Nineteenth- and Twentieth-Century American Interior]**

Spring (even-numbered years). 3 credits. Enrollment limited to 15 students. S-U option. Field trips \$50. T R 10:10-11:30. Not offered spring 1998. J. Jennings.

A topical study of nineteenth- and twentieth-century American vernacular interiors, exploring the relationship between interior design theory and social and cultural values. Sources include historic interiors, literature and art, architectural and material culture studies. Reading, discussion, comparative analysis, and critical writing.]

**DEA 451 Seminar in Facility Planning and Management**

Fall. 1 credit. S-U grades only. M 3:35-4:25. F. Becker, W. Sims.

Series of seminars led by Cornell faculty and other facility management professionals. Topics include strategic space planning, space standards, office automation, project management, energy conservation, environmental protection and regulatory issues.

**DEA 453 Planning and Managing the Workplace**

Spring. 3 credits. Prerequisite: DEA 250 or permission of instructor. M 7:30-10:30. 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 building, design, furniture and equipment and policies governing their use and allocation, affect individual and organizational effectiveness. Special topics, such as the human implications of new information technologies and work at home, are also covered.

**DEA 454 Facility Planning and Management Studio**

Spring. 4 credits. Prerequisite: DEA 459 or permission of instructor. Letter grades only. Minimum cost of materials, \$100. T R 1:25-4:25. W. Sims.

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

**DEA 455 Research Methods in Human-Environment Relations**

Fall. 3 credits. Prerequisites: DEA majors only or permission of instructor, and a statistics course. M W F 1:25-2:15. G. Evans.

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

**DEA 459 Programming Methods in Design**

Fall. 3 credits. T R 10:10-11:25. W. Sims. Introduction to environmental programming. Emphasis on formulation of building requirements from user characteristics and limitations. Diverse methods for determining characteristics that will enable a particular environmental setting to support desired behaviors of users and operators. Methods include systems analysis, soft system, behavior circuit, behavior setting, and user characteristic approaches. Selection of appropriate methods to suit problems and creation of new methods or techniques are emphasized.

**DEA 470 Environmental Analysis I: Applied Ergonomic Methods**

Spring (even-numbered years). 3 credits. Prerequisite: DEA 325. T R 2:55-4:10. A. Hedge.

This course covers ergonomics methods and techniques and their application to the design of modern work environments. Emphasis is placed on understanding key concepts. Coverage includes conceptual frameworks for ergonomic analysis, systems methods and processes, a repertoire of ergonomics methods and techniques for the analysis of work

activities and work systems. This course is the undergraduate section of DEA 670, which will share the same lectures but will meet for an additional hour. DEA 670 will have additional readings and projects.

**DEA 499 Design Studio VIII**

Spring. 4 credits. Prerequisites: DEA 301, 302, 303, and 304. Letter grade only. Minimum cost of materials, \$150; diazo machine fee, \$8 per semester. T R 12:20-4:25. S. Danko.

Design-problem-solving experiences involving completion of advanced interior design problems. Problems are broken into five phases: programming; schematic design and evaluation; design development, including material and finish selection; design detailing; and in-process documentation and the preparation of a professional-quality design presentation.

**DEA 600 Special Problems for Graduate Students**

Fall or spring. Credit to be arranged. S-U grades optional. Department faculty. Independent advanced work by graduate students recommended by their special committee chair and approved by the head of the department and instructor.

**[DEA 643 Cultural Construction: The Nineteenth- and Twentieth-Century American Interior]**

Spring (even-numbered years). 4 credits. Enrollment limited to 15 students. S-U option. Field trips \$50. T R 10:10-11:30. Not offered spring 1998. J. Jennings.

A course intended for graduate students who want a more thorough grounding in the history of vernacular interiors than is provided by DEA 443. Each student is required to attend DEA 443 lectures, meet with the instructor and other graduate students for an additional class hour each week, and do additional readings and projects.]

**DEA 645 Dancing Mind/Thinking Heart: Creative Problem-Solving Theory and Practice**

Spring. 3 credits. Limited to 15 graduate and advanced undergraduate students. Prerequisite for undergraduates: permission of instructor. T 4:30-7:30. S. Danko.

Focuses on thinking processes and techniques that support creative problem solving. Theories of creative behavior and critical thinking are examined. Course is highly participatory and experiential by design. Weekly discussions include hands-on applications of theories on short problems tailored to the backgrounds of the students. Primary goal is to demonstrate perceptual, emotional, intellectual, cultural, and environmental blocks to creative thinking and expand the student's repertoire of creative problem solving strategies for use in day-to-day professional practice. Case studies of creative individuals and organizations from a variety of fields are presented.

**DEA 648 Advanced Applications in Computer Graphics**

Fall. 3 credits. Limited to 12 graduate and advanced undergraduate students. Prerequisites for undergraduates: DEA 302 or permission of instructor. Minimum cost of materials \$150. Lab fee \$35. T R 9:05-12:05. K. Gibson.

Advanced use of computer technology to create and analyze interior environments. Emphasis will be on the use of 3-D modeling, animation, photorealistic rendering and

emerging technologies to investigate dynamic design issues.

#### **DEA 650 Programming Methods in Design**

Fall. 4 credits. Recommended prerequisites: DEA 660, 652, and 656. T R 10:10-11:25. W. Sims.

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. See DEA 459 for more detail.

#### **DEA 651 Human Factors: Ergonomics-Anthropometrics**

Fall. 4 credits. Recommended: DEA 150 and a 3-credit statistics course. T R 8:40-9:55. 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. See DEA 325 for more detail.

#### **DEA 652 Human Factors: The Ambient Environment**

Spring. 4 credits. Recommended: DEA 150. T R 8:40-9:55. A. Hedge.

A course intended for graduate students who want a more thorough grounding in human factors considerations 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. For detailed description, see DEA 350.

#### **DEA 653 Planning and Managing the Workplace**

Spring. 4 credits. Prerequisite: DEA 250/660 or permission of instructor. M 7:30-10:30. F. Becker.

Intended for graduate students who want a more thorough grounding in the planning, design, and management of facilities for complex organizations than is provided by DEA 453. Each student is required to attend DEA 453 lectures, meet with the instructor and other graduate students for an additional class each week, and do additional readings and projects. See DEA 453 for more detail.

#### **DEA 654 Facility Planning and Management Studio**

Spring. 4 credits. Prerequisite: DEA 459 or permission of instructor. Letter grades only. Minimum cost of materials, \$100. For graduate students in facility planning and management. T R 1:25-4:25. W. Sims.

For description, see DEA 454.

#### **DEA 656 Research Methods in Human-Environment Relations**

Fall. 4 credits. Prerequisites: DEA majors only or permission of instructor, and a statistics course. M W F 1:25-2:15. G. Evans.

Intended for graduate students who want a more thorough understanding of the use of research to study the relationship between physical environment and human behavior than is provided by DEA 455. Each student is required to attend DEA 455 lectures, meet

with the instructor and other graduate students for an additional class each week, and do additional readings and projects. See DEA 455 for more detail.

#### **DEA 659 Seminar on Facility Planning and Management**

Fall. 1 credit. For graduate students and advanced undergraduates interested in careers in facility planning and management. S-U grades only. M 3:35-4:25. F. Becker, W. Sims.

Series of seminars led by Cornell faculty members and other professionals directly involved in facility planning and management. Topics include strategic and tactical facility planning, space standards, project management, computer and facility management, facility maintenance and operations, energy conservation and building systems.

#### **DEA 660 The Environment and Social Behavior**

Fall. 4 credits. Prerequisite: DEA 150 or permission of instructor. Field trip fee \$65. T R 2:55-4:10. G. Evans.

Intended for graduate students who want a more thorough understanding of the influence of environmental form on social behavior than is provided by DEA 250. Each student is required to attend DEA 250 lectures, meet with the instructor and other graduate students for an additional class each week, and do additional readings and projects. See DEA 250 for more detail.

#### **DEA 668 Design Theory Seminar**

Spring. 3 credits. Enrollment limited to 15 students. T R 10:10-11:30. J. Jennings.

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

#### **DEA 670 Environmental Analysis I: Applied Ergonomics Methods**

Spring (even-numbered years). 4 credits. Enrollment limited to 20. Prerequisite: DEA 651. T R 2:55-4:10. A. Hedge.

Intended for graduate students who want a more thorough understanding of applied ergonomics methods than is provided by DEA 470. Each student is required to attend DEA 470 lectures, meet with the instructor and other graduate students for an additional class each week, and do additional readings and projects. See DEA 470 for more detail.

#### **DEA 671 Environmental Analysis II: Indoor Air Quality Methods**

Spring (odd-numbered years). 3 credits. Enrollment limited to 20. Prerequisite: DEA 652. T R 10:10-11:25. A. Hedge.

This course provides in-depth coverage of the nature of indoor air pollutants and techniques for analyzing indoor air quality in modern work environments. Emphasis is placed on understanding key concepts in environmental exposure, toxicology, epidemiology and on understanding the procedures for assessing indoor air quality conditions. Coverage also includes detailed consideration of the design of modern ventilation systems.

#### **DEA 899 Master's Thesis and Research**

Fall or spring. Credits to be arranged. Prerequisite: permission of the chair of the graduate committee and the instructor. S-U grades optional. Department graduate faculty.

## **HUMAN DEVELOPMENT AND FAMILY STUDIES COURSES**

S. Hamilton, chair; S. Robertson, director of graduate studies; J. Brumberg, undergraduate advising coordinator; C. Anderson, U. Bronfenbrenner, R. Canfield, S. Ceci, M. Cochran, S. Cornelius, D. Dempster-McClain, R. Depue, J. Doris, J. Eckenrode, J. Garbarino, K. Greene, J. Haugaard, C. Hazan, B. Koslowski, L. C. Lee, M. Lenzenweger, B. Lust, P. Moen, K. Pillemer, M. Potts, C. Raver, H. Ricciuti, J. Ross-Bernstein, R. Savin-Williams, G. Suci, E. Wethington, W. Williams

**NOTE: Class meeting times are accurate at the time of publication. If changes are necessary, the department will provide new information as soon as possible.**

#### **HDFS 115 Human Development**

Fall or summer. 3 credits. S-U grades optional. M W F 1:25-2:15. S. Ceci.

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

#### **HDFS 150 Families and the Life Course**

Spring. 3 credits. S-U grades optional. M W F 1:25-2:15. E. Wethington.

This course provides an introduction to social scientific research on family roles and functions. Topics include family history, how families change over the life course, and how families are influenced by cultural and economic forces.

#### **HDFS 216 Human Development: Adolescence and Youth**

Spring or summer. 3 credits. Prerequisite: HDFS 115. S-U grades optional. T R 2:55-4:10. Staff.

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

#### **HDFS 218 Human Development: Adulthood and Aging**

Fall. 3 credits. Prerequisite: HDFS 115. S-U grades optional. M W F 9:05-9:55. S. Cornelius.

Provides a general introduction to theories and research in adult development and aging. Psychological, social, and biological changes from youth through late adulthood are



discussed. Both individual development within generations and differences among generations are emphasized.

**[HDFS 241 History of Childhood in the United States]**

Spring. Limited to 30 students. 3 credits. Not offered 1997–98. J. Brumberg. An examination of childhood and adolescence in various historical contexts: Puritan New England, slave plantations, evangelical revivals, the Western frontier, Victorian families, reform schools, early high schools and colleges, the sexual revolution of the 1920s, immigrant communities, the Depression and World War II, the 1950s, and more recent social and cultural changes affecting families. Students will evaluate continuities and changes in the lives of American children as well as changing scientific ideas about children. Students have an opportunity to reflect on and write about their own childhood and adolescence. This course is designed to give students a humanities perspective on approaches to childhood central to many different disciplines.]

**[HDFS 242 Participation with Groups of Young Children]**

Fall or spring. 4 credits. Limited to 20 students (limit depends on availability of placements and of supervision). Prerequisites: HDFS 115 and permission of instructor. S-U grades optional. W 10:10–12:05. J. Ross-Bernstein. This course is designed to integrate developmental theories with supervised experience in child care centers, with the intention of enhancing the student's abilities to understand and to relate effectively with young children. Participation, observation, reflection, reading, writing, and sharing of viewpoints are some of the means used to these ends. Placements are in local nursery schools, day care centers, Head Start programs, and kindergartens.

**[HDFS 243 Participation with Groups of Children, Ages 6–12]**

Fall or spring. 4 credits. Limited to 20 students (limit depends on availability of placements and supervision). Prerequisites: HDFS 115 and permission of instructor during preregistration. S-U grades optional. W 12:20–2:15. Not offered 1997–98. Staff. This course is designed to allow students to gain a working developmental perspective on the school-aged child (ages 6–12). Students will participate in area elementary schools for 6 hours per week as a classroom assistant, attend a weekly 2-hour resource and discussion seminar, and complete readings in developmental theory, current trends, and issues regarding children's learning and growth. The application of readings and discussions to the field experience via written assignments will give the student the opportunity for a well-integrated understanding of the school-aged child.]

**HDFS 251 Social Gerontology: Aging and the Life Course**

Spring. 3 credits. Limited to 60 students. Prerequisites: HDFS 150 or equivalent to be determined by instructor. S-U grades optional. T R 10:10–11:25. D. Dempster-McClain. This course analyzes the social aspects of aging in contemporary American society from a life course perspective. Topics to be covered include: (1) An introduction to the field of gerontology, its history, theories, and

research methods, (2) A brief overview of the physiological and psychological changes that accompany aging, (3) An analysis of the contexts (such as family, friends, social support, employment, volunteer work) in which individual aging occurs, including differences by gender, ethnicity, and social class. (4) The influences of society on the aging individual. Guest speakers will provide an introduction to various careers in the field of gerontology.

**[HDFS 253 Gender and the Life Course]**

Fall. 3 credits. Limited to 110 students. S-U grades optional. Not offered 1997–98. T R 10:10–11:40. P. Moen. This course examines the complex interplay between gender and age as well as the social construction of the life course. Students explore the relationship between social change and individual lives, observing the significance of two key institutions—work and family—in shaping basic life choices and their consequences throughout the life course. Implications of key life trajectories and transitions for individual lives and for social policy will also be discussed.]

**HDFS 258 History of Women in the Professions, 1800 to the Present (also Women's Studies 238 and History 238, American Studies 258)**

Spring. 3 credits. S-U grades optional. Human ecology students must register for HDFS 258. T R 8:40–9:55. J. Brumberg. The historical evolution of the female professions in America (midwifery, nursing, teaching, librarianship, home economics, and social work) as well as women's struggles to gain access to medicine, law, and the sciences. Lectures, reading, and discussion are geared to identifying the cultural patterns that fostered the conception of gender-specific work, and the particular historical circumstances that created these different work opportunities. The evolution of "professionalism" and the consequences of professionalism for women, family structures, and American society are also discussed.

**HDFS 260 Personality Development (also Psychology 275)**

Fall 1997. D. Berm. T R 10:10–11:25. Spring 1999 C. Hazan. T R 12:20–1:45. 3 credits. Prerequisites: HDFS 115 or Psychology 101 or instructor permission. Offered alternate years. An introduction to personality psychology, with an emphasis on personality development and contemporary research. Covers the major theories of personality, influences on personality development (including genetic, biological, experiential and environmental factors), and methods for assessing personality.

**HDFS 261 The Development of Social Behavior**

Spring. 3 credits. Prerequisite: HDFS 115 or Psychology 128. Offered alternate years. T R 1:25–2:40. C. Raver. Issues in the development of social behavior are viewed from the perspective of theory and research. Likely topics include bases of social behavior in infancy and early childhood, the role of parents, siblings and peers, the development of prosocial and aggressive behavior, the development and functioning of attitude and value systems, and the function and limits of experimental research in the study of social development.

**HDFS 284 Introduction to Sexual Minorities (also Women's Studies 285)**

Fall. 3 credits. Prerequisite: one social science course. S-U grades optional. M 6:30–9:00 p.m. R. Savin-Williams. This course introduces students to theories, empirical scholarship, public policies, and current controversies with lesbian, gay, bisexual, transgender, sexual questioning, and other sexual minority populations. The major focus is on gay, lesbian, and bisexual development, lifestyles, and communities with additional emphasis on ethnic, racial, gender, and class issues. Requirements include reaction papers to the readings.

**HDFS 300 Special Studies for Undergraduates**

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

**[HDFS 313 Problematic Behavior in Adolescence]**

Fall. 3 credits. Prerequisite: HDFS 115 or Psychology 101; HDFS 216 recommended. Not offered 1997–98. T R 2:55–4:10. J. Haugaard. This course will explore several problematic behaviors of adolescence, including depression, drug abuse, eating disorders, and delinquency. Various psychological, sociological, and biological explanations for the behaviors will be presented. Appropriate research will be reviewed; treatment and prevention strategies will be explored. An optional discussion section will be available to students who would like an opportunity to discuss readings and lectures in greater depth.]

**[HDFS 334 The Growth of the Mind]**

Spring. 4 credits. Open to undergraduate and graduate students. Graduate students should also enroll in HDFS 635, a supplemental graduate seminar. Prerequisites: A course in human experimental psychology, statistics, or HDFS 115 or equivalent; or permission of the instructor. S-U grades optional. Offered alternate years. Not offered 1997–98. B. Lust. In this course the fundamental issues of cognition are introduced. What is the nature of human intelligence? of logical and scientific reasoning? How are knowledge and understanding acquired and represented in the human mind? What is the nature of mental representation? What are the cognitive characteristics of the mind at birth? What is the relation of the acquisition of knowledge and understanding to their final representation? What are the relations between language and thought? In the study of those issues, how can epistemology and experimental psychology be related through the experimental method?

Basic debates in the study of cognition are introduced and discussed throughout: for example, the roles of innateness and learning, the distinction between competence and performance, and the relation between

induction and deduction in the acquisition of knowledge. Those psychological issues are set in a context of basic epistemological issues involving the tension between rationalism and empiricism. The course will analyze Piaget's comprehensive theory of cognitive development and experimental results. Current research in cognitive development will be contrasted.]

#### **HDFS 344 Infant Behavior and Development**

Fall. 3 credits. Prerequisites: HDFS 115, a biology course, and a statistics course. Not open to freshmen. M W F 1:25-2:15. S. Robertson.

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

#### **HDFS 346 The Role and Meaning of Play**

Fall. 2 credits. Limited to 30 juniors and seniors. Prerequisite: HDFS 115. M 7:30-9:25 p.m. J. Ross-Bernstein.

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

#### **[HDFS 347 Human Growth and Development: Biological and Behavioral Interactions (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. Limited to 150 students. Not offered 1997-98. M W F 1:25. S. Robertson and J. Haas.

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

#### **HDFS 348 Advanced Participation with Children**

Spring. 4 or 8 credits. Limited to 20 students (limit depends on availability of placements and supervision). Prerequisites: HDFS 115 and HDFS 242, 243 or 331; and permission of instructor. Recommended: HDFS 346. S-U grades optional. T 12:20-2:15. J. Ross-Bernstein.

An advanced, supervised field-based course, designed to help students deepen and consolidate their understanding of children. Students are expected to define their own goals and assess progress with supervising teachers and instructor; to keep a journal; and to plan, carry out, and evaluate weekly activities for children in their placement. Conference group and readings focus on contexts of development and on ways to support children's personal and interpersonal learning. Each student is expected to do a presentation and paper on a self-selected topic within the scope of the class. Participation is in settings that serve typical and/or special needs children from two to ten years of age and provide education, care, or special-purpose interventions for them.

#### **HDFS 353 Risk and Opportunity Factors in Childhood and Adolescence**

Spring. 3 credits. Enrollment limited to 100 students. Prerequisites: HDFS 115 and HDFS 150. S-U grades optional. T R 1:25-2:40. J. Garbarino.

This course explores the meaning of risk and opportunity in the lives of children and youth. It begins from an understanding of risk accumulation and resilience as they relate to social policy, professional practice, and community development. The concept of "social toxicity" is an organizing central theme of the course. Assignments include writing research-based editorials and participating in a simulated public policy debate.

#### **[HDFS 354 Families in Cross-cultural Perspective]**

Spring. 3 credits. Prerequisites: HDFS 115 or HDFS 150 or Rural Sociology 101 or 102 or Anthropology 101 or 102, or equivalent. S-U grades optional. Not offered 1997-98. M W F 10:10-11:00. Staff.

This course will be taught with an emphasis on the life cycle of families and individuals. Focus will be on the rites/rituals, both subtle and obvious, that mark an individual's movement through the stages of life. The approach will be both anthropological and historical. Students will see correlations between diverse family forms in the United States and around the world.]

#### **[HDFS 359 American Families in Historical Perspective (also Women's Studies 357, History 359, American Studies 359)]**

Spring. 3 credits. Prerequisite: HDFS 150 or one 200-level social science or history course. S-U grades optional. Not offered 1997-98. Human ecology students must register for HDFS 359. T R 10:10-11:25. 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 concep-

tions of sexuality, sex roles, generational relationships, stages of life, and life events. Students are required to do a major research paper on the history of their family, covering at least two generations, and demonstrating their ability to integrate life-course development theory, data drawn from the social sciences, and historical circumstances.]

#### **HDFS 362 Human Bonding**

Fall. 3 credits. Prerequisite: HDFS 115 or Psychology 101. S-U grades optional. T R 1:25-2:40. C. Hazan.

The science of interpersonal relationships. Examines the basic nature of human affectional bonds, including their functions and dynamics. Covers such topics as interpersonal attraction and mate selection, intimacy and commitment, love and sex, jealousy and loneliness, the neurobiology of affiliation and attachment, and the role of relationships in physical and psychological health.

#### **HDFS 370 Experimental Psychopathology (also Psychology 325)**

Fall. 4 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. Letter grades only. M W F 11:15. Fall 1997-K. Lockhart, Fall 1998-M. Lenzenweger, Fall 1999-M. Lenzenweger.

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

#### **HDFS 397 Experimental Child Psychology**

Fall. 4 credits. Prerequisites: HDFS 115 or Psychology 101 and one course in statistics. Intended primarily for students interested in entering graduate programs involving further research training. Limited to 16 students. M W 8:40-9:55. L. Lee.

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

#### **HDFS 400-401-402-403 Special Studies for Undergraduates**

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

For advanced independent study by an individual student or for study on an experimental basis with a group of students in a field of HDFS not otherwise provided through course work in the department or

elsewhere at the university. Students prepare a multicopy description of the study they want to undertake, on a form available from the department office in NG14. This form must be signed by the instructor directing the study and the student's faculty adviser and submitted to NG14 MVR, the Office of Undergraduate Education. After clearance that all prerequisites are met, the student picks up the form in NG14 to file at course registration or within the change-of-registration period after registration. To ensure review before the close of the periods, early submission of the special studies form to the Office of Undergraduate Education is necessary. Students, in consultation with their supervisor, should register for one of the following subdivisions of independent study (guidelines for each are available in NG14 Martha Van Rensselaer Hall):

#### **HDFS 400 Directed Readings**

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

For study that predominantly involves library research and independent study.

#### **HDFS 401 Empirical Research**

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

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

#### **HDFS 402 Supervised Fieldwork**

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

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

#### **HDFS 403 Teaching Apprenticeship**

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

For study that includes assisting faculty with instruction.

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

Spring. 3 credits. Limited to 25 students. Prerequisites: HDFS 258 or 359 or a 200- or 300-level history or women's studies course. Permission of instructor required T 2:20-4:25. J. Brumberg.

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

#### **HDFS 436 Language Development (also Psychology 436 and Linguistics 436)**

Spring. 4 credits. Open to undergraduate and graduate students. Graduate students should also enroll in HDFS/LING 633, a supplemental graduate seminar. Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive development, or linguistics. S-U grades optional. Offered alternate years. T R 3:35-4:25. B. Lust.

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

#### **HDFS 438 Thinking and Reasoning**

Fall. 3 credits. Prerequisite: HDFS 115 or Psychology 101. T R 1:25-2:40. B. Koslowski.

The course will examine problem solving and transfer, pre-causal thinking, logical thinking, practical syllogisms, causal reasoning, scientific reasoning, theories of evidence, expert vs. novice differences, and non-rational reasoning. Two general issues will run through the course: the extent to which children and adults approximate the sorts of reasoning that are described by various types of models, and the extent to which various models accurately describe the kind of thinking that is required by the types of problems and issues that arise and must be dealt with in the real world.

#### **[HDFS 439 Cognitive Development: Infancy through Adolescence]**

Spring. 3 credits. Prerequisites: HDFS 115 or Psychology 101. Letter grades only. Not offered 1997-98. T R 1:25-2:40. B. Koslowski.

The course will be an overview of current and classic issues and research in cognitive development. Central topics of both "hard cognition" (e.g., information processing and neuropsychological functioning) and "soft cognition" (e.g., problem solving, concepts and categories) will be covered. Selected topics will be linked to methodological issues and to important social issues such as cross-cultural cognitive development and putative racial and social class differences.]

#### **HDFS 440 Internship in Educational Settings for Children**

Fall or spring. 8-12 credits. Prerequisites: HDFS 115, 242, or 243 and 348. Recommended: HDFS 346. Permission of instructor required. S-U grades optional. J. Ross-Bernstein.

Opportunity to integrate theory with practice at an advanced level and to further develop understanding of children ages two to ten and their families. Interns will function as participants in varied settings and participate in curriculum planning, evaluation, staff meetings, home visits, parent conferences, and parent meetings. Supervision by head teacher and instructor. Students are expected to define their own goals and to assess their progress, to do assigned and self-directed

readings, and to keep a critical incident journal.

#### **[HDFS 451 Nontraditional Families and Troubled Families]**

Fall. 3 credits. Limited to 30 students. Prerequisites: HDFS 115 and 150. Letter grades only. Not offered 1997-98. T R 8:40-9:55. J. Haugaard.

This is an advanced course designed to explore the functioning of families. The first part of the course examines family system theory and how it relates to our understanding of all families. Four types of families are then examined: two nontraditional families (e.g., adoptive families) and two troubled families (e.g., families with a chronically ill child).]

#### **[HDFS 456 Families and Social Policy]**

Spring. 3 credits. Prerequisite: one course in the area of the family or in sociology. S-U grades optional. Not offered 1996-97. P. Moen.

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

#### **HDFS 457 Health and Social Behavior**

Fall. 3 credits. Prerequisites: HDFS 150, HSS 101, Sociology 101, or Rural Sociology 101 and a course in statistics. Letter grades only. T R 8:40-9:55. E. Wethington.

This course critically examines theories and empirical research on the relationships among social group membership, social status, and physical and mental health. The lectures focus on social stress, social support, and family structure, all of which are associated with variations in physical health, mental health, and health maintenance behaviors. Students are expected to read widely from current literature in medical sociology, health psychology, public health, and epidemiology.

#### **HDFS 464 Sexual Minorities and Human Development (also Women's Studies 467)**

Spring. 3 credits. Limited to 15 students. Permission of instructor required. T 2:55-4:10. R. Savin-Williams.

The first half of the course covers topics of a fairly general nature regarding theoretical, research, and applied issues on sexual minorities. In the second half of the course, students will determine the content through their selection of particular topics that interest them. The success of the course depends on students feeling personally engaged and committed to the course content. Because of the multidisciplinary nature of the course, it is hoped that students from a variety of backgrounds in disciplines, gender, sexual orientation, ethnicity, race, class, and religious affiliation will feel comfortable in the course.

#### **[HDFS 466 Neurobiology of Personality and Psychopathology]**

Fall. 3 credits. Limited to 30 students. Prerequisites: HDFS 115 or Psychology 101, Psychology of Psychopathology (HDFS 370 or Psychology 325), a semester of biology OR biological psychology. Letter grades only. Not offered 1997-98. T R 2:55-4:10. R. Depue.

For juniors and seniors who have an interest in the neurobiology of behavior. Course material is presented within an evolutionary biology perspective, where the development

of neurobehavioral systems as a means of adapting to critical internal and external stimuli is explored. Focus is on the general role played by the biogenic amines (dopamine, norepinephrine, and serotonin) and opiates in personality and psychopathology. Specifically, the relation of dopamine and positive emotionality, norepinephrine and negative emotionality, serotonin and behavioral stability, and opiates and social reward-attachment is explored in the area of personality. The manner in which these neurotransmitters may also be involved in disorders of affect, anxiety, personality, obsessive compulsion, and autism, respectively, is covered. The manner in which environmental influences across the lifespan may be coded in the brain and influence the development of personality and psychopathology is explored. Approximately 24-30 papers and chapters will be read and discussed.]

**HDFS 467 Psycho-social Issues in Asian American Identity**

Spring. 3 credits. Enrollment limited to 50 students. Prerequisites: HDFS 115 or Psychology 101 or permission of instructor. S-U grades optional. W 7:30-9:25. L. Lee.

The course will review theories of identity and self and their usefulness in understanding identity formation for various ethnic groups within the Asian American population. It will examine the impact of various societal forces, e.g., racism, stereotypes, etc. as well as life experiences, e.g., immigration, family values, etc. in shaping or contributing to the formation of identity or identities of Asian Americans.

**[HDFS 470 Advanced Experimental Psychopathology]**

Fall. 3 credits. Limited to 20 juniors or seniors; not open to graduate students. Prerequisites: HDFS 370, statistics (Psychology 350 preferred), introductory biology or neurobiology. Permission of instructor required. Letter grades only. TBA. Not offered 1997-98. M. Lenzenweger.

This course is intended to be an opportunity for advanced undergraduate students (i.e., juniors and seniors) to explore rigorously and in depth the empirical research literature concerning several specific forms of severe psychopathology. The course will focus on schizophrenia, affective illness, and the personality disorders. Each syndrome will be discussed in terms of phenomenological and classification issues, etiological factors, and developmental trajectory within the context of the diathesis-stress model of psychopathological development.]

**[HDFS 471 Child Development and Psychopathology]**

Spring. 3 credits. Limited to 60 advanced-level students. Prerequisites: a basic course in psychopathology or instructor's permission. Letter grades only. Not offered 1997-98. T R 2:55-4:10. J. Haugaard.

This class will explore the development and process of mental, emotional, and behavioral disorders in children such as mental retardation, autism, and attention deficit disorders. Topics will include (1) the classification of mental disorders; (2) biological, psychological, and sociological theories regarding the development and maintenance of mental disorders; (3) prevalence and etiology of childhood mental disorders, and (4) therapeutic and preventive interventions. If there is

sufficient enrollment, an optional discussion section will be available to those students who would like an opportunity to discuss readings and lecture material in greater depth.]

**HDFS 473 Schizophrenia**

Fall. 3 credits. Limited to 25 students. Prerequisites: HDFS 370 OR Psychology 325, and a statistics course and a neurobiology course. Letter grades only. Offered alternate years. T R 10:10-11:25. M. Lenzenweger.

This course will examine the nature of schizophrenia as a major mental illness in depth. The history of the illness will be traced from early observations through the most current nosological perspectives. Research data from a variety of relevant disciplines will be examined with a particular emphasis on etiology, course, and outcome of the illness. Perspectives from classification, behavioral genetics, neurobiology, psychology, and epidemiology will be integrated within an experimental psychopathology framework. This course will not focus on issues related to treatment or nonscientific approaches to the disorder.

**[HDFS 482 Child Development and Social Policy]**

Fall. 3 credits. Enrollment limited to 25 HDFS juniors and seniors or by permission of instructor. Prerequisites: HDFS 115, HDFS 150, and a course in statistics. HDFS 260 OR 261 strongly recommended. Letter grades only. Offered alternate years. Not offered 1997-98. T R 12:20-1:45. C. Raver.

Course work and seminar discussion emphasize the integration of basic research in young children's social and emotional development with intervention- and prevention-oriented research. The course also examines theoretical models of the relations between risk and resilience in child development, family functioning, community and culture. Policies in the domains of parenting, early childhood education, family and community violence, poverty, and child care are analyzed. Broad questions regarding the identification of social problems and the design of solutions are considered within cultural and historical contexts.]

**HDFS 498 Senior Honors Seminar**

Fall. 1 credit. Required for, and limited to, seniors in the HDFS honors program. S-U grades only. TBA. Staff.

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

**HDFS 499 Senior Honors Thesis**

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

**Topics Courses**

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

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

**HDFS 215, 315, 415 Topics in Adolescent and Adult Development**

**HDFS 235, 335, 435 Topics in Cognitive Development**

**HDFS 245, 345, 445 Topics in Early-Childhood Development and Education**

**HDFS 255, 355, 455 Topics in Family Studies and the Life Course**

**HDFS 265, 365, 465 Topics in Social and Personality Development**

**HDFS 275, 375, 475 Topics in Developmental Psychopathology**

**HDFS 285, 385, 485 Topics in the Ecology of Human Development**

**The Graduate Program**

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

**General Courses**

**HDFS 610 Processes in Human Development**

Spring. 3 credits. Limited to 20 students. Open to graduate students and juniors and seniors in HDFS and related fields with recommendation from a faculty member and instructor's permission. Prerequisite: a minimum of one course in statistics. Letter grades only. W 2:00-4:25. U. Bronfenbrenner.

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

**[HDFS 617 Adolescence]**

Spring. 3 credits. Not offered 1997-98. Staff.

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

**[HDFS 631 Cognitive Development]**

Fall. 3 credits. Letter grades only. Offered alternate years. Not offered 1997-98. Staff.

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

**[HDFS 640 Infancy]**

Fall. 3 credits. Not offered 1997-98. TBA. S. Robertson.

Development in infancy will be examined through a critical review of key research and theory in selected aspects of neurobehavior, perception, cognition, language, emotion, and social relationships. Theoretical issues to be considered include the role of experience in early development, sensitive periods, continuity and discontinuity in development,



and the functional significance of early behavior. Some of the conditions that put infants at risk for poor development will also be considered, such as premature birth, perinatal medical complications, and exposure to environmental toxins. The course will combine perspectives from developmental psychology and psychobiology.]

**[HDFS 650 Contemporary Family Theory and Research]**

Fall. 3 credits. Not offered 1997–98.  
E. Wethington.

Sociological and social psychological theories and research on the family are examined with reference to the relationship between the family and society. Topics change from year to year, but focus on the processes of socialization and social control, the reproduction of gender and social class across generations, changes in family "values" across time, the rise of divorce and single motherhood, family diversity, and the genesis of deviance and psychological disorder.]

**HDFS 660 Social Development**

Spring. 3 credits. S-U grades optional.  
C. Raver.

This course is designed to provide both broad and in-depth training in the areas of social and emotional development during infancy and childhood. It will cover most of the major topic areas and theoretical orientations. Consideration will be given to basic influences on socioemotional development—biological, social, and cultural. Coverage will include normative development as well as the origins and nature of individual differences. We will explore such fundamental issues and questions as: What are emotions? What role do they play in the development and organization of personality? What are the effects of early social relationships on emotional regulation? When and how does the self-system emerge? Emphasis will be on the processes—both internal and external—that help determine the course and outcome of development.

**[HDFS 670 Experimental Psychopathology]**

Spring. 3 credits. Prerequisite: an undergraduate course in abnormal psychology or psychopathology; a course in multivariate statistics; and substantive course work in neurobiology or related biological science. Not offered 1997–98.  
TBA. M. Lenzenweger.

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

**Topical Seminars**

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

**HDFS 618 Seminar in Adolescence and Adult Development**

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

**HDFS 633 Seminar on Language Development**

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

**HDFS 635 Seminar in Cognitive Development**

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

**HDFS 645 Seminar on Infancy**

Focuses on selected topics in the developmental psychology and psychobiology of infancy (including fetal development). Special topics vary and depend in part on student interests.

**HDFS 646 Seminar in Early-Childhood Development and Education**

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

**HDFS 655 Seminar in Family Studies and the Life Course**

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

**HDFS 665 Seminar in Personality and Social Development**

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

**HDFS 675 Seminar in Developmental Psychopathology**

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

**HDFS 685 Seminar in Human Development and Family Studies**

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

**HDFS 690 Seminar on Ecology of Human Development**

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

**Individualized Special Instruction**

**HDFS 700–706 Special Studies for Graduate Students**

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

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

**HDFS 700 Directed Readings**

For study that predominantly involves library research and independent study.

**HDFS 701 Empirical Research**

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

**HDFS 702 Practicum**

For study that predominantly involves field experience in community settings.

**HDFS 703 Teaching Assistantship**

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

**HDFS 704 Research Assistantship**

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

**HDFS 705 Extension Assistantship**

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

**HDFS 706 Supervised Teaching**

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

**HDFS 899 Master's Thesis and Research**

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

**HDFS 999 Doctoral Thesis and Research**

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

**POLICY ANALYSIS AND MANAGEMENT**

Keith Bryant, chair; R. J. Avery, Consumer Economics and Housing, director of graduate studies; Andrea Parrot, Human Service Studies, director of graduate studies; A. Mathios, director of undergraduate studies; J. Allen, D. Barr, R. Battistella, R. Bounous, B. J. Bristow, W. K. Bryant, P. Chi, E. J. deLara, L. Dimmler, F. M. Firebaugh, J. Ford, J. Gerner, K. Grazier, J. Greene, R. Heck, A. Kabcenell, D. Kenkel, J. Kuder, N. Kutty, D. Lillard, C. McClintock, L. Morton, J. Mueller, E. Peters, P. Pollak, M. Rendall, E. Rodriguez, W. Rosen, L. Street, J. Tiffany, D. Tobias, W. Trochim; R. Babcock, Emeritus; H. Biesdorf, Emeritus; G. Byrners, Emerita; A. Hahn, Emeritus; E. S. Maynes, Emeritus; L. Noble, Emerita; J. Robinson, Emerita; K. Walker, Emerita; B. L. Yerka, Emerita; J. Ziegler, Emeritus

**NOTE: Class meeting times are accurate at the time of publication. If changes are necessary, the department will provide new information as soon as possible.**

**PAM 100 Skills for Learning in the Field (formerly HSS 100)**

Fall and spring. 3–4 credits. Priority given to PAM students. Open to all levels, undergraduate and graduate. Limited to 30 students. T R 2:30–4:25. R. Bounous.

Students learn to be self-directed learners and to integrate theory and experience. Topics include experiential learning, participant observation, interpersonal communication, critical analysis, and empowerment. These ideas and skills are learned through participation in CLASP, an adult literacy program.

**PAM 180 Human Services in Contemporary Society (formerly HSS 101)**

Fall. 3 credits. Recommended for freshmen and first-year transfer students. T R 10:10–11:25. Staff.

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, health, and criminal justice. Barriers to service delivery are discussed, such as racism, sexism, classism, sexual preference, physical disability, and age. Contemporary issues that impact on service delivery will also be discussed with attention to the relationship between direct service and public policy.

**PAM 200 Intermediate Microeconomics (formerly CEH 210)**

Fall or spring. 4 credits. Prerequisite: Econ 101 or equivalent. Fall: preference to sophomores and juniors. Spring: preference to juniors and seniors. M W F 11:15-12:05. B. Rosen.

A section is mandatory. 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.

**PAM 201 Determinants of Behavior (formerly HSS 246)**

Fall. 3 credits. Prerequisites: introductory sociology and introductory psychology and HDFS 115. Enrollment limited to 45. Priority given to social work majors. M W F 2:30-3:20. J. Mueller.

This course provides an interdisciplinary knowledge base for human service professionals. We examine 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 and policy formulation for vulnerable groups in our society).

**PAM 202 Household and Family Demography (formerly CEH 226)**

Fall. 3 credits. Prerequisite: RSOC 101 or equivalent. S-U grades optional. T R 2:30-3:45. M. Rendall.

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

**[PAM 204 Applied Public Finance**

Spring. 3 credits. Prerequisites: PAM 200 or concurrent with PAM 200. S-U grades optional. Not offered 1997-98. D. Kenkel. The public sector now spends nearly \$2 out of every \$5 generated as income in the U.S. economy. A thorough knowledge and understanding of this important sector is an essential part of training in policy analysis and management. This course will provide an overview of the public sector of the U.S. economy, the major categories of public expenditures, and the main methods used to

finance these expenditures. The principles of tax analysis and cost-benefit analysis will be presented with a focus on the role of public policy in improving economic efficiency, improving equity by altering the distribution of wealth and income, and promoting the goals of equity and social justice.]

**PAM 205 Research Methods (formerly HSS 292)**

Spring. 3 credits. M W 2:30-3:20. Sections TBA. W. Trochim.

Students will learn the logic and methods of social science research and develop skill in transforming issues of interest to them into researchable questions. Readings, written assignments, and in-class exercises focus on stating hypotheses, designing studies and samples to test hypotheses, measuring variables, and simple statistical analysis. PAM majors should take no later than their junior year.

**[PAM 206 Racism in American Society (formerly HSS 280)**

Not offered Fall 1997. For description, see AS&RC 280.]

**PAM 220 Introduction to Management**

Spring. 3 credits. D. Tobias and S. Walston.

This course includes a basic introduction to major management and related concepts of planning, organizing, controlling, leadership, and special topics within five major management contexts including individual/personal, groups/families, firms, not-for-profit organizations, and governments/communities.

**PAM 221 Groups and Organizations (formerly HSS 203)**

Spring. 3 credits. Enrollment limited to 125 students. M W F 10:10-11:00. L. Street.

A basic course in the social psychology of groups and human service organizations. Study of the human service organization focuses on individual, group, and organization interface in terms of such issues as the perception of roles, norms, communication, power, leadership, and other issues. Students are expected to learn about the basic concepts and propositions that provide insight into organizational issues that confront members of organizations. Exercises are used to heighten understanding of group and organizational behavior.

**PAM 223 Consumers in the Market I (formerly CEH 233)**

Fall. 4 credits. Prerequisites: Econ 101 or equivalent. M W F 2:30-3:20. R. J. Avery.

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

**PAM 230 Introduction to Policy Analysis**

Fall. 3 credits. E. Peters and J. Zeigler.

Policy analysis is an interdisciplinary field that uses theories, concepts, and methods from disciplines such as economics, sociology, and political science to address substantive issues in the public policy arena. Students will be introduced to the functions of and interactions between the major institutions (public and private) at the national, state, and local level

involved in the policy making process. The course will focus on public policy analysis in the consumer, health, and family/social welfare areas and will also include an introduction to the technical skills required to undertake policy analysis.

**PAM 270 Housing and Society (formerly CEH 247)**

Spring. 3 credits. S-U grades optional. M W F 10:10-11:00. 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.

**PAM 281 The Elements of Helping (formerly HSS 210)**

Fall and spring. 3 credits. Limited to 60 students. Priority given to HSS majors. S-U optional. Prerequisite: Attendance at first class meeting mandatory. W 1:25-4:25. C. Miller.

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

**PAM 300 Special Studies for Undergraduates (formerly CEH and HSS 300)**

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

**PAM 301 Economic Organization of the Household (formerly CEH 325)**

Fall. 3 credits. Prerequisite: Econ 101 or equivalent. S-U grades optional. T R 10:10-11:25. W. K. Bryant.

Economic models are used to help explain a wide variety of family and individual behavior. Topics include the demand for consumer goods and services; consumption and saving; time allocation in the household including labor supply, household production and leisure; human capital investment; fertility; marriage and divorce. Within each topic, uses of the material by public- and private-sector decision makers are discussed.

**PAM 303 Ecology and Epidemiology of Health (formerly HSS 330)**

Spring. 3 credits. S-U grades optional. Limited to 30 students. T R 10:10-11:25. Staff.

Ecological and epidemiological approaches to the problems of achieving human health

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

**PAM 305 Introduction to Multivariate Analysis (formerly CEH 307)**

Fall. 4 credits. Prerequisites: ARME 310 or ILRST 210 or equivalent. M W F 10:10–11:00. D. Lillard.

The course introduces students to basic econometric principles and the use of statistical procedures in empirical studies of economic models. Assumptions, properties, and problems encountered in the use of multiple regression procedures are discussed. Students are required to specify, estimate, and report the results of an empirical model. Factor analysis and analysis of variance will be covered as well. Section meets once a week.

**PAM 310 Evaluation of Public Policies (formerly CEH 485)**

Fall. 3 credits. Prerequisites: Econ 101, PAM 200, 330, or equivalent and an introductory statistics course. T R 11:40–12:55. B. Rosen.

This is an advanced course in economic policy analysis that builds on the material covered in PAM 330, Introduction to Policy Analysis. The course will use a series of policy examples to demonstrate the economic approach. Special topics in cost-benefit analysis and policy evaluation techniques will be developed when necessary for the example under study. Examples of topics that may be addressed include excise taxation, economic evaluations of health care innovations, environmental policies, traffic regulations, consumer policies, and welfare reform.

**PAM 323 Consumers in the Market II (formerly CEH 333)**

Spring. 4 credits. M W F 12:20–1:10. R. J. Avery.

This course focuses on external and internal forces that drive consumer demand. Material in this course will cover the processes whereby consumers interpret market-provided information and the social forces impacting consumer purchase decisions. Particular emphasis will be placed on communication institutions in the market (advertising, the news, and other mass media) and the control of these institutions through government regulation. A select group of consumer policy issues will be covered, such as consumer evaluation of product safety and quality, food additives, consumer privacy, and socially responsible advertising.

**PAM 324 Families in Business (formerly CEH 435)**

Spring. 3 credits. Prerequisites: introductory statistics or permission of instructor. S-U grades optional. T R 10:10–11:25. R. Heck.

Offers students the opportunity to explore family business topics such as business formation, growth and expansion, strategic management, professionalization, succession, locational choices, and family dynamics, conflicts, and relationships relative to the business. An overview of families who own businesses and the profiles of their businesses will be presented along with the examination of the course topics relative to the various stages of business activity including feasibility,

start-up, ongoing maintenance, expansion or redirection, and exit or transfer. Case studies from the Harvard Business School series will be utilized to examine the course topics listed above. The course also provides an introduction to research on family businesses by surveying the conceptual issues and methodological approaches related to the study of family businesses.

**PAM 325 Empirical Research on Family-Owned Businesses (formerly CEH 436)**

Fall. 3 credits. Prerequisites: introductory statistics or permission of instructor. S-U grades optional. T R 10:10–11:25. R. Heck.

Allows students to develop research skills by providing opportunities for hands-on survey and fieldwork. Topics and activities include research design, sampling, questionnaire development, and statistical analyses related to family-owned businesses; critical review of current research approaches and extant databases used to research business ownership; and implementation and completion of an actual survey of fieldwork project of selected family business owners, or the use of extant databases for descriptive analyses of family-owned businesses.

**PAM 326 Personal Financial Management (formerly CEH 315)**

Spring. 3 credits. Preference given to human ecology students; limit 200; not open to freshmen. S-U grades optional. M W F 10:10–11:00. R. Heck.

The study of personal financial management at various income levels and during different stages of the family life span. Course topics include financial management frameworks and decision-making processes, basic economic and financial principles, returns to human resources, income and wealth analysis, the role of consumer and mortgage credit, financial insolvency and counseling, expenditure and purchase analyses, the use of budgets and record keeping in achieving family economic goals, economic risks and available protection, retirement and estate planning, and alternative forms of savings and investments.

**PAM 330 Intermediate Policy Analysis (formerly CEH 250)**

Spring. 3 credits. Prerequisite: PAM 200. T R 12:20–1:35. N. Kutty.

Introduction to the tools and techniques of policy analysis. Topics covered include microeconomic concepts such as consumer and producer surplus, deadweight loss; rationale for public policy; benefit-cost analysis; impact assessments; experimental, quasi-experimental, and non-experimental designs; and the social ecology of policy analysis.

**PAM 331 Introduction to Program Planning and Development (formerly HSS 360)**

Fall and spring. 3 credits. M W F 9:05–9:55. Staff.

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.

**PAM 340 The Economics of Consumer Policy (formerly CEH 330)**

Fall. 4 credits. Open to juniors, seniors, and graduate students. Prerequisites: Econ 101, 102 and PAM 200 or permission of instructor. Class packets on sale at Campus Store. T R 1:25–2:40. D. Lillard.

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

**PAM 341 Economics of Consumer Law and Protection (formerly CEH 365)**

Spring. 3 credits. Prerequisite: Econ 101 or equivalent. S-U grades optional. M W F 11:15–12:05. A. Mathios.

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, accident law and antitrust law, as well as the activities of such agencies as the Federal Trade Commission, the Food and Drug Administration, and the Consumer Product Safety Commission.

**[PAM 342 Financial and Credit Markets and Policy (formerly CEH 434)]**

Spring. 3 credits. Prerequisite: Econ 102. S-U grades optional. T R 8:40–9:55. Not offered 1997–98. Staff.

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

**PAM 350 Contemporary Issues in Women's Health (formerly HSS 335)**

Fall. 3–4 credits. T R 12:20–1:35. A. Parrot.

This course will deal with the history of women in medicine and historical and cultural treatment of women's health problems. Health care research and the exclusion of women from research trials and protocols will also be addressed. Reproductive issues, alternative approaches to treatment, medical problems, ethical issues, cancers, factors that contribute to post-traumatic stress disorders, health promotion behaviors, political issues, and routine medical recommendations will also be discussed in depth. Students may take the course for a fourth credit, which will require attending a discussion section every other week and observations of seven

facilities that provide a variety of women's health care (i.e., birthing center, mammogram, and ultrasound center, wellness center, hospital labor and delivery unit, LaMaze class, women's self defense class, etc.) on the alternate weeks.

**PAM 351 Community Mental Health (formerly HSS 380)**

Summer only. 3-4 credits.

Students become acquainted with basic concepts in the field of community mental health. Beginning with the injustices that served as a catalyst to the community mental health movement, the course evaluates the ethical and practical challenges experienced by mental health professionals in the community. Other topics include social roles of mental illness, epidemiology, the role of culture and social class in mental illness, public attitudes, and civil liberties.

**PAM 370 Wealth and Income (formerly CEH 355)**

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 PAM 600.

Prerequisites: Econ 101-102 or equivalent. S-U grades optional. M W F 9:05-9:55.

D. Lillard.

The wealth and income positions of American households are defined and described. Various statistics are employed to present conflicting pictures of the distribution of income using the same underlying data. Several models of economic determinants of income are presented and redistributive policies are discussed in the context of the economics of the political and philosophical positions for and against such policies.

**[PAM 371 Economics of Family Policy—Adults (formerly CEH 320) (also Economics 420)]**

Fall. 4 credits. Limited to 40 students.

Junior or senior standing; non-PAM majors by permission of instructor. M W F 1:25-2:15. Not offered 1997-98. Staff.

This course examines the economics of family policy issues that have a particular impact on adult family members. Emphasis in this course is on the economic behavior surrounding the policy and the incentives set up by the policy. Policies considered include marriage and divorce, family leave policy, policies assisting single parents, and policies affecting caregiving.]

**[PAM 372 Economics of Family Policy—Children (formerly CEH 321) (also Economics 421)]**

Spring. 4 credits. Limited to 40 students.

Junior or senior standing; non-PAM majors by permission of instructor. M W F 1:25-2:15. Not offered 1997-98. J. Gerner.

This course examines the economics of family policy issues that particularly affect children. This course focuses on a) the economic behavior that generates the policies and b) the economic incentives and behavior that result from the policies. Topics include child welfare, education, day care provision, child support, and adoption.]

**PAM 373 The Economics of Welfare Policy (formerly CEH 356)**

Fall. 4 credits. Prerequisite: Econ 101 or equivalent. S-U grades optional. M W F 11:15-12:05. M. Rendall.

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.

**PAM 374 Urban Economics and Policy (formerly CEH 348)**

Spring. 4 credits. Prerequisite: PAM 200 or equivalent. S-U grades optional. T R 2:30-3:45. N. Kutty.

This course explores the economics of cities and urban problems. The course is a study of the location choices of firms and households, growth of cities, and determination of land rents. The urban policy issues explored in this course include—housing, urban poverty, zoning, and community development.

**PAM 375 Housing for the Elderly (formerly CEH 444)**

Fall. 3 credits. Prerequisite: PAM 270 or permission of instructor. S-U grades optional. T R 2:55-4:10. P. Chi.

This is a service-based seminar that will allow students to explore, through a wide range of service experiences, the different ways community agencies assist older adults to remain independent in such diversified residential settings as planned retirement housing, subsidized housing for the low-income elderly, home-sharing projects, ECHO housing, accessory apartments, shared group living projects, and continuing care retirement community. This seminar will focus on how the residential environment influences the ability of older adults to function independently and impacts their need for services. Throughout the seminar, students will be asked to reflect critically on how their service experience complements, challenges, or extends the course curriculum. The seminar will meet every week for 2 hours. Students are also required to have 4-6 hours of service a week, 4 during the weeks the seminar meets and 6 during the other weeks.

**[PAM 376 Housing, Neighborhood and Community (formerly CEH 445)]**

Spring. 3 credits. Prerequisite: PAM 270 or permission of instructor. S-U grades optional. M W F 2:30-3:45. Not offered 1997-98. 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.]

**PAM 380 Human Sexuality (formerly HSS 315)**

Spring. 3 credits. Limited to 500 students. Prerequisite: an introductory course in human development and family studies, psychology, or sociology (or equivalent social science course). Recommended: one course in biology. T R 2:55-4:10. 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. The course will focus on the evolution of sexual norms, cross-cultural customs, legislation within changing sociopolitical systems, and delivery of services related to sexual issues, needs, and/or problems. Future

trends in sexuality will be addressed.

Biological and 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.

**PAM 381 Health-care Services and the Consumer (formerly HSS 325)**

Fall. 3 credits. Prerequisite: an introductory course in human services or health or biology. S-U grades optional. T R 12:20-1:45. Staff.

This course is an introduction to health care services and will present developments in the health field that affect the availability and kinds of health services. Emphasis is placed on interrelationships between types of practitioners, 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, cultural concerns, ethical issues, politics and policies, and the contemporary problems of health care.

**PAM 383 Social Welfare as a Social Institution (formerly HSS 370)**

Fall. 3 credits. M W F 9:05-9:55. J. Allen.

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

**PAM 400-401-402 Special Studies for Undergraduates (formerly CEH and HSS 400-401-402)**

Fall and spring. Credits to be arranged.

S-U grades optional. 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, HSS, or PAM not otherwise provided through course work in the department or elsewhere at the university. Students prepare a multicopy description of the study they want to undertake, on a form available from the Student Services Office. This form must be signed by the instructor directing the study and the department chair and filed at course registration or within the change-of-registration period after registration. To ensure review before the close of the course registration or change-of-registration period, early submission of the special studies form to the department chair is necessary. Students, in consultation with their faculty supervisor, should register for one of the following subdivisions of independent study.

**PAM 400 Directed Readings (formerly CEH and HSS 400)**

For study that predominantly involves library research and independent reading.



**PAM 401 Empirical Research (formerly CEH and HSS 401)**

For study that predominantly involves data collection and analysis.

**PAM 402 Supervised Fieldwork (formerly CEH and HSS 402)**

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.

**PAM 403 Teaching Apprenticeship (formerly HSS 403)**

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.

**PAM 404 Senior Seminar (formerly HSS 473)**

Spring. 9 credits. Prerequisite: PAM 480 or 481-482 (482 may be taken concurrently). M 1:25-4:00.

The process of change at the individual, family, and community level is a major theme of the senior seminar. The second theme, which is integrated throughout the course, concerns ethical principles and values that should inform professional practice. We will also discuss value dilemmas attendant on interventions to promote change at both the micro and macro levels of practice.

**PAM 432 Community Decision Making (formerly HSS 465)**

Fall. 3 credits. S-U grades optional. T R 12:20-2:15. L Street.

This course provides an introduction to the local political environment of human service agencies and programs. Special attention is given to how community issues are raised, debated, and resolved. Topics include the roles of service providers, local government officials, social movement organizations, federal and state governments, the courts, and the news media. Previous or concurrent participation in community activities is desirable but not required.

**PAM 450 Economics of Health Behavior and Policy (formerly CEH 432)**

Spring. 3 credits. S-U grades optional. Prerequisites: PAM 200 or equivalent or permission of instructor. T R 8:40-9:55. D. Kenkel.

This course uses the tools of economics to provide a better understanding of health behavior and policy. One focus is on policies that promote public health, including education programs and cigarette and alcohol taxation. Policies that influence consumer choices about health care and health insurance are also considered. A common theme is that to understand the effects of health policy it is necessary to analyze the incentives faced by consumers and the incentives of their employers, insurers, and health care providers. Analyses of specific health policies help develop this theme.

**PAM 470/HDFS 485 Psycho-Economic Perspectives on Human Intelligence and Achievement: Did the Bell Curve Get It Right? (formerly CEH 475)**

Spring. 3 credits. Prerequisites: Basic Statistics: any of the following (ARME 310, ARME 411, BTRY 215, PAM 305, ECON 319, ECON 320); Basic Economics: ECON

101 or permission of either instructor. Open to juniors and seniors; limited to 100. S. Ceci, E. Peters.

The course brings together the analytical tools and key models of economics and psychology to investigate issues raised by Herrnstein and Murray's book *The Bell Curve*. The objective of the course is to bring research into the classroom by enabling students to understand and use (in the lab) the methods available for defining and assessing intelligence and its relationship to success in life and other social issues.

**[PAM 471 Power and Empowerment in Human Services (formerly HSS 417)]**

Spring. 3 credits. Limited to 20 students. T R 10:10-11:25. Not offered 1997-98. D. Barr.

The course will take a theoretical world view of power and the historically colonial relationship between the American ruling class and other people. The three dimensions of power will be used as the framework for analysis. The relationships among social class, race, sex, and power will be under study. In addition, the class will explore the nature of empowerment and new theories of power and empowerment.]

**PAM 472 Crime and Crime Policy (formerly HSS 426)**

Fall. 3 credits. S-U grades optional. Limited to 20 juniors and seniors. T R 10:10-12:05. L Street.

This course is for students who are interested in understanding crime and crime-control policies. The purpose of the course is to learn how to think about crime problems in terms of their social, political, and human service contexts. The following topics are among those addressed in order to realize the objectives of the course: American culture and crime policy; criminal justice agency and system operations; criminal offending and victimization; race and crime; and community crime-control programs. These topics are examined from the vantage point of criminal justice, social justice, and public health perspectives.

**PAM 473 Social Policy (formerly HSS 475)**

Spring. 3 credits. Prerequisite: PAM 383 or Government 111 or Sociology 141. S-U grades optional. M W F 9:05-9:55. 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.

**PAM 474 Housing and Feeding the Homeless (formerly HSS 476)**

For description, see H ADM 490.

**PAM 480 Professional Internship in Human Service Studies (formerly HSS 414)**

Fall or spring. 4-7 credits. Limited to juniors and seniors majoring in human service studies. Prerequisite: PAM 100. Precourse enrollment required. T 1:30-4:25. Staff.

Students intern for a minimum of 10 hours a week in a human service organization and attend a weekly seminar or office hours 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.

**PAM 481-482 Social Work Methods and Practice I and II (formerly HSS 471-472)**

Introduction to concepts and methods used in a generalist model of social work practice. Examination of the values and ethics of professional practice. Students learn knowledge and skills appropriate for working with individuals, groups, families, organizations, and communities. Class content is integrated with concurrent supervised fieldwork. Placements are made in social agencies in Tompkins and surrounding counties. Students are expected to arrange and to pay for their own transportation.

**PAM 481 Social Work Methods and Practice I (formerly HSS 471)**

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 PAM 201 and 383. Lec M W 10:10-12:05 and Lab T R 9-5. R. Bounous, E. DeLara.

**PAM 482 Social Work Methods and Practice II (formerly HSS 472)**

Spring. 9 credits. Limited to 25 social work students. Prerequisites: grade of B- or better in PAM 481 and satisfactory performance in fieldwork. M W 10:10-12:05 and Lab T R 9-5. R. Bounous, E. DeLara.

**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.

**PAM 483 Human Service Environments—Topic course (formerly HSS 490)****PAM 484 Human Service Programs—Topic course (formerly HSS 491)****PAM 485 Human Service Processes—Topic course (formerly HSS 492)****PAM 499 Honors Program (formerly CEH 499 and HSS 499)**

Fall or spring. This course is a combination of CEH 499 and HSS 499. For CEH and PA majors the goal of the honors program is to provide students with the opportunity to undertake basic or applied research leading to the preparation of a thesis representing original work of publishable quality. The program is intended for those students who desire the opportunity to extend their interests and efforts beyond the current course offerings in the department. Furthermore, the program is designed to offer the student the opportu-

nity to work closely with a professor on a topic of interest. CE&H or PA majors doing an honors program may take PAM 499 for up to 15 credits. See Professor Alan Mathios for more details. For HSS majors the honors program affords the opportunity of an independent literature or field investigation. The HSS Honors Program is open to HSS majors who have been admitted as juniors to the College of Human Ecology Honors Program. HSS majors may take up to 6 credits of PAM 499 and should spread the credit over two semesters in their senior year.

**PAM 600 Special Problems for Graduate Students (formerly CEH and HSS 600)**

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

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

**PAM 601 Research Workshop in Consumer Economics and Housing (formerly CEH 601)**

Fall and spring. 1 credit. S-U grades only. W 12:10-1:30. Staff.

Research workshop designed to provide a forum for graduate students in consumer economics and housing to present their research.

**PAM 603 Teaching Experience (formerly HSS 603)**

Fall and spring. 1-3 credits. S-U only. For students assisting faculty with instruction. The aspects of teaching and the degree of involvement vary depending on the needs of the course and the experience of the student. Does not apply to work for which students receive financial compensation.

**PAM 604 Economics of Consumer Demand (formerly CEH 613) (also Economics 413)**

Fall. 3 credits. Prerequisite: PAM 200, Economics 311 or 313, or concurrent enrollment in one of the three, and two semesters of calculus. S-U grades optional. T R 8:40-9:55. W. K. Bryant.

Introduction at the graduate level to theory and empirical research on household demand, consumption, and saving. Emphasis on the use of the theory in empirical research. Topics include neo-classical theory of demand, duality, complete demand systems, conditional demand, demographic scaling and translating, consumption and savings. As time allows, Becker and Lancaster models of demand will be introduced.

**PAM 605 Economics of Household Behavior (formerly CEH 624) (also Economics 427)**

Spring. 3 credits. Prerequisite: PAM 604 or Economics 609-610 or consent of instructor. S-U grades optional. T R 12:20-1:35. E. Peters.

This course examines economic models of fertility, investment in children, family formation and dissolution, resource allocation within the household, and intergenerational transfers across households. Empirical applications of the models are presented for both developed and developing countries. Implications of the models for family policies such as child care subsidies, divorce laws, and family planning programs are also discussed.

**PAM 606 Demographic Techniques (formerly CEH 606)**

Fall. 3 credits. S-U grades optional. T R 12:20-1:35. M. Rendall.

This course provides an introduction to the methods, measures, and data used in the analysis of human populations. Topics include demographic rates, life-table analysis, cohort vs. period analysis, sources and quality of demographic data, population estimation and projection, and stable population models.

**PAM 607 Advanced Family Demography (formerly CEH 627)**

Fall. 3 credits. Prerequisite: PAM 606 or equivalent. S-U grades optional. W 1:25-3:55. Offered alternate years. Offered 1997-98. M. Rendall.

This course builds on the basic methods of dynamic population analysis covered in PAM 606, Demographic Techniques, extending them to the study of lives and populations structured not only by age and sex, but also by family status. The same or very similar methods apply to populations structured on other discrete dimensions (e.g., labor force status, region of residence, health status). Life-course analysis methods used to study the distribution of total lifetime are extended to the study of the distribution of total lifetime between family states. Methods for studying reproduction are extended to the study of kin and family sizes resulting from distributions of reproductive performance in the female population. Methods for studying individual lifetimes are also extended to the study of intersecting lifetimes, primarily through nuptiality. These are two-sex models or, more generally, models of interacting populations. Finally, household structure, fusion, and fission are studied. This combines elements of interacting-population and kin-availability modeling, plus static population-comparison methods.

**PAM 610 Introduction to Program Evaluation (formerly HSS 689)**

Fall. 1 credit. M 9:05-9:55. J. Greene.

This course provides a conceptual introduction to the theory and practice of social program evaluation. It is designed particularly but not exclusively for students planning a major or minor in HSS program evaluation and planning. The course emphasizes two major dimensions of evaluation: 1) its practical, real-world, political dimension and 2) its theoretical, methodological dimension. At the intersection of these two dimensions lie issues of evaluation's purpose and role, which are also addressed in the course.

**PAM 611 Program Evaluation and Planning—Topic course (formerly HSS 611)**

**PAM 612 Measurement for Program Evaluation and Research (formerly HSS 690)**

Fall. 3 credits. Priority given to HSS students. Limit 35. M W 10:10-11:25. E. Rodriguez.

The course reviews measurement theory and its application to the evaluation of human service programs. Topics include validity; reliability; scaling methods; basic principles of instrument design; and varied methods of data collection with an emphasis on structured questionnaires and interviews. Student work is focused around an applied course project. Attention is also given to ethical and managerial issues that arise in applied measurement settings.

**PAM 613 Program Evaluation and Research Design (formerly HSS 691)**

Spring. 3 credits. M W 10:10-11:25. W. Trochim.

This course reviews research design and its application to the evaluation of human service programs. Major topics include experimental, quasi-experimental, and nonexperimental research designs; basic sampling and measurement theory; and the theory of validity in research. Attention is given to issues that arise in the application of research designs to the evaluation of programs, including problems of randomization, causal inference, replication, and utilization of results. The central role of the general linear model in the statistical analysis of outcome evaluation is presented through case examples and computer simulation. Students will encounter examples of outcome evaluations from a wide range of disciplines including health, mental health, social welfare, criminal justice, social policy, and education.

**PAM 614-615 Program Evaluation in Theory and Practice (formerly HSS 692-693)**

614, fall; 615, spring. 4 credits each semester. Prerequisites for PAM 614: 612 and 613 or 617, or permission of instructor. Prerequisite for PAM 615: 614. Students must register for both semesters. M W 2:30-3:45. Staff.

This course is a practicum in which the class designs and conducts an evaluation of a human service program. 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).

**PAM 616 Strategies for Policy and Program Evaluation (formerly HSS 695)**

Fall. 3 credits. Prerequisites: PAM 612 and 613 or 617 or equivalent. Offered alternate years. T 2:00-4:25. Staff.

This course examines a wide range of approaches to the evaluation of policies and programs in the human services. The approaches are examined with respect to their purposes, key audiences, and methodologies, as well as their philosophical, political, and value frameworks. Analysis of commonalities and differences across evaluation approaches are used to judge the appropriateness of a given strategy for a particular context.

**PAM 617 Qualitative Methods for Program Evaluation (formerly HSS 696)**

Spring. 3 credits. Prerequisites: PAM 612 and 613 or equivalent. T R 10:10-11:25. J. Greene.

This course presents a qualitative approach to applied research and the evaluation of human service programs. Topics include the epistemological assumptions underlying this approach, questions of entry into setting, methods for data collection and data analysis, reporting, confidentiality of participants, and the ethics of qualitative inquiry. The course aims to help students understand how, when, and why a qualitative approach to social inquiry can be used appropriately, effectively, and defensibly.

**PAM 618 Seminar in Program Evaluation and Evaluative Research (formerly HSS 697)**

Fall and spring. 1 credit. W 12:20–1:10.

J. Greene, E. Rodriguez, and W. Trochim.

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

**PAM 620 Human Service Administration—Topic Course (formerly HSS 610)****PAM 623 Consumer Decision Making (formerly CEH 639)**

Spring. 3 credits. M W F 2:30–3:20.

R. J. Avery.

Individual and family decision making with respect to their market purchases will be investigated from a multidisciplinary perspective. Topics to be covered in the course include cognitive theories of information processing; theories of group interaction in decision making; and the effect of advertising, imperfect information, and uncertainty on consumer product evaluation and purchase behavior. Special attention will be given to decision making by consumers in various market segments, e.g., low-income consumers, children, and the elderly. Specific attention will be paid to how consumers in these segments process marketer-provided information and their related consumption decisions.

**PAM 630 Seminar in Program Planning and Development (formerly HSS 669)**

Fall. Variable credit. T R 12:20–1:35.

Staff.

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.

**PAM 631 Ethics, Public Policy, and American Society (formerly HSS 658)**

Fall. 3 credits. M W 2:00–4:25. J. Ziegler.

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

**PAM 632 The Intergovernmental System: Analysis of Current Policy Issues (formerly HSS 664)**

Fall. 3 credits. Open to seniors who have had a course in American government and to graduate students. M W 10:10–12:00.

J. Ziegler.

This course offers advanced policy analysis of current political/social/economic issues in the context of the intergovernmental system. Particular attention is paid to how certain policy and human service issues are played out at the federal, state, and local levels of government, and to the formulation of federal and state budget policy. General public

administration theory is considered. Students work in teams on a policy/administrative research project and report to the class.

**PAM 633 Social Policy and Program Planning in Human Services (formerly HSS 660)**

Spring. 3 credits. S-U grades optional.

M W 11:15–12:30. Staff.

An examination of the policy process with an emphasis on the ways in which this process determines the allocation and distribution of social services in the fields of health, education, income security, employment, criminal justice, and housing. The relationship of the policy process to the political economy, to intergovernmental relations, and to social change at the national, regional, state, and local levels will be analyzed. To this end history, theory, cultural values and beliefs, and the structure of society will also be investigated. The role of evaluation in policy planning and implementation will be underscored. Current issues in policy, such as the role of the private and voluntary sectors, interest group politics, barriers and constraints to the development of effective policies, and the respective roles of consumers, clients, and human service professionals in the policy process will also be addressed.

**PAM 640 Information and Regulation (formerly CEH 635) (also Economics 435)**

Spring. 3 credits. Prerequisite: PAM 604 or PAM 200 and two semesters of calculus.

Class packets on sale at Campus Store.

M W F 9:05–9:55. A. Mathios.

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.

**PAM 650 Health Administration—Topic course (formerly HSS 612)**

Topical Seminars and Practica

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

**PAM 651 Seminar in Mental Health Services (formerly HSS 613)**

Fall. 3 credits. Open to undergraduate seniors with instructor's approval. T 4:00–6:30. J. Mueller.

Using lectures, case examples, and class discussions, we will look from both administrative and clinical perspectives at the organization and delivery of mental health services to persons who are mentally ill, mentally infirm, or seriously emotionally and/or developmentally disabled. We will examine model programs for long-term community care and services designed to meet the special needs of ethnic/racial minorities, women, and homeless persons who are mentally impaired. State/federal partnerships will be discussed in terms of their impact on fiscal and human resources for both public and for-profit agencies.

**PAM 652 Health Care Services: Consumer and Ethical Perspectives (formerly HSS 625)**

Fall. 3–4 credits. Limited to 30 students;

undergraduates with permission of instructor. 4-credit option, may be used as Biology and Society Senior Seminar option. T R 10:10–11:25. A. Parrot.

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

**[PAM 653 Health Economics and Policy (formerly CEH 632)]**

Spring. 3 credits. Prerequisites PAM 604.

Econ 609 or permission of instructor. S-U

grades optional. T R 2:30–3:45. Not

offered 1997–98. D. Kenkel.

This course provides an overview of research in health economics and its relevance for health policy. Models of health capital, household production, and insurance are developed and used to address public health policies and health insurance programs and reforms. Major issues in the

economics of the health care sector are discussed, including the markets for physician services, hospital care and long-term care. Much of the course focuses on the U.S., but it will also review research on other countries, especially developing countries that face a much different set of health policy issues.]

**PAM 654 Legal Aspects of Health-Services Delivery (formerly HSS 627)**

Spring. 3 credits. Prerequisites: PAM 657

or permission of instructor. Staff.

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

**PAM 655 Comparative Health-Care Systems (formerly HSS 630)**

Spring. 3 credits. Open to graduate students and a limited number of seniors with permission of instructor. M 7:30–10:00 p.m. P. J. Ford.

An overview of health services is given within the larger context of the social and economic development policies of several industrialized democracies and developing countries. Sociocultural, economic, and epidemiologic 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.

**PAM 656 Managed Health Delivery Systems: Primary-Ambulatory Care (formerly HSS 631)**

Spring. 3 credits. Prerequisite: PAM 657.

T R 2:30–3:45. R. Battistella.

The concept of primary care is used to enhance understanding of the direction and

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

**PAM 657 Health Care Organization (formerly HSS 634)**

Fall. 3 credits. Limited to 30 students. Priority given to Sloan students or permission of the instructor. T R 12:20-1:35. R. Battistella.

The course will provide an introduction at the graduate level to the organization of health providers in the United States, the interrelationships of health services, and major sources and methods of paying for care. The course will describe how health services are structured in the United States and how these different services interrelate along the continuum of care. The course will describe and analyze organization, delivery, and financing issues from a variety of perspectives using specific performance criteria (e.g., equity, quality, efficiency). Innovations by the public and private sectors in the delivery and reimbursement of health care will also be presented.

**PAM 658 Field Studies in Health Administration and Planning (formerly HSS 635)**

Fall or spring. 1-4 credits. TBA. Staff. 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 faculty.

**PAM 659 Epidemiology, Clinical Medicine, and Management Interface Issues (formerly HSS 637)**

Spring. 3 credits. T 3:45-6:15. E. Rodriguez.

This course explores from an empirical and analytical framework the relationships between epidemiology, clinical medicine, and management. The course will review the epidemiology, policy issues, and treatment of selected diagnoses accounting for a significant percentage of utilization and cost of health care services. In addition, students will have an opportunity to explore issues of resources allocation and continuous quality improvement. The format for the class is lecture, discussion, and case analysis.

**PAM 660 Quality in Health Care Organizations (formerly HSS 638)**

Spring. 1 credit. TBA. A. Kabcenell.

The quality of health services—the extent to which the appropriate and most effective care is properly administered in the least costly manner—is a topic of paramount importance to patients. But, it is also a central concern of the providers and managers of health services and those who pay for care. It is also a cornerstone of health care reform. Through readings, lecture, discussion, and group work, this course will acquaint the student with the basic elements of managing quality in health care organizations including: defining quality from many perspectives; measuring performance and detecting poor quality care; traditional and progressive approaches to managing quality including Continuous Quality Improvement; and the politics of quality, both within and outside the organization.

**PAM 661 Economics of Health and Medical Care (formerly HSS 640)**

Fall. 3 credits. T R 8:30-9:55. J. Kuder.

The course is designed for graduate students who seek an understanding of the tools, vocabulary, and way of thinking of economics as it is applied to decision making in health services delivery, administration, and policy. The philosophy of the course approach is based upon the often-quoted credo of John M. Keynes: "The theory of economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, apparatus of the mind, a technique of thinking which helps its possessor to draw correct conclusions." The basic methods of micro-economics will be emphasized as tools to help individuals and organizations make better decisions about health services delivery, administration, financing and policy issues.

**PAM 662 Health Care Financial Management I (formerly HSS 641)**

Spring. 3 credits. T 10:10-12:40.

J. Kuder.

The course is designed to give graduate students an intensive introduction to the issues and techniques in the financial management of health service organizations. Class lectures, readings, guest speakers, problems, case studies, and research for term paper/projects will all be used to get across the important points and reinforce them with examples and applications. The course emphasizes the internal financial management knowledge and skills necessary for financial success in complex health organizations.

**PAM 663 Health Care Financial Management II: Payment Systems (formerly HSS 642)**

Spring. 3 credits. Prerequisite: PAM 662. W 3:35-6:05. K. Grazier.

The purpose of this course is to develop an understanding of the theories on which health care payment and reimbursement systems are based and the techniques through which they operate.

**PAM 664 Information Resources Management in Health and Human Service Organizations (formerly HSS 645)**

Spring. 3 credits. Prerequisite: PAM 662. W 12:20-2:50. Staff.

The course focuses on the nature of decision making and decision support systems, sources of information, and the strategic management of information resources in organizations.

**PAM 665 Managing Health and Human Service Organizations I (formerly HSS 648)**

Fall. 4 credits. T R 12:20-2:00.

L. Dimmler.

This is the first segment of an 8-credit sequence addressing the management and leadership of health and human services organizations, with a perspective that ranges from that involved in first-line supervision to that of strategy setting at the CEO level. This course begins with a study of basics of management—communications, motivation, change management, leadership, human resources, organizational design issues, and labor relations. It then turns to the development of technical skills in the areas of problem solving, decision making, productivity measurement, resource allocation and performance measurement. The course is taught with an applied focus and utilizes a case study approach.

**PAM 666 Managing Health and Human Service Organizations II (formerly HSS 649)**

Spring. 4 credits. Prerequisite: PAM 665. T R 12:20-2:00. L. Dimmler.

This is the second segment of an 8-credit sequence in the management and leadership of health and human services organizations. This course concentrates on strategy issues, marketing, organizational culture issues, development of mission, the management of professionals, and studies the importance of roles, structure, and inter- and intra-institutional relationships in these organizations. The course is taught via a case study approach.

**PAM 667 Health and Welfare Policy (formerly HSS 685)**

Fall. 3 credits. T R 2:30-3:45.

R. Battistella.

Health and welfare issues are seen as reflecting alternate solutions to the broader institutional problems of allocation (economics), control (politics), and normative behavior (morality). A basic tenet is that health and welfare policy is deeply rooted in social values and the availability of economic resources. Health policy is interpreted from a multidisciplinary perspective in which change emanates from structural dynamics accompanying socioeconomic development such as the evaluation of the economy from the entrepreneurial to the managerial to the post-industrial stages, together with shifts in social and political ideology—libertarianism, welfare statism, and secular humanism.

**PAM 668 Long-Term Care and the Aged: Alternative Health and Social Service Delivery Systems (formerly HSS 688)**

Spring. 3 credits. T R 9:00-10:15.

Prerequisite: PAM 657. R. Battistella.

Alternatives for the organization and delivery of long-term care services are examined within the context of public-financing constraints. Progressive long-term care is viewed as a continuum encompassing medical and social services positioned to optimize independent living. Relevant experience from other highly developed countries is presented. Visiting speakers from the public and private sectors are featured. Field trips provide additional insights into the many challenges and opportunities in long-term care policy and management.



**PAM 674 Housing Economics (formerly CEH 648) (also Economics 448)**

Spring. 3 credits. Prerequisite: PAM 200 or Economics 311 or 313. M 1:25–3:55. N. Kutty.

A survey of economic theory and empirical research related to housing markets. The course studies the demand and supply sides of the housing market as applications of microeconomic theory. Topics related to housing demand include tenure choice (decision to own or rent), household formation, mobility, and discrete choice models of housing demand. Topics on the supply side include housing starts, maintenance, and rehabilitation. Topics in housing finance such as mortgage choice, and the demand for home mortgage debt will be studied. Housing policy issues such as tax policy, housing for the elderly, fair housing, rent control, and zoning also will be addressed.

**PAM 680 Leadership in the Human Services (formerly HSS 655)**

Spring. 3 credits. Limited to 20 students. S-U grades optional. T R 4:00–5:15. J. Mueller.

Students in this seminar will study human service organizations in the context of their changing economic, political, ecological, and technological environments, and in terms of the leadership behaviors of administrators who are making successful adaptive responses to these changes. The introduction of new organizational forms and strategies for nurturing innovation and for effecting cultural change within the work environment will be discussed from the perspective of leadership roles at various organizational levels. Readings include both new theoretical literature and practical how-to-do-it guides for administrators. The seminar format provides an opportunity for simulations so that students can enact and receive feedback on their own developing leadership skills.

**PAM 704-705 Internship in Human Service Studies (formerly HSS 704-705)**

Fall, spring, or summer. 1–15 credits. S-U grades optional.

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.

**PAM 718 Advanced Seminar in Program Evaluation (formerly HSS 790)**

Fall, spring. 1–3 credits. S-U grades optional. Prerequisite: permission of instructor. T R 2:30–3:45. Staff.

This advanced course is intended for students with at least three courses in evaluation (PAM 612 series or equivalent) and statistics through multiple regression. The seminar focuses on analysis and appraisal of current literature on program evaluation and evaluative research. The seminar is topical, addressing current issues of importance in the field.

**PAM 799 MPS Problem Solving Project (formerly HSS 799)**

Fall or spring. Credits to be arranged. For students recommended by their chair and approved by the instructor in charge for independent advanced work. S-U grades optional.

**PAM 899 Master's Thesis and Research (formerly CEH and HSS 899)**

Fall and spring. Credit to be arranged. Prerequisite: permission of the chair of the graduate committee and the instructor. S-U grades optional.

**PAM 999 Doctoral Thesis and Research (formerly CEH and HSS 999)**

Fall and spring. Credit to be arranged. Prerequisite: permission of the chair of the graduate committee and the instructor. S-U grades optional.

**Topical Seminars and Practica—PAM 618 and 630 (formerly HSS 697 and 669)**

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

**Topics Courses—PAM 611, 620, and 650 (formerly HSS 611, 610 and 612)**

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.

This series of courses provides an opportunity for graduate students 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.

**TEXTILES AND APPAREL COURSES**

A. Lemley, chair, A. Netravali, director of graduate studies; P. Schwartz, director of undergraduate studies; S. Ashdown, C. C. Chu, C. Coffman, C. Jirousek, S. K. Obendorf, A. Racine, S. Watkins

**NOTE: Class meeting times are accurate at the time of publication. If changes are necessary, the department will provide new information as soon as possible.**

**TXA 114 Introduction to Computer-aided Design**

Fall and spring. 3 credits. Fall, T, W, or R 1:25–4:25. It is important for students on wait lists to attend the first class. Limit 12 per lab section. Priority given to TXA and DEA students. S-U grades optional. A. Racine.

A studio course that focuses on using the microcomputer as a design tool. The command-driven AutoCAD software program is the medium of expression for creating, modifying, and plotting visual images. Students will develop two-dimensional surface designs based on historical and cultural sources for portfolios and display. Approximate cost of supplies is \$80.00; lab fee \$10.

**TXA 125 Art, Design, and Visual Thinking**

Fall. 3 credits. S-U grades optional. Lects M W F 12:20–1:10. C. Jirousek.

An introduction to the visual arts and design that explores aesthetic and cross-cultural dimensions of visual experience. Augmented by slide presentations, artifacts, video, and an internet-based electronic textbook, lectures emphasize the varieties of visual expression to be seen in works of art and design. Social, cultural, and historic interpretations of visual expression are discussed.

**TXA 135 Fibers, Fabrics, and Finishes**

Spring. 3 credits. S-U grades optional. Lects M W F 9:05–9:55. P. Schwartz.

An introduction to fibers, fibrous materials, and dyes and finishes. Special emphasis is given to the use of fibrous materials in apparel, residential and contract interiors, and industrial applications. Topics covered include fiber properties, fabric structure, coloration of fibrous materials, dimensional stability, flammability, product specifications, and performance standards.

**TXA 145 Introduction to Apparel Design**

Spring. 4 credits. Limited to 36 students with 18 students per lab section; priority given to TXA majors or students transferring into TXA. Apparel design majors should take course during the first year. Minimum cost of materials, \$125; lab fee, \$10. Lec T 1:25–4:25 and lab F 10:10–12:05 or lec R 1:25–4:25 and lab F 12:20–2:15. A. Racine.

Intensive study of principles and processes of flat-pattern design with emphasis on creative expression in children's apparel. Students develop a thorough understanding of principles and techniques needed to produce apparel.

**TXA 217 Drawing the Clothed Figure**

Spring. 3 credits. Enrollment limited to 18 students. Prerequisite: a basic drawing course. Priority given to apparel design students. Letter grades only. Minimum cost of supplies \$125.00. Lab fee: \$30. T R 10:10–1:10. S. Watkins.

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.

**TXA 237 Structural Fabric Design**

Fall. 3 credits. S-U grades optional. Prerequisite: TXA 135. Recommended: college algebra. Lects M W F 9:05–9:55. A. Netravali.

This course covers the elements of technical fabric design with an emphasis on woven and knitted fabrics. Topics include structure of woven and knitted fabrics, openness, manufacturability, equivalence, and color effects.

**TXA 246 Introduction to Functional Apparel Design**

Fall. 4 credits. Prerequisite: TXA 135 and TXA 145. Letter grades only. Minimum cost of materials, \$125; lab fee, \$10. T R 10:10–1:10. S. Watkins.

This studio course applies the principles and processes of advanced pattern making and the theory of functional clothing to the development of sportswear, actionwear, and clothing for active leisure activities. Assigned problems will require students to use the design process

to apply information about body structure, user needs (thermal protection and comfort, mobility, and visibility), and the nature of materials to the production of functional, fashionable apparel.

#### **TXA 269 Style, Fashion, and the Apparel Industry**

Spring (last seven weeks of semester). 2 credits. Prerequisite: TXA 125 and TXA 135. Not open to freshmen or those who have taken TXA 245. Lec M W 10:10-12:05. A. Racine.

Illustrated lectures will focus on changes in the U.S. apparel industry and fashion from the nineteenth century to the present day due to social forces, technological developments, and shifting demographics. The Cornell Costume Collection will be used for discussion. Students will write research papers on issues related to the apparel/textile complex.

#### **TXA 300 Special Studies for Undergraduates**

Fall or spring. Credit 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 department chair, is filed at course registration or during the change-of-registration period.

#### **TXA 331 Apparel Production and Management**

Fall. 3 credits. Prerequisites: Economics 101 and 102 and an upper-division course in either apparel or textiles. T R 10:10-11:25. Staff.

Introduction to technical and economic aspects of textile and apparel production. Emphasis is on design and functioning of apparel manufacturing systems and their components. Analysis of efficient manufacturing methods such as Quick Response (QR), Just-in-Time (JIT) as applicable to apparel production, and use of computer technology in production and quality control will be included.

#### **TXA 335 Fiber Science**

Spring. 3 credits. Prerequisites: College chemistry and physics. Lec M W 1:25. Lab M 2:30-4:25. A. Netravali.

This course covers fibers commonly used in various engineering, medical, and apparel applications. Topics include nature of polymer molecules, chemical structure of organic fibers, inorganic fibers, micro-macro structure of fibers, fiber dimensions, environmental effects, mechanical, optical, thermal, and frictional properties of fibers. Fiber uses such as composites in aerospace and other structural components, circuit boards, bulletproof vests, sutures, artificial arteries, geotextiles, sporting goods, etc. will be discussed.

#### **TXA 336 Fundamentals of Color and Dyeing**

Fall. 3-4 credits. Prerequisite: College Natural Science Requirements. Fiber science students are required to take the lab. Lab fee, \$15. Lec M W F 10:10-11:00; lab M 1:25-4:25. C. C. Chu.

Color is an extremely important and useful factor in daily life. This course will emphasize theories and scientific principles of color, providing a framework for the use of colors in

design, marketing, or research. How colorants are used to dye fabrics will be addressed. Although fabrics are chiefly used to illustrate color in the class, much of the information and knowledge will be useful to non-textile majors. Guest lecturers from industry will provide the practical aspects of color in business.

#### **TXA 367 Draping**

Spring. 4 credits. Limited to 20 students. Prerequisite: TXA 125, TXA 246, and one drawing course. Minimum cost of materials, \$125; lab fee, \$10. M W 1:25-4:25. S. Ashdown.

This studio course examines the process of creating a three-dimensional garment from the two-dimensional fabric. Through exercises, the principles and processes of draping, advanced flat pattern making, and fitting are studied. Assigned problems require the students to make judgments regarding the design process, the nature of materials, body structure, function, and fashion.

#### **TXA 368 Computer-Aided Apparel Design**

Spring (first seven weeks of semester). 2 credits. Prerequisite: TXA 114, TXA 125, TXA 246, and TXA 367. Students whose programs include field or international experiences may elect to enroll in TXA 367 and TXA 368 in the same term. Recommended: two art or drawing courses. Minimum cost of materials, \$125; lab fee, \$10. M W F 10:10-12:05. A. Racine.

Intermediate apparel students prepared to challenge and refine their design skills will be presented with a variety of complex studio problems involving computer-aided apparel design and team work.

#### **TXA 375 Color and Surface Design of Textiles**

Fall. 4 credits. Recommended: TXA 114 and TXA 135. Minimum cost of other materials, \$100; lab fee, \$75. Limited to 15 students. T R 1:25-4:25. C. Jirousek.

Studio experience in the surface design of textiles combined with exercises in color theory. Textile projects will utilize techniques such as block printing, shibori, batik, silk painting, silk screen, and stitchery to produce a portfolio of textile designs. Studio work will be augmented by lectures on pattern and color theory illustrated by slides and textile examples.

#### **TXA 400-401-402-403 Special Independent Studies for Undergraduates**

Fall or spring. Credits to be arranged. S-U grades optional. 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 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 Student Services office. This form must be signed by the instructor directing the study and the department chair and filed at course registration or within the change-of-registration period after registration. To ensure review before the close of the course registration or change-of-registration period, early submission of the special-studies form to the department chair is necessary. Students, in consultation with their supervisor, should register for one of the following subdivisions of independent study.

#### **TXA 400 Directed Readings**

For study that predominantly involves library research and independent reading.

#### **TXA 401 Empirical Research**

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

#### **TXA 402 Supervised Fieldwork**

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

#### **TXA 403 Teaching Apprenticeships**

Fall or spring. 2-4 credits. Prerequisites: student must have upperclass standing, have demonstrated a high level of performance in the subject to be taught and in the overall academic program, and have permission of the instructor and the department chair. S-U grades optional. Staff.

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

#### **TXA 432 Product Quality Assessment**

Fall. 3 credits. Prerequisites: TXA 135 and Statistics. Lab fee, \$15. Lec M W 1:25; lab M W 2:30-4:25. S. K. Obendorf.

This course covers evaluation of fibers, yarns, fabrics, and garments, with emphases on the meaning of standards, testing philosophy, quality control, and statistical analysis. Day-to-day tests done in textile and apparel industry will be discussed. Laboratory sections will introduce students to various test methods, data generation for analysis, and evaluation.

#### **TXA 436 Fiber Chemistry**

Spring. 3 credits. S-U grade optional. Senior and first-year graduate students. Lec M W F 10:10-11:00. C. C. Chu.

The chemical and physical structure of several commercially important fibers, such as cotton, wool, silk, polyesters, nylons, acrylics, polyolefins and spandex and their polymerization process are discussed. The general chemical and physical properties of each will be given. Degradation reactions for certain fibers such as polyolefins and acrylics will be discussed.

#### **TXA 439 Biomedical Materials and Devices for Human Body Repair**

Spring. 2-3 credits. S-U grades for 2 credits, letter grades for 3 credits. Juniors and seniors only. Prerequisites: College Natural Science Requirement. (Chem. or Biol.). T 1:25-3:20, R 1:25-2:15. C. C. Chu.

Survey of materials and devices for repair of injured, diseased, or aged human tissues/organs. It includes properties of synthetic and biological materials, wound healing processes, medical devices for repair of wounds, blood vessels, hearts, joints, bones, nerves, male impotence, vision/hearing/voice, and drug control/release.

#### **TXA 444 Apparel/Textile Retailing and Distribution**

Spring. 3 credits. S-U grades optional. Prerequisite: TXA 135 and ARME 240 or equivalent. Lec T R 2:30-3:45.

P. Schwartz.

This course provides an overview of the business of design, production, distribution,

marketing, and merchandising of apparel and related products from a management perspective. The organization and structure of both domestic and international retailers is included along with pricing strategies, merchandise planning, inventory management, and sales promotion. New uses of computer systems and information technologies will be emphasized throughout.

**[TXA 446 Apparel Design: Intermediate Functional Clothing Design]**

Spring. 3 credits. Prerequisites: TXA 367 and TXA 246 or permission of instructor. Minimum cost of materials, \$125; lab fee, \$15. Not offered 1997-98. S. Watkins.

Complex problems in functional apparel design will be studied with an emphasis on totally encapsulating clothing. Students will work in groups and individually to set design criteria and develop innovative solutions for current problems in protective apparel.]

**TXA 465 Apparel Design: Product Development and Presentation**

Fall. 4 credits. Prerequisites: minimum of three drawing or art courses, TXA 367, TXA 368, and TXA 375 or permission of instructor. Minimum cost of materials, \$250; lab fee, \$10. M W 10:10-1:10. S. Ashdown.

Through studio problems in apparel design, students examine the influence of manufacturing technology and cost on apparel products. Garments are developed to various stages from sketches to finished samples. Some portfolio development included.

**TXA 499 Honors Thesis Research**

Fall and spring. 1-6 credits (maximum 6 credits for graduation). S-U grades optional. Prerequisite: TXA students who have been admitted to college honors program. Staff.

Independent research leading to the honors thesis. College honors program guidelines are to be followed.

**TXA 600 Special Problems for Graduate Students**

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

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

**TXA 620 Physical Properties of Fiber-Forming Polymers and Fibers**

Spring. 3 credits. Prerequisite: permission of instructor. A. Netravali.

Formation and properties of fiber-forming polymers, rubbery, glassy, and crystalline states and their interconnection. Fiber structure, relationship between chemical structure and physical properties of manufactured and natural fibers. Mechanical, thermal, and viscoelastic properties of fibers and testing methods will be discussed.

**[TXA 626 The Chemistry of Textile Finishes and Dyeing]**

Spring. 3 credits. S-U optional. Prerequisites: TXA 336 or equivalent and organic chemistry, or permission of instructor. Not offered 1997-98. C. C. Chu.

Chemical aspects of textiles with emphasis on finishes and dyeing are discussed. Industrially important textile chemicals used for dyeing and enhancing fiber and fabric properties, such as durable press, anti-soiling, water repellency will be studied. The emphasis is on the correlation of the observed effect with

chemical structure, end-use influences, interaction with fabric and fibers, sources and synthetic routes. The environmental impact of these textile chemicals and current federal regulation will be briefly discussed.]

**TXA 635 Special Topics in Textiles and Apparel**

Fall. 1-3 credits. Prerequisite: permission of instructor. Staff.

**TXA 637 Research Seminars in Apparel Design**

Fall and spring. 1 credit; S-U optional; repeat of course each semester is encouraged for all apparel design graduate students. Available to advanced undergraduate students with permission of individual instructor. Apparel Design faculty.

**[TXA 639 Mechanics of Fibrous Assemblies]**

Fall. 3 credits. Prerequisite: solid mechanics or permission of instructor. Not offered 1997-98. P. Schwartz.

A study of the mechanics of fiber assemblies: idealized yarn and fabric models; statistical bundle theories; deformation of yarns and fabrics in tensile, shear, and compression stress; bending and buckling; and the mechanical behavior of nonwoven textile materials.]

**TXA 664 Human Factors: Anthropometrics and Apparel**

Spring (even-numbered years). 3 credits. S-U grades optional. Limit 15. Prerequisite: permission of instructor. Open to advanced undergraduates. S. Ashdown.

Seminar course focusing on the human form and its relationship to clothing. Includes discussion of quantification of body sizes and human variation; historical, cultural, and aesthetic concepts of fit; apparel sizing techniques; national and international sizing systems and standards; impact of sizing systems on various populations (elderly, handicapped, etc.).

**TXA 675 Aesthetics and Meaning in World Dress**

Spring. 3 credits; S-U grades optional. Prerequisites: TXA 125 or course in history of art, costume history, or other history. Offered alternate years. C. Jirousek.

An examination of the aesthetic and social psychological relationship between body and clothing in the context of various cultures. Students will develop a research topic to be presented orally and in a term paper and will participate in the development of an exhibition.

**TXA 899 Master's Thesis and Research**

Fall or spring. Credits to be arranged. Prerequisite: permission of the chair of the graduate committee and the instructor. S-U grades optional. Staff.

**TXA 999 Doctoral Thesis and Research**

Fall or spring. Credit to be arranged. Prerequisite: permission of the chair of the graduate committee and the instructor. S-U grades optional. Staff.

## FACULTY ROSTER

- Allen, Josephine A., Ph.D., U. of Michigan. Assoc. Prof., Policy Analysis and Management
- Anderson, Carol L., Ph.D., Iowa State U. Assoc. Prof., Human Development and Family Studies, Assistant Dean
- Ashdown, Susan, Ph.D., U. of Minnesota. Asst. Prof., Textiles and Apparel
- Avery, Robert B., Ph.D., U. of Wisconsin. Prof., Policy Analysis and Management
- Avery, Rosemary J., Ph.D., Ohio State U. Assoc. Prof., Policy Analysis and Management
- Barr, Donald J., Ph.D., Indiana U. Prof., Policy Analysis and Management
- Battistella, Roger M., Ph.D., U. of Michigan. Prof., Policy Analysis and Management
- Becker, Franklin D., Ph.D., U. of California at Davis. Prof., Design and Environmental Analysis
- Boyd, D. Michael, B.A., U. of North Iowa. Prof., Design and Environmental Analysis
- Brumberg, Joan J., Ph.D., U. of Virginia. Prof., Human Development and Family Studies
- Bryant, W. Keith, Ph.D., Michigan State U. Prof. and Chair, Policy Analysis and Management
- Canfield, Rick, Ph.D., U. of Denver. Asst. Prof., Human Development and Family Studies
- Ceci, Stephen J., Ph.D., U. of Exeter (England). Prof., Human Development and Family Studies
- Chi, Peter S., Ph.D., Brown U. Prof., Policy Analysis and Management
- Chu, Chih-Chang, Ph.D., Florida State U. Prof., Textiles and Apparel
- Cochran, Moncrieff, Ph.D., U. of Michigan. Prof., Human Development and Family Studies
- Cornelius, Steven W., Ph.D., Pennsylvania State U. Assoc. Prof., Human Development and Family Studies
- Danko, Sheila, M.I.D., Rhode Island School of Design. Assoc. Prof., Design and Environmental Analysis
- Depue, Richard, Ph.D., U. of Oklahoma. Prof., Human Development and Family Studies
- Eckenrode, John J., Ph.D., Tufts U. Assoc. Prof., Human Development and Family Studies
- Eshelman, Paul E., M.F.A., U. of Illinois. Assoc. Prof., Design and Environmental Analysis
- Evans, Gary, Ph.D., U. of Massachusetts at Amherst. Prof., Design and Environmental Analysis
- Firebaugh, Francille M., Ph.D., Cornell U. Prof., Policy Analysis and Management, Dean
- Ford, John L., Ph.D., U. of Michigan. Prof., Policy Analysis and Management
- Garbarino, James, Ph.D., Cornell U. Prof. and Director, Family Life Development Center
- Gamer, Clark E., M.F.A., U. of Kansas. Prof. Emer., Design and Environmental Analysis
- Gerner, Jennifer L., Ph.D., U. of Wisconsin. Prof., Policy Analysis and Management, Assistant Dean
- Gibson, Kathleen J., M.A., Ohio State U. Asst. Prof., Design and Environmental Analysis
- Grazier, Kyle, Ph.D., U. of California at Berkeley. Assoc. Prof., Policy Analysis and Management
- Greene, Jennifer C., Ph.D., Stanford U. Assoc. Prof., Policy Analysis and Management

Hamilton, Stephen F., Ed.D., Harvard U. Prof. and Chair, Human Development and Family Studies

Haugaard, Jeffrey, Ph.D., U. of Virginia. Asst. Prof., Human Development and Family Studies

Hazan, Cindy, Ph.D., U. of Denver. Assoc. Prof., Human Development and Family Studies

Heck, Ramona K.Z., Ph.D., Purdue U. Assoc. Prof., Policy Analysis and Management

Hedge, Alan, Ph.D., U. of Sheffield (England). Prof., Design and Environmental Analysis

Hogarth, Jeanne M., Ph.D., Ohio State U. Assoc. Prof., Policy Analysis and Management

Jennings, Jan, M.S. Oklahoma State U. Assoc. Prof., Design and Environmental Analysis

Jirousek, Charlotte, Ph.D., U. of Minnesota. Asst. Prof., Textiles and Apparel

Kenkel, Donald, Ph.D., U. of Chicago. Assoc. Prof., Policy Analysis and Management

Koslowski, Barbara, Ed.D., Harvard U. Assoc. Prof., Human Development and Family Studies

Kuder, John, Ph.D., U. of Michigan. Assoc. Prof., Policy Analysis and Management

Kutty, Nandinee K., Ph.D., Syracuse U. Asst. Prof., Policy Analysis and Management

Lacy, William, Ph.D., U. of Michigan. Prof., Associate Dean

Laquatra, Joseph Jr., Ph.D., Cornell U. Assoc. Prof., Design and Environmental Analysis

Lee, Lee C., Ph.D., The Ohio State U. Prof., Human Development and Family Studies

Lemley, Ann T., Ph.D., Cornell U. Prof. and Chair, Textiles and Apparel

Lenzenweger, Mark F., Ph.D., Yeshiva U. Assoc. Prof., Human Development and Family Studies

Lillard, Dean R., Ph.D., U. of Chicago. Asst. Prof., Policy Analysis and Management

Lust, Barbara C., Ph.D., City U. of New York. Prof., Human Development and Family Studies

Mathios, Alan, Ph.D., U. of Pennsylvania. Assoc. Prof., Policy Analysis and Management

Maxwell, Lorraine E., Ph.D., City U. of New York. Asst. Prof., Design and Environmental Analysis

McClintock, Charles, Ph.D., SUNY at Buffalo. Prof., Policy Analysis and Management, Associate Dean

Minot, Marion E., Ph.D., Cornell U. Prof., Policy Analysis and Management

Moen, Phyllis, Ph.D., U. of Minnesota. Prof., Human Development and Family Studies

Mueller, B. Jeanne, Ph.D., U. of Wisconsin. Prof., Policy Analysis and Management

Netravali, Anil, Ph.D., North Carolina State U. Assoc. Prof., Textiles and Apparel

Obendorf, Sharon K., Ph.D., Cornell U. Prof., Textiles and Apparel

Parrot, Andrea, Ph.D., Cornell U. Assoc. Prof., Policy Analysis and Management

Peters, Elizabeth, Ph.D., U. of Chicago. Assoc. Prof., Policy Analysis and Management

Pillemer, Karl A., Ph.D., Brandeis U. Assoc. Prof., Human Development and Family Studies

Pollak, Patricia B., Ph.D., Syracuse U. Assoc. Prof., Policy Analysis and Management

Potts, Marion H., Ph.D., Penn State U. Prof., Human Development and Family Studies

Raver, C. Cybele, Ph.D., Yale U. Asst. Prof., Human Development and Family Studies

Rendall, Michael, Ph.D., Brown U. Asst. Prof., Policy Analysis and Management

Robertson, Steven S., Ph.D., Cornell U. Assoc. Prof., Human Development and Family Studies

Rodriguez, Eunice, Ph.D., U. of California at Berkeley. Asst. Prof., Policy Analysis and Management

Savin-Williams, Ritch C., Ph.D., U. of Chicago. Prof., Human Development and Family Studies

Schwartz, Peter, Ph.D., North Carolina State U. Prof., Textiles and Apparel

Shapiro, Constance H., Ph.D., Cornell U. Prof. and Chair, Policy Analysis and Management

Sims, William R., Ph.D., Massachusetts Inst. of Technology. Prof. and Chair, Design and Environmental Analysis

Street, Lloyd C., Ph.D., U. of California at Berkeley. Assoc. Prof., Policy Analysis and Management

Suci, George J., Ph.D., U. of Illinois. Prof., Human Development and Family Studies

Trochim, William M. K., Ph.D., Northwestern U. Prof., Policy Analysis and Management

Watkins, Susan M., M.S., Pennsylvania State U. Prof., Textiles and Apparel

Wethington, Elaine, Ph.D., U. of Michigan. Assoc. Prof., Human Development and Family Studies

### Lecturers

Beck, Sam N., Ph.D., U. of Massachusetts. Sr. Lecturer, Urban Semester

Bounous, Ruth M., Ph.D., Cornell U. Sr. Lecturer, Policy Analysis and Management

Dempster-McClain, Donna I., Ph.D., Cornell U. Sr. Lecturer, Human Development and Family Studies

Diaz, Gladys M., M.A., Cornell U. Lecturer, Policy Analysis and Management

Dimmeler, Laura, M.P.A., Harvard U. Lecturer, Policy Analysis and Management

Fisher, Amy, M.S., Rush U. Lecturer, Division of Nutritional Sciences

Gilmore, Rhonda, M.A., Cornell U. Lecturer, Design and Environmental Analysis

Johnson, Ellen, M.S.W., Syracuse U. Lecturer, Policy Analysis and Management

Racine, Anita, Ph.D., Cornell U. Sr. Lecturer, Textiles and Apparel

Rosen, William, Ph.D., U. of CA. Sr. Lecturer, Policy Analysis and Management

Ross-Bernstein, Judith, M.Ed., Northwestern U. Lecturer, Human Development and Family Studies

Tennant, Priscilla A., M.Sc.Ed., SUNY-Cortland. Lecturer, Division of Nutritional Sciences