

COLLEGE OF HUMAN ECOLOGY

ADMINISTRATION

Patsy M. Brannon, dean

Jennifer Gerner, associate dean

S. Kay Obendorf, associate dean

Brenda Bricker, director, undergraduate affairs

Darryl Scott, director, admission, student and career services

Joanne LaValle, college registrar

COLLEGE FOCUS

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; as well as 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.

FACILITIES

The college is housed in Martha Van Rensselaer, Savage and Kinzelberg Halls. The buildings include administrative and faculty offices, classrooms, auditoriums, galleries, and lecture halls; wet chemistry and biochemistry laboratories for nutrition, food science, and textile science; experimental food laboratories; design studios and computer-aided design laboratories; woodworking shops; experimental observation rooms with one-way vision screens and sound-recording equipment; human factors and infant research facilities; and an audio/visual classroom for distance learning. Also included are learning resource centers for career planning, field and international study, a historical costume collection, a human metabolic research unit, an animal research 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, chromatography, radioisotope analysis, electrophoresis, microscopy, and ultracentrifugation; physical testing equipment; and cameras, videotape, and sound recording equipment.

DEGREE PROGRAMS

Cornell programs in Human Ecology lead to the degrees of Bachelor of Science (B.S.), Master of Arts (M.A.), Master of Science (M.S.), Master of Professional Studies in Human Ecology (M.P.S.), Master of Health Services Administration (M.H.A.), and Doctor of Philosophy (Ph.D.).

General academic information concerning the Bachelor of Science degree is given here under the heading "Undergraduate Study." Curricula for major studies are described under the various academic areas.

Programs leading to master and doctoral degrees are administered by the Graduate School. They are described in the *Announcement of the Graduate School* and in announcements published by the individual field offices (Design and Environmental Analysis, Human Development, Nutrition, Policy Analysis and Management, and Textiles and Apparel). For information regarding The Sloan Program in Health Services Administration, contact the Department of Policy Analysis and Management.

UNDERGRADUATE DEGREES

Bachelor of Science (B.S.) degrees are offered in the following areas:

Biology and Society

Design and Environmental Analysis

Human Development

Human Biology, Health, and Society

Nutritional Sciences

Policy Analysis and Management

Textiles and Apparel

Individual Curriculum

UNDERGRADUATE AFFAIRS

Persons interested in undergraduate study in human ecology should contact the admissions office, 170 Martha Van Rensselaer Hall (255-5471). 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.

Counselors in the Office of Admission, Student, and Career Services (172 MVR) can help prospective students understand college programs and requirements, as well as college and university resources and services. They provide a broad range of career services and personal support for all matriculated undergraduates. The college registrar (145 MVR) assists undergraduates with questions about academic credit and graduation requirements.

The Student Body

The College of Human Ecology undergraduate enrollment is 1,400. Roughly 400 students graduate each year; last year 245 freshmen and 195 transfer students matriculated. One hundred fourteen faculty members serve as advisers to 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 highly selective. Approximately two-thirds of the student body comes from New York State, with the remainder coming from other parts of the United States and abroad. In 2001, 29 percent were identified as members of minority groups. Approximately 200 graduate students have members of the college's faculty chairing their special committees. The college awarded 46 master's degrees and 14 doctorates last year.

Mature Students

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 24 years old or older at first matriculation, the college has adopted certain procedures specifically for that group. Counselors in the Office of Admission, Student, and Career Services (172 MVR) can provide information of interest to mature students. Mature students are permitted to enroll for as few as six credits without petitioning for permission and also are permitted to extend their residency beyond the normal eight terms. To find out about qualifying for prorated tuition, mature students must see the registrar before registration each semester.

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 who are 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 nondegree 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 statutory divisions of the university. Courses taken while a person is classified as a special student may be counted toward the requirements of the bachelor's degree. Those interested in becoming special students should make appointments to discuss admissions procedures in the Office of Admission (170 MVR, 255-5471).

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, 255-4987). 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 must 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.

Transfer Students

Students who enter the College of Human Ecology after the first semester of their freshman year are considered transfer students. An internal transfer student is one who transfers to Human Ecology from one of the other colleges at Cornell University. An external transfer student is one who transfers to Human Ecology from an institution outside of Cornell University. Internal transfer students should take special care to learn the policies of Human Ecology because each college at Cornell operates under a different set of rules. Staff in the Office of the College Registrar (145 MVR, 255-2235) and in the Office of Admission, Student, and Career Services (172 MVR, 255-5471) are available to answer students' questions. External transfer students may transfer a maximum of 60 credits to the college after admission. Both internal and external transfer students should contact the Office of the College Registrar to discuss how the transfer credits will apply to the various degree programs.

MAJORS

The college requires students to fulfill requirements for a major in order to graduate. Students must declare a major by the end of the sophomore year, and may elect to complete more than one College of Human Ecology major. It is common for students to change interests during their undergraduate careers. Counselors in the Office of Admission, Student, and Career Services (172 MVR) and directors of undergraduate study in each of the academic departments can help students to consider their options and engage in academic planning. All changes of major require submission of the Change of Major form, and are processed through the College Registrar's office, 145 MVR. Change of major will trigger re-evaluation of credit and assignment of a new faculty adviser.

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, managing, and maintaining the built environment face enormous challenges, including frequent social and organizational changes, 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 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 MVR gallery. The DEA Resource Center includes books, journals, newsletters, and material samples for student use.

Options

The department offers undergraduate education in three professional areas: interior design, facility planning and management, and human factors and ergonomics. The interior design option is accredited by the Foundation for Interior Design Education Research (FIDER). The Facility Planning and Management Program at Cornell is an "IFMA Recognized Program." This means that it meets the standards for recognition of programs established by the International Facility Management Association.

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 should plan on a minimum of six semesters at Cornell to complete the program.

Option I: Interior Design

This option prepares students for professional careers in interior design. The program emphasizes a systematic design process in which innovative solutions are based on research derived knowledge of human behavior, values, and attitudes. Students develop an understanding of design theory and methods, design history, behaviorally based programming, and post-occupancy evaluation. They learn about design communication, building systems, furnishings, materials and finishes, and professional practice. Students may utilize their elective courses to develop a concentration in areas such as design history, historic preservation, hotel and restaurant design, theater design, digital media, design for aging, and design for sustainability.

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 Factors and Ergonomics

Human factors and ergonomics 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. This knowledge is then used to help architects, planners, interior and product designers, and facility managers 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 factors and ergonomics 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, William Sims, in E214 Martha Van Rensselaer Hall.

Consultation with faculty advisers about future goals, departmental requirements, sequences of courses, and electives inside or outside the college 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 approve students' schedules during course enrollment each term, it is the student's responsibility to keep track of his or her courses and to make sure that they meet

graduation requirements for their major and 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 BIOLOGY, HEALTH, AND SOCIETY

The Human Biology, Health, and Society (HBHS) Program permits you to combine your interests in the biological sciences while exploring human health issues from the perspectives of both the biological and behavioral sciences. HBHS majors select the issues they want to explore in depth from Human Ecology courses that address health and the broad range of factors that influence human well-being. Examples of issues you can explore include: biology and behavior; metabolism, genetics, and health; biology, growth, and development; and food and health policy and health promotion. Most students in this program will proceed to programs of advanced study to pursue careers related to health. This major is offered by faculty in the Division of Nutritional Sciences. More information about this program can be found in a separate section of the catalog that describes the division's programs.

HUMAN DEVELOPMENT

Human Development majors explore the psychological, social, cultural, and biological development of people from conception to old age, focusing on the processes and mechanisms of growth and change over the life course. A wide range of issues are included in the study of human development, including biological, cognitive, and emotional development; the role of family, neighborhood, workplace, and culture in development; and the influence that developing humans have on their environment. The Human Development major provides an excellent foundation for many careers, such as medicine (particularly family medicine, pediatrics, and psychiatry), clinical psychology and other mental health professions, law, business (especially human resources), child and family advocacy, and education (from preschool and elementary school teaching to school administration). The major prepares students for academic careers as professors in human development, psychology, or sociology departments. Learning about human development also helps students understand more clearly their own development and the development of those around them.

The faculty of the Department of Human Development comes from several disciplines, including developmental and clinical psychology, sociology, and history. The diversity of faculty expertise results in a wide-ranging view of human development. The research of the department's faculty is extensive. It includes basic research on issues such as the neurobiology of personality, the role of childhood attachments in the development of adult

romantic relationships, the acquisition of language in infants, and the effects of environmental toxins on children's cognitive development. It also includes applied research useful for the creation of public policy, such as studies of the causes and consequences of child maltreatment and studies of the effectiveness of reading programs for Headstart preschoolers, apprenticeship programs for high school students, and support programs for older adults moving into retirement communities.

Curriculum

Human Development is the most flexible major in the College of Human Ecology. While all students learn the fundamentals of human development, each student can focus on one or more areas of particular interest. The flexibility of the major also allows students ample opportunity to meet the requirements for admission to many professional schools, including medical, dental, law, and business schools.

Requirements specified by the College of Human Ecology make up part of each student's curriculum, and include classes in the social and natural sciences, humanities, writing, and communication. In addition, there are requirements for the Human Development major. Students in this major can choose up to 14 elective courses from the broad range of offerings across the Cornell campus.

Special Opportunities

Beyond formal coursework, students have many other opportunities that involve ongoing individual work with Cornell faculty or other professionals. Academic credit can be earned through all of them. These opportunities include the following:

Field Placements. Human Development majors can arrange internships with Urban Semester in New York City, Cornell in Washington, and Cornell Abroad programs and in local agencies. These have included hospitals, psychiatric hospitals, juvenile detention centers, retirement homes, and the department's on-campus Early Childhood Program. Students have also participated in projects with the Tompkins County Office of Aging, the Tompkins County Youth Bureau, and the Law Guardian's Office of Tompkins County.

Faculty Research. Many students work as research assistants on faculty projects. Students use research techniques ranging from laboratory procedures to family observations to large surveys. They assist in study design, data collection, and data analysis. Participation in faculty research provides the type of experience that many graduate and professional schools expect from their top applicants. Recent projects have included the study of parent-infant interactions, the transition of high school students into the world of work, and the study of recent trends in the composition of American families.

Independent Research. Under faculty supervision, some advanced students complete an honors thesis in an area of personal interest by designing a study and collecting and analyzing data. Recent thesis topics have included marital quality in Asian and interracial couples, development in families that adopt school-age children, and connections between speed of visual processing in infants and later scores on intelligence tests.

Undergraduate Teaching Assistant.

Advanced students can serve as undergraduate teaching assistants. This requires close work with the professor teaching the course as well as with students taking the course.

Teaching Certification. A cooperative education program exists between Human Development and Wells College. This program requires careful planning and course scheduling. It enables students to graduate with a Cornell Bachelor's Degree and New York State Certification to teach nursery school through sixth grade. This certification is honored by most other states.

The program requires a minimum of a three-semester commitment. Cornell HD students take four courses at Wells College and student teach their last semester at Cornell. Although there is van transportation between Cornell and Wells College, it is important for students to have access to a car, especially while student teaching. Students will be registered at Cornell during the entire undergraduate program and usually maintain Ithaca housing. Wells College courses count as Cornell courses and are used as electives, but do not get included in a student's GPA. The one-semester student teaching experience is typically based in the Ithaca area, though not necessarily within the City of Ithaca.

This program is open to HD majors only. You must have at least a 3.0 Cornell cumulative GPA upon application, and must maintain a 3.0 GPA to qualify for student teaching and to complete the program. For more information, contact Judith Ross-Bernstein in G56 MVR at 255-0826.

NUTRITIONAL SCIENCES

A major of Nutritional Sciences (NS) focuses on the complex interrelationships of food patterns, nutritional status, and health. This field draws upon chemistry, biology, and the social sciences to understand questions such as: How are nutrients used by the body? What factors influence human food choice? What nutrients and dietary patterns are recommended to promote growth, maintain health, or reduce the risk of chronic disease? Students in this program may also fulfill the courses required for professional membership in The American Dietetic Association, which will enable them to be employed as nutrition counselors, clinical nutritionists, sports nutritionists, or administrators of food and nutrition services. Students also may prepare for medical school and other types of advanced degree programs through this major. The requirements for this program are outlined in the section of this catalog that describes the division's programs.

Special Opportunities

Dietetics and Clinical Nutrition

Interested students should complete the academic requirements for The American Dietetic Association (ADA). Courses in foods, nutrition and disease, microbiology, management, statistics, and economics are added to the core curriculum (specific requirements). Evaluation of academic credentials for active membership and registration in ADA should be completed before graduation. Seniors should initiate this academic evaluation process in March if they

will graduate in January or in September if they will graduate in May. All students who will complete the academic requirements by graduation should participate in the evaluation process while at Cornell. Students who meet most but not all of the academic requirements are encouraged to have their academic work evaluated while they are at Cornell so that deficiencies can be identified and documented.

Advisers in the dietetics program can also help students plan to meet the experience or supervised practice component required for active membership and/or eligibility to take the Registration Examination to be certified as a registered dietitian (R.D.). For additional information about meeting ADA requirements, contact Gail Canterbury, Dietetics Program Administrative Assistant, 335 MVR.

Exercise Science Minor

Students can complete the Applied Exercise Science Concentration at Ithaca College, which includes courses in fitness measurements, exercise physiology, and biomechanics of human movement. Nutrition courses of special interest relate to growth and development, regulation of body weight, and community nutrition and health. For information about the Applied Exercise Science Concentration, contact the DNS Academic Affairs Office (309 MVR, 255-4410).

POLICY ANALYSIS AND MANAGEMENT

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 policy areas: family/social welfare, health, or 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. It also gives students the knowledge to build management skills for use in public, not-for-profit, 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 these skills within a particular concentration area—social welfare/family, health, or consumer policy. Social

welfare/family policy includes a panoply of governmental and private sector income maintenance, social, and human service delivery programs and policies that range from child adoption, neglect, and abuse policies 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, managed care, public health issues, and substance abuse policies. Consumer programs and policies include regulations and laws governing advertising, product safety, food and drug safety, nutrition policies, consumer credit, insurance, telecommunications, mortgage, housing, and public utility markets, and also deal with issues such as the invasion of privacy, Internet security, and children's television. 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 meeting college requirements, all PAM majors are expected to take the following 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 policy. Finally, all PAM majors are required to complete an integrative capstone experience, which may involve an experiential learning program such as Cornell in Washington, the Capital Semester, or Urban Semester, or an honors thesis. Please check with the undergraduate advising coordinator, Professor Sharon Tennyson, for further details.

TEXTILES AND APPAREL

The Department of Textiles and Apparel (TXA) focuses on the use of textiles and fibrous materials for apparel, composites, biomaterials, residential and contract interiors, geotechnical and other applications. Programs in the department, in keeping with the overall mission of the college, emphasize the use of materials to meet human needs. The undergraduate curriculum focuses on the development of design skills, an understanding of the properties of textile materials, knowledge of marketing, and the use of technology in the industry.

Practical problem-solving skills are developed in the department's studios and laboratories. 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, Anil Netravali (201 MVR). 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 working with their advisers early to develop a professional portfolio of their work. Students are free to

change advisers; changes must be recorded with the director of undergraduate studies. Although advisers must provide the PIN number to lock in courses 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 his/her major and 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 the loss or theft of student work.

Course Fees

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

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 aesthetic and functional 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. Most transfer students will need at least one extra semester to fulfill the requirements of the major. Transfers in the design option should plan on two additional semesters.

Option I: Apparel Design

The study of apparel design includes both aesthetic and functional 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, product development, 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 design, management, new product development, 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. It is also designed 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 courses in the fields of mathematics, biology, humanities, and social sciences. 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 may be selected from concentrations in: 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 Nancy Breen, Director of Undergraduate Studies, in MVR 205.

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, Patti Papapietro, Office of Admission, Student and Career Services (172 MVR).

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 after the freshman year and must be made before the second semester of the junior year.

If an individual curriculum seems advisable, the individual curriculum coordinator will provide direction in formally developing a program of study. Although the coordinator must approve 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 adviser and the program coordinator before 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.

Study Abroad

Each year nearly 100 Human Ecology students spend a semester or more off campus in places spanning the globe, such as Australia and Zaire. There they supplement their Cornell studies with a wide range of cross-cultural and academic experiences. Study abroad opportunities are available through Cornell Abroad, U.S. college-sponsored programs abroad, and individual applications at foreign universities.

All study abroad students must meet college study abroad requirements and remain registered at Cornell during the overseas study. Credits earned count towards the 60 Cornell credits required for graduation. Study abroad credits do not count toward the maximum number of endowed credits that Human Ecology students are permitted to earn. Typically, students considering study abroad begin their planning at least by September or October of their sophomore year.

To start:

- Carefully consider what it is you hope to get out of a study abroad experience (academically and culturally). The Cornell Abroad Center (474 Uris Hall) houses the largest on-campus collection of materials on programs around the world. The Human Ecology Career Development Center (162 MVR) has additional materials.
- Pick up an application from the Office of the Registrar (145 MVR).
- Meet with the college's study abroad adviser (172 MVR). The adviser, with the college registrar, will help you complete the application, plan for your semester off campus, and secure the necessary signatures.
- Submit your application to the Office of the Registrar. Deadlines are early February for study abroad the following fall term, and early September for study abroad the following spring term. Please note that

some programs fill up quickly and applications to these most popular programs should be submitted several months before these deadlines.

Independent Research

Research opportunities for undergraduates are extensive and valued as an important part of the learning experience. The opportunity to engage in substantive research with some of the leading scientists in their fields is so compelling that approximately half of the college's undergraduates conduct research projects. Students may become involved in research with the guidance of faculty members by conducting research assigned in a class, joining a faculty member's research group, completing an independent study research project, or carrying out an honors program project.

For further information, contact individual faculty members or the director of undergraduate studies (DUS) in your department.

Honors Programs

Students interested in college honors programs that lead to the degree "bachelor of science with honors" usually apply to the appropriate honors committee no later than the end of their sophomore year. Generally, a minimum grade point average of 3.3 and demonstrated potential for honors-level research is required. Students take approved courses in research methodology and evaluation, attend honors seminars, complete a written thesis, and defend it in an oral examination.

In addition to the college honors program, special programs are offered by the Department of Human Development and the Division of Nutritional Sciences.

If you are interested in the honors program, it is important to contact the director of undergraduate studies (DUS) in your department or division for information and guidelines.

Field Study and Internships

Field study and internships provide experiential learning opportunities in real-life circumstances where classroom knowledge is tested and applied. Students are able to master new skills, develop and implement plans of action, solve problems, interact in multicultural situations, and build networks for future job opportunities. By applying techniques of research methods, critical thinking, and self-directed learning, students learn to think conceptually while becoming agents of change.

Check with the Director of Undergraduate Studies for major specific information. The Career Development Center (162 MVR) and career counselors in 172 MVR can also provide resources and assistance in finding internships and other experiential opportunities.

Concentration/Certificate in Gerontology

For students interested in pursuing study related to aging, the College of Human Ecology, under the auspices of the Bronfenbrenner Life Course Center, offers the option of completing an undergraduate concentration in gerontology. This program is designed to develop an understanding of and competence in dealing with the processes and issues of aging. Study in gerontology enriches the practical experience of students and prepares them for pro-

fessional work in this area. The program draws on the resources of several departments and colleges at Cornell and Ithaca College to shape a curriculum suited to each student's professional goals and interests.

The concentration is available in combination with any major offered by the university. Twelve credit hours of course work must be completed with nine of these taken in the College of Human Ecology. The courses explore aging through biology, psychology, sociology, economics, and design.

Experiential learning opportunities are strongly recommended as a complement to classroom work. With faculty sponsorship, students can participate in experiences in the Ithaca area, the Urban Semester in New York City, Cornell-in-Washington, the Capital Semester, or in a placement arranged more individually.

Both Cornell and Ithaca College offer courses that incorporate a service-learning component into their curriculum. Cornell's course, "Housing for the Elderly," (PAM 375) has placements in a variety of local agencies (e.g., Office of Aging, Housing Authority, Ithacare) where students gain valuable experience with the different ways communities make it possible for adults to remain independent. This course and others at Ithaca College are sponsored by the Ithaca Partnership for Service Learning in Elder Care. They offer a variety of options for combining volunteer service with classroom experiences. Opportunities for undergraduates to become involved in research projects, such as the Pathways to Life Quality Study, a new Cornell University/Ithaca College longitudinal study of residential changes and adjustments in the later years are also available. In addition, senior students can apply to work as a teaching assistant for a gerontology course.

Departments and programs have designated academic advisers for the gerontology concentration who will help students plan the sequences of courses and electives needed to complete both a major and the gerontology concentration. Because many gerontology courses have prerequisites, early and careful planning is essential.

Specific program requirements may be obtained in the Office of the College Registrar (145 MVR, 255-2235) or from Nancy Wells, Bronfenbrenner Life Course Center (E220 MVR, 254-6330).

General Concentration

Students may develop a concentration in additional fields taught at Cornell by taking 12 credits in an approved area. Computer science, Africana Studies, Women's Studies, communications, or business are just a few examples of concentrations that are possible.

THE URBAN SEMESTER PROGRAM IN NEW YORK CITY

Multicultural Issues in Urban Affairs

Sam Beck, Ph.D., director

The Urban Semester Program is a set of courses spanning the entire year. Students choose either fall or spring semester and enroll in three classes focusing on the opportunities and barriers that a multicultural society pres-

ents and their relationship with professional, community, or public policy settings and concerns (15-credit residential program). They also intern three days each week in placements of their choosing. One day each week, students carry out community service in an inner city school (pre-k to high school). One day each week, students participate in site visits. Seminars are incorporated into these activities. All students reside in the Olin Hall dormitory of the Weill Medical College of Cornell University.

In the eight-week summer semester (one to two credits), students carry out internships in various medical settings. Students work with the program staff to locate internship placements. For information, contact the Urban Semester Program staff in 162 MVR Hall, (607) 255-1846, or the Urban Semester Program in New York City at (212) 746-2273.

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 Presbyterian Hospital/New York Weill Cornell Medical Center, Queens Medical Center for Women and Children, South Bronx Health Center for Children and Families, Memorial Sloan Kettering Hospital, Hospital for Special Surgery, Montefiore Hospital, Bellevue Hospital, Our Lady of Mercy Hospital

Private and public law—NWL Legal Defense and Education Fund, Agenda for Children Tomorrow, Skadden Arps, Slate, Meagher, & Flom, Lawyers for Children, DA's Office, Legal Aid Society, AALDEF, Committee Against Anti-Asian Violence, Center for Immigrant Rights, NAACP/DEF, Dorsey & Whitney

Government and community agencies—Cornell University Cooperative Extension, Senator Charles Schumer's office, NYC Housing Authority, Dept. of Aging, Women's Action Alliance, NYC Commission on the Status of Women, NYC Dept. of Consumer Affairs, The Center for Puerto Rican Studies, Manhattan Borough President's office, Central Park Wildlife Center, Attorney General's office, The Parks Dept., Health Dept.

Wall Street firms and other private businesses—Bloomingdales, Prudential Securities, Merrill Lynch, PricewaterhouseCoopers, Cairns & Associates, Burson Marsteller, Cushman & Wakefield, AIG-AI Underwriters, Salomon Smith Barney, Jane Clark Chermayeff Associates, DDB Needham, KCSA, William M. Mercer Consulting Co., MGM, Madison Square Garden, Gensler Architecture, Niedhoff-Henkel Century Group, American Management Association

Private not-for-profit organizations—City Lights Youth, Council on Economic Priorities, Planned Parenthood, Talbot Perkins, FEGS, National Resources Defense Council, Urban Youth Alliance Inc., Phipps Housing, The Door, Covenant House, Global Policy and International Law, UN International Assoc. of Religious Freedom, Mothers and Others for a Livable Planet, UN Child Care Center, WHEDCO, YAI, Families and Work Institute

Private and public schools—Beginning with Children, Banana Kelly High School, East Harlem School at Exodus House, The Hetrick Martin Institute, Nuestros Niños, Theodore

Roosevelt High School, The Choir Academy of Harlem, El Puente, Genesis RFK Center, River East School, MS 118, Mott Haven Village

Design and arts organizations—Harlem Textiles Works, TADA!, NY Theater Workshop, Cynthia Rowley, Inc., Perry Ellis International, Museum of African Art, SOHO20 Gallery, Lower East Side Tenement Museum, Tommy Hilfiger, Polo, The Gap, Liz Claiborne

Communications and media—Nickelodeon, Do Something magazine, NBC Dateline, CNN, CBS News-48 Hours, NBC News, ABC One Life to Live, MSNBC The News w/Brian Williams, The Village Voice, Good Housekeeping, The New Yorker, Essence, Children's Television Workshop, Good Morning America, MTV, HarperCollins Publishing, Maxim Magazine, MTV Online International

Other Off-Campus Programs

Capital Semester

William Rosen, Ph.D., director

Combine a full semester of 15 Cornell credits with a paid internship and a reduction in tuition of \$3,500. Students intern directly for New York State legislators in Albany to explore their interests in greater depth, doing research projects, meeting with lobbyists and constituents, writing reports for legislation and publication, and working on legislative hearings. This is great experience for law school, graduate school, and employment. It is available for the spring semester only with preference given to juniors and seniors. Visit the Career Development Center (162 MVR) for more information and applications or contact Prof. William Rosen, 259 MVR, the director of the program.

Cornell in Washington

Students take courses from Cornell faculty, conduct individual research projects, and work as externs while taking advantage of the rich resources of the nation's capital. For more information, visit the program office (471 Hollister Hall).

Courses at Ithaca College and Wells College

Full-time undergraduate students at Cornell may petition to enroll in courses at Ithaca or Wells College. Students pay regular full tuition to Cornell and only special fees to either Ithaca or Wells where applicable. Students are allowed to register for one course per term and a maximum of 12 credits in four years. Exceptions will be granted to Cornell students enrolled in methods and practice teaching courses at Ithaca and Wells, and those students pursuing a concentration in exercise science through a specially arranged program with Ithaca College.

Cornell students are eligible to register only for Ithaca and Wells College courses that are relevant to their program and that do not duplicate Cornell courses. Ithaca and Wells College credit counts as Cornell credit, but not as Human Ecology credit. Students are accepted on a space-available basis. Participation in this program is not guaranteed, and both Ithaca and Wells have the right to accept or reject students for any reason deemed appropriate. The program is available only during the fall and spring semesters. For further information, contact the college registrar (145 MVR, 255-2235).

Double-Registration Programs

Cornell undergraduates from PAM and other fields across the college and campus are eligible to apply to the Sloan Program in their junior year for a five-year accelerated B.S./M.P.S. degree in health administration. In their senior year, these students will take the first-year Sloan courses, which will be counted twice to satisfy both undergraduate as well as graduate requirements. At the end of their senior year, students will graduate with a B.S. degree. If the student's grades are competitive, they will be notified during the spring semester of their senior year that they are invited to continue for the final year of Sloan as a graduate student. Those students accepted for the five-year program will participate in a health care administrative internship during the summer after earning their B.S. degree and following the first year of Sloan academic coursework. The following graduate year they will complete the second year of required Sloan courses and electives and will earn a Master in Professional Studies, with Cornell certifying completion of the requirements for a graduate degree in health administration.

Students applying to the accelerated M.P.S. program need to complete the initial application to the Sloan five-year program through PAM in their junior year. In general, most of their undergraduate requirements will have been met. This application must include the GRE general test score, along with recommendations from the faculty adviser and at least one other source, as well as transcripts and the statement of purpose. During their final senior undergraduate year they also will have to submit a formal application to the graduate school. A sample schedule of the two year curriculum for Sloan can be viewed at: www.human.cornell.edu/pam/sloan/2003curr.cfm.

Double-Registration Program for Law

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 (Myron Taylor Hall, 255-5141) to discuss the admissions criteria. Because students accepted to this program will be spending their senior year away from Human Ecology, they need to plan ahead to ensure that distribution requirements for the B.S. degree will be met. Successful applicants need the approval of the college registrar in Human Ecology.

ACADEMIC ADVISING AND STUDENT SERVICES

Faculty Advisers

Students who choose to major in a particular department are assigned an adviser whose special interests match their need. Students may change advisers as their own interests

change by working with the director of undergraduate studies (DUS).

Faculty advisers are available to discuss course requirements and sequences, useful electives inside or outside the college, as well as future goals and career opportunities. Although advisers must provide the adviser key number (PIN) during course enrollment each term, it is the student's responsibility to make sure that his or her 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.

Office of Admission, Student, and Career Services

The Office of Admission, Student, and Career Services (ASCS) (172 MVR) is a center for student orientation activities; academic, personal, and career advising; study abroad; and minority student programs.

Personal counseling, including exploration of problems or concerns of a personal nature, is available to all students. These ASCS counselors, however, are not psychiatrists or therapists; they are available to help you understand and navigate the Cornell system, and to offer support, assistance, and referral. Discussions are completely confidential. Appointments may be made through the receptionist in ASCS or by calling 255-2532.

In addition, ASCS provides support for several student organizations, including Human Ecology Ambassadors, the Mature Students Association, the Association for Students of Color, the Pre-professional Association towards Careers in Health, the Pre-law Undergraduate Society, the Orientation Committee, and Human Ecology Voices. Primary responsibilities of the office are listed below:

Academic advisement. This service is provided to all students as an adjunct to faculty advising. Counselors can assist in course scheduling, academic planning, selection of a major, graduation requirements, and related issues.

Undeclared majors. Students who have not yet declared a major are urged to work closely with student services staff to plan their program of study. For the period a student is undeclared, counselors will provide assistance during course enrollment.

Career counseling. Career counseling is designed to help students clarify the relationship between personal skills, abilities, and career goals. Services are offered on an individual or group basis. Counselors assist in identifying career outcomes of the majors, developing networking skills, suggesting course work appropriate to various career goals, and assisting students in their general job searches.

Post-graduate advisement. Material pertaining to graduate and professional schools, graduate entrance examinations, courses of study, and career outcomes is readily available.

Students with disabilities. The college is committed to assisting students with disabilities. Students who have special needs are

urged to contact the Student Disability Services (420 CCC) when they arrive on campus.

Financial aid. Students who encounter financial difficulty or anticipate running short of funds may discuss their needs with a counselor. Complete information is available from the Office of Financial Aid, 203 Day Hall.

The Human Ecology Alumni Association Cash Award Fund. This fund provides small emergency grants to students in the college who have unexpected financial problems. Applications may be made through ASCS.

Office of the Registrar

The Office of the University Registrar (B7 Day Hall) maintains the official academic records for the university and provides students with their official university transcripts. Additional information is available on the university registrar's web site: www.sws.cornell.edu/our. The college registrar (145 MVR) maintains students' official academic records, including the audit of progress toward the degree. The college registrar also provides services such as adding and dropping classes, correcting student records, issuing letters verifying that a student is registered, and approving the transfer of credit from other institutions.

Minority Programs

The College of Human Ecology at Cornell University believes that a diverse community enriches the educational process for all members of the college community. Consequently, the college focuses particular efforts on a broad range of services for students of color. This includes not only recruitment but also services for students already on campus. Additionally, the college collaborates with university and New York State programs to assure Human Ecology students have access to the vast array of services available here.

The professional staff of Human Ecology's Office of Admission, Student, and Career Services includes a director of multicultural programs who assists in the recruitment, admission, and enrollment of the most qualified and appropriate EOP (a program for New York State residents), African American, Native American, Hispanic American, and Asian American students to the college. All EOP students are invited to a special university-wide pre-freshman summer program that introduces accepted students to the Cornell campus and its classrooms. Services for current students include EOP/COSEP; academic, career, and personal counseling; recommendation letters for employment or graduate schools; and advising and support for student activities and programs.

The Human Ecology Partnership Program provides mentorship through a network of faculty and upper-class students to all incoming students of color, particularly during their first year. In addition, this office serves as a liaison to the Office of Minority Educational Affairs (COSEP), State Programs (EOP), and the Learning Strategies Center. Students are also encouraged to visit the college's Career Development Center to enhance personal career exploration and decision making.

Selected programs include the following:

BBMTA (Black Biomedical and Technical Association). A university organization that provides enrichment activities for minority stu-

dents interested in pursuing medical careers. For more information, contact Janice Turner (55 Goldwin Smith, 255-9497).

ASC (Association for Students of Color). With the motto "Yesterday's vision, today's reality, and tomorrow's hope," the ASC was created to bring together Human Ecology students to provide a supportive foundation for enrollment, retention, graduation, and career placement for students of color.

The goals of the ASC are to increase communication between students of color, administration, and faculty, to assist in increasing enrollment of students of color in Human Ecology, and assist in increasing the retention of students of color in Human Ecology and in their selected majors.

ASC's four committees are recruitment and retention, student relations, career development, and peer advising. For more information contact Verdene Lee (172 MVR, 255-2532).

Human Ecology Peer Partnership Program helps incoming students of color transition to the college and university. Small groups of freshmen, usually about six to eight students, are paired with faculty and upperclassmen. They meet weekly for discussions, guidance, and explorations of the Cornell campus and the Ithaca community. For more information, contact Verdene Lee (172 MVR, 255-2532); Gary Evans in the Department of Design and Environmental Analysis (E306 MVR, 255-4775); or Lorraine Maxwell in the Department of Design and Environmental Analysis (E310 MVR, 255-1958).

CSTEP. The Collegiate Science and Technology Entry Program is the New York State program of enrichment activities and programs for pre-med and pre-law New York State residents. Services are targeted at populations who are historically underrepresented in scientific, technical, health-related, or licensed professions and/or who are economically disadvantaged and who demonstrate interest in, and potential for, a CSTEP-targeted profession. For more information, contact Verdene Lee (172 MVR, 255-2532).

Multicultural Education

Multicultural education broadens understanding of the world's many different societies as well as the various cultures of this country. Students take courses in the Cornell programs listed below that may be used to meet degree requirements. The college encourages students to incorporate courses from these cultural programs and from study abroad experiences in their degree programs. See information on study abroad opportunities.

Africana Studies and Research Center

American Indian Program

Asian American Studies Program

East Asia Program

Gender and Global Change

Institute for European Studies

Languages and Linguistics

Latin American Studies Program

Latino Studies Program

Peace Studies Program

Program for Contemporary Near Eastern Studies

Program in Jewish Studies

Religious Studies

South Asia Program

Southeast Asia Program

Women's Studies Program

International Students

The International Students and Scholars Office (ISSO, B50 Caldwell Hall, 255-5243) provides a broad range of services to international students. All international students should maintain contact with the ISSO. Counselors in ASCS are also available for assistance.

International students in the College of Human Ecology are encouraged to meet with the college registrar to discuss any questions or concerns that they have about their academic record.

Career Planning, Graduate and Professional School, and Job Search Services

Counseling. The Office of Admission, Student, and Career Services (ACCS, 172 MVR, 255-2532) provides career counselors and resources in the Career Development Center to help students assess possible career outcomes and access educational and extracurricular programs and resources to prepare for those careers. Assistance is available through one-on-one advising or group programming. The office works with the Cornell Career Services (103 Barnes Hall, 255-5221) to facilitate access to larger, university-wide programs.

The Career Development Center (CDC, 162 MVR) is a starting point for students looking for career information. Selected resources about career planning and job search techniques, general directories to begin job or graduate school searches, and information for alumni networking are housed here. Also available are Cornell Career Services handouts and registration forms, graduate and professional school testing booklets and registration packets, study abroad, and Urban Semester program materials. Computer terminals provide access to web-based information regarding internship and employment opportunities, as well as graduate/professional schools.

The CDC is open weekdays during the regular school term. Student career assistants are available to provide résumé and cover letter critiques, conduct mock interviews on video, and help navigate the library resources. Final critiques can be provided by a career counselor once the student review has been completed.

Former Urban Semester Program participants comprise a portion of the CDC student staff and are available daily to answer questions about the program and its application process.

Selected services are listed below. They will help you to investigate your interests, skills, and values as they relate to career options, provide you with useful information and tips for a successful summer or full-time job search, and provide access to employment opportunities. In addition, please refer to the college's career services web site: www.human.cornell.edu/student/.

Prelaw or Premed. Students who consider themselves prelaw or premed are encouraged to join a student group affiliated with ACCS. Those interested in a law career can join PLUS

(PreLaw Undergraduate Society) where information on applying to law school, preparing for the LSAT, and examining career opportunities in law is provided. Students interested in pursuing a health-related career are welcome to join PATCH (Pre-professional Association Towards Careers in Health) which serves as a link to the university health careers network and provides guidance as students prepare for the MCAT, apply to medical school, and explore the various specialties of medicine.

Extern Program. Spend one day to one week over winter break shadowing an alum in a career field of your choice. Observe day-to-day activities, discuss specific jobs and careers, and sometimes obtain limited hands-on experience. This service is available to sophomores, juniors, and seniors.

Fresh Program. This service is similar to the Extern Program but is available to freshmen only. Spend one day to one week over spring break shadowing an alum in a career field of your choice. In addition to career explorations, the Extern and Fresh programs provide excellent networking opportunities.

Internship and Employer Files. The CDC keeps files of more than 300 internships and hundreds of potential employers for student review.

Student Jobs and Internships. This is an electronic listing of information about internships and career-related summer and academic year employment that is exclusive to Cornellians.

Alumni Career Presentations. Alumni from the college come back to campus throughout the year to discuss their postgraduate or professional experiences. These meetings are ideal for exploring career outcomes of specific majors.

AlumNet. Students have access to Human Ecology alumni who can provide information on their careers and offer suggestions on a job search in their particular field or location. Students can query alumni on a host of variables and review selected alumni résumés to learn more about specific careers.

Job Search Workshops. The college hosts approximately 10 workshops every semester. These workshops are designed to help students market themselves for either summer or full-time job opportunities. Students learn how to conduct an effective job search, write a résumé and cover letter, and interview successfully.

MonsterTRAK. Exclusively for Cornell students, MonsterTRAK provides a listing of job opportunities available. Most are full-time jobs, although some summer opportunities are listed. Search by career field, geographic location, or both.

InterviewTRAK. This service provides access to on-campus interviews with employers interested specifically in Cornell students. Interviews occur primarily in banking and financial services, retail sales and management, facilities planning and management, and consulting, along with a few nonprofit organizations.

New York Recruiting Consortium. Available exclusively to Human Ecology and Arts and Sciences students, the New York Recruiting Consortium happens in New York City over winter break. It offers interviews for full-time employment with employers involved in

banking and financial services, retail sales/management, advertising, law, health care, and consulting.

NFP in New York City and NFP in Washington, D.C. Speak with representatives from dozens of New York City or Washington, D.C. not-for-profit/public service agencies about work or internship opportunities in health, education, advocacy, government, and more (occurs only during the spring semester).

Communications Consortium. Interview with organizations in advertising, public relations, film and radio, and print media. National organizations come to Syracuse, New York, to meet with you for individual appointments. During the spring semester, a job fair occurs the evening before.

GRADUATION REQUIREMENTS AND POLICIES

It is important for students to track their graduation progress by comparing their current transcript with an appropriate curriculum sheet. Unofficial transcripts and curriculum sheets are available in the Human Ecology Registrar's Office (145 MVR Hall).

Cornell Credit Requirements

- To graduate, a student must earn a minimum of 120 academic credits. An unlimited number of credits may be taken in Cornell's statutory colleges.
- Students who matriculate as freshmen may apply a maximum of 15 non-Cornell credits earned prior to matriculation (including AP, IB, and college credits) toward the 120 credits required for graduation. An additional 15 in absentia credits earned after matriculation may be applied. AP, IB, and transfer courses may be applied toward fulfillment of specific requirements regardless of whether the credit is transferred (i.e., courses may be waived). No college credit earned prior to matriculation and used to meet Cornell's minimum admission requirements may be counted in the 120 credits required for graduation. This policy does not apply to transfer students. *Courses taught by a college in the high school setting are not allowed to count for either credits or fulfillment of requirements (i.e., Syracuse Project Advance).*
- Of the 120 credits required to graduate, at least 60 credits must be earned at Cornell University, applicable to transfer students.

Human Ecology Credit Requirements

- The college divides the 120 minimum required academic credits into four general categories. (Refer to curriculum sheets for your major for specific details on course selections. These sheets are available in the Office of the Registrar (145 MVR) and in the Office of Admission, Student, and Career Services (172 MVR) as well as on the college web site at www.human.cornell.edu.)

- Category I—College distribution requirements

Natural sciences

Social sciences

First-Year Writing Seminars

Humanities

Quantitative and analytical courses (math and statistics)

b) Category II—Requirements for a major

c) Category III—Electives (see definition below)

d) Category IV—Physical education

- Students must complete a minimum of 40 Human Ecology credits in Category II.
- Within Category II, students must earn nine credits in Human Ecology departments outside the major.
- These Human Ecology courses outside the major may not include HE 100, HE 101, or any 403 course. Any non-major 403 course will count as elective credit and not towards the 40 required HE credits. A maximum of three credits of special studies outside the major (400, 401, and 402), or any internship credit may be applied to this requirement. A maximum of five credits of HE 470, HE 480, HE 490 may be used. Seven credits of PAM 392 may be used in this category.
- Human Ecology courses used to satisfy distribution requirements in Category I:

1) WILL NOT count towards the 40-credit minimum in Category II.

2) Will satisfy the nine-credit requirement for course work outside the major.

(Exception: B&S majors must refer to the "NOTE" on B&S curriculum sheets at the end of Category II requirements for appropriate guidelines.)

Elective Credits

- 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 best round out their education.

Students should consult the index in this book to learn where different subjects are taught in the university. Some subjects are taught in more than one division.

Elective credits can be earned in the endowed and statutory divisions of Cornell.

Endowed Colleges

Africana Studies and Research Center

College of Architecture, Art, and Planning

College of Arts and Sciences

College of Engineering

School of Hotel Administration

Johnson Graduate School of Management

Statutory Colleges

College of Agriculture and Life Sciences

College of Human Ecology

School of Industrial Relations

College of Veterinary Medicine

- Students are allowed 21 credits of endowed courses as electives or in their major; they may take more than 21, but will then be billed at the endowed rate of tuition for the extra credits.

- To the extent possible, courses taken in the endowed colleges will be counted to meet distribution requirements in Category I. More than 40 endowed credits taken in Category I, however, will count against the 21 allowed endowed elective credits.

- Endowed credits earned in Category II (even if the endowed courses are required for the major) and Category III will be counted against the 21.

- Required credits listed in the requirements charts for Categories I and II are the minimums; credits taken in excess of those minimums count toward the additional credits required in Category III to make a total of 120 credits (exclusive of physical education). **An unlimited number of credits may be taken in the statutory colleges of Cornell.** Students may choose to take additional statutory credits and graduate with more than 120 credits.

- Elective credits in Category III earned in Cornell's endowed divisions during summer session, study abroad credits, in absentia credits, and transfer credits do not count against the 21 credits allowed in the endowed divisions.

Minimum Semester Requirements

- Students enrolling in the college as freshmen must complete at least 12 credits of Human Ecology courses by the end of the fourth semester, and at least 5 credits of Human Ecology courses must be taken in each of the freshman and sophomore years (ECON 101 and 102 may be used to fulfill this requirement).
- Students must carry 12 credits each semester, excluding physical education, to be matriculated as full-time students (Exception: mature students).

Requirements for Majors

- Students must fulfill the requirements specified for a major that are in effect at the time of their matriculation or thereafter.

Grade Point Average

- Students must earn a minimum cumulative grade point average of 1.7 (C-) or better to graduate.
- To be eligible for the Dean's List, students must have a semester GPA of 3.7 with no F or U grades. At least 12 credits of letter grades are required.

S-U Grade Options

- The S-U grading option may NOT be used for courses in Category I or required courses in Category II unless it is the only grade option offered for those courses. S-U MAY be used for the nine credits of Human Ecology coursework outside of one's major and for electives in Category III.
- Students may apply no more than 12 credits of S-U towards graduation. If a required course is only offered S-U, it will

not count towards this limit. Also, Honors Research 499 taken S-U does not count. Students may take more S-U's if they choose, but the additional credit cannot be applied towards graduation.

First-year Writing Seminars

All freshmen must complete the First-year Writing Seminars during their first two semesters. Those who do not fulfill this requirement will be referred to the Committee on Academic Status (CAS) and will be required to complete the writing requirement during the third semester or a hold will be placed on the student's record. First-year Writing Seminars must be taken at Cornell and **will not be approved for in absentia study**. Students who receive a 5 on their English AP exam can be exempt from one semester of their First-year Writing Seminar requirements. No other AP scores will allow a student this exemption.

Special Studies

- Students may use only 12 credits of 400, 401, 402, or 403 courses toward graduation.
- Additional credits of 400, 401, 402, or 403 courses can be taken but will not be applied towards graduation.

"00" Courses

- "00" courses do not count towards graduation requirements but do count towards full-time semester status.

Wells, Ithaca College, and Study Abroad Credits

Any credits earned with the Wells or Ithaca College exchange program are considered Cornell credits for the purpose of fulfilling the 60 Cornell credit graduation requirement. They can not be used for Human Ecology credit. Study Abroad courses may also count as Cornell credit.

Physical Education

- Students must earn two credits of physical education within their first two semesters. These two credits do not count as part of the 60 Cornell credits, or as part of the 120 total credits required for a degree, or towards full-time status. Students who matriculate at Cornell with 12 or more credits must complete only one credit of physical education. Students who transfer more than 25 credits (excluding AP credits) are not required to take physical education at Cornell, regardless of whether they took physical education at their previous college.
- Students must pass the university's swim test. Students who transfer more than 25 credits (excluding AP credits) are exempt. Refer to page 13 of this book for specifics.

Advanced Placement Credit

Refer to section above entitled "Cornell Credit Requirements" to calculate how many AP credits can be applied toward the 120 credits needed for graduation.

Students can earn advanced placement credit from one of the following:

- The requisite score on a departmental examination at Cornell (usually given during orientation week) or on a College Entrance Examination Board (CEEB) achievement test. The requisite scores for

the CEEB exams are determined by the relevant department at Cornell, vary by subject, and are listed in the beginning of this book (pages 6 and 7).

- A regular course taught at an accredited college to college students and approved by the relevant department at Cornell. Some departments have delegated the review of courses to college staff according to guidelines they have formulated. Some departments review each request individually. Some departments accept credit from virtually all accredited colleges; some do not.
- Credit from the international baccalaureates is evaluated individually.

Note: Cornell does not accept credit for courses sponsored by colleges but taught in high schools to high school students. This is true even if the college provides a transcript of such work. Students who have taken such courses may, however, take the appropriate CEEB test to qualify for credit as in paragraph 1 above. For information and limitations on Advanced Placement credit, see pages 6-11 of this book.

Foreign Language Study and Placement

Students who studied a foreign language before coming to Cornell and who want to continue must take either the CEEB 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. Human Ecology students who plan to work with non-English-speaking people in this country or abroad often find it necessary to be proficient in another language. 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 Advanced Placement Credits.

Extramural Credit

Extramural credit is administered by the Office of Continuing Education and Summer Sessions (B20 Day Hall, 255-4987). Extramural credit is charged by the credit hour at the endowed tuition rate. Students may count only 15 credits of extramural credit toward their degree requirements. A student may enroll for extramural credit during the fall or spring semester only if he or she is not registered in the College of Human Ecology. For example, some students enroll for extramural credit before matriculating at Cornell.

An exception to this rule is credit earned in the Ithaca College or Wells College exchange. Students enrolled in these programs simultaneously maintain their status as students registered in the College of Human Ecology.

Humanities

Only certain classes will count for Category I, Humanities. To determine eligibility the college uses the following definition: "The humanities include the study of literature, history (including art and design history), philosophy, religion, and archaeology. Critical, historical, and theoretical studies of the arts and design are considered humanities. Languages and creative or performing arts such as the writing of fiction or poetry, painting, sculpting, designing, composing or performing music, acting, directing, and dance are not considered humanities." Additionally, social science courses such as sociology, gov-

ernment, anthropology, and psychology are not considered humanities.

Specifically, courses in the following list will count as humanities:

- Africana Studies (literature and history)
 Archaeology
 Asian American Studies
 Asian and Near Eastern Studies (literature and history)
 Classics (literature and history)
 Comparative Literature
 Design and Environmental Analysis 111, 243, 251, 443
 English (literature only)
 History
 History of Art/History of Architecture
 Human Development 241, 359, 417
 Landscape Architecture 282
 Music and Theatre Arts (theory, literature, and history only)
 Natural Resources 407, 411
 Philosophy
 Policy Analysis and Management 652
 Religious Studies
 Rural Sociology 100, 175, 318, 442
 Science & Technology Studies 233, 250, 281, 282, 292, 360, 389, 433, 444, 447, 490

PROCEDURES

Registration and Course Enrollment

Registration Requirements

University registration is the official recognition of a student's relationship with the university and is the basic authorization for a student's access to services and education. Completion of registration is essential to enable the university to plan for and provide services and education, guided by the highest standards for efficiency and safety. Unauthorized, unregistered persons who use university services and attend classes have the potential to use university resources inappropriately and to displace properly registered students. In addition, the university assumes certain legal responsibilities for persons who participate as students in the university environment. For example, policy states that New York State health requirements must be satisfied. Because these requirements are intended to safeguard the public health of students, the university has a responsibility to enforce the state regulations through registration procedures.

The policy on university registration is intended to describe clearly the meaning of and the procedures for registration so that students can complete the process efficiently and be assured of official recognition as registered students. With the clear communication of the steps for registration, it is hoped that compliance will occur with a minimum of difficulty.

To become a registered student at Cornell University, a person must complete course enrollment according to individual college requirements; settle all financial accounts

including current semester tuition; satisfy New York State health requirements; and have no holds from the college, the office of the Judicial Administrator, Gannett Health Center, or the Bursar.

Individuals must become registered students by the end of the third week of the semester. Cornell University does not allow persons who are not registered with the university in a timely manner to attend classes. The university reserves the right to require unauthorized, unregistered persons who attend classes or in other ways seek to exercise student privileges to leave the university premises.

Verification of Registration

Many insurance companies or scholarship funds require verification of full-time registration at Cornell. Should students need such verification, request an official letter from the Office of the University Registrar (B-7 Day Hall). Students who need letters of good standing should contact the Human Ecology Registrar's Office (145 MVR).

Bursar Bill

A bursar bill is sent to each student over the summer and winter breaks; it summarizes what is owed to the university. The bursar bill can also be viewed through Just the Facts. Any questions regarding the bursar bill can be directed to the Bursar's Office (260 Day Hall, 255-2336). Initial New York State residency eligibility is determined during the admissions process, but the Bursar's Office will handle any request for a status change after matriculation.

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.** According to university policy, all students must be registered 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 may be withdrawn from the university. Should withdrawn students wish to return, they must reapply through the admissions committee.**

Proration of Tuition

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 or counselors for more information.) Students of mature status may carry 6 to 11 credits without petitioning, but must request that their tuition be prorated. Prorated tuition will only be considered for requests of 10 credits or fewer. All requests should be made to the college registrar by the first week of classes and no later than the third week of the term.

Course Enrollment

Initiating the Process

Students are expected to make course requests for the subsequent semester during a specified time in the current semester. Those dates are advertised publicly and available on the University Registrar's web site (www.sws.cornell.edu/our). CoursEnroll takes

place electronically, using software available through Just the Facts. During this time, each student must meet with his or her faculty adviser to discuss academic plans and to obtain the advising PIN code required for finalizing course requests. A student may enter and hold courses prior to entering their PIN. Once the PIN number is entered, however, the schedule is locked and it is not possible to change until the add/drop period of the next term. Information on courses is readily available in this book and in the *Course and Time Roster* for each semester. Both of these publications can be accessed on the web through CUInfo.

Incoming students will receive tentative schedules upon their arrival to campus, and will meet with faculty advisers during the orientation period.

Course Loads

The normal course load in the college ranges from 12 to 18 credits, although there is no limit to the number of statutory credits a student may take each semester. Nonetheless, students should avoid planning excessive workloads; the time required to keep abreast of courses tends to increase as the semester progresses. Classes cannot be withdrawn from after the seventh week of classes without petitioning and by substantiating extenuating circumstances. Students should avoid the need to drop courses by taking on a reasonable workload and using the drop period to make changes in their program.

Except for those with mature student status, students must carry at least 12 credits (exclusive of physical education) to maintain full-time status. 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 Admission, Student, and Career Services (172 MVR).

Late Course Enrollment

Students who do not complete course enrollment during the CoursEnroll period usually must wait until the beginning of the next semester's add/drop period 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 145 MVR as soon as possible. The college registrar can explain available options and course enrollment procedures under such circumstances.

Note: 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 options, and other data. Errors must be corrected immediately. Procedures for correcting enrollment errors as well as for making any other changes are described below under Course Enrollment Changes.

Course Enrollment Changes

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

Ideally, students evaluate their class workload 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, students must obtain the instructor's permission for a course requiring it, and must complete the same forms for special studies courses. Aside from the procedures listed below for course enrollment changes, all drop/add forms for nutritional science majors must be signed by a faculty adviser.

Deadlines for Add/Drop and Grade Option Changes

- During the first three weeks of the term, courses may be added, dropped, or the grade option changed.
- From the fourth through the seventh week of the term, courses may be dropped. **Grade option changes cannot be made at this point regardless of instructor's permission.**
- 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.
- **After the seventh week of the term, any requests for course changes must be made through the petition process.**
- 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, even if repeated in a later term.

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 a course 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.

Time and Place for Add/Drop and Grade Option Changes

All students may adjust their schedules and grading options during the first three weeks of each semester. **To make course changes after the seventh week of the term, a student must file a general petition form.** (See the section, *Petition Process*.) Students are expected to attend classes and to do assigned work until the petition has been formally approved or denied.

Permission of Instructor

Certain courses may be taken only with the permission of the instructor as indicated in this book. Undergraduates must obtain permission of the instructor to take any graduate course. Students must request the instructor's permission during the CoursEnroll 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 Tjaden 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 Sage Hall.

Course Enrollment while Studying Abroad

Students who plan to study abroad have several options available to enroll for their returning semester at Cornell. Students can consult with their faculty adviser before departure to consider the schedule of classes that they will take upon their return to campus. Once abroad, the student can use the web to access the Cornell University *Courses of Study* and the *Course and Time Roster* for the coming term. The roster is available on the web in approximately the first week of October and the first week of March. Using these resources, the student can e-mail the course requests to the student's faculty adviser for approval; the faculty adviser can then e-mail them to the college registrar. A student who does not have access to the Internet while abroad can wait for the *Course and Time Roster* to arrive via airmail from the Cornell Abroad Office. The student can then e-mail, fax, or mail the course requests to their faculty adviser and ask the faculty adviser to submit the course requests to the college registrar. The *Course and Time Roster* becomes available only the day that pre-enrollment begins; thus, students who depend on receiving the mailed copy will experience some delay in submitting their course requests.

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 this book. Students' professional goals may be considered. Those students not admitted to a course may be placed on a waiting list. Course instructors are responsible for determining the criteria to fill their classes from waiting lists. Waiting lists are maintained only for the first three weeks of each semester.

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.

Cross-listed Courses

In order to apply a cross-listed course to graduation requirements, students must enroll in the department for which they need the credits. If changes in department designations need to be made, students must complete a special form, which can be obtained in the registrar's office in 145 MVR.

Special Studies Courses

Each department in the College of Human Ecology (DEA, HD, 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. Juniors and seniors normally take those courses, and a faculty member in the department in which the course is offered supervises work on an individual basis. It is important for students to use the appropriate course number (300, 400, 401, or 402) for a special project.

To register for a special studies course, a student obtains a special studies form from the departmental office where they plan to take the course. The student discusses the proposed course 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 special studies form and obtains signatures from the instructor and department chair before submitting the form to the Office of the College Registrar (145 MVR). The student must also submit a course registration form (add/drop form) to the Office of the College Registrar. Special studies forms are available in 145 MVR or in departmental offices. Add/drop forms are only available in 145 MVR.

Semester credits for special studies courses are determined by the number of contact hours the student has with the supervising faculty member (or a person designated by the faculty member). To earn one credit, a student must have the equivalent of three to four hours of contact time per week for 15 weeks (a total of 45 contact hours). For additional credit, multiply the number of credits to be earned by 45 to determine the number of contact hours needed for the course. **A student can only use 12 credits of 400, 401, 402, or 403 courses towards graduation and only three 400-, 401-, or 402-credits can be used to satisfy the nine-credit-outside-the-major requirement.** To register in a special studies course taught in a department outside the college, follow the procedures established by that department.

Changes in Status

General 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. In most cases, extenuating circumstances are needed for a petition to be approved if it involves waiving a deadline. These are situations beyond a student's control, such as a documented medical emergency.

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 of a deadline, check with a counselor in the Office of Admission, Student, and Career Services (172 MVR) or with the Office of Registrar's staff (145 MVR).

A general petition may be needed to carry fewer than 12 credits, withdraw from a class after the seventh week deadline, add a course after the third week deadline, change a grade option after the third week deadline, be exempt from one or more of the college's graduation requirements, substitute a required course in one's major with another course, or stay an additional semester to complete the graduation requirements.

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.

If a student decides to submit a general petition, the form is available in the Office of the Registrar (145 MVR) and in the Office of Admission, Student, and Career Services (172 MVR) or on the web at www.human.cornell.edu/student/forms/. After completing the form and obtaining the required signatures, the student must turn the form in to the Office of the Registrar. Once a decision is made, a letter is placed in the Registrar's Office mail folder indicating approval or denial of the petition.

Students may appeal the college registrar's decision to the Committee on Academic Status. Students who elect to appeal have the option of appearing in person before the committee to state their case. A member of the counseling staff can guide a student through this process.

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. In absentia study can be done during any term; fall, winter, spring, or summer. (First-Year Writing Seminars cannot be taken in absentia).

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 the Committee on Academic Status has returned them to good standing. In some cases, students may petition for in absentia credit after the work has been completed, but there is no guarantee that such credit will be awarded without advance approval.

In absentia petition forms are available in the Human Ecology Registrar's Office (145 MVR) or on the web at www.human.cornell.edu/student/forms/. The student completes the form, attaches catalog descriptions for the courses that will be taken, then submits the form to the Human Ecology Registrar's Office (145 MVR). In absentia study during the fall or spring term carries a nominal administrative fee. (Contact the Bursar's Office, 260 Day Hall, for the current amount).

Students will receive a letter in their mail folder from the college registrar notifying them of the petition decision.

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. Students who study abroad during

the summer or winter term are limited to a maximum of nine in absentia credits. Study abroad during the fall or spring semester must be done through the Study Abroad Office and is not considered in absentia study.

On rare occasions a student's petition for more than 15 credits in absentia may be allowed: (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. Wells and Ithaca College credit are not considered in absentia credit and are not included in the 15 credit limit.

The college registrar requests approval from the appropriate department if a student wants to apply in absentia credit to requirements in 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 Human Ecology Registrar's Office at 145 MVR Hall. 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. In absentia courses appear on the Cornell University transcript, but the grades are not calculated in the student's GPA.

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 making a written request to the Office of Admission, Student, and Career Services. Note that in absentia study status and leave of absence status are mutually exclusive. Students on leave must notify the college registrar in MVR 145, in writing, of their intention to return to campus prior to the beginning of the semester. Those whose leave period has expired will be withdrawn from the college after the seventh week of the semester they were due back.

Students considering a leave of absence should discuss their plans with a counselor in the Office of Admission, Student, and Career

Services. The counselor can supply the necessary forms for the student to complete and file with the Human Ecology Registrar's Office (145 MVR). Leaves initiated after instruction begins will be charged a percentage of the semester tuition. (Refer to Bursar Information in this book for a billing schedule.)

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. If the petition for leave is approved the student's courses will remain on the transcript with "W's."

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.

Under certain documented medical circumstances a student may be granted a **medical leave of absence**. Medical leaves are initiated by the student with Gannett Health Center. If Gannett Health Center recommends a medical leave for the student, the college registrar may grant the leave. A medical leave is for an indeterminate period of time not to exceed five years. Students who are granted a medical leave of absence are encouraged to maintain contact with a counselor in the Office of Admission, Student, and Career Services (255-2532) to arrange their return to campus. The counselor will advise the student on procedures to obtain a recommendation from Gannett Health Center to the college registrar for the student's return. The student should plan sufficiently in advance to assure time for Gannett Health Center and the college registrar to consider their request.

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 Admission, Student, and Career Services and filing a written notice of withdrawal in the Human Ecology Registrar's Office. A student considering such an action is urged to discuss plans with a counselor in the Office of Admission, Student, and Career Services (172 MVR).

In some instances a student may be given a withdrawal by the college registrar. Students who leave the college without an approved leave of absence, or do not return after the leave has expired will be given a withdrawal after the seventh week of the term in which they fail 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.

GRADES AND EXAMINATIONS

Grade Definitions and Equivalents

The official university grading system uses a system of letter grades ranging from A+ to D- with F denoting failure. An INC grade is given for incomplete work and R is given at the end of the first semester of a two-semester class. If a student is given permission to withdraw from a class after the seventh week of the term a W is automatically assigned. Students can view their grades on Just the Facts after the semester has ended. Final spring semester grades are mailed to student's homes during the summer. See the "Grading Guidelines" section in this book for more information on the official university grading policies.

To compute a semester grade point average, first add up the products (credits hours X grade quality points) and divide by the total credit hours taken. Grades of INC, R, S, SX, U, UX, and W should not be included in any GPA calculations. A grade of F has no quality points, but the credits are counted thereby lowering the average. A cumulative GPA is just the sum of all semester products divided by all credits taken. For further help on calculating a grade point average ask at the Office of the College Registrar (145 MVR).

These are the quality point equivalents:

A+ = 4.3	C+ = 2.3
A = 4.0	C = 2.0
A- = 3.7	C- = 1.7
B+ = 3.3	D+ = 1.3
B = 3.0	D = 1.0
B- = 2.7	D- = 0.7
F = 0.0	

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 this book.

Courses listed as SX-UX are only available on an S-U basis and may not be taken for a letter grade. 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 of A-F grades. See the section, *Awards and Honors* for more details about the Dean's List.

No more than 12 S-U credits will count towards a student's 120-credit graduation requirement. However, a student may take more than one S-U course in any one semes-

ter. S-U courses may be taken only as electives or in the nine 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. If a required course is only offered S-U, it will not count toward the 12-credit or four-course limit. 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 form in the Human Ecology Registrar's Office before the end of the third week of the term. Forms are available in the Human Ecology Registrar's Office. After the third week of the term, students cannot 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.

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 must be signed by both the instructor and the student, needs to be submitted by the instructor to the Human Ecology Registrar's Office. 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 Human Ecology Registrar's Office with the grade sheet. Before a student will be allowed to register for succeeding semesters, he or she must go to the Human Ecology Registrar's Office 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 Human Ecology Registrar's Office (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.

Grade Disputes

Students who find themselves in disagreement with an instructor over grades have several options:

1. Meet with the instructor and try to resolve the dispute.
2. Meet with the chair of the department in which the instructor has their appointment.
3. Meet the associate dean for undergraduate studies of the college in which the course was taught.
4. Meet with the university ombudsman (118 Stimson Hall, 255-4321).

A student may also seek advice from their faculty adviser or with a counselor in the Office of Admission, Student, and Career Services (172 MVR).

Repeating Courses

Students are allowed to register a second time for a course they have already passed or have received an "F." If a student has previously passed a course they are taking a second time, the second registration will not count towards their degree requirements and the grade received will not be included in their cumulative GPA.

If a student enrolls in a course in which they previously received an F, the credits from the second registration will count towards their graduation requirements and the grade will be included in their cumulative GPA. The F will also remain on the record and will be included in the GPA.

Examinations

Both the preliminary and final examination schedules are printed every semester in the *Course and Time Roster*. The current exam information is also available on the university web page at www.cornell.edu/Academic/Academic.html#Class.

Final Examinations

The following is quoted from the Cornell University Faculty Handbook, 1990, pages 66-67:

"The University Faculty long ago established, and has never reversed, the policy that each course should require a final examination or some equivalent exercise (for example, a term paper, project report, final critique, oral presentation, or conference) to be conducted or due during the period set aside for final examinations.

"Although not specifically prohibited, it is University policy to discourage more than two examinations for a student in one twenty-four hour time period and especially on any one day. It is urged that members of the faculty consider student requests for a make-up examination, particularly if their course is the largest of the three involved and thus has the strongest likelihood of offering a makeup for other valid reasons, i.e. illness, death in the family, etc.

Legislation of the University Faculty governing study period and examinations is as follows:

1. No final examinations can be given at a time other than the time appearing on the official examination schedule promulgated by the Registrar's Office without prior written permission of the Dean of the Faculty.
2. No permission will be given, for any reason, to schedule final examinations during the last week of classes or the designated study period preceding final examinations.
3. Permission will be given by the Dean of the Faculty to reschedule examinations during the examination period itself if requested in writing by the faculty member, but only on condition that a comparable examination also be given for those students who wish to take it at the time that the examination was originally scheduled. The faculty member requesting such a change will be responsible for making appropriate arrangements for rooms or other facilities in which to give the examination. This should be done through the Registrar's Office.
4. No tests are allowed during the last week of scheduled classes unless such tests are part of the regular week-by-week course program and are followed by an examination (or the equivalent) in the final examination period.
5. Papers may be required of students during the study period if announced sufficiently far in advance that the student did not have to spend a significant segment of the study period completing them.
6. Faculty can require students to submit papers during the week preceding the study period.
7. Take home examinations should be given to classes well before the end of the regular term and should not be required to be submitted during study period but rather well into the examination period.

Students have a right to examine their corrected exams, papers, and the like, in order to be able to question their grading. They do not, however, have an absolute right to the return thereof. Exams, papers, etc., as well as grading records, should be retained for a reasonable time after the end of the semester preferably until the end of the following term, to afford students such right of review."

Preliminary Examinations

The following is quoted from the Cornell University Faculty Handbook (1990), pages 65-66:

"Preliminary examinations are those given at intermediate times during a course. It is common to have three of these in a term to encourage review and integration of major segments of the course, to provide students with feedback on how well or poorly they are progressing, and to contribute to the overall basis for a subsequent final grade.

The most convenient times and places for "prelims" are the normal class times and classrooms. But many courses, particularly large ones with multiple sections, choose to examine all the sections together at one time and to design an examination that takes more than one class period to complete. In such cases

the only alternative is to hold the prelim in the evening. This practice creates conflicts with other student activities, with evening classes and laboratories, and among the various courses that might choose the same nights.

To eliminate direct conflicts, departments offering large multisection courses with evening prelims send representatives annually to meet with the dean of the University Faculty to lay out the evening prelim schedule a year in advance. Instructors of smaller courses work out their own evening prelim schedules, consulting their students to find a time when all can attend. Room assignments are obtained by the faculty member through the contact person in his or her college or the Central Reservations Coordinator.

The policy governing evening examinations is as follows:

1. Evening examinations may be scheduled only on Tuesday and Thursday evenings and only after 7:30 P.M. without prior permission from the Office of the University Faculty.

a. Such prior permission is not, however, required for examinations or makeup examinations involving small numbers of students (generally 30 or fewer) provided that the scheduled time is acceptable to the students involved and that an alternate examination time is provided for those students who have academic, athletic, or employment conflicts at the time scheduled.

2. Permission from the Office of the University Faculty to schedule on evenings other than Tuesdays and Thursdays or at a time prior to 7:30 P.M. will be granted only on the following conditions:

a. Conditions such as the nature of the examination, room availability, large number of conflicts, etc., justify such scheduling.
b. An alternate time to take the exam must be provided for those students who have academic, athletic, or employment conflicts at the time scheduled.

3. If there is a conflict between an examination listed on the schedule developed at the annual evening prelim scheduling meeting and an examination not on the schedule, the examination on the schedule shall have a priority, and the course not on the schedule must provide an alternate time to take the examination for those students faced with the conflict.

4. If there is a conflict between examinations, both of which are on the schedule developed at the annual evening prelim scheduling meeting or both of which are not on the schedule, the instructors of the courses involved must consult and agree on how to resolve the conflict. Both instructors must approach this resolution process with a willingness to provide an alternative or earlier examination.

5. Note that courses using evening examinations are strongly urged to indicate this in the course description listed in Courses and must notify students of the dates of such examinations as early as possible in the semester, preferably when the course outline is distributed."

ACADEMIC STANDING

Criteria for Good Standing

The College of Human Ecology has established a set of minimum academic standards which all students must meet or exceed each semester. These standards are as follows:

1. A student must maintain a semester and cumulative grade point average of 1.7 or higher.
2. A student must successfully complete at least 12 credits per semester, excluding physical education courses.
3. Students enrolling in the college as freshmen must complete at least 12 credits of Human Ecology courses by the end of the fourth semester, and at least 5 credits of Human Ecology courses must be taken in each of the freshman and sophomore years (ECON 101 and 102 may be used to fulfill this requirement).
4. A student must be making "satisfactory progress" toward a bachelor's degree.

Upon the completion of each semester the Committee on Academic Status (CAS) reviews each student's academic record to ensure the above academic standards are upheld. The committee then takes appropriate action for students whose academic achievement is considered unsatisfactory as defined by the above criteria. The five voting faculty members, along with several nonvoting student services staff, consider each case individually before deciding on a course of action. The committee may take any of the following actions depending on the seriousness of the student's academic difficulties:

1. Take no action.
2. Return the student to **Good Standing**.
3. Place the student on a **Review List**, which means the case will be monitored throughout the semester.
4. Place the student on a **Warning** status.
5. Place the student on a **Severe Warning** status.
6. Place the student on a **Severe Warning with Danger of Being Dropped** status, implying that if the student does not show considerable improvement during the semester the committee will likely drop the student at the end.
7. **Suspend** the student for one or more terms during which the student may not register at Cornell (except in extramural status with CAS approval).
8. Permanently **withdraw** the student from the college and Cornell University.

Students who have been suspended or withdrawn have the right to appeal the decision in front of the committee during the appeals meeting. Students who have been placed on warning due to incomplete or missing grades may request their status be updated to good standing once they have cleaned up their records. These requests should be made with a general petition and submitted to the Office of the Registrar.

All students with a status will automatically be reviewed at the end of the subsequent semester. In most cases, students put on a warning, severe warning, or severe warning with danger of being dropped status will be informed

of conditions that they are expected to fulfill in order to return to good standing. In general these conditions are that a student must earn a minimum GPA of 2.0, complete 12 credits, and not have any incomplete, missing, "F", or "U" grades on their semester record.

If a student who has been previously suspended wishes to return to the college he/she must submit a plan of study to the committee before being rejoined.

Students who have been withdrawn by CAS may request reconsideration and ask to be readmitted by the committee. Such students have three years from the date they were withdrawn to make this request. After three years, a former student must apply for admission through the Office of Admission. A student should discuss their situation with a counselor in the Office of Admission, Student, and Career Services (172 MVR). They should also talk with others who may be able to help them—faculty advisers, instructors, or a member of the medical staff. A student may also write directly to the committee (via the committee chair, whose name can be obtained from the college registrar) and present new or previously unknown information. Any information given to the committee is held in the strictest confidence.

Academic Integrity

Academic integrity is a critical issue for all students and professors in the academic community. The University Code of Academic Integrity states that (1) a student assumes responsibility for the content and integrity of the academic work he or she submits, such as papers, examinations, or reports and (2) a student shall be guilty of violating the code and subject to proceedings under it if he or she:

- a. Knowingly represents the work of others as his or her own.
- b. Uses or obtains unauthorized assistance in any academic work.
- c. Gives fraudulent assistance to another student.
- d. Fabricates data in support of laboratory or fieldwork.
- e. Forges a signature to certify completion or approval of a course assignment.
- f. Uses an assignment for more than one course without the permission of the instructor involved.
- g. Uses computer hardware and/or software to abuse privacy, ownership, or user rights of others.
- h. In any manner violates the principle of absolute integrity.

The Academic Integrity Hearing Board, which consists of a chairperson, three faculty members, and three students, hears appeals from students who have breached the code. It also deals with cases brought directly to it by members of the faculty.

Academic Records

Students may obtain their Cornell academic record in several ways. The **Cornell transcript**, which is the official record of the courses, credits, and grades that a student has earned can be ordered with no charge at the Office of the University Registrar (B7 Day Hall). For more information call (607) 255-4232. Students who merely want an

unofficial working copy of their transcript can request a copy of their **record card** from the Office of the College Registrar (145 MVR). Students may also access their grades and course schedules electronically using **Just the Facts**. **Students should be in the habit of checking Just the Facts by the second week of every semester to confirm that their schedule and grade options are correct.**

The college also maintains a **graduation progress worksheet** for each student showing progress towards the degree. At the beginning of fall term continuing students should check their updated worksheet online. It is important to check this document and bring any errors to the attention of the staff in the Office of the College Registrar (145 MVR).

Access to Records

The Family Educational Rights and Privacy Act of 1974 assures students of privacy of their records. The law also assures students' access to their records. Information concerning a student's relationship with the university is considered restricted and may be released only at the student's specific written request. Restricted information includes the courses elected; grades earned; class rank; academic and disciplinary actions by appropriate faculty, student, or administrative committees; and financial arrangements between the student and the university. Letters of recommendation are restricted information unless the student has specifically waived right of access.

Students who want additional information on access to their records may contact the Office of the College Registrar (145 MVR) or the Office of the University Registrar (B7 Day Hall). An inventory of those student records maintained by Cornell University offices in Ithaca, their location, and cognizant officer are available in the Office of the Dean of Students (401 Willard Straight Hall).

For specific information, refer to the university's policy, "Access to Student Information," at the following web address: www.univco.cornell.edu/policy/ASI.html, or talk with the college registrar in the Office of the College Registrar (145 MVR).

ACADEMIC HONORS AND AWARDS

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

Honors

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 of letter grades and who have a semester grade point average of 3.7 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. The president of Kappa Omicron Nu has the honor of serving as First Degree Marshall for the college during May commencement.

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 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 Bowie Armitage (172 MVR) during their sophomore year or the first semester of their junior year. Most honors candidates have a minimum grade point average of 3.3 and have demonstrated potential for honors-level research. To graduate with honors a student must take approved courses in research methodology and evaluation, attend honors seminars, complete a written thesis, and successfully defend it in front of a committee.

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 January or May of the same academic year or the prior August. 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 10 percent of the senior class, or in the top 5 percent of the junior class. Provisions also exist for the election of faculty members and graduate students whose work merits recognition.

Gamma Sigma Delta is an honor society of the faculty in the colleges of Human Ecology, Agriculture and Life Sciences, and Veterinary Medicine. The common bond is promotion of excellence in work related to the quality of our environment and life based on "agriculture and the related sciences." The Cornell chapter recognizes the academic achievements of students, faculty, and alumni of those colleges with nominations for membership and with special awards. To be eligible, seniors must be in the upper 15 percent of their major. Five juniors with the highest grade point average in their college are also nominated.

Awards

The Elsie Van Buren Rice Award in Oral Communication is awarded for original oral communication projects related to the college's mission by undergraduate students in the College of Human Ecology. The contest is held each year in February and awards prizes totaling \$1,500.

The Flora Rose Prize is given biennially to a Cornell junior or senior whom, in the words of the donor, "shall demonstrate the greatest promise for contributing to the growth and self-fulfillment of future generations." The recipient will receive a cash prize of \$500.

The Florence Halpern Award is named for the noted psychologist, Dr. Florence Halpern, in recognition of her lifelong interest in "innovative human service, which better the quality of life." In that spirit the award is presented to an undergraduate in the College of Human Ecology who has demonstrated, through supervised field work or community service, creativity in the search for solutions to human problems. The award carries a \$500 cash prize.

COLLEGE COMMITTEES AND ORGANIZATIONS

Student Groups and Organizations

Following are brief descriptions of some of the organizations that offer valuable experiences to human ecology students. Information about many other student activities on campus may be obtained from the Office of the Dean of Students (401 Willard Straight Hall).

The American Council on Consumer Interests (ACCI) offers a student membership for those interested in consumer economics. Contact the Department of Policy Analysis and Management for further information.

The Cornell Design League was formed to give students interested in apparel a chance to express their creativity outside of the classroom by producing a fashion show every spring. It has become concerned with all aspects of a professional presentation. Consequently, it also provides a creative outlet for those interested in graphics, photography, illustration, or theater production. Although many of its designers are part of the Department of Textiles and Apparel, the Design League welcomes people of all majors and schools.

Students have opportunities to work throughout the community in a variety of service capacities. They volunteer in day care centers, youth programs, health-related agencies, services for elderly people and people with disabilities, as well as nutrition programs, arts organizations, and Ithaca schools. For further information, contact the **Public Service Center** (200 Barnes Hall). Call 255-1148 for information about volunteer work or 255-1107 for information about work-study arrangements.

Human Ecology Ambassadors is a group of undergraduates who assist the Office of Admission, Student, and Career Services by participating in group conferences with prospective students to provide information from a student's perspective, assisting with recruitment and yield activities for potential

students, conducting high school visitations, assisting with on-campus open-house programs for high school students and potential transfer students, helping with prospective students and alumni phonathons.

In addition, ambassadors attend regular meetings and serve as coordinators for activities in the Office of Admission, Student, and Career Services.

For information, contact the Office of Admission, Student, and Career Services (172 MVR, 255-5471).

The mission of the **Human Ecology Voices** is to build unity among students, faculty, and staff in the College of Human Ecology. Membership consists of all representatives of all other Human Ecology student organizations and other interested students. Patti Papapietro serves as Voices adviser from the Office of Admission, Student, and Career Services (172 MVR, 255-2532).

The **Human Ecology Mature Students Association** is an organization of students who are 24 years of age or older at the time of matriculation. Many mature students need to balance family, work, and other concerns with their academic efforts. The Mature Students Association strives to help by providing a forum for resource exchange and referral, support, socializing, and special projects depending upon expressed interest. These goals are pursued through seminars and informational meetings, the mature students list-serv, supplementary orientation activities, liaison with other university offices, and the encouragement of informal networking. Contact Patti Papapietro in the Office of Admission, Student, and Career Services (172 MVR) for more information.

Students interested in the relationship between the physical environment and human behavior may join the **Human-Environment Relations Students Association (HERSA)**. For more information, contact the Department of Design and Environmental Analysis.

The **International Facility Managers Association (IFMA)** also has a student chapter. Membership information is available from the Department of Design and Environmental Analysis.

The **Association for Students of Color (ASC)** unites human ecology minority students to provide a supportive foundation for their enrollment, retention, graduation, and career placement. ASC members work toward these goals by:

- participating in admissions hosting programs and conducting high school visitations.
- sponsoring presentations on career and graduate school outcomes of a human ecology education.
- providing volunteer services to the Cornell and Ithaca communities.
- attending regular meetings and hosting annual fall and spring forums.

Contact Verdene Lee in the Office of Admission, Student, and Career Services (172 MVR, 255-2532) for more information.

The **PreLaw Undergraduate Society (PLUS)** is sponsored by Human Ecology and welcomes members from the Cornell community. Meetings provide information and support for students considering careers in law. Programs

include information on applications and admissions, law school applications, LSAT preparations, tour of the Cornell Law School and information panels with current law students, and Mock Trial and internship opportunities. Guest speakers include practicing attorneys, law faculty, and current law school students. Contact the Office of Admission, Student, and Career Services, 172 MVR (255-2532) for more information.

The **Preprofessional Association Toward Careers in Health (PATCH)** provides support, advising, and up-to-date information to students pursuing careers in health care.

Programs include academic advising, guest speakers from allopathic and alternative medicine, information on medical school admissions, exposure to complementary healthcare career options, MCAT preparation tips, information on research and internship opportunities, and a visit to a local medical school. This student-run organization is sponsored by Human Ecology and is open to the Cornell community. Contact the Office of Admission, Student, and Career Services, 172 MVR (255-2532) for more information.

The **Orientation Committee** consists of students and advisers interested in planning and implementing programs to acquaint new students with the College of Human Ecology. The committee is particularly active at the beginning of each semester and is always eager for new members. For information, contact Patti Papapietro in the Office of Admission, Student, and Career Services (172 MVR, 255-2532).

Membership in the **Sloan Student Association** is open to students interested in health care and related fields. Contact the president of the association (N222 MVR, 255-8013) for more information.

The **Students for Gerontology (SFG)** is composed of students from a wide variety of majors who are interested in career and internship opportunities that contribute to the well-being of our aging population. Programs sponsored by this organization focus on developing linkages with community organizations and other student gerontology groups. SFG meets monthly. Contact Nancy Wells, faculty adviser, Bronfenbrenner Life Course Center, (E220 MVR Hall, 254-6330), for further information.

The **Health and Nutritional Undergraduate Society (Health NUTS)** promotes nutritional well-being through education, communication, and research. Members of the student chapter organize programs such as Food and Nutrition Day in March, and host on-campus speakers in nutrition and health-related fields. The student chapter is open to all students interested in nutrition education. For further information contact Gail Canterbury (335 MVR, 255-2628).

Committees and Councils

Several official organizations exist within the college to deal with matters of policy and to provide leadership in college planning. Most include elected student and faculty representatives; the actions of these various groups affect all students directly or indirectly.

The **Educational Policies Committee (EPC)** has two student members, one graduate and one undergraduate, who vote along with the faculty members on all matters relating to college academic policy. Recommendations are submitted to this committee regarding revi-

sions in degree requirements, new curriculum changes, and new course approval.

Students also have the opportunity to serve on the **Admissions Policy Subcommittee**, and the **Academic Integrity Hearing Board**.

The Selection Committee for the Chancellor's Award for Excellence in Teaching or Professional Service handles the nomination and selection process for this prestigious yearly award. The committee consists of three teaching faculty members, one professional staff member, and three undergraduate members.

The Human Ecology Alumni Association Board of Directors includes two student board members—one junior and one senior. One student is selected each spring to begin a two-year term as student representative. The two students co-chair the board's Student Activities Committee, which works to increase the visibility of the Alumni Association among the student body by funding a variety of activities. The student members also bring an important perspective to board deliberations about programming and annual goals.

The Committee on Academic Status does not include student representatives, but has a faculty representative from each department. This committee is responsible for upholding the academic standards of the college and takes action when appropriate. The committee also hears appeals regarding student petitions and requests to be readmitted.

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. Letter or S-U grades.

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 pre-freshman Summer Program students. Letter or S-U grades.

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 MULTICULTURAL DYNAMICS IN URBAN AFFAIRS

Cornell in New York City provides students with many study options that focus on multicultural dynamics in urban affairs. 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 or HE 495. Students learn 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, identify and 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 be agents of change.

HE 406 Fieldwork in Diversity and Professional Practice

Summer. Variable credits. Over the course of an eight-week summer session, students participate in a community-based medical center hospital or clinic member of New York Presbyterian Hospital and Weill Medical College of Cornell University. This is a four-day internship and one day of seminars per week.

HE 470 Multicultural Issues in Urban Affairs

Fall and spring. 3 credits. Students must take this course during the semester they participate in the Urban Semester Program. This course uses New York City as a classroom. The landscapes, built environments, and people in them are the texts. In the beginning students study the formation of this multicultural city by traversing lower Manhattan and imagining New Amsterdam as it became New York City. Then they investigate a number of neighborhoods and speak with local leaders about diversity issues in context, in practice, and in use, to learn how multicultural issues are experienced by people and how they make sense of them.

HE 480 Communities in Multicultural Practice

Fall and spring. 6 credits. Students must take this course during the semester they participate in the Urban Semester Program. This course is about urban children and youth in communities of color. Each week of the semester, students participate one day in the school lives of children pre-K through eighth grade in selected neighborhoods in New York City. Students keep journals of their reflections on their experiences and observations.

HE 490 Multicultural Practice

Fall and spring. 6 credits. Students must take either HE 490 or HE 495 during the semester they participate in the Urban Semester. Which is appropriate depends on the student's placement and will be determined by the Urban Semester director. Students explore the intersection of organizational culture with issues of diversity. They investigate the nature of organizational culture and how it engages and includes or

does not include diversity. Students report back in seminars their understanding and analysis of their internship organizations and their industry's role in creating conditions and environments of inclusion or exclusion. The course explores the conditions and processes that have brought about inclusion or exclusion.

HE 495 Culture, Medicine, and Professional Practice in a Diverse World

Fall and spring. 6 credits. Students must take either HE 490 or HE 495 during the semester they participate in the Urban Semester. Which is appropriate depends on the student's placement and will be determined by the Urban Semester director. Students participate in several experiential learning environments related to medicine over the course of the semester. Students rotate in a four-week unit, supported by Pastoral Care and ER, as well as several other choices through the semester. Medical and health-related practitioners make presentations throughout the semester.

DESIGN AND ENVIRONMENTAL ANALYSIS

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

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

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

DEA 4+1 Master's Degree Program

Outstanding students who complete their four year undergraduate degree in DEA are eligible to complete a Master of Arts/M.A. (Interior Design) or a Master of Science/M.S. (Human Environment Relations) degree in one additional year of graduate study.

Through careful planning many of the courses required in the M.A. or M.S. programs can be taken during the undergraduate years, creating an opportunity to focus the fifth year of study on completing course and thesis requirements. As early as the freshman year, students can plan their curriculum toward completing a fifth year master's. Typically, this means students will take 4 to 5 courses in their fall term as a graduate student, and 2 to 3 courses plus their thesis research in the spring term. Students should expect to complete their thesis by the end of the summer term of their fifth year.

Admission to the 4+1 Master's program is not automatic. Students must meet with their advisers early in their undergraduate programs to plan carefully for this possibility. In the fall of the senior year, interested students must submit an application to the Graduate School. The GRE exam is not required for admissions, but students must submit a statement of intent, letters of reference, and transcripts. Students who have compiled a strong undergraduate record in the department are usually good candidates for admission into the graduate program in Design and Environmental

Analysis. Students interested in this program should meet with their DEA adviser as early as possible to discuss and plan for application to this program.

DEA 101 Design Studio I

Fall. 3 credits. Limited to 20 students. Permission of instructor required for non-DEA majors. Priority given to interior design majors. Option I majors must take DEA 101 in fall of their first year. Approximate cost of materials, \$200. T R 10:10-1:10. J. Elliott.

This studio course introduces the fundamental vocabulary and principles of two- and three-dimensional design. Students experiment with the development of image and form through problem-solving activities. Visit <http://instruct1.cit.cornell.edu/courses/dea101/>

DEA 102 Design Studio II

Spring. 3 credits. Limited to 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 130. Lab Fee: \$25. M W F 11:15-12:05. S. Danko.

Students from any academic area may examine how design affects their daily lives and future professions. This 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, and other areas 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 include: nurturing innovation, visual literacy, design criticism, design and culture, semiotics, proactive/reflexive decision making, and ecological issues. Note: this course has evening exams.

DEA 115 Design Graphics

Spring. 3 credits. Option I DEA majors only. Prerequisite: DEA 101; must take DEA 102 and DEA 115 concurrently. Minimum cost of materials, \$100; technology fee \$10. M W F 9:05-11:00. 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.

This course analyzes environment and human behavior. We examine the interface of social and environmental sciences with application for the design and management of built and natural habitats. Topics include environmental effects on health, well-being, moods, aesthetics, performance, interpersonal relationships, and organizational effectiveness as well as the ecological consequences of human attitudes

and behaviors. Visit our web site at instruct1.cit.cornell.edu/courses/dea150. Note: this course has evening exams.

DEA 201 Design Studio III

Fall. 4 credits. Limited to Option I DEA students. Prerequisites: DEA 101, 102, and 115 (minimum grades of B-). Recommended: DEA 111 and 150. Coregistration in DEA 251 is required. Minimum cost of materials, \$150; lab fee, \$40; required field trip, approximately \$120. M W 12:20-4:25. J. Jennings.

This is the third semester in the studio sequence of eight semesters. The theme and objectives focus on design as critical thinking, introducing means by which students can think, draw, write, and build their way critically through design. Taken concurrently with DEA 251, the course applies historical and theoretical knowledge to design projects. The course also includes a collaborative project with a professor and students from another design discipline. Visit web site at <http://instruct1.cit.cornell.edu/courses/dea201>.

DEA 202 Design Studio IV

Spring. 4 credits. Each section limited to Option I DEA students. Prerequisites: DEA 201 and 203. Prerequisites or corequisites: DEA 204. Minimum cost of materials, \$120; diazo machine fee, \$8; field trip fee. T R 12:20-4:25. R. Gilmore.

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 three to five weeks duration is structured to emphasize different aspects of the design process.

DEA 203 Digital Communications

Fall. 2 credits. Limit 27. Limited to DEA majors. Lab fee \$10. F 8:00-11:00. J. Elliott. Digital information technologies for designers of the built environment. Students explore issues in relation to text and image and form and content through a series of weekly projects. They work towards the development of a professional web-based portfolio of self-promotional materials. The primary course objective is to reinforce principles of visual communications while learning the rudiments of vector, raster, and html graphic software. Visit <http://instruct1.cit.cornell.edu/courses/dea203/>

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. Visit <http://courseinfo.cit.cornell.edu/courses/dea204>.

DEA 250 The Environment and Social Behavior

Fall. 3 credits. Limited to 16. Priority order: DEA seniors, juniors, sophomores, freshmen. Prerequisite: DEA 150 and written 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 proj-

ects 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 to 65. Priority given to DEA majors. M W 8:40-9:55. J. Jennings. A 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, and a field trip will be included. Visit <http://instruct1.cit.cornell.edu/courses/dea251/>.

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 College Registrar's 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 \$10. 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, three to five 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. 5 credits. Prerequisites: DEA 301 and 303 or permission of instructor. Corequisite: DEA 305. Minimum cost of materials, \$150; shop fee, \$10. M W 12:20-4:25. 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 2:30-4:25. 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. F 12:20-2:15. 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. 2 credits. Prerequisites: DEA 301 and DEA 303. Corequisite: DEA 302. Minimum cost of materials \$50; field trips, \$50. F 9:05-11:00. 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. Visit web site at <http://ergo.human.cornell.edu>.

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-factor 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. Visit web site at <http://ergo.human.cornell.edu>.

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 department 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 in 145 MVR, College Registrar's Office, along with an add/drop slip. 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 407 Design Studio VII

Fall. 5 credits. Prerequisites: DEA 302, 303, 304, and 305. Minimum cost of materials, \$150; field trip \$50. T R 12:20-4:25.

R. Gilmore.

Advanced interior design studio organized around a series of interior design problems, three to five 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 408 Design Studio VIII

Spring. 5 credits. Prerequisites: DEA 301, 302, 303, and 304. Minimum cost of materials, \$150. M W 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 422 Ecological Literacy and Design (also ARCH 464.01)

Spring. 3 credits. Letter grade only. Field trips approximately \$25. T R 10:10-12:05. J. Elliott.

This is a lecture/seminar course for advanced (junior or senior) students interested in learning about the effects of designing the built environment of the biophysical world. Course objectives are to develop sensitivities to environmental issues, construct conceptual frameworks for analysis, and demonstrate how ecological knowledge can be applied to the practice of design through participatory approaches to learning. Visit <http://instruct1.cit.cornell.edu/courses/dea422/>.

DEA 423 Restaurant Design Charette

Spring. 1 credit. Limited to 18. Permission of instructor. Letter grade only. Minimum cost of materials \$50. 4 class meetings on Friday evening (Week 1) 6-10 P.M.; one complete weekend (Week 2) F 6-10 P.M., S 9:00 A.M.-10:00 P.M. and Sunday 10:00 A.M.-8:00 P.M. R. Gilmore, S. Robson.

This intensive weekend long course pushes the boundaries of current restaurant design by developing a concept plan for an innovative restaurant in a non-traditional setting. Students work in teams to develop design solutions and prepare design presentations for review

by course instructors and visiting design professionals.

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 9:05-11:00.

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 451 Introduction to Facility Planning and Management

Fall. 1 credit. Letter 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. Visit http://instruct1.cit.cornell.edu/courses/dea/451_659.

DEA 453 Planning and Managing the Workplace

Fall. 3 credits. Limited to juniors and seniors. Purchase of course packet required. T 7:30-10:30 p.m. F. Becker.

Intended for students interested in the planning, design, and management of facilities for complex organizations. The purpose of the course is to explore how characteristics of the workplace, including 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. Visit http://instruct1.cit.cornell.edu/courses/dea/453_653.

DEA 454 Facility Planning and Management Studio

Spring. 4 credits. Prerequisite: DEA 459 or permission of instructor. Letter grades only. Minimum cost of materials, \$200. 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. The course 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. Visit http://courseinfo.cit.cornell.edu/courses/dea454_654.

DEA 455 Research Methods in Human-Environment Relations

Fall. 3 credits. Limited to DEA majors or permission of instructor. Prerequisite: a statistics course. M W 1:25-2:40. N. Wells.

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. Letter grade only. Minimum cost of materials, \$100. 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. Visit http://instruct1.cit.cornell.edu/courses/dea/459_650.

DEA 460 Design City

Fall. 1 credit. S-U grades only. Required fee approx. \$150 includes hotel and chartered bus. R F all day, both days. K. Gibson, J. Jennings.

Field study of historic and contemporary interiors with guided tours to architectural and interior design firms, installations, exhibits, and showrooms in New York City, Toronto, or other major cities. Topics and themes change yearly. May be repeated for credit; freshmen may not take course for credit.

DEA 470 Applied Ergonomic Methods

Spring. 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 shares the same lectures but meets for an additional hour. DEA 670 has additional readings and projects.

DEA 472 Environments for Elders: Housing and Design for an Aging Population

Fall. 3 credits. Field trip fee \$20. W 7:30-10:30. N. Wells.

Through seminars, lectures, field trips, and service learning opportunities, students examine the relationship between older adults and the physical environment. Students gain understanding of the relevance of design characteristics on the well-being of older people; an appreciation of late-life social, cognitive and physiological changes; as well as familiarity with a variety of housing options for late life. Visit web site at <http://instruct1.cit.cornell.edu/courses/dea472>.

DEA 499 Senior Honors Thesis

Fall or spring. Variable credit. Prerequisite: permission of thesis adviser and DEA director of undergraduate studies. Letter grades only.

This is an opportunity for DEA majors to undertake original research and scholarly

work leading to the preparation of a thesis. Students work closely with their thesis adviser on a topic of interest.

DEA 600–603 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.

600: Special Problems. For study of special problems in the areas of interior design, human environment relations, or facilities planning and management.

601: Directed Readings. For study that predominantly involves library research and independent study.

602: Graduate Empirical Research. For study that predominantly involves collection and analysis of research data.

603: Graduate Practicum. For study that predominantly involves field experiences in community settings.

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

Spring. 3 credits. Limited to 24 graduate and advanced undergraduate students. Prerequisite for undergraduates: permission of instructor. M 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. The 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. The 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 18 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 is 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. 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 complete additional readings and projects. See DEA 459 for more detail. Visit <http://instruct1.cit.cornell.edu/courses/dea459-650>.

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 complete 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 complete additional readings and projects. For detailed description, see DEA 350.

DEA 653 Planning and Managing the Workplace

Spring. 4 credits. Letter grades only. Purchase of course packet required. T 7:30–10:30 P.M. 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 complete additional readings and projects. See DEA 453 for more detail.

DEA 654 Facility Planning and Management Studio

Spring. 4 credits. Prerequisite: DEA 459/650 or permission of instructor. Letter grades only. Minimum cost of materials, \$200. For graduate students in facility planning and management. T R 1:25–4:25. W. Sims. Visit <http://courseinfo.cit.cornell.edu/courses/dea454-654>.

For description, see DEA 454.

DEA 656 Research Methods in Human-Environment Relations

Fall. 4 credits. DEA majors only or permission of instructor. Prerequisite: a statistics course. M W F 1:25–2:15. N. Wells.

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 complete additional readings and projects. See DEA 455 for more detail.

DEA 659 Introduction to Facility Planning and Management

Fall. 1 credit. For graduate students interested in careers in facility planning and management. Letter 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 mainte-

nance and operations, energy conservation, and building systems. Visit http://instruct1.cit.cornell.edu/courses/dea451_659.

DEA 660 The Environment and Social Behavior

Fall. 4 credits. Prerequisite: DEA 150 and written 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 complete additional readings and projects. See DEA 250 for more detail.

DEA 668 Design Theory Seminar

Spring. 3 credits. Enrollment limited to 25 students. T R 10:10–11:40. 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. Visit <http://instruct1.cit.cornell.edu/courses/dea668>.

DEA 670 Applied Ergonomics Methods

Spring. 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 complete additional readings and projects. See DEA 470 for more detail.

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

J. Eckenrode, chair; S. Cornelius, director of graduate studies; E. Weingarten, director of undergraduate studies; C. Anderson, U. Bronfenbrenner, J. Brumberg, M. Casasola, S. Ceci, M. Cochran, D. Dempster-McClain, R. Depue, J. Doris, J. Garbarino, K. Greene, S. Hamilton, J. Haugaard, C. Hazan, B. Koslowski, L. C. Lee, B. Lust, P. Moen, K. Pillemer, H. Ricciuti, S. Robertson, J. Ross-Bernstein, R. Savin-Williams, E. Temple, Q. Wang, W. Williams

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

HD 115 Human Development

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

Provides a broad overview of theories, research methods, and current knowledge of human development from conception into adulthood. Course material covers infancy, childhood, and adolescence. Topics include biological, intellectual, linguistic, social, and

emotional development as well as the cultural, social, and interpersonal contexts that affect the developmental processes and outcomes of these domains.

HD 120 Exploring Human Development

Fall. 1 credit. Letter grades only. Limited to Human Development freshmen. TBA. HD faculty.

This course is a series of small group discussions with HD freshmen and a HD faculty member. Each faculty member sets the topics and style of discussion. Discussion groups meet one hour a week, each week of the fall semester. No exams are given. Grading is done on attendance, participation, and short written assignments.

HD 216 Human Development:

Adolescence and Youth

Spring. 3 credits. Prerequisite: HD 115 or PSYCH 101 or permission of instructor. S-U grades optional. T R 11:40-12:55.

Staff.

Provides a broad overview of theories, research, and issues in the study of human development from early to late adolescence (youth). Attention is focused on the major biological, cognitive, and social changes during adolescence; the psychosocial issues of adolescence, including identity, autonomy, intimacy, sexuality, achievement, and problems; and the contexts in which adolescent development occurs, particularly families, peer groups, schools, work, and popular culture. Empirical research, theories, case studies of the lives of real adolescents, and, to a lesser degree, public policies are discussed.

[HD 218 Human Development: Adulthood and Aging]

Spring. 3 credits. Prerequisite: HD 115. S-U grades optional. T R 11:40-12:55. Not offered 2003-2004. 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.]

HD 220 The Human Brain and Mind: Biological Issues in Human Development

Fall. 3 credits. Prerequisite: HD 115 or PSYCH 101. S-U grades optional. T R 2:55-4:10. E. Temple.

What do we know about the biology of the mind? As long ago as the 1600's, when the philosopher Descartes speculated on how the mind and body interact, humans have been fascinated by how the chunk of tissue we call the brain can give rise to all the complexity that is human behavior. This course is an introduction to the biology underlying human behavior. After studying basic concepts in neurobiology and neuroanatomy, the course covers a variety of topics including how the brain reacts to drugs and hormones, and what brain mechanisms underlie seeing, hearing, thinking, talking, feeling emotions and desires, and dreaming. We try to understand what is and is not yet understood (about the biological mechanisms underlying the human experience. We discuss the biology of clinical disorders throughout. This course gives the background necessary for other courses in HD that focus on biological mechanisms of human development and serves as a prerequisite for many of them.

HD 230 Cognitive Development

Spring. 3 credits. Letter grades only. Prerequisites: HD 115 or PSYCH 101. T R 2:55-4:10. Q. Wang.

This course surveys current theory and research on various aspects of cognitive development across the lifespan, with emphasis on infancy and early childhood. Topics include perception, representation and concepts, reasoning and problem solving, social cognition, memory, metacognition, language and thought, and academic skills. Students will develop a broad understanding of the mechanisms, processes, and current issues in cognitive development and learn to critically assess developmental research. The class is structured in a combination of lecture, seminar, and fieldwork.

HD 233 Children and the Law

Spring. 3 credits. Prerequisites: HD 115 and an introductory statistics course. TBA. S. Ceci.

This course examines psychological data and theories that shed light on the practical issues that arise when children enter the legal arena. It attempts to integrate theories, research, and methodology from several areas of psychology including, developmental, cognitive, social, and clinical. This course also attempts to examine the degree to which basic research can (and should) be used to solve applied issues. The topic of children and the law provides an opportunity to meet all these requirements. Rapid changes involving child witnesses in our legal system have forced social scientists to bring their work into the courtroom. At the same time, bringing this fray into the legal system has changed the course of research and thinking about certain aspects of child development and cognition: it has encouraged researchers to tackle new issues and to develop innovative experimental paradigms. Selected topics to be covered include: memory development, suggestibility, theory of mind, childhood amnesia, expectancy formation, symbolic representational ability, and finally, what can (or should) an expert witness tell the court. Several actual cases involving child witnesses will be presented to illustrate the application of scientific data to the courtroom. Because of the heavy use of case materials; video and textual coverage of actual trials, it is expected that students will devote more than the usual number of hours to this course.

[HD 241 History of Childhood in the United States (also HIST 271, AM ST 241)]

Spring. Recommended for sophomores and juniors. 3 credits. M W 8:40-9:55. Not offered 2003-2004. 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.]

HD 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: HD 115 and permission of instructor. S-U grades optional. W 1:25-3:30. J. Ross-Bernstein.

This course is designed to integrate developmental theories with supervised experience in child care centers, the intention being to enhance the student's abilities to understand and to relate effectively to young children. This class involves participation, observation, reflection, reading, writing, and sharing of viewpoints. Placements are in local nursery schools, day care centers, Head Start programs, and kindergartens.

HD 250 Families and the Life Course

(also SOC 250)

Spring. 3 credits. S-U grades optional. M W 2:55-4:10. E. Wethington.

This course provides an introduction to social scientific research on family roles and functions in American society. Topics include the history of the family, family change over the life course, and the influence of cultural and economic forces on families.

[HD 251 Social Gerontology: Aging and the Life Course]

Spring. 3 credits. Limited to 60 students. Strongly recommended: HD 250 or equivalent to be determined by instructor. S-U grades optional. T R 10:10-11:25. Not offered 2003-2004. Staff.

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 of gender, ethnicity, and social class; (4) and the influences of society on the aging individual. Guest speakers will provide an introduction to various careers in the field of gerontology.]

[HD 253 Gender and the Life Course

(also FGSS 253)

Fall. 3 credits. S-U grades optional. TBA. Not offered 2003-2004. Staff.

We will examine 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.]

[HD 258 History of Women in the Professions, 1800 to the Present

(also FGSS 238 and HIST 238, AM ST 258)

Spring. 3 credits. Letter grades only. Human ecology students must register for HD 258. Limited to 50 students. Permission of instructor required. M W 8:40-9:55. Not offered 2003-2004. J. Brumberg.

Covers 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 discussions aim to identify 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.]

HD 260 Introduction to Personality (also PSYCH 275)

Spring. 3 credits. Limited to 600 students (300 HD 260, 300 PSYCH 275).

Recommended: introductory course in psychology or human development. T R 1:25-2:40. D. Bem.

This course is designed as an introduction to theory and research in the area of personality psychology, with special emphasis on personality development. It covers the major influences—including genetic, environmental, and gene-environment interactions—and involves in-depth study of the major theories. The assumptions and models of human behavior that form the basis of each theoretical orientation are examined and compared, and the relevant empirical evidence reviewed and evaluated. In addition, basic psychometric concepts and the methods for measuring and assessing personality are covered, as are the major related debates and controversies.

HD 261 The Development of Social Behavior

Spring. 3 credits. Strongly recommended: HD 115 or PSYCH 128. T R 1:25-2:40. Staff.

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.

HD 266 Emotional Functions of the Brain

Spring. 3 credits. Prerequisite: HD 220 (no substitutions and no exceptions). Letter grades only. M 10:10-12:35. R. Depue.

Much of our social behavior, and what we refer to as personality, is related to phylogenetically-old emotional systems that help us to adapt to critical stimuli in the environment. These systems are structured and organized within the brain, but they are also capable of being modified by our everyday experiences. After an overview of the gross neuroanatomy of the primate brain is presented, the focus of the course concerns networks of brain regions that are organized around the integration of processes related to emotion and motivation. First, general features of the brain in relation to emotional evaluation and expression processes are discussed, and then the brain organization related to several specific types of emotional systems is presented, including incentive-reward motivation, social bonding, fear versus anxiety and affective aggression. Emotion, memory, and conscious awareness of emotional feelings are also discussed.

Neurobiological modulation of emotional processes by neurotransmitters and neuropeptides of wide distribution in the brain are detailed as well. The latter lay the groundwork for understanding the nature of individual differences in much of our social and emotional behavior as explored in HD 366.

[HD 282 Community Outreach (also PSYCH 282)]

Fall and spring. 2 credits. Letter grades only. Prerequisites: HD 115 or PSYCH 101. Students may not concurrently register with HD 327 or HD 328 or PSYCH 327 or PSYCH 328. T 10:10-11:25. Not offered 2003-2004. H. Segal.

This course provides students with information and perspectives needed to do volunteer fieldwork with human and social service programs in the community. To gain a practical understanding of what mental health professionals do in the workplace, students examine problems that emerge in fieldwork settings, which raise ethical, methodological, theoretical, and practical issues in the observation or treatment of clients or patients. They are also introduced more generally to the field of Community Psychology, its history, theory, and applications. Although students are not required to volunteer at a local agency, the instructor assists students in finding sites that may provide appropriate learning opportunities.]

HD 284 Gender and Sexual Minorities (also FGSS 285)

Fall. 3 credits. S-U grades optional.

Prerequisite: one social science course. T R 10:10-11:25. R. Savin-Williams.

This course introduces students to theories, empirical scholarship, public policies, and current controversies with lesbian, gay, bisexual, transgender, sexually questioning, and other sexual minority populations. The major focus is on sexual development, lifestyles, and communities with additional emphasis on ethnic, racial, gender, and class issues. Videos supplement the readings and lectures.

[HD 313 Problematic Behavior in Adolescence (also PSYCH 313)]

Fall. 3 credits. Prerequisite: HD 115 or PSYCH 101. M W 2:55-4:10. Not offered 2003-2004. J. Haugaard.

This course explores several problematic behaviors of adolescence, including depression, drug abuse, eating disorders, and delinquency. Various psychological, sociological, and biological explanations for the behaviors are presented. Appropriate research is reviewed; treatment and prevention strategies are explored. Lectures are supplemented by several novels and movies that focus on troubled adolescents.]

HD 327 Field Practicum I (also PSYCH 327)

Fall. 3 credits. Enrollment limited to 30 students. Students must commit to taking HD 328 in the spring semester. Prerequisites: HD 370 or PSYCH 325 and permission of instructor. Letter grades only. M W 8:40-9:55. H. Segal.

This course provides three components, which form an intensive undergraduate field practicum. Students spend three to six hours a week at local mental health agencies, schools, or nursing facilities working directly with children, adolescents, or adults; supervision is provided by host agency staff. Cornell faculty provide additional weekly educational supervision for each student. Seminar meetings cover issues of adult and developmental psychopathology, clinical technique, case studies, and current research issues. Students write two short papers, two final take-home exams, and present an account of their field experience in class.

HD 328 Field Practicum II (also PSYCH 328)

Spring. 3 credits. Enrollment is limited to 30 students. Prerequisites: HD 327 or PSYCH 327 taken the previous term, PSYCH 325 or HD 370 and permission of instructor. Letter grades only. M W 8:40-9:55. H. Segal.

This course continues the field practicum experience from HD 327. Students spend three to six hours a week at local mental health agencies, schools, or nursing facilities working directly with children, adolescents or adults; supervision is provided by host agency staff. Cornell faculty provide additional weekly educational supervision for each student. Seminar meetings cover issues of adult and family psychopathology, clinical technique, case studies, and current research issues. Students write two short papers, two final take-home exams, and present an account of their field experience in class.

HD 336 Connecting Social, Cognitive, and Emotional Development

Fall. 3 credits. Prerequisites: HD 115 or PSYCH 101 and HD 230 and either HD 260 or HD 261. S-U grades optional. T R 11:40-12:55. M. Casasola.

Provides an integrated view of development from infancy through middle childhood. Students gain an understanding of how aspects of social, emotional, and cognitive abilities interact and play integral roles in each other's development.

HD 344 Infant Behavior and Development

Fall. 3 credits. Prerequisites: HD 115, a biology course, and a statistics course. Not open to freshmen. Limited to 60 students. M W F 1:25-2:15. S. Robertson.

Behavior and development from conception through the first two years of life is examined in traditional areas (e.g., perception, cognition, socioemotional theory, language, motor function). The fundamental interconnectedness of these aspects of development is strongly emphasized, as is their relation to the biology of fetal and infant development. Topics with implications for general theories of development are emphasized (e.g., the functional significance of early behavior, the nature of continuity and change, and 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) are also considered. An emphasis on research methodology in the study of early behavior and development is maintained throughout the course.

HD 346 The Role and Meaning of Play

Fall. 3 credits. Limited to 30 juniors and seniors. Prerequisite: HD 115. M 7:30-10:00. 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 students explore the meaning 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.

[HD 347 Human Growth and Development: Biological and Behavioral Interactions (also B&SOC 347 and NS 347)]

Spring. 3 credits. Prerequisites: BIO G 101 or 109 or equivalent, and HD 115 or PSYCH 101. Limited to 150 students. M W F 1:25-2:15. Offered alternate years. Not offered 2003-2004. S. Robertson and J. Haas.

This course is concerned with the interrelationships of 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.]

HD 348 Advanced Participation with Children

Spring. 4-8 credits. Limited to 20 students (limit depends on availability of placements and supervision). Prerequisites: HD 115 and HD 242; and permission of instructor. Recommended: HD 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 the instructor; to keep a journal; and to plan, carry out, and evaluate weekly activities for children within their placement. Conference groups and readings focus on the 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 three to eight years of age and provide education, care, or special-purpose interventions for them.

HD 362 Human Bonding

Fall. 3 credits. Limited to 600 students. Recommended: introductory course in psychology or human development. S-U grades optional. T R 1:25-2:40. C. Hazan. Covers 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.

HD 366 Psychobiology of Temperament and Personality

Fall. 3 credits. Letter grades only. Limited to 20 students. Prerequisite: HD 266 (no substitutions and no exceptions); permission of instructor required. M 7:30-10:00. R. Depue.

This course is for students who have an interest in the neurobiology of behavior, in general, and in temperament and personality, in particular. The course material is presented within an evolutionary biology perspective, where the development of neurobehavioral systems as a means of adapting to critical stimuli is explored as the basis of emotional

traits in humans. The nature of temperament and personality is explored from psychometric, social, genetic, and biological points of view. There is a focus on the general role played by the biogenic amines (dopamine, norepinephrine, and serotonin), corticotropin hormone and opiates in determining individual differences in temperament and personality. Implications for modeling several forms of personality disorders and psychopathology are also discussed. Finally, the manner in which environmental influences across the life span may be coded in the brain and influence the development of personality is explored.

HD 368 Children's Development in Different Cultures

Spring. 3 credits. Letter grades only. Prerequisites: HD 115 or PSYCH 101 and one college-level statistics course. M W 2:55-4:10. K. Greene.

This course examines the influence of ecological, cultural, and ethnic factors on the social and cognitive development of children in different cultures. Particular attention is given to research methodologies that guide us in making comparisons about parent-child development across cultures. Topics include family origin and universality, parental roles, child-family interaction, patterns of kinship, and economic and health issues.

HD 370 Adult Psychopathology (also PSYCH 325)

Spring. 3 credits. Limited to sophomores, juniors, and seniors. Prerequisites: any one course in psychology or human development. T R 10:10-11:25. H. Segal.

A research-based introduction to the biological, psychological, and social (including cultural and historical) aspects of adult psychopathology. The major mental illnesses are covered, including but not limited to, schizophrenia, mood disorders, anxiety disorders, and personality disorders. Childhood disorders are not covered.

HD 382 Research Methods in Human Development

Spring. 3 credits. Prerequisites: HD 115. Letter grades only. M W 2:55-4:10. M. Casasola.

The course reviews different methodological approaches in the study of human development. In particular, students learn about the research designs as well as different methods of data collection and analysis, with a focus on those methods used by the faculty in the HD department. Through lectures, discussions, assignments, computer labs, and two projects, students gain a strong understanding of the strengths and limitations of experimental, quasi-experimental, survey, and qualitative research designs.

HD 400-401-402-403 Special Studies for Undergraduates

Fall or spring. Credits to be arranged (1-4). Permission required. 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 HD 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 the form is approved, the student takes the form to the College Registrar's Office, 145 MVR, along with an add/drop slip. 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.

400: Directed Readings. Permission required. For study that predominantly involves library research and independent study.

401: Empirical Research. Permission required. For study that predominantly involves data collection and analysis, or laboratory or studio projects.

402: Supervised Fieldwork. 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.

403: Teaching Apprenticeship. Enrollment limited to juniors and seniors with a minimum 3.0 GPA. Prerequisites: either HD 115, or PSYCH 101, and two intermediate level HD courses, or equivalent courses in psychology or sociology. Students must have taken the course and received a grade of B+ or higher. Permission required. For study that includes assisting faculty with instruction.

HD 417 Female Adolescence in Historical Perspective (also FGSS 438, HIST 458, AM ST 417)

Spring. 3 credits. Limited to 50 students. Prerequisites: HD 216 and at least one 300-level history or women's studies or American studies course. Permission of instructor required. Juniors and seniors only. T 1:25-4:25. J. Brumberg.

A reading, writing, and discussion course that attempts to answer a basic historical question that has consequences for both contemporary developmental theory and social policy: how has female adolescence in the United States changed in the past 200 years? The focus is 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. They will also be involved in events supporting the Johnson Museum Show "Girl Culture" in March 2004.

HD 418 Psychology of Aging

Fall. 3 credits. Enrollment limited to 25 students. Prerequisites: HD 218, 250, and 251 or permission of instructor. Letter grades only. Offered alternate years. T R 1:25-2:40. S. Cornelius.

This seminar addresses major issues and controversies in the field of aging. It is designed for upper-level students who wish to pursue an in-depth analysis of concepts such as "successful" aging and wisdom, as well as controversies surrounding issues of generational equity and the right to die. Although these issues are addressed primarily from a psychological viewpoint, interdisciplinary perspectives are considered and incorporated in both readings and discussions. The seminar is designed for advanced undergraduates who have completed an introductory course in adulthood and aging and wish to pursue such

issues in more depth. Class time is primarily devoted to discussion of assigned readings.

[HD 419] Midlife Development

Fall. 3 credits. Enrollment limited to 25 students. Letter grades only. Prerequisites: HD 218, 250 and 251 or permission of instructor. T R 1:25-2:40. Offered alternate years. Not offered 2003-2004. S. Cornelius.

This course examines the burgeoning research literature on adult development during midlife. The focus of the course is on research and theory examining psychological changes during middle adulthood such as relativistic and dialectical thinking, personality, identity, and sense of control. It also considers the social and physical changes that occur at this time of life especially regarding issues such as empty nest anxieties, divorce, career transitions, menopause, and cardiovascular disease. The course is conducted in a seminar format for upper-level undergraduates. Oral presentations, class participation, and an integrative paper is required.]

HD 433 Developmental Cognitive Neuroscience

Spring. 3 credits. Prerequisites: one neurobiology class such as HD 220 OR one cognitive psychology/development class. S-U grades optional. T R 1:25-2:40. E. Temple. What are the brain mechanisms underlying human behavior and cognition? How do those underlying brain mechanisms develop? These are the questions that developmental cognitive neuroscience tries to address and those we explore in this course. The course explores methods used in the field (including brain imaging techniques), recent findings on the development of brain mechanisms underlying human behaviors such as, language, attention, and memory, as well as the brain mechanisms that may underlie various developmental disorders such as developmental dyslexia, autism, and attention deficit (hyperactive) disorder (AD(H)D). Emphasis is on reading primary research literature and acquiring the skills to understand, critique, discuss, and write about primary research. The format includes lecture and discussion.

HD 436 Language Development (also COGST 436, PSYCH 436 and LING 436)

Spring. 4 credits. Open to undergraduate and graduate students. Graduate students should also enroll in HD 633/LING 700, a supplemental graduate seminar. Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive development, neurobiology, biology, or linguistics. S-U grades optional. A supplemental lab course is available (HD 437, COGST 450, PSYCH 437, LING 450). T R 2:55-4:10. Not offered 2003-2004. 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.]

[HD 437 Lab Course: Language Development (also COGST 450, PSYCH 437 and LING 450)]

Spring. 2 credits. Prerequisite: HD/COGST/PSYCH/LING 436 or equivalent. R 1:25-2:40. Not offered 2003-2004. B. Lust.

This laboratory course is an optional supplement to the survey course, Language Development (HD/COGST/PSYCH/LING 436). The lab course will provide students with a hands on introduction to scientific research, including design and methods in the area of first language acquisition.]

[HD 438 Thinking and Reasoning]

Fall. 3 credits. Prerequisite: HD 115 or PSYCH 101. T R 2:55-4:10. Not offered 2003-2004. B. Koslowski.

Examines the topics of problem solving, transfer, and creativity; pre-causal and causal reasoning; models of good thinking based on formal logic, pragmatic syllogisms, and probability theory; expert-novice differences; cognition and attitudes; extra-rational and magical beliefs; and putative racial and social class differences in intelligence. Two general themes run through the course. One is the extent to which children and adults approximate the sorts of reasoning that are described by various types of psychological models. The other is the extent to which various models accurately describe the kind of thinking that is actually required by the problems and issues that arise and must be dealt with in the real world.]

[HD 439 Cognitive Development: Infancy through Adolescence]

Spring. 3 credits. Prerequisites: HD 115 or PSYCH 101. Letter grades only. T R 2:55-4:10. Not offered 2003-2004. B. Koslowski.

The course is 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) are covered. Selected topics are linked to methodological issues and to important social issues such as cross-cultural cognitive development and putative racial and social class differences.]

HD 440 Internship in Educational Settings for Children

Fall or spring. 8-12 credits. Prerequisites: HD 115, 242 and 348. Recommended: HD 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 2 to 10 and their families. Interns 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.

[HD 451 Nontraditional Families and Troubled Families]

Spring. 3 credits. Limited to 30 students. Prerequisites: HD 115 and 250. Letter grades only. T R 8:40-9:55. Offered alternate years. Not offered 2003-2004. 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.)]

[HD 452 Culture and Human Development]

Fall. 3 credits. Prerequisites: HD 115 or PSYCH 101. Letter grades only. Open to undergraduate and graduate students. Limited to 30 students. M W 2:55-4:10. Not offered 2003-2004. Q. Wang.

This seminar takes an interdisciplinary approach to address the central role of culture in human development. It draws on diverse theoretical perspectives, including psychology, anthropology, education, ethnography, and linguistics, to understand human difference, experience, and complexity. It takes empirical reflections upon major developmental topics such as cultural aspects of physical growth and development; culture and cognition; culture and language; culture, self, and personality; cultural construction of emotion; culture issues of sex and gender; and cultural differences in pathology.]

HD 456 Families and Social Policy

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

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.

HD 457 Health and Social Behavior (also SOC 457)

Fall. 3 credits. Prerequisites: a course in statistics and **one** of the following: HD 250, SOC 101, SOC 251, or R SOC 101. Letter grades only. T R 10:10-11:25.

Offered alternate years. 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 socioeconomic status, 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.

HD 458 Parent-Child Development in African-American Families

Fall. 3 credits. Letter grades only. Enrollment limited to 30 seniors and juniors. Prerequisites: HD 115, HD 250, and a college level statistics course. T R 10:10-11:25. K. Greene.

This course examines parent-child relationships in African-American families. Topics include historical influences on contemporary parenting behaviors, the impact of societal forces on African American families' socialization practices, and the influence of parental child rearing beliefs, strategies, and practices on African American children's development. Particular attention is given to the relevance of mainstream theoretical formulations of African American's parental and familial functioning.

[HD 459 Disease in American Culture and Society (also AM ST 430)]

Fall. 4 credits. Limited to 15 students. Prerequisites: HD 241, or HD 258, or HD 359, or HD 417. Permission of instructor required. Not offered 2003-2004.

J. Brumberg.

How a society defines, explains, treats, and tries to prevent disease reveals a great deal about its basic ideals, values, and institutions. Diseases are not simple biological "facts," but the product of a complex amalgam of biological and social forces. This course uses the history of specific diseases to examine: (1) the ways in which the social and cultural environment shape the experience of illness; (2) the ideas that Americans have held about why some people get sick and others do not; (3) how those ideas reflect larger cultural as well as scientific trends; (4) the ways in which power relationships are involved in defining and responding to the threat of disease; (5) and the impact that disease has had on American society. A short response paper must be written for each session. An additional historiographical essay or research paper will be prearranged with the instructor.]

[HD 464 Adolescent Sexuality (also FGSS 467)]

Spring. 3 credits. Instructor permission required. T R 10:10-11:25.

R. Savin-Williams.

This course covers topics selected by students regarding theoretical, research, and applied issues on adolescent sexuality. In the second half of the course, students lead a class that focuses on a research topic of their choosing. The success of the course depends on students feeling personally engaged and committed to the course content. Students are expected to participate fully in the class discussions. Because of the multidisciplinary nature of the course, students from a variety of backgrounds in academic disciplines, gender, sexual orientation, ethnicity, race, class, and religious affiliation will be in the course.

[HD 468 Stress in Childhood and Adolescence]

Fall. 3 credits. Recommended: HD 115, HD 250 and a statistics course. Letter grades only. TBA. Not offered 2003-2004.

J. Eckenrode.

This is an advanced seminar that reviews research related to the nature and consequences of stressful experiences in childhood and adolescence, particularly those arising in the family. Topics covered represent common stressors in the lives of children (e.g. divorce of parents), which have potentially damaging consequences for development (e.g. child abuse). Topics in which faculty at Cornell have conducted significant research (e.g. children's memory for stressful events) are also covered. In addition to considering the negative effect of stress on development, we also consider issues of individual differences in stress reactivity, including the concepts of coping and resilience. These topics lead naturally into discussions of practice and policy.]

[HD 471 Child Development and Psychopathology (also PSYCH 476)]

Fall. 3 credits. Prerequisites: HD 115 or PSYCH 209; HD 230 or PSYCH 214; HD 260 or PSYCH 275. Recommended: a basic course in psychopathology. Letter grades only. M W F 9:05-9:55. Not offered 2003-2004. J. Haugaard.

This class explores the development and process of mental, emotional, and behavioral disorders in children such as mental retardation, autism, depression, and attention deficit disorder. Topics 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.]

[HD 483 Early Care and Education in Global Perspective]

Fall. 3 credits. Enrollment limited to 25 juniors and seniors. Prerequisites: HD 115 and HD 250. S-U grades optional. T R 2:55-4:10. M. Cochran.

In this course we examine American child care and early education policies and programs, broadly defined, in the context of policies and programs in Africa, Asia, Europe, and Latin America. Comparison and analysis are guided by several complementary conceptual frameworks. Particular attention is given to the synthesis of child care with early intervention and family support. Policy-related topics include parental leave, developmentally appropriate practices, universal pre-kindergarten, cultural diversity, parent involvement, teacher preparation, and financing the ECE system. Students specialize in the child care policies and programs of another country, work in teams to analyze a contemporary policy issue, and apply course content to an ECE issue of their choice in a final paper.

[HD 498 Senior Honors Seminar]

Fall and spring. 1 credit. Required for, and limited to, seniors in the HD honors program. S-U grades only. M 12:20-1:10. S. Cornelius.

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

[HD 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.

[HD 206, 306, 406 Topics in Human Development]

2-4 credits. S-U grades optional.

These topics vary each time the course is offered and are taught by advanced graduate students in the field of human development. Descriptions are available at the time of course registration. These courses do not fulfill any requirements for the major; they must be taken as electives.

Topics Courses

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

Permission of instructor may be 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.

[HD 215, 315, 415 Topics in Adolescent and Adult Development]**[HD 235, 335, 435 Topics in Cognitive Development]****[HD 245, 345, 445 Topics in Early-Childhood Development and Education]****[HD 255, 355, 455 Topics in Family Studies and the Life Course]****[HD 265, 365, 465 Topics in Social and Personality Development]****[HD 275, 375, 475 Topics in Developmental Psychopathology]****[HD 285, 385, 485 Topics in the Ecology of Human Development]****The Graduate Program**

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

General Courses**[HD 617 Adolescence]**

Spring. 3 credits. Not offered 2003-2004. 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.]

[HD 631 Cognitive Development]

Fall. 3 credits. Letter grades only. Not offered 2003-2004. 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.]

[HD 640 Infancy]

Fall. 3 credits. TBA. S. Robertson.

Development in infancy is 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 experiences 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 are also considered, such as premature birth, perinatal medical complications, and exposure to environmental toxins. The course combines perspectives from developmental psychology and psychobiology.

[HD 650 Contemporary Family Theory and Research]

Fall. 3 credits. Not offered 2003-2004. 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.]

[HD 660 Social Development]

Spring. 3 credits. Letter grades only. TBA. K. Greene.

This seminar examines literature relevant to early childhood determinants and developmental processes of personality and social behavior. Current research, theories, and methodological issues are addressed. Special emphasis is placed on possible interrelations between the quality of relationships with parents and with peers, and on the meaning of risk, vulnerability, and resilience in children's lives.

[HD 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. TBA. Not offered 2003–2004. Staff. Overview of current theories and empirical research on functional and organically based psychological disorders. Topic areas 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.

HD 618 Seminar in Adolescence and Adult Development

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

HD 633 Seminar on Language Development

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

HD 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.

HD 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.

HD 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.

HD 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.

HD 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.

HD 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.

HD 685 Seminar in Research Methods

This course focuses on quantitative and qualitative research methods frequently used in developmental psychology or life course studies, such as surveys, questionnaires, observations, and interviews.

HD 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

HD 700–806 Special Studies for Graduate Students

Fall or spring. Credits and hours to be arranged. Credits 1–15 (3 hours work per week per credit). S-U grades at discretion of instructor.

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

HD 700 Directed Readings

For study that predominantly involves library research and independent study.

HD 701 Empirical Research

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

HD 702 Practicum

For study that predominantly involves field experience in community settings.

HD 703 Teaching Assistantship

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

HD 704 Research Assistantship

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

HD 705 Extension Assistantship

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

HD 706 Supervised Teaching

4 credits.

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

HD 806 Teaching Practicum

4 credits. For advanced graduate students to independently develop and teach an undergraduate topics course under the supervision of a faculty member.

HD 899 Master's Thesis and Research

Fall or spring. Credit to be arranged.

Credits 1–15 (3 hours work per week per credit). Prerequisite: permission of thesis adviser. S-U grades only.

HD 999 Doctoral Thesis and Research

Fall or spring. Credit to be arranged.

Credits 1–15 (3 hours work per week per credit). Prerequisite: permission of thesis adviser. S-U grades only.

POLICY ANALYSIS AND MANAGEMENT

R. Burkhauser, chair; A. Mathios, associate chair; E. Peters, Policy Analysis and Management, director of graduate studies; S. Tennyson, director of undergraduate studies; K. Waldron, associate director of Sloan Program; J. Allen, R. J. Avery, R. Battistella, B. J. Bristow, R. Burkhauser, J. Cawley, T. DeLara, R. Dunifon, R. Geddes, J. Gerner, K. Joyner, D. Kenkel, J. Kuder, A. Mathios, L. O'Neill, A. Parrot, E. Peters, P. Pollak, E. Rodriguez, W. Rosen, N. Roufael, K. Simon, R. Swisher, S. Tennyson, D. Tobias, W. Trochim, K. Waldron, M. Waller; R. Babcock, Emeritus; D. Barr, Emeritus; H. Biesdorf, Emeritus; W. K. Bryant, Emeritus; F. M. Firebaugh, Emerita; J. Ford, Emeritus; A. Hahn, Emeritus; E. S. Maynes, Emeritus; C. McClintock, Emeritus; J. Mueller, Emerita; L. Noble, Emerita; J. Robinson, Emerita; C. Shapiro, Emerita; L. Street, Emeritus; 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 200 Intermediate Microeconomics

Fall or spring. 4 credits. Prerequisite: ECON 101 or equivalent. J. Cawley, R. Geddes, A. Mathios, W. Rosen.

Topics include 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; and risk. A section is mandatory.

PAM 204 Economics of the Public Sector

Fall or spring (not taught spring 2004). 3 credits. Prerequisites: PAM 200. S-U grades optional. S. Tennyson, K. Simon.

The public sector now spends nearly 2 out of every 5 dollars 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 provides 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 are presented with a focus on the role of public policy in improving economic efficiency, promoting the goals of equity and social justice, and improving equity by altering the distribution of wealth and income.

PAM 210 Introduction to Statistics

Fall or spring. 4 credits. K. Joyner, R. Swisher.

This course introduces students to descriptive and inferential statistics. Topics include hypothesis testing, analysis of variance, and multiple regression. To illustrate these topics, this course examines applications of these methods in studies of child and family policy.

PAM 215 Research Methods

Fall or spring. 3 credits. Prerequisites: PAM 210 or equivalent. Sections TBA. J. Kuder, M. Waller.

Students learn the logic and methods of social science research, as well as how to create researchable questions out of their issues of interest. 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 this course no later than their junior year.

PAM 220 Introduction to Management: Principles and Differences Among Sectors

Fall. 3 credits. D. Tobias.

This course is 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 223 Consumer Markets

Fall. 4 credits. Not offered 2003-2004.
R. J. Avery.]

PAM 230 Introduction to Policy Analysis

Fall or spring (not taught fall 2003).
4 credits. R. Avery, J. Gerner.

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 are 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 focuses on public policy analysis in the consumer, health, and family/social welfare areas and also includes an introduction to the technical skills required to undertake policy analysis.

PAM 300 Special Studies for Undergraduates

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 multi-copy description of the study they want to undertake on a form available from the College Registrar's 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 303 Ecology and Epidemiology of Health

Fall. 3 credits. Limited to 50 students. S-U grades optional. E. Rodriguez. Ecological and epidemiological approaches to the problems which restrict human health within the physical, social, and mental environment. The course introduces epidemiological methods 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

Fall or spring. 4 credits. Prerequisites: PAM 210, AEM 210 or ILRST 210 or equivalent. W. Rosen.

The course introduces 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. Section meets once a week.

[PAM 320 Intermediate Policy Management]

Spring. 3 credits. Prerequisite: PAM 205, 220, and 230. Not offered 2003-2004.
W. Trochim.]

[PAM 323 Consumer Markets II]

Spring. 4 credits. Not offered 2003-2004.
R. Avery.

This course focuses on the cognitive, behavioral, and environmental forces that drive consumer demand. The first half of the course draws on theories and concepts from psychology and focuses on the cognitive processes whereby consumers interpret market-provided information and other stimuli in the purchase environment. The second half of the course draws on theories and concepts from retail anthropology to explain the behavior of consumers in the in-store environment. Particular emphasis is placed on communication institutions (advertising, television, print media), their impact on consumer decision making, and their control through government regulation. Course format is highly audio-visual and incorporates guest lectures from prominent consumer product firms, advertising agencies, and government regulators.]

PAM 334 Corporations, Shareholders, and Policy

Fall. 3 credits. Prerequisites: ECON 101. S-U grades optional. R. Geddes.

This course uses economic analysis to study the interaction of the market, the corporation, and the law and how these interactions affect the well being of shareholders and consumers. The costs and benefits of the corporate form of organization are examined. The legal institutions defining the corporation, such as limited liability and shareholder voting, are analyzed along with regulations governing these institutions. A particular focus is mechanisms that control the behavior of managers. Those mechanisms include hostile takeovers, insider trading, outside directors on the board, the role of large investors, and executive compensation plans. Additional topics include government ownership of corporations and non-profit enterprises.

PAM 340 The Economics of Consumer Policy

Spring. 4 credits. Prerequisites: PAM 200 or permission of instructor. R. Geddes, S. Tennyson.

This course is designed to familiarize students with the economic analysis of consumer policy issues. The course is structured around the major forms of government intervention in consumer markets, and examines a wide variety of economic and social regulations from the economic perspective.

PAM 341 Economics of Consumer Law and Protection

Fall. 3 credits. Prerequisite: ECON 101 or equivalent. S-U grades optional.
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, product liability, accident law and antitrust law, and the activities of such agencies as the Federal Trade Commission, the Food and Drug Administration, and the Consumer Product Safety Commission.

[PAM 346 Economics of Social Security (also ECON 447)]

Spring. 3 credits. Prerequisite: PAM 200. S-U grades optional. Not offered 2003-2004. R. Burkhauser.

This course provides students with an economic perspective on social security policies. The readings illustrate the use of economic analysis to predict the behavioral effects and income distributional consequences of policy. The course primarily focuses on the Old-Age, Survivors, and Disability Insurance Program. But other programs such as the Supplemental Security Income and mandates, for example the Americans with Disabilities Act, that affect the aged and those with disabilities are discussed.]

PAM 350 Contemporary Issues in Women's Health

Fall. 3-5 credits. A. Parrot.

This course deals with the history of women in medicine and the historical and cultural treatment of women's health problems. Health care research and the exclusion of women from research trials and protocols are also 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 are also discussed in depth. Students may take the course for a fourth credit, which requires attending a discussion section every other week and observing seven facilities (i.e., birthing center, mammogram, and ultrasound center, wellness center, hospital labor and delivery unit, LaMaze class, women's self defense class, etc.) that provide a variety of women's health care.

PAM 371 Demography and Family Policy

Fall. 3 credits. K. Joyner.

This course examines from a demographic perspective family policies that concern children and adults. Toward this end, this course considers the relationships between family policies and demographic behavior. It also addresses the effects of family policies and demographic behavior on the well-being of children. Although this course focuses on the United States, it considers U.S. trends against the backdrop of changes in other industrialized countries.

PAM 380 Human Sexuality

Spring. 4 credits. Limited to 200 students. Prerequisite: an introductory course in human development and family studies, psychology, or sociology (or equivalent social science course). Recommended: one course in biology. 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 focuses 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 are addressed.

PAM 383 Social Welfare as a Social Institution

Fall. 3-4 credits. S-U grades optional.
J. Allen.

Provides a philosophical and historical introduction to social welfare policy, programs, and services. The course examines the social, political, and economic contexts within which social welfare policies have evolved in the

United States. It analyzes the ideological, political, and social processes through which public policy is formed, the significance of social justice, social and economic disparities, and the translation of public policies into social welfare programs. The importance of a global perspective is emphasized in the context of present program design, public concerns, interrelationships, and in support of services.

PAM 392 New York State Government Affairs: Capital Semester in Albany

Spring. 15 credits. (Human Ecology students: 7 of the credits count toward the outside-the-major requirement. PAM majors: credits satisfy capstone requirement and 7 additional PAM credits.)

Permission of instructor. Open to sophomores, juniors, and seniors with minimum 2.3 GPA. W. Rosen.

Students participate in either the New York State Assembly or New York State Senate Intern Programs. Internships include research on legislation, support for legislator initiatives and public hearings, work on constituent and interest group issues, and other tasks. Students also participate in one "in-residence" course, and Cornell students also participate in a seminar conducted by W. Rosen. Students earn \$3,500 stipend.

PAM 400-401-402 Special Studies for Undergraduates

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 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 field 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 with an add/drop slip in 145 MVR, College Registrar's Office. 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. For study that predominantly involves library research and independent reading.

PAM 401: Empirical Research. For study that predominantly involves data collection and analysis.

PAM 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.

PAM 403 Teaching Apprenticeship

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

PAM 420 Management Information Systems for the Public Sector

Spring. 3 credits. L. O'Neill.

The story of the 1990s was the story of information technology (IT) in business. This is an upper-level MIS class on the management of technology with a particular emphasis on the public or nonprofit sector. Students will study the philosophy of computer science including ethics, security, and public policy. Students also will become proficient users of Access database software. As an imminent college graduate, each student will be expected to be comfortable with IT, to be knowledgeable about IT, and to be able to discuss IT intelligently. The main purpose of this course is to provide students with the tools they will need to be successful in a rapidly changing world.

PAM 423 Risk Management and Policy

Spring. 3 credits. Prerequisite: ECON 101 and a course in statistics. S. Tennyson.

The objective of this course is to provide students with a broad understanding of risk management problems and solutions, a greater appreciation of the importance of risk and risk regulation in our society, and increased comprehension of the complexities of making decisions about risk. Topics covered include alternative ways to define and measure risk, the importance of risk-tradeoffs, and models of decision making under risk. With this background, alternative approaches to risk management are analyzed. The impact on risk management of the legal liability system and government programs, laws, and policies are also considered.

[PAM 427 Complementary Alternative Medicine]

Fall. 3 credits. Prerequisites: a health course and intro biology or permission of instructor. Not offered 2003-2004.
A. Parrot.]

PAM 435 The U.S. Health Care System

Fall. 3 credits. R. Battistella.

This course provides an introduction to the health care delivery systems in the United States, and covers the inter-relatedness of health services, the financing of health care, and the key stakeholders in health care delivery including regulators, providers, health plans, employers, and consumers. The course describes the history and organization of health care, behavioral models of utilization, issues of health care reform, and current trends. The course provides an overview of the key elements of the field including ambulatory care services, mental health services, hospitals and clinicians, insurers, the role of public health organizations, and the politics of health care in the United States.

[PAM 437 Economics of Health Policy]

Spring. 3 credits. Prerequisite: ECON 101 or equivalent. S-U grades optional. Not offered 2003-2004. K. Simon.

Uses the economic tools of policy analysis to understand the health care system and critically evaluate current policy debates. In the past decade, some of the most controversial policies considered by state and federal governments have involved issues that have been studied by health economists and health services researchers. PAM 437 uses the United States as its main institutional framework, but also pays attention to health care topics of international concern, particularly through the group projects in the second half of the semester.]

PAM 440 Critical Perspectives

Fall. 3 credits. J. Allen.

Presents an overview of different perspectives on U.S. social policies and programs with an emphasis on health, education, welfare, family, and consumer issues. Historical, social, scientific, and personal perspectives are analyzed and contrasted. Students will explore the inevitability and legitimacy of diverse perspectives on social conditions, policies, and programs. Students also will gain knowledge about the social contexts, conditions, policies, and programs presented in this course; critically analyze them; employ the conceptual frameworks presented in class; and evaluate policy debates by applying these insights.

PAM 444 Violence Against Women: Policy Implications and Global Perspectives

Spring. 3 credits. A. Parrot.

Violence is committed against women worldwide at an alarming rate. This course focuses on the historical and current reasons for and impact of violence against women both domestically and internationally. The impact of legislative, public, social, or religious policies on the incidence of such violence is considered. Violence against women is committed to protect women's virginity, because women are viewed as property, for political reasons, as hate crimes, and in the name of culture, religion, and tradition. The types of violence discussed in this course include: rape, child sexual abuse, homicide, battering, hate crimes, gay bashing, kidnapping, ethnic cleansing, war crimes, forced prostitution, female genital mutilation, honor killings, public beating, lashing, stoning, torture, female infanticide, trafficking of women, forced abortions, acid attacks, and sati (self-immolation). Each student is required to evaluate the impact of one current policy and critique the potential value of one pending policy relating to violence against women.

PAM 454 Contemporary Issues in Human Sexuality and Research

Spring. 2 credits. Permission of instructor required. A. Parrot.

An in-depth seminar in theoretical and applied methodology for the study of human sexuality. Topics covered include current and contemporary issues, educational strategies, policy formation, legal jurisdiction, cultural mores, social attitudes, and individual sexual behavior.

PAM 457 Innovation and Entrepreneurship in the Health Care Industry

Spring. 3 credits. Prerequisite: PAM 435 or permission of the instructor. J. Kuder.

Designed for students interested in the management, financing, and development of innovation in the health services industry. The unique features of the health delivery system are emphasized as students learn about developing creative approaches to health services problems. Approaches to managing change are taught with case studies from a wide range of industries. Students are taught tools for critically evaluating and implementing new business concepts in for-profit and not-for-profit firms. Both the creation of new start-up companies and innovation within existing firms are explored.

PAM 473 Social Policy

Spring. 3 credits. Prerequisites: GOVT 111 or SOC (R SOC) 105 or permission of the instructor. S-U grades optional. J. Allen.

An examination of the policy process and the significance of national policies as they affect the distribution of resources and services. Several analytical frameworks are used to

evaluate social programs and service delivery systems in selected policy areas, including education, economic security, juvenile justice, child welfare, health, mental health, and housing. Implications for change and the significance of current competing policy priorities at the state and local levels will be explored. Field experiences in the Ithaca community are encouraged.

PAM 499 Honors Program

Fall or spring.

The honors program provides students with the opportunity to undertake basic or applied research which will be preparation of a thesis representing original work of publishable quality. The program is intended for 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 opportunity to work closely with a professor on a topic of interest. PAM majors doing an honors program may take PAM 499 for up to 15 credits. See Professor Sharon Tennyson for more details.

PAM 547 Microeconomics for Management and Policy

Spring. 4 credits. S-U grades optional. Staff. This course introduces microeconomic theory and its application to decision making in the management and policy arenas. Special emphasis is placed on the economic environment of health care organizations and the problems faced by managers in this environment.

PAM 552 Health Care Services: Consumer and Ethical Perspectives

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. A. Parrot.

The course focuses 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 553 Health Economics and Policy

Spring. 3 credits. Prerequisites: PAM 604, ECON 609 or permission of instructor. S-U grades optional. Not offered 2003-2004. D. Kenkel.]

PAM 554 Legal Aspects of Health Care

Spring. 3 credits. Prerequisites: PAM 557 or permission of instructor. Taught in alternate years. H. Allen.

This course introduces principles of the law that are specifically applicable to health-service 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 556 Managed Care

Fall. 3 credits. Prerequisite: PAM 557 or permission of instructor. Not offered 2003-2004. J. Kuder.]

PAM 557 Health Care Organization

Fall. 3 credits. Limited to 30 students. Priority given to Sloan students or permission of the instructor. R. Battistella.

The course provides an introduction at the graduate level to the organization of health providers in the United States, the interrelationships of health services and the major sources and methods of paying for care. The course describes how health services are structured in the United States and how these different services interrelate along the continuum of care. The course describes and analyzes 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 are also presented.

PAM 558 Field Studies in Health Administration and Planning

Fall or spring. Fall-1 credit, spring-3 credits, 4 total credits. 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. This course is the capstone course for second-year Sloan students.

PAM 559 Epidemiology, Clinical Medicine, and Management Interface Issues

Spring. 3 credits. E. Rodriguez.

From an empirical and analytical framework this course explores the relationships between epidemiology, clinical medicine, and management. The course reviews 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 have an opportunity to explore issues of resource allocation and continuous quality improvement. The format for the class is lecture, discussion, and case analysis.

[PAM 560 Quality in Health Care Organizations

Fall. 3 credits. Not offered 2003-2004. Staff.]

[PAM 561 Economics of Health and Medical Care

Spring. 3 credits. Not offered 2003-2004. Staff.]

PAM 562 Health Care Financial Management I

Spring. 3 credits. Staff.

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 demonstrate important points, which will be reinforced by examples and applications. The course emphasizes the internal financial management knowledge and skill necessary for financial success in complex health organizations.

PAM 563 Health Care Financial Management II: Payment Systems and Decision-Making

Fall. 3 credits. Prerequisite: PAM 562 or other financial management course. J. Kuder.

Designed to strengthen student's abilities to use the tools of financial management in guiding strategic decisions made in the health services sector. The class does this by 1) expanding and deepening the students' knowledge and skills in general financial management and financial risk management, 2) describing and examining the unique features of the health care industry that make the problems, the problem solving process, and the solutions different (especially important is a complete understanding of the effects of alternative payment systems, 3) emphasizing the development of skills in decision-making under conditions of uncertainty, and 4) using the knowledge and skills to analyze real world situations, make and defend decisions, and understand the risks involved with each decision and their consequences and approaches to their management.

PAM 564 Information Resources Management in Health Organizations

Spring. 3 credits. Recommended: strong basic computer skills. S-U grades optional. L. O'Neill.

Students are expected to have basic computer skills upon entry into the course. This course is a graduate course in Health Services Administration. Students are exposed to the opportunities and challenges inherent in the use of health management information systems (HMISs) in clinical and nonclinical applications. The course focuses on the manager's role in the application of HMISs to solve problems and address concerns in today's health care service industry. Students learn how an HMIS can enhance the ability to appraise multiclinal and nonclinical services of care.

PAM 565 Managing Health and Human Service Organizations I

Fall. 1 credit. D. Tobias.

This is the first segment of a six-credit sequence addressing the management and leadership of health and human services organizations. Different perspectives are examined, from that of the first-line supervision to the CEO level. This course begins with a study of the basics of management—communications, motivation, change management, leadership, human resources, organizational design issues, and labor relations. It then looks at 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 566 Strategic Management and Organizational Design of Health Care Systems

3 credits. Prerequisite: PAM 565. Staff. This is the second segment of a six-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 within these organizations. The course is taught via a case study approach.

PAM 567 Health Policy

Fall. 3 credits. K. Simon.
This course addresses major health policy issues and the critical processes that influence them. It focuses primarily on the United States, with some coverage of health policy in other countries. Topics discussed include: Medicare, Medicaid, the uninsured, public health, the effect of welfare policy on health care, managed care development and regulation, state and federal health care reform, and many others. The course analyzes the politics of health policy in terms of legislative and executive processes; the forces involved including economic, social, ethical, and political factors; and key players in health policy, such as special interest groups, lobbyists, public agencies, the press, elected officials, and legislative staff.

PAM 569 Regression Analysis and Managerial Forecasting

Fall. 3 credits. Prerequisite: at least one statistics course. L. O'Neill.
This course teaches various statistical methods for managerial decision making, with a particular emphasis on regression and forecasting. Other topics include: ANOVA, correlation, confounding, interaction, and statistical process control. Applications to health care organizations are emphasized.

PAM 570 Health Care Accounting

Fall. 4 credits. N. Roufael.
This is a core course for students in Sloan Graduate Program, Master in Health Care Administration. The course introduces the basic concepts of financial and managerial accounting with emphasis on health care applications. The course explains the measurement system of business operations, business valuation, financial reporting, budgeting, cost allocation, service and product costing, and special reports for managerial use. Ethical and international issues are integrated throughout the course materials with real world applications. At the conclusion of the course, students should be able to read, understand, and analyze the annual financial reports of an organization. Collaborative learning, cases, discussions, readings, researches, presentation, speakers, problem solving, videotapes, and lectures are used as teaching pedagogy.

PAM 600 Special Problems for Graduate Students

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 Policy Process and Theory

Fall. 3 credits. R. Swisher.
This course introduces students to the policy process model, of goal setting and problem formulation, identification of policy alternatives, cost-benefit analysis and policy selection, implementation, monitoring, and feedback. At each stage, we read and discuss theoretical contributions from across the social sciences and political philosophy, that help to contextualize and "socially embed" this mainstream, micro-economics driven model. Such contributions include: notions of bounded-rationality, satisficing, incrementalism, and muddling-through from organizational behavior; heuristics and biases from social psychology; theories of justice from political philosophy; habitus and other pragmatic logics from anthropology; and concepts such as bureaucracy, power, status, symbolic interaction, and social learning from sociology and psychology.

phy; habitus and other pragmatic logics from anthropology; and concepts such as bureaucracy, power, status, symbolic interaction, and social learning from sociology and psychology.

PAM 603 Experimental, Quasi-Experimental, and Economic Evaluation Methods

Spring. 3 credits. Strongly recommended: background in statistics (e.g., BTRY 601 or equivalent) and micro-economics (e.g., PAM 200, PAM 547 or ECON 639).
E. Peters.

Focuses on quantitative methods of policy analysis and program evaluation, with an emphasis on those programs and policies that are related to health, family, and consumer issues. The first part of the course covers experimental design and methods of making causal inferences from non-experimental data. The second part of the course covers benefit-cost analysis, explicitly incorporating both equity and efficiency considerations.

Throughout the course attention is paid to the role of economic modeling in program evaluation, including the role of structural theoretical models and general equilibrium analysis.

PAM 604 Qualitative, Survey, and Mixed Method Approaches to Research

Fall. 3 credits. M. Waller.
Exposees students to several methods of field research, including surveys, in-depth interviews, participant observation, and focus group interviews. The course introduces students to qualitative methods and addresses strategies for mixing different methods in policy and evaluation research. Topics of non-probabilistic sampling, questionnaire design, scale measurement, and reliability will also be covered.

PAM 605 Economics of Family Policy

Fall. 3 credits. Prerequisite: PAM 604 or ECON 609-610 or consent of instructor.
S-U grades optional. E. Peters.

This course examines household decision making in both single agent and multiple agent (e.g., game theoretic or bargaining) frameworks. The first half of the course focuses on: (1) fertility; (2) household production; (3) and time allocation models of behavior—decisions that are usually modeled in a single-agent framework. The second half of the course looks at: (1) marriage markets; (2) family formation and dissolution; (3) bargaining models of resource allocation within the household; (4) and intergenerational transfers across households. These kinds of behaviors are more fruitfully studied using multiple agent models such as contract theory, game theory, and household bargaining. Empirical applications of the theoretical models are presented for both developed and developing countries. Implications for family policies such as child care subsidies, divorce laws, family planning, government subsidies to education, and social security are also discussed. Much of the material covered by this course could also be found in economic demography and economics of the family courses.

PAM 606 Demographic Techniques (also R SOC 608)

Fall. 3 credits. S-U grades optional.
K. Joyner.

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 versus period analysis, sources and quality of

demographic data, population estimation and projection, and stable population models.

PAM 608 Economics of Consumer Demand (also AEM 670)

Fall. 3 credits. Prerequisite: PAM 200, ECON 313, or concurrent enrollment in one of those, and 2 semesters of calculus. S-U grades optional. C. Ranney.

A graduate level introduction to theory and empirical research on household demand, consumption, and saving. Emphasis is 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. Becker and Lancaster models of demand are introduced.

[PAM 611 Social Demography

Fall. 3 credits. Prerequisites: STBTRY 601, SOC 505, or equivalent. Not offered 2003-2004. K. Joyner.

This course considers demographic behavior from a sociological perspective. Topics include fertility, cohabitation, marriage, divorce, inequality, immigration, and health. Close attention is paid to the effects of social policies on demographic behavior. To a lesser extent, this course addresses the effects of social policies and demographic behavior on individual well-being. Although a background in demographic methods is not required, some of the assigned articles are based on these methods.]

[PAM 616 Strategies for Policy and Program Evaluation

Fall. 3 credits. Prerequisites: PAM 612 and 613 or 617 or equivalent. Not offered 2003-2004. W. Trochim.]

PAM 631 Ethics, Public Policy in American Society

Fall. 3 credits. Limited to seniors and graduate students. J. Ziegler.

Explores 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 nonprofit 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.

PAM 632 The Intergovernmental System: Analysis of Current Policy Issues

Fall. 3 credits. Open to seniors who have had a course in American government and to graduate students. 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 Seminar in Pharmaceutical Policy Issues

Fall. 2 credits. S-U optional. S. Tennyson
This weekly seminar exposes students to, and fosters critical thinking about, consumer and health policy issues related to pharmaceuticals

and the pharmaceuticals industry. A key component of the seminar is invited presentations from practitioners and researchers in pharmaceutical policy. Specific topics vary and depend in part on the interests of the invited speakers. Students are required to write critiques of invited papers and a literature review on a selected topic in pharmaceutical policy.

PAM 639 Graduate Microeconomics for Policy Analysis

Spring. 3 credits. Prerequisites: Principles of Economics, Calculus. Priority given to Ph.D. students, undergraduates welcome with permission of the instructor.

J. Cawley.

The goal of this course is to train graduate students in the use of the tools of microeconomics in order to prepare them to conduct high quality research in the social sciences. This comprehensive course covers microeconomic theory and its application to public policy analysis. Topics addressed include consumer decision-making, the theory of the firm, general equilibrium, welfare economics, monopolies and oligopolies, strategy, and market imperfections.

PAM 640 Consumers, Information, and Regulatory Policy

Fall. 3 credits. Prerequisites: PAM 639 or calculus and intermediate microeconomics.

A. Mathios.

Examines information problems in markets and how they impact consumers, focusing on market mechanisms and regulatory actions that address those information problems. Major theoretical topics covered include price and quality uncertainty, moral hazard, adverse selection, and principal-agency theory. The course gives an overview of market mechanisms that deal with information issues such as marketing, advertising, warranties, third-party certification, licensing, and self regulation; the major regulatory institutions that govern consumer policy including the Food and Drug Administration and the Federal Trade Commission; and the way the legal system provides consumer protection. The market for pharmaceuticals is a particular focus. Primary reading material is drawn from economics journals, policy journals, and papers from the Journal of Public Policy and Marketing.

[PAM 742 Applied Econometrics II (also ILRLE 742)]

Spring. 4 credits. S-U or letter grades. Not offered 2003-2004. Staff.

Course covers statistical methods for models in which the dependent variable is not continuous. Covers: models for dichotomous response (including probit and logit); poly-chotomous response (including ordered response and multinomial logit); various types of censoring and truncation (e.g. the response variable is only observed when it is greater than a threshold); and sample selection issues. Course includes an introduction to duration analysis. Covers not only the statistical issues but also the links between behavioral theories in the social sciences and the specification of the statistical model.]

PAM 760 Challenges and Trends in the Health Services Industry

Fall and spring. 1 credit. S-U grades only. Staff.

The goal of the course is to provide students with information and exposure to current and emerging issues in the health services industry. Topics may include such matters as: finan-

cial management of health care facilities, human resource management, information systems, cost effective clinical decision making, quality measurement and outcomes, public health, and entrepreneurship in the health services industry.

PAM 799 MPS Problem Solving Project

Fall or spring. Credits to be arranged. For students recommended by their chair and approved by the instructor in charge of independent advanced work. S-U grades optional.

PAM 899 Master's Thesis and Research

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

PAM 999 Doctoral Thesis and Research

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

TEXTILES AND APPAREL

A. Lemley, chair; C. C. Chu, director of graduate studies; A. Netravali, director of undergraduate studies; S. Ashdown, N. Breen, C. Coffman, M. Frey, C. Jirousek, V. D. Lewis, S. Loker, S. K. Obendorf, A. Racine

TXA 114 Introduction to Computer-Aided Design

Fall, summer 6-week session. 3 credits. Limited to 14 students per section. Priority given to TXA students. S-U grades optional.

Minimum cost of materials \$80. A. Racine. A studio course that explores the creative potential of microcomputers. The AutoCAD software program is used as a design tool for generating a wide variety of visual images. Basic Photoshop software commands are introduced. Daily hands-on demonstrations and studio work. Students develop two-dimensional designs based on historical, cultural, and museum sources for portfolios and display.

TXA 117 Fashion Graphics (Drawing the Clothed Figure)

Spring. 3 credits. Enrollment limited to 21 students. Priority given to apparel design students. Prerequisite: a basic drawing course. Letter grades only. Minimum cost of supplies \$125. Lab fee: \$30. V. D. Lewis. Students will develop both familiar and unfamiliar methods that will enable them to draw the fashioned body and ancillary expressions of fashion. Drawing is explored as a communicative medium for visual research and as a creative tool for image creation.

TXA 125 Art, Design, and Visual Thinking

Fall. 3 credits. S-U grades optional. 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 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. A. Netravali.

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 136 Fiber and Yarn Analysis Laboratory

Spring. 1 credit. Students are required to take TXA 135 and TXA 136 concurrently. Letter grades only. A. Netravali.

Course consists of 14 laboratory sessions, in which students learn techniques to identify and test fibers and yarns. A midterm and final exam will be based on using the methods learned to identify an unknown fiber (midterm) and an unknown bi-component yarn (final).

TXA 145 Introduction to Apparel Design

Spring. 4 credits. Limited to 36 students with 18 students per lab section; priority given to TXA students, and students transferring into TXA. Prerequisite: TXA 114. Letter grades only. Apparel design majors should take course during the first year.

Minimum cost of materials, \$150. A. Racine.

Intensive study of principles and processes of flat-pattern design with emphasis on creative expression in children's apparel. Students develop an understanding of the techniques needed to produce apparel from sketches, including patternmaking and garment assembly.

TXA 237 Structural Fabric Design

Fall. 3 credits. Prerequisite: TXA 135. Recommended: college algebra. S-U grades optional. M. Frey.

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 264 Draping

Fall. 4 credits. Limited to 30 students; 15 in each lab. Prerequisite: TXA 125 and TXA 145; one drawing course recommended. Letter grades only. Minimum cost of materials, \$125; lab fee, \$10. S. Ashdown.

This studio course examines the process of creating a three-dimensional garment from the two-dimensional fabric. The principles and processes of draping, advanced flat pattern making, and fitting are studied through projects. Drawing exercises focus on the communication of three-dimensional garments in two-dimensional sketches. Assigned problems require the students to make judgments regarding the design process, the nature of materials, body structure, function, and fashion.

TXA 265 Apparel Patternmaking

Spring. 3 credits. Limited to 30 students. Prerequisites: TXA 114, 117, 125, 145, 264; and TXA 135 (may be taken concurrently). Letter grades only. \$250 for fabrics, studio, and portfolio supplies. A. Racine.

The goal of this apparel studio course is to expand student competencies in flat pattern design and analysis and fitting techniques. Students generate original design concepts using fashion sources from historic to contemporary times. The Cornell Costume Collection is used for inspiration and instruction. Full-

scale samples in various levels of completion, from paper patterns to muslins to finished garments, include detailed technical drawings for portfolios.

TXA 266 Apparel Design: Product Development

Spring. 3 credits. Prerequisites: TXA 114, 145, 264; and TXA 117 and 265 (may be taken concurrently). Letter grades only. Minimum cost of materials \$250; lab fee, \$10. S. Ashdown.

A project-based course in which students explore the relationship between technology and design. Students learn computer-aided patternmaking, grading, manufacturing technologies, communication of technical details, flats, specifications, and costing of garments and how those factors affect design. Designs are developed to various stages from conceptual work to final garment.

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 College Registrar's 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 325 (225) Color and Surface Design of Textiles

Fall. 4 credits. Limited to 18 students. Preference given to TXA apparel design majors. Recommended: TXA 114 and TXA 135. Minimum cost of materials, \$100; lab fee, \$75. C. Jirousek.

Studio experience in the surface design of textiles combined with exercises in color theory. Textile projects use techniques such as block printing, shibori, batik, silk painting, silk screen, and stitchery to produce a portfolio of textile designs. Studio work is augmented by lectures on pattern and color theory illustrated by slides and textile examples.

TXA 332 Designers as Entrepreneurs

Spring. 1 credit. Enrollment limited to 40 students. Prerequisite: any design course. S-U grade optional. S. Loker.

This course presents issues that are critical to designers who are entrepreneurs, such as product development and maintenance; sourcing materials, assembly, and other services; copyright, trademark, and patents; branding and licensing; mass customization; distribution options including e-commerce; and social responsibility in business. The course draws extensively on guest speakers and case studies.

TXA 335 Fiber Science

Fall. 3 credits. Limited to 20 students. Prerequisites: college chemistry and physics. S-U grades optional. A. Netravali.

This course covers fibers commonly used in various engineering, medical, and apparel applications. Topics include the nature of polymer molecules, the chemical structure of organic fibers, inorganic fibers, micro-macro structure of fibers, fiber dimensions, environmental effects, and mechanical, optical, thermal, and frictional properties of fibers. The following fiber uses are discussed: composites in aerospace and other structural components, circuit boards, bulletproof vests, sutures, artifi-

cial arteries, geotextiles, sporting goods, and others.

[TXA 336 Fundamentals of Color and Dyeing]

Fall. 3–4 credits. 3 credits for lecture only; 4 credits for lecture and lab. Fiber science students are required to take the lab. Prerequisite: college Natural Science Requirements. S-U grades optional. Lab fee, \$15. Next offered 2004. C. C. Chu.

Color is extremely important and useful in daily life. This course emphasizes theories and scientific principles of color, providing a framework for the use of color in design, marketing, or research. How colorants are used to dye fabrics is addressed. Although fabrics are chiefly used to illustrate color in the class, much of the information and knowledge is useful to non-textile majors. Guest lecturers from the industry address the practical aspects of color in business.]

TXA 346 Design Process

Fall. 4 credits. Enrollment limited to 30. Prerequisite: TXA 135, TXA 145, TXA 264, and TXA 265. Letter grades only. Minimum cost of materials, \$140; lab fee, \$10. V. D. Lewis.

Provides an exposition of the methods used by the creative fashion designer. The course aims to develop your personal handwriting as a designer. It unites a provocative design issue with the requirement of functionality and emphasizes pattern cutting as a way of realizing design ideas.

TXA 369 (269) Style, Fashion, and the Apparel Industry

Fall. 2 credits. Limited to 30 students. Preference to TXA majors. Not open to freshmen. Prerequisites: TXA 125, TXA 135, and TXA 237. Letter grades only. A. Racine.

Illustrated lectures 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 is used for discussion. Students write a term paper on issues relating to the fashion industry.

TXA 370 Principles of Color and Design in Textiles

Spring. 3 credits. Prerequisite: TXA 125 or permission of instructor. S-U grades optional. Offered alternate years. C. Jirousek.

Explores color theory principles, color trends, science and technology of color measurement, color and design in textile construction and embellishment, design use of pigments and dyes, and history of textile design as a designer resource. Students complete hands-on exercises, two exams, and a paper.

TXA 400–401–402–403 Special Independent Studies for Undergraduates

Fall, summer, 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 department office. This form must be signed by the instructor directing the study and the depart-

ment chair and filed at course registration or within the change-of-registration period after registration along with an add/drop slip in 145 MVR, College Registrar Office. 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. S-U only. 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 431 (331) Apparel Production and Management

Spring. 3 credits. Enrollment limited to 40 students. Prerequisites: ECON 101 and 102 and an upper-division course in either apparel or textiles. S-U grades optional. S. Loker.

This course presents an introduction to the global textile and apparel industry, particularly the technical and economic aspects of apparel production. It includes analysis of specific apparel manufacturing and management issues such as international sourcing, Quick Response, mass customization, production and information technology, labor, and logistics.

TXA 432 Product Quality Assessment

Spring. 3 credits. Enrollment limited to 36 in lecture and 18 in each lab section. Prerequisites: TXA 135 and Statistics. S-U grades optional. Lab fee, \$15. N. Breen.

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 are discussed. Laboratory sections introduce students to various test methods, data generation for analysis, and evaluation.

TXA 436 Fiber Chemistry

Spring. 3 credits. Senior and first-year graduate students. S-U grade optional. Offered alternate years. 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 are given. Degradation reactions for certain fibers such as polyolefins and acrylics are discussed.

TXA 439 Biomedical Materials and Devices for Human Body Repair

Spring. 2-3 credits. 2 credits meets T only; 3 credits meets T and R. Juniors and seniors only. Prerequisites: college Natural Science requirement (Chem. or Biol.). S-U grades only for 2 credits, letter grades only for 3 credits. 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

Fall. 3 credits. Juniors and seniors only. Prerequisites: TXA 135 and a marketing course. S-U grades optional. N. Breen.

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 are emphasized throughout.

[TXA 466 Textiles, Apparel, and Innovation]

Fall. 3 credits. Prerequisite: TXA 237. Recommended: TXA 432. S-U grades optional. Field trip fee, \$100. Offered alternate years; next offered 2004. S. Ashdown.

Designed for students in all TXA options, the course explores the relationship between materials and design with a concentration on the use of innovative textile materials in apparel. Both aesthetic and functional issues are addressed. The course consists of a combination of lecture, discussion of readings, oral reports, a research paper, and project work. There is a one-day field trip to New York City.]

TXA 470 Fashion Presentation: Portfolio Development

Fall. 3 credits. Enrollment limited to 25. Prerequisites: TXA 117, TXA 264, TXA 265, and TXA 346. Minimum cost of materials, \$100. V. D. Lewis.

Students will gain an understanding of presentation methods currently used by fashion designers, runway illustrative journalists, forecasting artists and fashion editorial illustrators. Skills in fashion illustration, image manipulation and photography are developed. To satisfy personal philosophies of fashion, students discover and adopt current presentation techniques with new and original effects. Students must bring all past project work for possible inclusion in the portfolio.

TXA 499 Honors Thesis Research

Fall and spring. 1-6 credits (maximum 6 credits for graduation). Prerequisite: TXA students who have been admitted to college honors program. S-U grades optional. 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. Permission of instructor. Offered alternate years; next offered 2005. A. Netrvalali.

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. Prerequisites: TXA 336 or equivalent and organic chemistry, or permission of instructor. S-U optional. Offered alternate years; next offered 2005.

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 are 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 effect of these textile chemicals and current federal regulation is briefly discussed.]

TXA 637 Research Seminars in Apparel Design

Fall and spring. 1 credit; S-U only; 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. Offered alternate years. S-U grades optional. Staff. 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 compressive stress; bending and buckling; and the mechanical behavior of nonwoven textile materials.

TXA 664 Human Factors: Anthropometrics and Apparel

Fall. 3 credits. Open to advanced undergraduates. Prerequisites: course in statistics and permission of instructor. Offered alternate years. S-U grades optional.

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 666 Fiber Formation: Theory and Practice

Spring. 3 credits. Prerequisites: organic chemistry, college physics, TXA 436, TXA 620, or permission of the instructor. S-U grades optional. Offered alternate years. M. Frey.

Covers the practical and theoretical analysis of the chemical and physical principles of the methods of converting bulk polymer to fiber; rheology; melt, dry, and wet polymer spinning; fiber drawing; heat setting; and general theory applied to unit processes.

TXA 670 Fashion Theory

Spring. 3 credits. Enrollment limited to 25. Prerequisite: TXA 346 for undergraduates or similar course for graduates. Letter grades only. Offered alternate years.

V. D. Lewis

Provides students with the theoretical tools that will enable them to conduct debates and create strategy about the design of fashion. Debates will support visual outcomes, conceptual foundations, and methodologies that are unequivocal in practice, criticism, education, management, and the cultural context of fashion design.

[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; next offered 2005. S-U grades optional. C. Jirousek.

An examination of the aesthetic and social/psychological relationship between body and clothing in the context of various cultures. Students develop a research topic to be presented orally and in a term paper, and they participate in the development of an exhibition.]

TXA 899 Master's Thesis and Research

Fall or spring. Credits to be arranged. 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. Credits to be arranged. 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

Ashdown, Susan, Ph.D., U. of Minnesota. Assoc. Prof., Textiles and Apparel

Avery, Rosemary J., Ph.D., Ohio State 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. and Chair, Design and Environmental Analysis

Brannon, Patsy, Ph.D., Cornell U. Prof., Nutritional Sciences, Dean

Brumberg, Joan J., Ph.D., U. of Virginia. Prof., Human Development

Burkhauser, Richard, Ph.D., U. of Chicago. Prof. and Chair, Policy Analysis and Management

Casasola, Marinella, Ph.D., U. of Texas, Austin. Asst. Prof., Human Development

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 Lust, Barbara C., Ph.D., City U. of New York. Prof., Human Development
 Mathios, Alan, Ph.D., U. of Pennsylvania. Prof., Policy Analysis and Management
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 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
 Simon, Kosali, Ph.D., U. of Maryland. Asst. Prof., Policy Analysis and Management
 Sims, William R., Ph.D., Massachusetts Inst. of Technology. Prof., Design and Environmental Analysis
 Swisher, Raymond, Ph.D., U. of North Carolina, Chapel Hill. Asst. Prof., Policy Analysis and Management
 Temple, Elise, Ph.D., Stanford U. Asst. Prof., Human Development
 Tennyson, Sharon, Ph.D., Northwestern U. Assoc. Prof., Policy Analysis and Management
 Tobias, Donald J., Ph.D., Michigan State U. Assoc. Prof., Policy Analysis and Management
 Trochim, William M. K., Ph.D., Northwestern U. Prof., Policy Analysis and Management
 Waller, Maureen R., Ph.D., Princeton U. Asst. Prof., Policy Analysis and Management
 Wang, Q. I., Ph.D., Harvard University. Asst. Prof., Human Development
 Wells, Nancy, Ph.D., U. of Michigan. Asst. Prof., Design and Environmental Analysis
 Wethington, Elaine, Ph.D., U. of Michigan. Assoc. Prof., Human Development
 Williams, Wendy M., Ph.D., Yale U. Assoc. Prof., Human Development
- Lecturers**
- Basinger, Annette, B.A., Michigan State. Lecturer, Design and Environmental Analysis
 Beck, Sam N., Ph.D., U. of Massachusetts. Sr. Lecturer, Urban Semester
 Beckmann, Randi, M.S., Elmira College. Lecturer, Human Development
 Breen, Nancy, Ph.D., Syracuse U. Lecturer, Textiles and Apparel
 Delara, Thomas, M.B.A., Barry U. Lecturer, Policy Analysis and Management
 Dempster-McClain, Donna I., Ph.D., Cornell U. Sr. Lecturer, Human Development
 Gilmore, Rhonda, M.A., Cornell U. Lecturer, Design and Environmental Analysis
 Meneely, Jason, M.S. U. of Kentucky. Lecturer, Design and Environmental Analysis
 O'Donnell, Mary, Ph.D., U. of Missouri. Lecturer, Policy Analysis and Management
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