

# Cornell University Announcements (USPS 132-860)

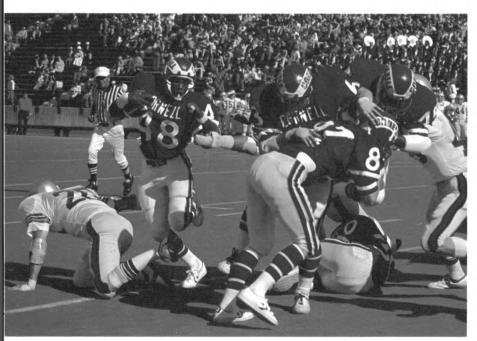
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Introducing Cornell



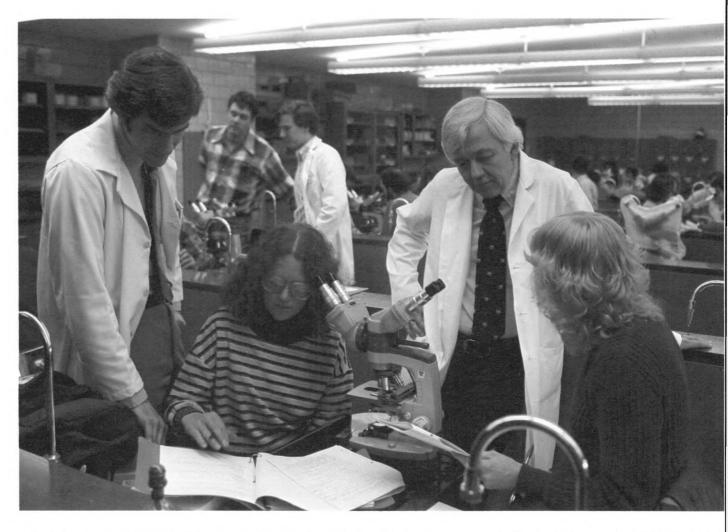






of nutrition on the psychological development of children; and analyze achievements in philosophy, literature, history, and art to deepen our understanding of what it means to be human and sharpen our sensitivity to what is outside ourselves. Students of all national and ethnic origins and social and cultural backgrounds find their way to this rural setting to explore with the faculty the world in which they live: men and women, from public and private schools, with many or few material advantages all come to Cornell to take advantage of its abundant resources and to learn from each other.

What you will not find at Cornell is conformity. From its very beginning, Cornell introduced the notion that the student's own initiative in choosing a program of study or an extracurricular activity is an



essential component of a university education. Nor should you expect to exhaust all the resources of the University in four years: there are simply too many courses, books, research laboratories, museums, darkrooms, practice rooms, athletic facilities, and extracurricular organizations for you to explore in such a short time. You will enroll in one of the seven undergraduate colleges and chances are excellent that as you cross the college quadrangles every day you will get to know the faculty and students very well. Whether you are enrolled as a student in one of the privately supported divisions of Cornell—the Colleges of Arts and Sciences, Architecture, Art, and Planning, and Engineering or the School of Hotel Administration—or in one of the publicly supported divisions—the Colleges of Agriculture and Life Sciences and Human Ecology or the School of Industrial and Labor Relations-you always have the entire University at your disposal



to broaden and enrich your life. You may even want to see what is going on in the Law School, the Graduate School of Business and Public Administration, or the College of Veterinary Medicine. In other words, you may find the resources of Cornell a little overwhelming at first, perhaps even a little confusing, but always exciting.

One more word if you are thinking about Cornell: most of the applicants have the potential to succeed if they are determined to do so. Therefore, while we stress past academic achievement in the admission process, we also look for personal qualities and special talents. We hope to select men and women who will be able to take full advantage of the many opportunities available at Cornell and who will also give something of themselves to the life of our University. As you read the pages ahead, think not only about Cornell as a university but also about Cornell as your University.

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ornell offers unusual variety and diversity. As an independent Ivy League institution and the land-grant university of the state of New York, Cornell has thirteen colleges and schools, of which four are state supported and nine privately endowed. On the Ithaca cambus hundreds of subjects and courses of study are available covering a range that is rare on a single campus.

Today, along with the pursuit of excelence in traditional subjects at Cornell, here is an acute awareness of current broblems. Students and faculty members n many segments of the University are exploring such problems, and their efforts ake shape in new fields, programs, and centers. There is, for example, the Peace Studies Program, the Rural Development Committee, and the International Populaion Program. The University has a variety of programs in international agriculture, nutrition, and economics and an interdisiplinary program on science, technology, and society. The Africana Studies and Research Center is concerned with such opics as Pan-Africanism, contemporary plack ideologies, and people and movenents in the black urban ghetto

Cornell encourages the spirit and pracice of academic freedom. The educaional aims and programs are based argely on student choice, a philosophy hat has real meaning because of the existing variety and flexibility. The undergraduate programs permit a significant amount of sampling and exploring and encourage the selection of an area of nterest and its pursuit in depth. This sysem does, of course, put great responsibility on the students—to become acquainted with available offerings and acilities and to choose wisely according their needs and interests.

# **Indergraduate Programs**

## New York State College of Agriculture and Life Sciences

he College of Agriculture and Life Sciinces has a clear and exciting mission: b increase our understanding of nature and natural processes in the areas of ag-



ricultural sciences, biology, protection of the environment, and development and effective use of natural and human resources; to educate citizens for leadership in these areas; and to translate new knowledge into action for the well-being and quality of life of the people, their agriculture, their resources, and the communities where they live.

With a student population of 3,000 undergraduate students and 1,000 graduate students, and a faculty of about 500, the college is the second largest of the schools and colleges within Cornell University. Many students in the college study the traditional plant and animal sciences, focusing on production agriculture, food processing, and marketing. Of equal importance in today's world are environmental and societal problems in rural and urban areas. Many students are learning about conserving natural resources, developing alternative energy sources, enhancing home and community settings, improving methods of farm finance, and upgrading the quality of life for all people.

Many of the college's distinguished faculty are internationally recognized as leaders in their fields. High priority is placed on excellence in classroom teaching and on updating curriculum content to reflect the rapidly expanding research developments. Most of the teaching faculty also have responsibilities in either research or extension and thus the content of courses includes the most current information available.

The college's genesis goes back to the Land Grant College Act of 1862, providing for instruction related to agriculture and the mechanical arts, and to Ezra Cornell's impetus in founding Cornell where "any person can find instruction in

any study." This was followed by the Hatch Act of 1887, authorizing agricultural experiment stations, and the Smith-Lever Act of 1914, establishing cooperative extension services. The land-grant philosophy, as it has evolved over the years, emphasizes student opportunity according to ability and without regard to financial means, a close interweaving of academic matters and practical life, a social consciousness leading to educational service in behalf of all people, and a meaningful relationship between teaching, research, and service.

Few colleges in the world are so well equipped to participate in this challenging endeavor. The college has fourteen thousand acres for research and teaching, the second largest agricultural library in the world, classrooms, teaching laboratories, greenhouses, its own forest, fishery and marine laboratories, experiment stations in Ithaca and Geneva, research farms and field stations throughout the state. Computer facilities provide on-line communication with large data bases in many areas and access to both TELENET and EDUNET worldwide computer networks. The laboratories provide opportunities for students to use equipment that is on the front line in research and experimentation.

#### **Undergraduate Programs**

The curriculum emphasizes the biological and physical sciences. Students elect to study in one of nine major academic areas of the college:

agricultural and biological engineering animal science applied economics and business management behavioral and social sciences biological sciences environmental studies food science plant sciences special programs and options

Within these major areas, the departments offer numerous specializations and options. Over four hundred courses are offered by the college for undergraduates. By augmenting that study with courses in other divisions of the University, students can develop a program of

study suited to individual interests and career objectives. Several specialized intercollege programs are available.

By selecting introductory and general courses in the physical, biological, and social sciences and applied courses in one or more areas of specialization, students selecting a technological emphasis prepare for employment related to their training and interests. By selecting advanced courses in principles and theory as well as introductory physical, biological, and social sciences, students selecting a more science-oriented curriculum prepare for graduate study or research.

Internships, work experience, and cooperative arrangements with industry can be arranged. The college offers several study-abroad programs in cooperation with universities in England, Mexico, France, and Sweden.

Diverse opportunities for careers in business, industry, government, education, research, and commercial agriculture and for graduate and professional study exist for graduates of the college. All students are assigned faculty advisers in their selected program area for help in program planning and career choice. Advisers, professional and student counselors, and career placement services all help students in making important choices for the future.

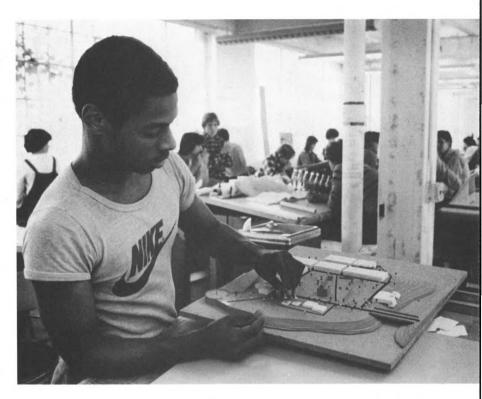
#### **Graduate Programs**

Graduate programs are offered through the Graduate School of the University. Students enrolled in a field of study offered by the College of Agriculture and Life Sciences have an opportunity to select a minor field and take courses in any college at the University. Research is an important part of the graduate program

The faculty and departments of the college offer advanced instruction leading to degrees of Master of Arts, Master of Arts in Teaching, Master of Professional Studies (Agriculture), Master of Professional Studies (Communication Arts), Master of Science, Doctor of Education, and Doctor of Philosophy. Detailed information is available in the *Announcement of the Graduate School*, obtained by writing to Cornell University Announcements, Research Park, Ithaca, New York 14850.

#### **Further Information**

Additional information about the college may be obtained by writing to Admissions, College of Agriculture and Life Sciences, Cornell University, 195 Roberts Hall, Ithaca, New York 14853 (telephone: 607/256–2036).



# College of Architecture, Art, and Planning

#### **Architecture**

Architects are continually assuming a wider range of responsibilities for problems of the built environment and for improving the habitat of people. The concerns of regional ecology, the application of the social sciences, the evolution of design philosophies and methodologies, and the emergence of new roles for the designer all present special challenges to architecture study and practice.

The College of Architecture, Art, and Planning is convinced that breadth is an essential element of undergraduate education, and the professional concentration of courses within the college, balanced by the wider view gained from study in other divisions, establishes a broad understanding of human values and social problems as well as the theoretical and technical base of professional competence. The professional courses themselves explore a wide range of architectural issues and scales of involvement and provide the opportunity to develop a particular emphasis that may become the basis for specialized studies at the graduate level.

The course of study leading to the degree Bachelor of Architecture normally requires five years. After a two-year introduction to the field, students may depart from the professional program and develop a concentration in some area of the broader discipline. There are two non-professional programs leading to degrees after four years of study. The program leading to the Bachelor of Fine Arts degree is offered in history of architecture and urban development and design communications; the program leading to the Bachelor of Science degree is offered in city and regional planning.

Through special planning of their fifthyear program, students in the professional architecture program may be able to complete the requirements for the first year of one of the two-year graduate programs offered in the college.

#### Art

The undergraduate curriculum in art, leading to the Bachelor of Fine Arts degree, provides an opportunity for students to combine a general liberal education with the studio concentration required for a professional degree. During the first year all students follow a commor course of study designed to provide a broad introduction to the arts and a basis for the intensive studio experience in painting, sculpture, photography, and



graphic arts of the last three years. Studio courses occupy approximately half the students' time during the four years; the remainder is devoted to a diversified program of academic subjects with a generous provision for electives. All faculty members of the Department of Art are active practicing artists whose work represents a broad range of expression.

For information on the Dual Degree Program, with the College of Arts and Sciences, see p. 12.

#### **Graduate Programs**

Through the Graduate School, the College of Architecture, Art, and Planning offers graduate-level programs in art, architectural design and urban and regional design, architectural sciences, history of architecture and urban development, preservation planning, city and regional planning and related programs, and landscape architecture.

For further information about these programs consult the *Announcement of the Graduate School*, obtained by writing Cornell University Announcements, Research Park, Ithaca, New York 14850, or by contacting the Office of the Dean, College of Architecture, Art, and Planning, Cornell University, Sibley Hall, Ithaca, New York 14853.

# The College of Arts and Sciences

The College of Arts and Sciences is the home of those departments that teach and study the subjects known collectively as the liberal arts. The aim of a liberal education, in the most general terms, is to give students the opportunity to develop their understanding of themselves and of the world about them by studying the natural sciences, the social sciences, and the humanities. In many ways this training provides the best possible foundation for future achievement. The world is changing at an ever-increasing pace and the body of our knowledge is expanding rapidly. In these circumstances it is essential to develop the powers of creative, analytic, and critical thinking and skill in communicating one's thought. There is no surer way to do so than by gaining familiarity with the different modes of thought that are involved in the study of the physical world, human behavior, and historical process. By becoming acquainted with the main achievements of human intellect and imagination and by writing and speaking frequently about these matters, students gain the skills that are necessary for excellence in any career or profession. Many graduates of the College of Arts and Sciences engage in further academic or professional study, but just

as many begin their careers immediately after completing the bachelor's degree.

#### **Program of Study**

The variety and richness of the curriculum is extraordinary. There are no courses that all students must take, and there are several hundred from which they may choose. Students usually take four or five courses a semester and must take at least thirty-four courses and 120 credits to graduate. Although students are ultimately responsible for their own education, each is assigned both a faculty and a student adviser and has recourse to other sources of information and advice on campus and within the college itself. This help is offered, but not imposed, so that the student may construct an integrated and innovative program within the general pattern established by the college faculty.

**Breadth.** The college requires its students to take two related courses in one subject chosen from each of the following categories: (1) the physical or biological sciences; (2) the social sciences or history, and (3) the humanities or expressive arts. Students are also encouraged to study mathematics, but may instead choose an area not used to fulfill another requirement.

Writing. So that students may develop their skill in writing English prose, the college has instituted a Freshman Seminar Program. Students choose one course each semester in the freshman year from more than a hundred seminars, offered by over twenty departments in the humanities and social sciences. All these courses are primarily writing courses; they also offer students the opportunity to study something altogether new to them and ensure that every incoming student experiences the individual attention and informal discussion that small classes provide.

Foreign language. Foreign language study is another essential part of a liberal education, since it opens the way to the larger world and creates an appreciation for the complex structures of language. Instruction is offered in approximately forty languages, including an unusually comprehensive offering in the languages of the Near and Far East. The college requires proficiency in one language or basic competence in two.

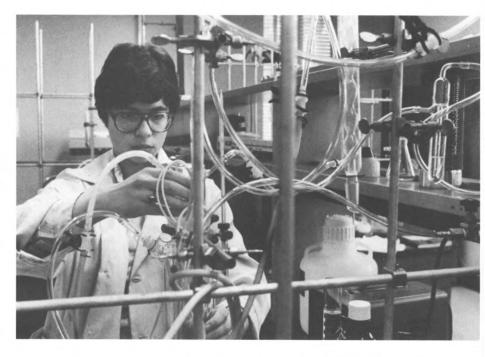
Many students find that their preparation has already carried them beyond the college requirement in one or more of these areas. It is important to remember that no single course is required of anyone and that the range and variety of courses ensures every student the freedom to develop an interesting, creative and highly individual program.

The major. In their last two years students devote roughly half their time to acquiring depth and competence in a major subject. The choice of a major is not intended to be the choice of a lifetime's occupation, although it may become that. By selecting one field of interest, and bringing to bear the full extent of their imagination and interest on something they care about, students develop initiative, critical skills, and flexible habits of mind that have wide-ranging application.

**Electives.** Advanced students continue intellectual exploration by taking electives that are not part of the major. They choose among all courses that are offered, but can consult particularly the courses listed in the General Education booklet. These courses are designed for nonspecialists. At the introductory level they can be deeper and more challenging than conventional introductions designed to prepare future specialists for further study. At more advanced levels such courses raise questions about the history of a field, about its methodological or philosophical presuppositions, or about its relation to other fields of knowledge. Only 100 of the 120 credits required for graduation must be taken within the College of Arts and Sciences. Students sometimes use the other credits to gain practical training by taking courses offered in other colleges of the University.

#### The Faculty

The faculty of the college includes some of the world's most distinguished scientists, scholars, and creative artists. They bring the excitement and perplexities of current research into the classroom, and so create the crucial difference between a college of liberal arts within a research university and a small liberal arts college. Students have opportunities to work with their professors on research projects either through independent study or special seminars. They can discuss major issues both in and outside class. The opportunities for interaction among faculty, students, and visiting scholars



can be one of the great advantages of education in the College of Arts and Sciences.

#### **Departments**

The following list indicates the main aspects of each discipline as it is taught in the College of Arts and Sciences.

Anthropology—archaeological, biological, ecological, linguistic, and sociocultural anthropology; theory; history

Archaeology—an interdisciplinary field; the Mediterranean, Near East, Latin America

Asian Studies—language, literature, religion, and culture of China, Japan, South Asia, and Southeast Asia

Astronomy—theoretical astrophysics; space sciences; infrared and radio astronomy; planetary exploration programs

Biological Sciences—animal physiology and anatomy; biochemistry; botany; cell biology; ecology, systematics and evolution; genetics and development; neurobiology and behavior; general biology

Chemistry—analytical, bio-organic, biophysical, inorganic, physical, theoretical

Classics — Greek and Latin language and literature; classical civilization; archaeology

Comparative Literature—genre studies; period studies; critical theory; aesthetics; literary motifs; history of ideas

Computer Science—computation theory; numerical analysis; programming systems

Economics—analytic methods; history; policy; theory; money, banking, and public finance; organization, performance, and control of industry; international and comparative economics; growth and development; peace science

English—major periods, authors, and genres in English and American literature; critical theory; creative and expository writing

Geological Sciences—geophysics; geochemistry; petrology; tectonics; seismology

Government — American government and institutions; political theory; comparative government; international relations

History — American; Asian; ancient, medieval, and modern European; Latin American; history of science

History of Art—American; ancient, medieval, and modern European; oriental art and architecture

Mathematics—applied mathematics and differential equations; analysis; algebra;



Psychology—biopsychology; human experimental psychology; social, personality, and abnormal psychology

Sociology—American institutions and public policy; human society; population studies; personality and social psychology

Theatre Arts: Drama, Dance, Film—history, literature, and theory of theatre; playwriting; design and technology; directing; acting; dance technique and composition; history, theory, and analysis of film; filmmaking

#### Interdisciplinary Studies

Areas in which Students May Major—Africana Studies, American Studies, Biology and Society, Jewish Studies, Russian and

# Introducing Cornell

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o American college has a more magnificent setting. From the Cornell campus one looks over the blue waters of Cayuga Lake, the successive range of far hills, and the small central New York city of Ithaca. The 740-acre campus, containing nearly one hundred major buildings, is bounded on the north and the south by deep gorges and many waterfalls; the nearby Sapsucker Woods, a 180-acre bird sanctuary maintained by the University, contains miles of nature trails; and all around the campus there is open country, state parks, and year-round recreational facilities that provide excellent opportunities for sailing, swimming, skiing, ice skating, hiking, camping, and other outdoor activities. No wonder students and vis-



itors so often stay here long past their original expectations.

It was on one of these hills above the lake that two extraordinary men, Ezra Cornell and Andrew Dickson White, established their university in 1865. Ezra Cornell was the tough-minded, farm-bred mechanic who amassed a fortune when the telegraph lines he had built were consolidated to form Western Union. Andrew Dickson White was a highly-educated scholar, professor of history, and international diplomat. Together they spearheaded revolutionary educational reforms in this country that called for the broadening of the traditional curriculum, the coeducation of women, and a learning environment free of sectarian domi-



ties for students to design a program of study tailored to interests that do not easily fit into one of the established majors. The Undergraduate Research Program enables students to undertake basic research as participants in faculty projects. Other programs take advantage of resources outside the college, in other divisions of the University, and virtually anywhere in the world. The common purpose of all of these options is to allow students to develop a program of study that is well-adapted to their particular interests and goals.

Independent Major Program. Although the college offers more than thirty-five departmental and interdepartmental majors, some students want to pursue an interest that cannot be met within an established major. If they want to study specialized areas that cut across several departments, they may plan, with the help of a faculty adviser, an independent major. During the sophomore year the student submits the proposal for an independent major to a board of faculty members. The board members consider whether the major brings a particular subject into clear focus, whether the plan is equivalent in coherence, breadth, and depth to a departmental major, whether it is well-suited to the student's academic preparation and ability, and whether the student is likely to acquire the critical and methodological skills that departmental majors encourage. An independent major may include courses from other divisions of the University, but the proposal must be in the spirit of a liberal arts education.

College Scholar Program. Students whose interests and talents do not easily fit into established majors, who demonstrate exceptional promise, and who show maturity to plan and carry out with the help of their advisers well-designed programs of study, may be admitted to the College Scholar Program. They are then allowed almost complete freedom to design their own degree programs outside the college's usual guidelines. Most College Scholars want to gain depth in diverse fields of study, and they enjoy synthesizing various kinds of learning.

Students.who are interested in the program apply during the spring term of their freshman year. They explain their educational objectives in an essay, and obtain a recommendation from one of their instructors. The selection committee considers the student's academic goals, maturity, and ability as demonstrated by first-year grades. Faculty legislation limits the program to forty students a year.



Undergraduate Research Program. This program enables students to gain firsthand experience in scholarly research by participating in a faculty member's project and to earn credit for their own work. The program emphasizes what the students will learn, rather than what they will contribute to the project, yet they sometimes make important contributions and publish the results of their work. Since the program is based on voluntary association of students and teachers, and since they consult together in advance, they can be sure of common interests and expectations. As a result the students who participate in the program almost invariably describe this experience as one of the most valuable in their own education.

**Dual Degree Program.** Students who want to acquire both a well-rounded liberal arts education and excellent professional training should consider the Dual Degree Program. This program permits qualified students to register in the College of Arts and Sciences and in either the College of Engineering or the Department of Art in the College of Architecture, Art, and Planning (the college hopes soon to offer a dual degree program in conjunction with the Department of City and Regional Planning, as well). Students in the Dual Degree Program earn a Bachelor of Arts degree and either a Bachelor of Science degree or a Bachelor of Fine Arts degree. Further information may be obtained from the Academic Advising Center, College of

Arts and Sciences, Cornell University, 134 Goldwin Smith Hall, Ithaca, New York 14853.

#### Off-Campus Study

Study abroad. Many students find it appropriate to their major or to their overall academic program to study abroad for one or two semesters. When it makes academic sense, the college encourages its students to study in absentia and grants credit toward the degree for work completed satisfactorily. The Career Center maintains up-to-date information on hundreds of programs all over the world. An adviser in the College of Arts and Sciences helps students find the program best suited to their academic goals.

**Archaeological excavations.** During the summer months students may participate in one of several Cornell-sponsored archaeological investigations in the Near East and Latin America.

Marine science. The Shoals Marine Laboratory, a seasonal field station located on Appledore Island, the largest of the Isles of Shoals (off the Maine and New Hampshire coasts), emphasizes the study of intertidal and shallow subtidal environments.

**Cornell-in-Washington.** This program enables advanced students to take Cornell courses and to do supervised research, using the resources that are available only in Washington, during a term of residence in the capital.

### College of Engineering

Engineering programs at Cornell prepare students for careers in technological areas and also for advanced work in a wide range of scientific, professional, business, and interdisciplinary fields.

The four-year program, which leads to the Bachelor of Science degree, provides a broad educational background as well as a foundation in science, mathematics, and engineering. Every curriculum includes at least 40 percent elective courses, some in liberal studies, some in technical subjects, and some unrestricted.

All freshman engineering students begin their college work in the Division of Basic Studies and then select a major in a particular area of engineering. The college also admits transfer students from two-year and other four-year colleges.

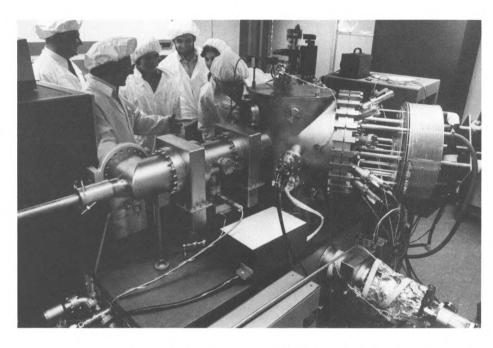
Among well-defined majors offered by the college are the following field programs:

chemical engineering
civil and environmental engineering
computer science
electrical engineering
engineering physics
geological sciences
materials science and engineering
mechanical engineering
operations research and industrial
engineering

A program in agricultural engineering is arranged by enrollment in the College of Agriculture and Life Sciences for the first three years and in the College of Engineering for the fourth year.

There is considerable opportunity for the development of individualized curricula within the field programs, and for students whose interests or career goals are not met by one of these programs, there is the additional option of an individually structured College Program. Students in the College Program may combine two engineering disciplines or augment their engineering education with study in such areas as the physical or social sciences, biology, architecture, city and regional planning, and ecology and conservation. Certain partially structured College Programs are sponsored by some of the engineering departments. These are in the areas of energy conversion, engineering science, environmental and public systems, and regional science.

Special programs available to engineering students include the Engineering Cooperative Program, which provides for periods of employment in industry dur-



ing the undergraduate years without delaying graduation. Each student in this program gains valuable work experience with one of about fifty-five participating companies. Another special program, offered in cooperation with the University's COSEP program, provides counseling services for minority-group students. A dual degree program, in which wellqualified students may earn baccalaureate degrees from both the College of Engineering and the College of Arts and Sciences, is described on page 12. Upperclass engineering students who are interested in careers in business have the opportunity to enter a cooperative program with Cornell's School of Business and Public Administration that leads to master's degrees in both engineering and business in two years after receipt of the bachelor of science degree.

After receiving the Bachelor of Science degree, many Cornell engineering students continue their studies at the graduate level. The largest number of students enter the college's Master of Engineering degree program, which offers curricula that are integrated with upperclass majors and so provides professional education in an overall five-year course of study. Other graduates enter general graduate degree programs in some branch of engineering or applied science through Cornell's Graduate School or at other universities. Some elect to prepare for careers in nonengineering fields such as business, education, law, and medicine.

The Master of Engineering (M.Eng.) degree, with field designation, is the professional engineering degree. It is designed primarily for those who want to practice an engineering specialty, but it also provides a practical base for further graduate study in Ph.D. programs in applied science and engineering. The M.Eng. degree may be taken in any of the following areas: aerospace, agricultural, chemical, civil, electrical, materials, mechanical, or nuclear engineering; operations research and industrial engineering; engineering mechanics; or engineering physics. For this degree a design project rather than a thesis is required.

Application forms may be obtained by writing to Graduate Professional Engineering Programs, Cornell University, 323 Upson Hall, Ithaca, New York 14853.

The M.S.-Ph.D. degree program is organized into graduate fields of instruction. Fields that may be of interest to engineering students include aerospace engineering, agricultural engineering, applied mathematics, applied physics, chemical engineering, civil and environmental engineering, computer science, electrical engineering, geological sciences, materials science and engineering, mechanical engineering, nuclear science and engineering, operations research, theoretical and applied mechanics, and water resources.

Application is made through the Graduate School. In addition, it is advisable for a prospective student to correspond with the professor who is the graduate faculty representative in the subject area of interest.

More-detailed information about graduate study in engineering is contained in *Graduate Study in Engineering and Applied Science* and the *Announcement of the Graduate School*. These publications may be obtained by writing to Cornell University Announcements, Research Park, Ithaca, New York 14850.

### School of Hotel Administration

The School of Hotel Administration offers training in the numerous disciplines required for modern management, including accounting, finance, marketing, operations, and human resources development. The school's graduates hold executive positions in a variety of industries but are especially well represented in the management of hospitality-related enterprises, such as hotels, motels, restaurants, condominiums, and clubs.

Students are encouraged to pursue a broad range of courses, including those in the humanities, as preparation for assuming their places in the business community. All students are required to master a number of disciplines that are known to be essential to the successful manager. Included in this basic curriculum are courses in financial management, food and beverage management; law; communication; operations, administration, and physical plant management. The courses are technical, requiring a command of quantitative techniques, but they also present broad concepts applicable to the varied situations encountered in the commercial world

Students receive practical training through the operation of the Statler Inn, a practice hotel on the University campus containing rooms for transient guests, banquet facilities, service restaurants, and cafeterias. A successful work-study program also provides management internships for academic credit in selected organizations away from the campus.

The course of study covers four academic years and leads to the Bachelor of Science degree.

Graduate study in the school leads to the Master of Professional Studies (Hotel Administration), Master of Science, or Doctor of Philosophy degree. Moredetailed information is available in the Announcement of the School of Hotel Administration and the Announcement of the Graduate School, which the reader may obtain by writing to Cornell Univer-



sity Announcements, Research Park, Ithaca, New York 14850.

Requests for further information regarding the undergraduate program should be addressed to the Admissions Office, School of Hotel Administration, Cornell University, Statler Hall, Ithaca, New York 14853.

# New York State College of Human Ecology

Students in the College of Human Ecology complete programs that lead to careers in human problem-solving. Building on study in the traditional disciplines of the biological, physical, and social sciences and design, these programs investigate the mutual interaction of individuals and environments. Through analysis of the family, the community, and society, students of human ecology study fields of importance to contemporary life: nutrition and health, housing and environmental design, the consumer in the marketplace, human growth and development, the stability of the family, the effectiveness and efficiency of social service systems, and the impact of technology on human well-being.

The undergraduate curriculum leads to a Bachelor of Science degree in human ecology from Cornell University. While a considerable part of the curriculum in-

volves course work in the college, students find that graduation requirements and elective opportunities take them into courses in other colleges of the University.

Undergraduates select from among twenty-four areas of concentration grouped in six main areas:

Consumer economics and housing—consumer economics, housing

Design and environmental analysis apparel design, interior and product design, textiles, human-environment relations

Human development and family studies—cognitive, personality, and social development (from infancy through adolescence), family studies, atypical development

Human service studies—community and family life education, social work

Nutritional sciences—clinical nutrition, community nutrition, consumer food and nutrition, foods, nutritional biochemistry, dietetics

Social planning and public policy—an interdepartmental program

Students have until the end of the sophomore year to choose their area of concentration. An individualized curriculum is possible, but students seeking



this avenue must have high commitment to a clear educational goal if this option is to serve them well.

There is ample opportunity to build a bachelor's degree program based on traditional concepts of liberal education combined with a program of study directed toward a specific professional career. A special quality of many of the college programs is that they require some study outside the traditional classroom, laboratory, and library setting of the campus. The college emphasizes field study as part of its commitment to provide students with a framework for developing a systematic understanding of social systems and problems.

Certain areas of concentration carry students directly along a professional career path. The College of Human Ecology has one of the first accredited undergraduate social work programs. It also has a nationally recognized innovative course of study leading to certification in home economics teaching. Nutrition majors interested in dietetics can take a well-planned curriculum that fulfills the professional requirements of the American Dietetics Association.

Other areas of concentration are preprofessional, providing a basis for further education and training in such fields as biology and biochemistry, business and public administration, childhood education, clinical nutrition, clinical psychology, communication, community education, economics, environmental design and analysis, human development, law, medicine, psychopathology, public health, public policy, social work, sociology and social psychology, and textile chemistry.

The pragmatic student will find in human ecology a wide set of options and a broad education that the highly professional schools cannot provide. The student with clear career goals in business, education, public service, and research will find opportunities for purposeful study. Students who are less certain about their career path but who know they are interested in a liberal education that has a clear focus on human service will find human ecology an appropriate college choice.

As a college dedicated to training for problem solving in both the public and private sectors, the College of Human Ecology feels a special obligation to consider the outcomes of its educational programs in terms of career opportunities for its students. About half of its graduates go directly from graduation into the work force. About a fourth go on to higher education. Fewer than 13 percent have not resolved their next career step by the fall after they graduates. A sampling of positions taken by graduates in the last five years tells a more characteristic story.

In the world of business and industry, graduates have held such jobs as consumer education specialist, financial analyst, public relations assistant, textile chemist, and pension administrator. In the field of education they have taken positions such as education research director, college counselor, cooperative extension agent, and college student life director. In government they have been hired to do service as therapeutic dietitian, youth division counselor, hospital drug researcher, public health counselor, and state personnel analyst.

Inquiries about the undergraduate programs may be addressed to the Director of Admissions, College of Human Ecology, Cornell University, Martha Van Rensselaer Hall, Ithaca, New York 14853.

Graduate study in the college, offered through all departments, leads to either the master's or the Ph.D. degree. Detailed information is available in the *Announcement of the Graduate School*, obtained by writing to the Associate Dean for Graduate Education and Research, College of Human Ecology, Cornell University, Martha Van Rensselaer Hall, Ithaca, New York 14853.

### New York State School of Industrial and Labor Relations

The School of Industrial and Labor Relations offers professional study for both undergraduate and graduate students. The curriculum is designed to prepare men and women for careers in personnel and union-management relations with business and industry, labor organizations, and state and federal government agencies. It also offers preparation for graduate study in law, education, business, psychology, sociology, economics, history, political science, international affairs, and other fields concerned with contemporary social, economic, urban, and political problems.

To develop an understanding of modern industrial society, the curriculum provides a broad base in the social sciences and a core of course work in industrial and labor relations, complemented by general electives in the humanities. The freshman and sophomore years consist mainly of required courses offered by the School of Industrial and Labor Relations and the College of Arts and Sciences. Upperclass students are free to pursue elective studies, about evenly divided between courses offered by this school and by other divisions of the University.



Undergraduates who work to prepare for graduate work in one of the basic social sciences may use out-of-school electives to establish an informal minor in business, communications, economics, government, history, psychology, or sociology. Advanced industrial and labor relations electives are chosen from the offerings of the following departments in the school:

collective bargaining, labor law, and labor history

economics and social statistics international and comparative labor relations

labor economics organizational behavior personnel and human resource management

Internships of varying lengths are available through the school during the academic year and in the summer, enabling students to confirm their interests in collective bargaining, legislative and policy formation, arbitration, education and training, union administration, personnel management, or research.

In recent years slightly more than half of the school's graduating class interviewed on campus for entry-level positions as labor relations specialists, personnel management trainees, and industrial relations assistants. Graduating students have located positions as union organizers, trainers, and researchers through networks of people familiar with the school and its graduates.

Undergraduate study leads to the Bachelor of Science degree, and graduate study leads to either the Master of Science or the Doctor of Philosophy degree.

Further information is contained in *Graduate Study at ILR*, obtained by writing to Cornell University Announcements, Research Park, Ithaca, New York 14850; or to the Director of Admissions, Office of Resident Instruction, School of Industrial and Labor Relations, Cornell University, 101 Ives Hall, Ithaca, New York 14853.

### **Divisions**

# Division of Biological Sciences

The Division of Biological Sciences provides a unified curriculum for undergraduate majors enrolled in either the College of Agriculture and Life Sciences or the College of Arts and Sciences. Courses in biological sciences are also an integral part of many disciplines today and a basic requirement for areas of study in many schools and colleges of Cornell.

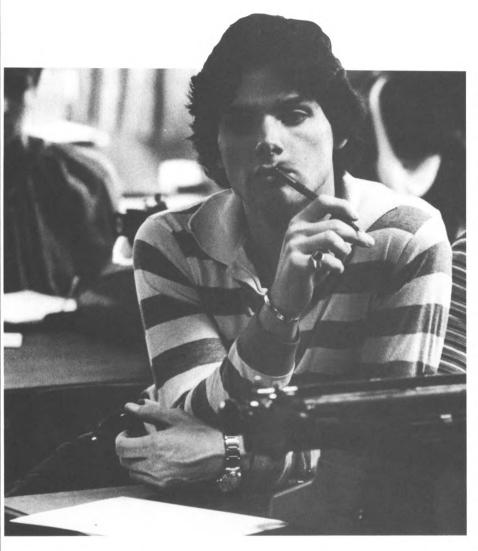
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The biological sciences program stresses the importance of a firm foundation in the basic sciences and prepares the student for a career in one of the many areas and applications of modern biology. Freshmen and sophomores in the process of completing the prerequisites may be admitted to the major on a provisional basis. Final admission to the major requires satisfactory performance in completing a year of introductory biology for majors, a year of general chemistry, a year of college mathematics (including at least a semester of calculus), and at least a semester of organic chemistry. In addition, a 2.75 Cornell cumulative grade point average is required except for those students admitted directly to the major as freshmen or as transfers. A student is not encouraged to undertake a major in biological sciences unless performance in the above four subjects gives evidence of capacity to do superior work at a more advanced level.

Students accepted into the biological sciences major may choose one of the following concentration areas: animal physiology and anatomy; biochemistry; botany; cell biology; ecology, systematics, and evolution; genetics and development; neurobiology and behavior; or an independent concentration designed by the student and approved by the Division of Biological Sciences Curriculum Committee. Students may choose instead to complete the Program in General Biology designed for those who do not want to concentrate in one particular area of biology.

A brochure describing the biological sciences specialization in more detail is available from the admission offices of the College of Agriculture and Life Sciences and the College of Arts and Sciences.

Graduate study in the biological sciences is administered by more than a dozen specialized fields within the Graduate School. More-detailed information



about graduate study is contained in the *Announcement of the Graduate School*, obtained by writing to Cornell University Announcements, Research Park, Ithaca, New York 14850.

### Division of Nutritional Sciences

Cornell's Division of Nutritional Sciences brings together specialists from the biological and social sciences in an attempt to understand the complex relationship of food, diet, and health. The division, which bridges the College of Human Ecology and the College of Agriculture and Life Sciences, coordinates undergraduate teaching, cooperative extension services, and research programs covering many aspects of human nutrition.

Most undergraduate students who major in nutrition are admitted through the College of Human Ecology and must meet the admission and general graduation requirements of that college. Undergraduates in the College of Agriculture

and Life Sciences may also major in nutrition through the general studies program.

Basic courses in the biological and physical sciences, social sciences, communications, and the humanities, as well as professional courses in nutritional science, are taken by all majors. This common core provides the foundation for five major emphases: community nutrition, clinical nutrition, nutritional biochemistry, foods, and consumer food and nutrition. It is possible to specialize in dietetics in any of these emphases.

Graduate study is administered by the graduate Field of Nutrition. In the M.S. and Ph.D. degree programs students may major in human nutrition, animal nutrition, international nutrition, nutritional biochemistry, food, or general nutrition. A professional Master of Nutritional Sciences (M.N.S.) degree in clinical nutrition combines academic study on campus with hospital training. The research interests of the faculty in the Field of Nutrition are broad, ranging from the intensive study of a single nutrient to the consideration of global food problems.

### Division of Summer Session, Extramural Courses, and Related Programs

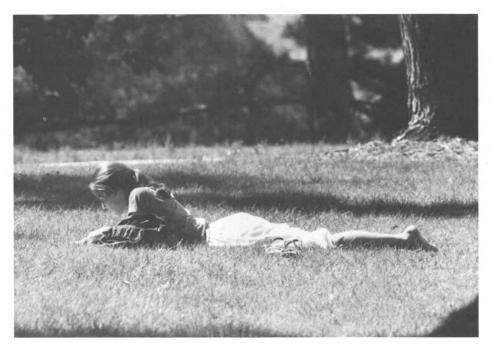
The Division of Summer Session, Extramural Courses, and Related Programs provides a wide variety of educational opportunities beyond the degree-granting programs of the University. These programs encompass virtually all age groups and are conducted during the summer, the fall and spring semesters, and the January intersession.

Summer Session. Summer Session provides some unique and unusually attractive opportunities for study and recreation for students ranging in age from high school senior to the senior citizen. With Ithaca weather at its best, summer study makes available the extensive academic and recreational facilities of the University and the Finger Lakes region. Students may choose from a wide spectrum of courses scheduled during three-week, six-week, and eight-week sessions, as well as dozens of special programs of varied lengths. Admission is kept relatively open and simple. Classes meet daily, and because they are usually small, a close association between student and teacher is facilitated.

Extramural courses. The extensive course offerings of the University are available to area residents on a part-time basis. Those interested may apply for admission to practically any course in the University and will be admitted if they receive the instructor's written approval. During the January intersession period the division offers credit courses primarily for undergraduates but open to anyone. Among the courses offered in recent years have been study tours to England, the Soviet Union, and Costa Rica.

Continuing education. The Continuing Education Information Center provides free information, counseling, and referral to men and women who have been out of school for several years and want to resume their education. Anyone who wants to take courses, begin an undergraduate or graduate degree program, or complete an unfinished degree is welcome to use the services of the center.

The center provides information on all schools and departments of the University; opportunities for part-time and full-time study; special courses, workshops, and seminars; and community resources available to older students. A small library includes information on continuing educa-



tion research, adult learning and development, educational opportunities at local institutions of higher learning, financial aid, work-study programs, and admission procedures.

The center also provides individual and group counseling; sponsors an organization for older students, Older, Wiser Learners (OWLS); and conducts workshops of special interest to mature students.

Cornell's Adult University. CAU (Cornell's Adult University) offers one-week noncredit academic courses on campus during the summer and off-campus weekend seminars during the fall and spring. Though originally conceived as a program for alumni, that concept has long since been abandoned in favor of a concept of adult education. CAU is committed to the concept that learning never ends and that one of the roles of a great university is to provide a bridge between traditional, formal education and informal noncredit studies.

**Conference Office.** During the summer and, to a lesser extent, during the academic year Cornell's classrooms, libraries, recreational facilities, and residence halls are available for use by conference groups. Few conference locales offer such extensive facilities in an atmosphere so pleasant and so conducive to learning.

# Business and Preprofessional Study

### Undergraduate Business Study

Undergraduate preparation for business is found in many schools and colleges at Cornell. Students most frequently take courses in more than one area, as well as in related fields, to construct a program to suit their interests and career objectives. Each of the following areas provides a different focus for application and use of business study and training, and students should consider carefully the implications of each program when making a choice. (Graduate study is available in the Graduate School of Business and Public Administration as well as in graduate fields following each of the undergraduate options.) The areas most often pursued include applied economics and business management (College of Agriculture and Life Sciences), economics (College of Arts and Sciences), engineering, hotel administration, consumer economics and housing (College of Human Ecology), and industrial and labor relations.

Applied economics and business management. Economics, marketing, finance, public affairs management, food industry management, resource management, and distribution processes are examples

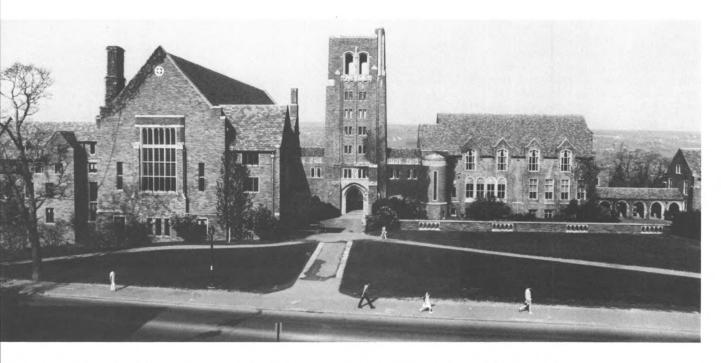
of specific areas available. There is more emphasis on the application of these areas than on the theoretical aspects of economic theory and money, currency, and banking. (These subjects would be more easily pursued in the Department of Economics.) Instruction is appropriate for both agricultural and nonagricultural use.

**Economics.** This program provides a broad view of that social science concerned with the description and analysis of the production, distribution, and consumption of goods and services, the understanding of monetary systems, and the comprehension of economic theories and models. It is viewed more often as preprofessional than as training for immediate practice in business or economics.

**Engineering.** This area provides much of the management personnel of modern industry. Engineers frequently climb the ladders of technological management. which lead to more general management responsibilities; more than half of the management-level personnel of major corporations such as General Electric, Xerox, IBM, and Du Pont have engineering degrees. In addition to becoming managers by being effective technical supervisors, many students enter engineering explicitly anticipating graduate business education, judging that an engineering background is particularly appropriate for management in a technology-oriented society.

Study in operations research and industrial engineering is particularly appropriate for those anticipating a business management career. The curriculum focuses on the design of integrated, costeffective systems of people, materials, and equipment for manufacturing industries, public and private service organizations, and consulting firms.

Hotel administration. This undergraduate program provides managers for the hospitality industry. Capability for management of motels, hotels, condominiums, restaurants, clubs, hospitals, and land and facility development is developed through instruction in personnel and general administration, financial management, food and beverage service, and communications. Students interested in the School of Hotel Administration must have developed an explicit awareness of and commitment to this area through work experience, reading, study, and discussions with industry representatives.



#### Consumer economics and housing.

The focus is on the economic behavior and welfare of consumers in the private, public, and mixed sectors of the economy. There is an option for special concentration on housing. Study aims at an understanding of economics, sociology, and government policy as they apply to consumer problems.

Industrial and labor relations. The world of work, especially the employee-employer relationship in the broadest sense, including the political, social, and economic forces affecting that relationship, are studied. Graduates can pursue mmediate employment in industry, government, and labor organizations or choose graduate study in industrial and abor relations or such related fields as law and business and public administration.

#### Related Areas

Courses in areas directly related to these pusiness programs are found in many of the University departments. For example, quantitative methods may be studied in the Departments of Mathematics and Computer Science, and courses in public administration are found in the Departments of Government and City and Regional Planning. There are additional programs that allow students with an interest in business to focus on a particular geographic area. Examples are the Latin American Studies Program, the South Asia Program, and the Africana

Studies and Research Center. Such interdisciplinary programs as the Program on Science, Technology, and Society and the various programs in international agriculture provide additional opportunities for study of interest to business students.

#### **Combined Degree Programs**

Because Cornell has the Graduate School of Business and Public Administration, special opportunities exist here for highly qualified undergraduates to combine their undergraduate programs with graduate study in that school. Students in the double-registrant program generally receive a bachelor's degree after four years of study and a Master of Business Administration, Master of Public Administration, or Master of Professional Studies (Hospital and Health Services Administration) degree after the fifth year of study, rather than the normal sixth year. Students in all Cornell undergraduate colleges and schools are eligible to explore this option. There is also a program with the College of Engineering that allows qualified students to earn a B.S., M.B.A., and Master of Engineering in six years. Admission to these combined degree programs is limited to particularly promising applicants. Careful planning is required for successful integration of the work in the two areas.

## Prelaw Study

Law schools do not prescribe any particular prelaw program; nor do they require any specific undergraduate courses, as do medical schools. Law touches nearly every phase of human activity, and there is practically no subject that can be considered to be of no value to the lawyer and no undergraduate course of study that can be judged as totally inappropriate. Prelaw students should, however, be guided by certain principles when selecting college courses.

- 1. Interest encourages scholarship, and students will derive the greatest benefit from those studies that stimulate their interest.
- 2. Of first importance to the lawyer is the ability to express thoughts clearly and cogently, in both speech and writing. Courses in the Freshman Seminar Program, required of nearly all Cornell freshmen, are designed to develop these skills. English literature and composition and communication arts courses also serve this purpose. Logic and mathematics develop exactness of thought. Also of value are economics, history, government, and sociology, because of their close relation to law and their influence on its development; ethics, because of its kinship to guiding legal principles; and philosophy, because of the influence of philosophic reasoning on legal reasoning and jurisprudence. Psychology leads to an understanding of human nature and

mental behavior. Some knowledge of the principles of accounting and of the sciences, such as chemistry, physics, biology, and engineering, is recommended and will prove of practical value to the lawyer in general practice in the modern world.

- 3. Cultural subjects, though they may have no direct bearing on law or a legal career, will expand students' interests, help cultivate a wider appreciation of literature, art, and music, and make better educated and well-rounded persons.
- 4. Certain subjects are especially useful in specialized legal careers. For some a broad scientific background-for example, in agriculture, chemistry, physics, or engineering—when coupled with training in law, may furnish qualifications necessary for specialized work with the government, for counseling certain types of businesses, or for a career as a patent lawyer. A business background may be helpful for those planning to specialize in corporate or tax practice. Students who anticipate practice involving labor law and legislation might consider undergraduate study in the School of Industrial and Labor Relations. Whatever course of study is chosen, the important tasks are to acquire perspective, social awareness, and a critical cast of mind; to develop the ability to think logically and analytically; and to express thoughts clearly and forcefully. These are the crucial tools for a sound legal education and successful

The presence of the Cornell Law School on campus provides the opportunity for a limited number of highly qualified undergraduates registered in the College of Arts and Sciences at the University to be admitted to the Law School. At the time of entry they must have completed 105 of the 120 credits required for the Bachelor of Arts degree, including 92 credits of course work in the College of Arts and Sciences.

# Premedical Study

Medical and dental schools, while not requiring any particular major course of study, do require that a certain selection of undergraduate courses be completed. These courses usually include general chemistry and organic chemistry, biology, physics, and a year of English composition (or a Freshman Seminar). In addition,



those premedical students who elect a nonscience major are advised to take at least one advanced biological science course, such as genetics, embryology, histology, or physiology.

There is no major program that is the best for those considering medical or dental school, and students are therefore encouraged to-pursue their own intellectual interests. Students are more likely to succeed at and benefit from subjects that interest and stimulate them, and there is no evidence that medical colleges give special consideration to any particular undergraduate training beyond completion of the required courses. In the past at Cornell most successful applicants to medical and dental schools have been enrolled primarily in the Colleges of Arts and Sciences and Agriculture and Life Sciences, with some also in the Colleges of Engineering and Human Ecology. The appropriate choice depends to a great extent on the student's other interests.

Qualified students in the Colleges of Agriculture and Life Sciences, Arts and Sciences, and Human Ecology may apply for acceptance into a dual registration program arranged between Cornell University and the Cornell University Medical College in New York City. This program allows registered students to save one year in pursuit of the bachelor's and M.D. degrees. Further information about these programs is available from the Health Careers Program at the Career Center, Cornell University, 14 East Avenue, Ithaca. New York 14853.

# Preveterinary Study

There is no specific preveterinary program at Cornell, and students interested in veterinary medicine as a career should select an area for study that fits their interests while at the same time meeting the entrance requirements for veterinary college listed below. Most preveterinary students enroll in the College of Agriculture and Life Sciences. However, because of the statutory nature of that college, out-of-state applicants will find it extremely difficult to gain acceptance into its biological sciences or animal sciences program. These and other students, because of their secondary interests or desire for a broader undergraduate curriculum, often enter other divisions of the University, especially the College of Arts and Sciences.

The college-level prerequisite courses for admission to the New York State College of Veterinary Medicine at Cornell are English, biology, physics, general chemistry, organic chemistry, biochemistry, and microbiology. All science courses must include a laboratory. The college also requires demonstrated proficiency in written and spoken English and encourages college-level work in mathematics. These requirements, necessary for admission to Cornell's College of Veterinary Medicine, may vary slightly at other veterinary colleges.

For information on additional preparation, including work experience and necessary examinations, students should consult the *Announcement of the New York State College of Veterinary Medicine*, obtained by writing to Cornell University Announcements, Research Park, Ithaca, New York 14850 New York 14850.

### Officer Education

As a land-grant institution chartered under the Morrill Act of 1862, Cornell has offered instruction in officer education for more than a hundred years. Instruction is provided by the Department of Military Science (Army ROTC programs), the Department of Naval Science (Naval ROTC programs), and the Department of Aerospace Studies (Air Force ROTC programs).

Men and women have the opportunity, through these programs, to earn a commission while completing requirements for an academic degree. ROTC qualifies the student for service as an officer in the Army, Navy, Marine Corps, or Air Force and provides valuable managerial training for civilian or military careers. To obtain a commission in one of the armed services, a student must meet certain physical standards and complete the required course of study in a four-, three-, or two-year program. Upon graduation the student is commissioned and can expect to serve a required tour of active miltary service. Active-duty requirements vary significantly between services and programs. Certain qualified students may delay active duty to pursue graduate studies.

Participation in ROTC is voluntary. It is advisable, but not mandatory, for interested students to enroll in the fall of the freshman year since openings in the three- and two-year programs may be limited.

The two-year program is available to undergraduates who have two academic vears remaining at Cornell and also to graduate students planning to spend two years at Cornell as of the date of their enrollment. Students may be eligible for scholarships consisting of tuition, books, and a monthly subsistence allowance. Interested students should communicate with the appropriate ROTC department and apply for the two-year program no later than March 1 of the academic year preceding their desired enrollment date.





Further information is given in the Announcement of Officer Education, obtained by writing to Cornell University Announcements, Research Park, Ithaca, New York 14850. Details about the specific programs, including scholarships and active-duty requirements, may be obtained by writing to the commanding officer of the department concerned, Cornell University, Barton Hall, Ithaca, New York 14853

# Interdisciplinary **Programs and Centers** of Study

### Africana Studies and Research Center

Since its beginning in 1969, the Africana Studies and Research Center has grown steadily. It now has a faculty of twelve and offers twenty-four courses each semester.

The curricula for the undergraduate major and the graduate programs are specifically developed and taught by the faculty of the center. The course offerings are multidisciplinary and comparative. and they present a variety of subjects. Undergraduate students may major in Afro-American or African studies or a combination of both. All majors are reguired to take a prescribed number of core courses and a variety of electives in the focal areas of history, literature, the social sciences, and Swahili language and literature.

All courses offered by the center are approved for credit as electives in the College of Arts and Sciences. Therefore a student not majoring in the program may take center courses as electives to fulfill college distribution requirements

The center encourages joint majors within the College of Arts and Sciences and with the Department of Human Service Studies in the College of Human



Ecology in the areas of social work and adult and community education. The center's undergraduate faculty representative and the executive assistant to the director will assist students in the design and coordination of such a cooperative program.

For those students who display highquality academic performance, there is the choice of an honors program that allows the student an opportunity to conduct independent library research or to engage in a field project.

Graduate students engage in studies leading to a Master of Professional Studies (African, Afro-American), with either an African or Afro-American specialty, or they may follow a more general program if they want to combine the two areas. Students in other graduate fields at the University may minor in Afro-American studies or African studies.

The center brings visiting lecturers to the campus, sponsors a lecture series as a forum for persons within the University, and has arranged study tours to Africa and the Caribbean.

Requests for additional information should be addressed to the Office of the Director, Africana Studies and Research Center, Cornell University, 310 Triphammer Road, Ithaca, New York 14850.

### Center for International Studies

The major role of the Center for International Studies is to support and coordinate Cornell's teaching and research programs in international and comparative studies. The center functions through a structured network of faculty committees organized on a multidisciplinary basis and clustered in area studies programs, professional programs, and problem-solving programs.

The areas covered in the area studies programs are China and Japan, Latin America, South Asia, Southeast Asia, and the Soviet Union. Professional programs investigate international agriculture, international education, international law, and international and comparative labor relations. Problem-solving programs, which examine substantive policy issues cutting across area and professional concerns, are in the areas of international population, international nutrition, international political economy, international studies in planning, participation and labormanaged systems, peace studies, rural development, and advanced, industrialized Western societies. The center also sponsors the Field of International Development, a program of graduate studies leading to a professional master's

Študents interested in international or comparative studies will find that the flexibility of Cornell's undergraduate and graduate requirements permits considerable latitude in selecting subjects. Appropriate courses of study may be chosen from the regular offerings of the schools and colleges of the University. Further information about the center and its associated programs may be obtained from the Center for International Studies, Cornell University, 170 Uris Hall, Ithaca, New York 14853.

### Program on Science, Technology, and Society

The Program on Science, Technology, and Society (STS) is an interdisciplinary unit that promotes teaching and research on the interactions of science and technology with political and social institutions. The program draws its students, faculty, and research staff from departments in all colleges of the University. Topics of special concern include science. technology, and public policy; biology and society; technology assessment; citizen participation in technical decision making; arms control and national defense policies; energy policy; environmental policy and ethics; and biomedical ethics. These and other subjects are studied through courses, graduate and faculty seminars, workshops, and research projects.

In cooperation with University academic departments and centers, STS participates in the development of interdisciplinary courses at both the graduate and the undergraduate levels. Courses developed by the program are designed to both synthesize and contrast the perspectives of several academic disciplines in the analysis of relationships among science, technology, and the needs, values, and institutions of modern societies. The program participates in the undergraduate biology and society major in the College of Arts and Sciences and offers a science policy "stream" within the graduate minor Field of Public Policy. A new peace studies minor is available.

Further information may be obtained by contacting the Program on Science, Technology, and Society, Cornell University, 632 Clark Hall, Ithaca, New York 14853.

## Women's Studies Program

The Women's Studies Program, in the College of Arts and Sciences, has three goals: to encourage the development of teaching about women and sex roles for women and men; to examine assumptions about women in various disciplines

and develop, systematize, and integrate into these disciplines new knowledge about women; and to cooperate in public service activities with the extension division of the University. Each term the program offers undergraduate and graduate courses, both independently and in cooperation with other departments. Students in the College of Arts and Sciences who want to major in women's studies can design their own major through the College Scholar or Independent Major Program.

Any graduate student in the University may elect a women's studies minor. The program usually sponsors a biweekly noncredit seminar for students and faculty to facilitate sharing of knowledge

across disciplinary lines.

The program is guided by a board composed of faculty and students at Cornell and members of the Cornell and Ithaca communities who have an intellectual interest in women's studies. During the academic year the program sponsors frequent public events dealing with social, political, and intellectual issues in women's studies.

# Graduate Units

Graduate study at Cornell is pursued through the Graduate School, which administers the many graduate fields of study, and through the various graduate professional schools and colleges.

The following schools and colleges require a baccalaureate degree for admission, except in a few special cases:

	proximate Enrollment
Graduate School of Business and Public Administration	500
Graduate School	3,470
Law School	500
Medical College	440
Graduate School of Medical Sciences	120
New York State College of Veterinary Medicine	320

The Medical College and the Graduate School of Medical Sciences are located in New York City.



### Graduate School

The graduate program at Cornell permits an unusual degree of accommodation to the needs and interests of the individual student. Degree requirements are kept to a minimum. There are no specific credithour requirements for the advanced degrees of Master of Arts, Master of Science, and Doctor of Philosophy but only general requirements that best accomplish the aim of graduate study: a period of study in residence, mastery of the major subject, adequate acquaintance with allied subjects, oral examinations to establish competency for presentation of a thesis, and a satisfactory thesis. Certain advanced professional degree programs have specific credithour requirements; these are announced by the faculty of the professional school or college offering the degrees.

A close working relationship with faculty is essential to the graduate program at Cornell. Under the Special Committee system the student is guided by and works with at least two or three faculty members, chosen by the student to represent his or her major and minor subjects. The major subject representative is the chairperson of the Special Committee and usually has the primary responsibility for directing the student's thesis research.

Students who want to use the University's facilities for intensive specialized training only and do not want to be degree candidates may apply for admission as non-degree candidates.

### Requirements for Admission

To be admitted to the Graduate School an applicant should—

- hold a baccalaureate degree granted by a faculty or university of recognized standing or have completed studies equivalent to those required for a baccalaureate degree at Cornell;
- have adequate preparation for graduate study in the chosen field of instruction;
- 3. have fluent command of the English language;
- 4. present evidence of promise in advanced study and research; and
- have a combined score of 1200 in the verbal and quantitative tests of the Graduate Record Examinations for those fields that require the GRE.

Students from United States colleges and universities should be in the top third of their graduating class.

International students whose native language is not English must submit a score of at least 550 on the Test of English as a Foreign Language before admission can be finally approved. Exceptions may be made for those who have degrees from, or who have studied for at least two years in, universities located in countries where English is the primary language.

Applications for admission to the Graduate School may be submitted at any time during the year. Many fields, however, require that applicants for fall admission submit their completed applications by January 15.

Applicants who are also applying for fellowship consideration *must* submit their completed applications and supporting credentials by January 15.

#### **Further Information**

Inquiries about admission and fellowships should be addressed to the Dean of the Graduate School, Cornell University, Sage Graduate Center, Ithaca, New York 14853.

Inquiries about facilities for advanced study and research in a given field, special requirements for such study and research, and opportunities for teaching and research assistantships should be addressed to the graduate faculty representative in the particular field.

Information on admission requirements and courses of study for professional degrees may be obtained from the several schools and colleges that administer them.

Programs leading to the degrees of Doctor of Law (J.D.), Doctor of Medicine (M.D.), Doctor of Veterinary Medicine (D.V.M.), Master of Business Administration (M.B.A.), Master of Public Administration (M.P.A.), and Master of Professional Studies (Hospital and Health Services Administration) [M.P.S.(H.H.S.A.)] are not administered by the Graduate School. Information on those programs can be obtained from the Law School, the Medical College (New York City), the College of Veterinary Medicine, and the Graduate School of Business and Public Administration.

For further information see the Announcement of the Graduate School, obtained by writing to Cornell University Announcements, Research Park, Ithaca, New York 14850.

# Graduate School of Business and Public Administration

The Graduate School of Business and Public Administration prepares men and women for managerial careers in private business, public service, and health care. The school offers course work in many disciplines to provide potential business, public, and health managers with an understanding of the complexities of the external environment in which they will operate and of the internal workings of the organizations they will join.

A bachelor's degree or its equivalent is required for admission to the two-year program leading to the Master of Business Administration (M.B.A), Master of Public Administration (M.P.A.), or Master of Professional Studies (Hospital and Health Services Administration)

[M.P.S.(H.H.S.A.)] degree. The master's degree program is designed for students who have not studied business at the undergraduate level. Slightly less than half the students begin their graduate training immediately after receiving their bachelor's degrees, and the remainder, after work or military experience.

There are combined degree programs for highly qualified students in the undergraduate divisions that allow them to register in the school during their senior year, earning a master's degree in less than the usual time.

The Doctor of Philosophy program, administered through the Graduate School, provides an advanced and comprehensive education in administration, primarily for those who seek careers in teaching and research.



More-detailed information about these programs is available in the *Announcement of the Graduate School of Business and Public Administration*, obtained by writing Cornell University Announcements, Research Park, Ithaca, New York 14850. Application forms and the Announcement may also be obtained by writing to the Associate Dean of Admissions and Student Affairs, Graduate School of Business and Public Administration, Cornell University, Malott Hall, Ithaca, New York 14853.

#### Law School

The primary function of the Law School is to prepare for both public and private practice attorneys who are equipped to render skillful professional service and who are thoroughly conscious of the important role played by the law as a means of social control. The curriculum is designed to prepare students for admission to the bar in all American states and territories.

Ordinarily a student who is admitted to the Law School must have a baccalaureate degree from an approved college or university. The course of study leading to the degree of Doctor of Law (J.D.) covers three academic years. A limited number of students are admitted to a program of study leading to the degree of Doctor of Law with specialization in international affairs.

There are combined graduate degree programs with the Graduate School of Business and Public Administration, the Department of City and Regional Planning of the College of Architecture, Art, and Planning, the College of Arts and Sciences, and the School of Industrial and Labor Relations, as well as a special opportunity for highly qualified undergraduates in the College of Arts and Sciences to register in the Law School during their senior year.

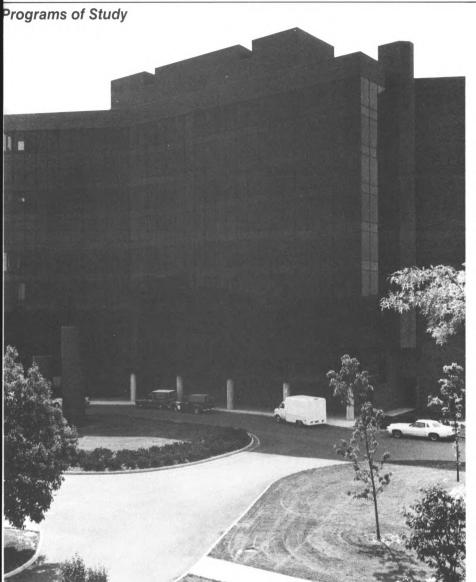
The graduate program of the Cornell Law School is a small one, to which only a few students are admitted each year. The LL.M. degree (Master of Laws, or Legum Magister) and the J.S.D. degree (Doctor of the Science of Law, or Jurisprudentiae Scientiae Doctor) are conferred. A small number of law graduates may also be admitted as special students, to pursue advanced legal studies without being degree candidates.

Requests for further information should be addressed to the Director of Admissions, Cornell Law School, Myron Taylor Hall, Ithaca, New York 14853.

## Medical College

Cornell University Medical College is located at the center of a large complex of medical institutions involved in teaching, research, and treatment on the east side of Manhattan in New York City.

The Medical College offers a four-year course of professional instruction leading



to the degree of Doctor of Medicine and qualifying graduates for licensing examinations in all states and territories of the United States. Applicants for admission to the Medical College must have completed at least three years of undergraduate study at approved universities, colleges, or scientific schools.

The first two years of the medical curriculum are devoted primarily to study of the basic sciences of anatomy, microbiology, pathology, physiology, biochemistry, public health, and pharmacology, but a number of hours are reserved for the clinical sciences (approximately 10 percent of total time) and electives (20 percent of total time). In addition, several interdisciplinary and interdepartmental conferences are offered. The last two years concentrate on training in the clinical sciences of internal medicine, neurology, surgery, pediatrics, psychiatry, and obstetrics and gynecology. The fourth-year program consists of electives selected by the student.

The Cornell University Medical College is a component of the New York

Hospital—Cornell Medical Center. In its teaching programs the Medical College is affiliated with and uses the clinical facilities of The New York Hospital, the Memorial Sloan-Kettering Cancer Center, the Hospital for Special Surgery, and the North Shore University Hospital.

Requests for information should be addressed to the Chairman, Committee on Admissions, Cornell University Medical College, 445 East Sixty-ninth Street, New York, New York 10021.

# Graduate School of Medical Sciences

The Graduate School of Medical Sciences offers programs leading to the degree of Doctor of Philosophy in biochemistry, biological structure and cell biology, biology, biomathematics, biophysics, genetics, microbiology, neurobiology and behavior, pathology, pharmacology, and physiology. The school also offers programs leading to the Master of Science degree in some of

these fields. The faculty of the school is drawn from the basic science departments of Cornell University Medical College and from the units of its Sloan-Kettering Division. The research facilities of the Medical College and of the Sloan-Kettering Institute for Cancer Research are utilized in the graduate programs of the school. Requests for information should be addressed to the Graduate School of Medical Sciences, Cornell University Medical College, 1300 York Avenue. New York, New York 10021.

### New York State College of Veterinary Medicine

The College of Veterinary Medicine offers a professional program that requires four years of full-time academic and clinical study of the normal and abnormal structure and function of the animal body and the diagnosis, treatment, and prevention of animal disease.

Graduates of the college receive the Doctor of Veterinary Medicine (D.V.M.) degree, recognized by licensing boards throughout the world. Graduates generally enter private practice or become engaged in one of the increasing number of other biomedical activities.

Admission requires a minimum of three years of college work, including specific prerequisite courses and experience. In exceptional cases outstanding students who have completed all of the prerequisites in two years of undergraduate education may be considered for admission. Applications must be filed approximately a year before the proposed matriculation date. The competition for admission is keen since there are many more qualified applicants than can be admitted.

Postdoctoral training in pathology and clinical specialties is available to Doctors of Veterinary Medicine.

Graduate programs in veterinary and basic biological research that lead to the degrees of Master of Science, Doctor of Philosophy, and Doctor of Science in Veterinary Medicine are offered for Doctors of Veterinary Medicine and highly qualified holders of baccalaureate degrees.

More-detailed information is contained in the *Announcement of the College of Veterinary Medicine*, obtained by writing to Cornell University Announcements, Research Park, Ithaca, New York 14850.



s a fine university, Cornell provides a variety of excellent academic and recreational facilities. A partial list of the academic facilities includes one of the ten largest academic library systems in the country, with more than four million volumes, excellent scientific laboratories and equipment, and a spectacular art museum. There are three student unions equipped for many kinds of social, cultural, recreational, and educational activities. Opportunity for extensive intercollegiate and intramural athletic participation is provided for men and women in the vast athletic facilities, including an indoor rink for ice hockey and skating, two competition-sized indoor pools, a championship golf course, intramural and varsity playing fields, squash courts, crew tanks, gymnasiums, and a riding hall for polo. These facilities for athletics, plus the many concerts, plays, lectures, movies, and other cultural events, provide a wealth of activities for all students on campus.

# University Libraries

The Cornell University library system ranks among the largest major academic libraries in the United States. The extensive system of college, school, and department libraries contains well over four million volumes and more than a million and a half microforms and currently subscribes to fifty-two thousand periodicals. Together these libraries provide the facilities for research and study in hundreds of undergraduate major subject areas and in more than eighty-five fields of study for advanced degrees.

At the south end of the Arts Quad is Uris Library, the building with the tower that has become the symbol of Cornell. It is essentially an undergraduate library for students in the liberal arts. A principal aim of this library is to bring readers and books as close together as possible. Bookstacks are open to all, and only reserve books in heavy demand are held in a special category. There are listening rooms where students, singly or in groups, may hear recordings of the spoken word, and there is a lecture room with sound and projection capabilities.



Across the walk from Uris is the John M. Olin Library, devoted more specifically to graduate and faculty research, especially in the liberal arts. This closed-stack library houses many special collections of books and manuscripts, among them Rare Books, a collection on East and Southeast Asia, and a collection on the history of science and the archives of the University, maps, and newspapers.

The two libraries, Uris and Olin, complement each other in support of the University's program of teaching and scholarship. Besides this central facility, there is an extensive system of college, school, and department libraries. Chief among these are the Albert R. Mann Library, serving the Colleges of Agriculture and Life Sciences and Human Ecology; the Fine Arts Library, serving the College of Architecture, Art, and Planning; the libraries of the College of Engineering and the New York State College of Veterinary Medicine; and the libraries serving the Graduate School of Business and Public Administration, the Law School, the School of Hotel Administration, and the New York State School of Industrial and Labor Relations.

All the libraries are open long hours, some of them until midnight. Most have copying services, and some distribute handbooks and bibliographies without charge.

# Social and Cultural Activities

It is difficult to characterize the climate of extracurricular life at Cornell. As with many other things at the University, an appealing aspect is the diversity. For those at Cornell with interests in particular fields, there are more than four hundred organized groups that include students, faculty, and staff in their membership. Among them are clubs for persons with similar academic interests or similar hobbies, local chapters of professional organizations, associations of students from other nations, and a number of national honorary societies that recognize achievement in scholarship and other fields of endeavor. If an interest group does not now exist, like-minded persons may readily establish one.

#### Music

Students who want to participate in music making will find a wide range of opportunity through the Sage Chapel Choir, the Cornell Chorus, the University Glee Club, the University orchestras and bands, chamber music ensembles, the Opera Workshop, the Collegium Musicum, and the Indonesian Gamelan.

The University Faculty Committee on Music sponsors programs by visiting soloists and major orchestras in the Bailey Hall Concert Series, string quartets and other groups in the Statler Series at Alice Statler Auditorium, and occasional operas, ballets, and special events. Several times each month the Department of Music sponsors free concerts and lectures by visiting artists or by Cornell faculty and students, primarily in Barnes Hall Auditorium.

The Cornell Concert Commission offers a series of student-produced popular rock, folk, soul, and jazz concerts. Other student organizations have regular performances of Gilbert and Sullivan operettas, jazz, and folk music. Local bluegrass and folk performers are featured in informal concerts in the Commons, a coffeehouse in Anabel Taylor Hall.

#### Theater

Cornell students have numerous opportunities to attend or participate in theatrical productions.

Under the sponsorship and general supervision of the Department of Theatre Arts, Theatre Cornell presents a full season of classical, modern, and experimental dramas. These productions include

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guest professionals, graduate actors, designers, and directors from the department's professional training program as well as undergraduate majors. All students in the University who are interested in participating in theater in any capacity are eligible to audition for these productions. Auditions are held twice a year. The department also has, in its studio theater, a more informal production program, directed, acted, designed, and managed entirely by students. Staffing and casting for these events take place throughout the year.

Other theatrical opportunities can be found at Risley Residential College, which has a small theater available for student productions; with the Cornell Savoyards, who produce two Gilbert and Sullivan operettas annually; and within the Ithaca community, which has several theater groups that mount various productions

during the year.

### Dance

The dance division of the Department of Theatre Arts sponsors a range of possibilities for students interested in dance. Informal and formal dance programs are presented through the year by student dancers and choreographers. In the spring a dance concert presents works by guest, faculty, and student choreographers. The division also sponsors a series of performances by touring professional dance companies during the year. The Ithaca community includes several studios that present workshops and performances in a wide range of dance forms.

### Art Exhibitions

Cornell is generously supplied with art exhibitions, some permanent and some temporary. The displays range from the works of students and visiting collections to the permanent University collection housed at the Herbert F. Johnson Museum of Art. Other campus locations for art displays include the Art Room in the Straight, the Fine Arts Gallery in Sibley Hall, and the galleries in Goldwin Smith Hall, Martha Van Rensselaer Hall, and Franklin Hall.

#### Lectures

On the more academic side of audience entertainment, there is the lecture. Dozens of extracurricular lectures are given



every week, ranging from scholarly presentations on subjects of narrow interest to well-known speakers with campuswide appeal.

#### Films ·

Throughout the year and on almost every night of the week, single film showings and film series make available educational and entertaining films at reduced rates. In addition, there are a half-dozen commercial theaters in Ithaca itself, making movie going among the most popular leisure-time activities.

Students interested in producing their own films may participate in the filmmaking program sponsored by the Department of Theatre Arts.

#### **Publications**

Cornell students edit and publish a wide variety of publications, including a yearbook, literary magazines, such as *Praxis Magazine* and *Rainy Day*, and a number of magazines relating to special fields of interest, such as the *Cornell Engineer*, the *Cornell Countryman*, and the *Cornell Law Review*. Cornell students are in complete charge of the publication of the *Cornell Daily Sun*, an independent daily newspaper.

# **Athletics**

At Cornell athletics are designed to encourage the participation of every able and interested student in either varsity sports or the extensive intramural program. Cornell supports one of the largest intercollegiate athletics programs for men and women in the country and belongs to the lvy League. There is intercollegiate competition for men in baseball, basketball, crew, 150-pound crew, cross-country, fencing, football, lightweight football, golf, gymnastics, hockey, lacrosse, polo, rifle, sailing, skiing, soccer, squash, swimming, tennis, track, and wrestling.

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Cornell fields seventeen intercollegiate women's teams, more than any other college or university in New York State. The women's athletics program, one of the largest in the nation, includes basketball, bowling, crew, cross-country, fencing, field hockey, gymnastics, ice hockey, lacrosse, polo, sailing, skiing, swimming, synchronized swimming, tennis, track,

and volleyball.

Needless to say, one can enjoy these intercollegiate athletics programs not only as a participant but also as a spectator.

Cornell's extensive intramural program gives students the chance to exercise

and enjoy whatever athletic skills and interests they may have. This program (also one of the largest of its kind in the country) has unusual variety that includes sailing, box lacrosse, broomstick polo, and horseshoes, in addition to the more usual sports, such as touch football and softball.

In all, Cornell offers 170 leagues—men, women, and combined—in twenty-one sports, covering all levels of play.
Last year some 26,000 contestants participated in the independent, dormitory, graduate, and women's intramural divisions.

# Campus Government

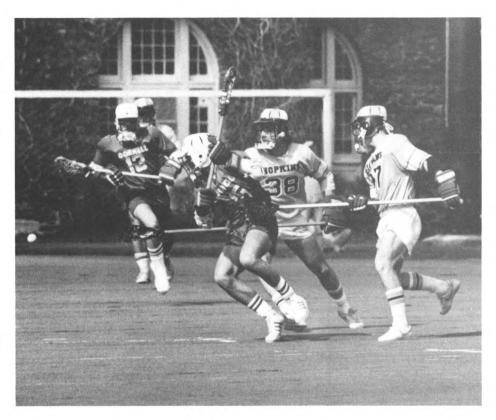
The system of campus government at Cornell consists of four deliberative bodies representing both the University population as a whole and its major subdivisions. The system recognizes both the diversity and the unity so basic to the life of an academic community.

The University Assembly focuses on matters concerning the entire campus in common, including such day-to-day essentials as transportation, campus store, and health services. Its delegates are drawn from the Student Assembly, the Employee Assembly, and the Faculty Council of Representatives. Each of these groups is a separate deliberative body that is not subservient to the University Assembly. The four assemblies together provide a variety of settings in which issues can be effectively discussed and policy considered by those people most directly affected.

The Student Assembly consists of twenty-three students elected by the student population, all of whom are voting members, and has legislative authority over the policies of the Departments of Dining, Residence Life, and Unions and Activities and the Office of the Dean of Students. It also has authority to review the budgets and actions of these departments.

The Employee Assembly is composed of thirteen voting members elected by and representing the exempt and nonexempt employees.

The Faculty Council of Representatives is the legislative assembly of the University Faculty, which exercises the faculty's responsibility to regulate academic matters (including the calendar) that affect more than one academic division of the University.



# Fraternities and Sororities

For many students fraternity or sorority life is an integral part of the Cornell experience. There are currently forty-eight fraternities at the University with about 2,500 students, or 36 percent of the male undergraduate students, as members. There are twelve sororities, with approximately 1,000 students, or 20 percent of the woman students, as members. Each chapter has its own flavor and environment

As one of the largest systems in the country, diversity is the key to its continuing growth. While satisfying room and board needs, fraternities and sororities provide, in addition to friendships, opportunities for leadership and personal growth. Most of the fraternity chapters are members of the Interfraternity Council, a student-run board that oversees the many programs associated with fraternities. The Cornell Panhellenic Council is the governing body for the sororitiy system.

# **University Unions**

There are three University unions at Cornell: Willard Straight Hall, the oldest, the largest, and the most centrally located; Noyes Center, located in the west campus residential area on Stewart Avenue; and the North Campus Union, in the residence hall complex between Pleasant Grove and North Triphammer roads.

These unions serve as gathering points and centers for social, cultural, recreational, and educational activities for all Cornell students. A partial list of available union facilities includes large rooms for dances, receptions, and other social gatherings; a theater; billiard and game rooms; craft shops that offer lessons in such skills as ceramics, weaving, metal craft, and printing; music listening rooms; meeting rooms and offices for student organizations; and photographic darkrooms. Among the many special services available to students are a central ticket office, a painting and record rental service, a duplicating service, and a travel office. All University unions offer a variety of dining services, ranging from a snack bar, cafeteria, and private dining room to a pub and tavern.

The Department of University Unions also sponsors Cornell Cinema, the cam-

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pus film program; the Cornell Concert Commission, which produces popular concerts; the University Unions Program Board, which presents lectures, concerts, touring theatrical productions, and experimental classes; Wilderness Reflections, which presents summer outdoor orientation programs for new students; and the Third World Student Programming Board, which sponsors events that highlight minority and ethnic cultures.

General responsibility for determining policies and operating procedures for all union facilities and programs is in the hands of students. Each union has both a student board and a program committee that sponsor a variety of social, cultural, recreational, and educational programs. The services and activities support the educational objectives of the University, while fulfilling the bequest of Willard Straight, whose objective was "the enrichment of the human contacts of student life."

# Religious Affairs

"Freedom for all; domination by none" is the guiding principle under which religious affairs have flourished at Cornell since 1869. Cornell United Religious Work (CURW) was established in 1929 to provide a vehicle for cooperative religious work on campus. Its thrust is threefold: denominational, interreligious, and non-denominational. Anabel Taylor Hall, given

by Myron C. Taylor in 1952, provides office and meeting facilities for the religious programs described below. In 1956 CURW was officially designated the Department of Religious Affairs.

A diverse staff of pastoral counselors and advisers, available day and night for consultation, may be reached through the information office, CURW, Cornell University, 118 Anabel Taylor Hall, Ithaca, New York 14853 (telephone: 607/256-4214). This office also has information concerning weekly religious convocations in Sage Chapel and worship opportunities in Anabel Taylor Hall and the local churches and synagogue. Anabel Taylor Hall is the headquarters for CIVITAS (Cornell-Ithaca-Volunteers-in-Training-and-Service), through which students provide many services to local and regional community agencies. Interreligious International Ministry (IRIM) offers courses and conferences that discuss world religions and ideologies in the context of world community. The Commons, a coffeehouse in the building, provides a place for informal communication among faculty, staff, and students.

Member groups currently participating in CURW are AME Zion, Baha'i, Catholic, Christian Science, Episcopal, Evangeli-

cal, Friends, Jewish, Latter-Day Saints. Lutheran, Muslim, Eastern Orthodox, Unitarian Universalist, United Ministry (Baptist, Disciples of Christ, Reformed, United Church of Christ, United Methodist, and United Presbyterian), and Wesley Foundation. Other religious organizations active on campus are listed at the Office of the Coordinator of Student Organizations in Willard Straight Hall. The denominational programs offer daily or weekly opportunities for worship, study, pastoral care, retreats, recreation, and special projects and programs. As members of CURW, they share in support and leadership of interreligious programs and activities. Among these are the Sage Chapel Convocations, CIVITAS, IRIM, noncredit courses, lectures, conferences. and involvement in varied services to the University community.

The groups that engage in social service and social action programs do so as denominations, or in coalition, or through the Center for Religion, Ethics, and Social Policy (CRESP), closely associated with CURW but independent of it. CRESP is the primary research and action component of religious affairs at Cornell. It advocates a fundamental connection between spiritual vision and social practice





and addresses concerns related to human needs and potential. The scope of its work is revealed by some of its programs and projects, all of which are open to everyone in the University and the wider community: Eco-Justice Project, the Learning Web, the Anne Carry Durland Memorial Alternatives Library, the Draft Counseling and Information Service, the Committee on U.S.—Latin America Relations, the Prison Research Education Action Project, the Cornell Corporate Responsibility Project, Alternative Agricultural Seminars, the Public Interest Research Group.

CURW and CRESP jointly sponsor the campus conferences on religion, which bring exceptional leaders to focus on vital matters of contemporary spiritual and societal life, and noncredit courses that offer a varied selection of classes and workshops on religious understanding and personal transformation.

The united work of CURW and CRESP is open to all persons, with or without religious affiliation.

# Motor Vehicles

The University is concerned about the effects of motor vehicles on the campus environment and the limited parking facilities. The use of alternative forms of transportation, including public transit, ride sharing, bicycling, and walking, is encouraged for all members of the community.

Any student is permitted to operate a motor vehicle at Cornell. All vehicles owned or operated by members of the community must be registered with the Traffic Bureau. This regulation also applies to motorcycles and mopeds. Bicycles must be registered with the Department of Public Safety.

Vehicle access to central campus is restricted. Parking space for commuters and residents is very limited.

Questions about parking and transportation services should be addressed to the Traffic Bureau, Cornell University, 124 Maple Avenue, Ithaca, New York 14850 (607/256–4600).

# Housing

Living arrangements at Cornell are flexible, and students are permitted to live on or off campus. Some students prefer to live on campus, just a few minutes away from classes, the libraries, an evening concert, a lecture, or a film. Others prefer to rent apartments and rooms in the Ithaca community or to live in sororities or fraternities adjacent to the campus.

Residence halls. The University provides numerous residence halls accommodating approximately 5,500 single undergraduate and graduate students. These residence halls offer substantial variety in size, style, and type of living arrangement. The various kinds of accommoda-

tions available include single rooms, double rooms, triple rooms, suites, and a few apartments. Some halls are reserved for women or men, while others are coeducational.

In addition to the larger halls, there are small units that provide an opportunity for cooperative living arrangements for upperclass students, and there are also special residences reserved for students sharing a particular interest, such as ecology or the performing arts.

The University's residence halls are more fully described in the booklet *Living on Campus: Housing for Single Students*, available from the Department of Residence Life, Housing Assignment Office, Cornell University, 1142 North Balch Hall, Ithaca, New York 14853.

Family housing. Unfurnished apartments for 422 students and their families are available in three apartment complexes: Cornell Quarters, Pleasant Grove Apartments, and Hasbrouck Apartments. Requests for further information should be directed to the Family Housing Office, Hasbrouck 40, Pleasant Grove Road, Ithaca, New York 14850.

Off-campus housing. Information on available off-campus housing is posted at the beginning of the fall term in the International Lounge in Willard Straight Hall. Because changes of available accommodations occur daily, it is not practical to prepare lists for distribution by mail. If possible, a student should make at least one trip to Ithaca to look over the available rooms, apartments, and houses before taking up residence.

A brochure describing off-campus housing in the Ithaca area may be obtained by writing to the Office of the Dean of Students, Cornell University, 103 Barnes Hall, Ithaca, New York 14853.

# **Dining Services**

Cornell University maintains dining services in ten locations—Willard Straight Hall, North Campus Union, Noyes Center, Balch Hall, Sage Hall, Hughes Hall, Noyes Lodge Pancake House, Risley Hall, the Statler Student Cafeteria, and the Dairy Bar. These facilities are open to all students on a cash or credit basis, whether or not they live in University residence halls or subscribe to a specific dining plan. The University has no formal dining requirements, allowing students the flexibility of eating when and where they choose.

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The Department of Dining Services also operates a grocery store on campus, the Pick-Up, in Noyes Lodge Pancake House. Major vending machine areas in Martha Van Rensselaer and Warren halls and the veterinary college offer hot and cold food and drinks along with radar ovens for convenience in heating food.

For those students who want to subscribe to a dining plan, the following options are offered:

Co-op Dining Program. This program is one of the most convenient and flexible programs in the country. Dining's pioneering use of computers allows students to choose from a wide range of prepaid options to best suit their needs. Students can eat at any of six co-op dining centers at any given meal; a "late night" feature built into the program allows a student who misses dinner due to studies or extracurricular activities to eat at a designated unit up until 10:00 p.m. Students do not need to be campus residents to participate in this plan. Additional information may be obtained from Cornell Dining, 233 Day Hall, Ithaca, New York 14853.

**Cornellcard.** A credit card for those who do not want to pay cash for each meal or be on the Co-op Dining Plan is honored by Cornell Dining. The Cornellcard program is administered by the Office of the Bursar. Information is available from the Office of the Bursar, Cornell University, 260 Day Hall, Ithaca, New York 14853.

# Student Services

### Office of the Dean of Students

The University, through the Office of the Dean of Students, maintains a staff of advisers available to graduate and undergraduate students. The staff helps students with the routine problems that arise in the normal course of campus life and also more-personal problems. It is the general University office concerned with student life at Cornell. Referrals may be made to other professionally trained members of the University staff who are best qualified to assist with particular problems.

Staff members of the office help fraternities, sororities, and peer counseling groups with programs and policy. The office also coordinates programs for orienting new students to campus life and sponsors sex and drug education pro-



grams and special programs for married students.

In addition, the coordinator for offcampus students has information about available rooms and apartments in the Ithaca area. The coordinator is also prepared to provide programs and activities relevant to the unique needs and interests of off-campus student residents.

Staff members of the schools and colleges of the University also give special attention to the orientation of their students. They provide counselors and advisers to assist their students in all matters connected with courses of study and academic pursuits.

#### International Student Office

Nearly 1,300 foreign students are enrolled at Cornell, over 300 of them as undergraduates. The International Student Office works with nearly thirty national and cultural clubs, oversees the Host Family Program, and services the needs of Cornell's international student population. Questions regarding immigration regulations, arrival services, orientation, adjustment to Cornell, and health insurance are problems the office deals with daily. For further information, contact the International Student Office, 200 Barnes Hall, 607/256–5243.

### Services for the Handicapped

A brochure describing services for the handicapped student may be obtained by writing to the Office of Equal Opportunity, Cornell University, 217 Day Hall, Ithaca, New York 14853. Questions or requests for special assistance may also be directed to that office.

### University Ombudsman

The University Ombudsman's Office assists all members of the Cornell community seeking solutions to a wide range of problems. The main purpose of the office is the just and equitable resolution of conflicts in the University. The office can provide information on University policies and practices, help examine alternatives. find proper authorities to resolve the situation, or otherwise seek a resolution to the problem. All communications are confidential. As an unbiased "third party," the office can frequently find solutions that have eluded the interested parties. The office is located in 201 Barnes Hall (telephone 607/256-4321).

### Career Services

Ezra Cornell's intention to "found an institution where any person can find instruction in any study" finds expression in the career services provided by the University. Any student who wants to explore employment or educational opportunities in almost any field will find someone on the faculty or an adviser to help. Students who want to pursue specialized professional goals in agriculture and life sciences, engineering, labor relations, or hotel administration will find a placement office in their school or college. In addition, the Career Center in Sage Hall serves the entire campus.

#### **Career Center**

While emphasizing the process of choosing a career after graduation as well as providing employment services, the Career Center also provides information, instruction, and advice on a wide range of related areas, including summer job opportunities, internships, graduate and professional schools, graduate fellowships and scholarships, summer study programs, student travel, minority opportunities, overseas study, volunteer activities, job-hunting techniques, preprofessional advising, and instructional videotapes.



The center's facilities, program, and activities include the following:

Library services. The library contains an extensive collection of information and video tapes. Students are welcome to come in and browse through our resources. Sections include information on careers, graduate and professional schools, fellowships, employers, health careers, study-abroad programs, government, overseas and summer employment, job hunting techniques, and internship opportunities. Throughout the academic year there are sessions that explain how to use the library to find a summer job, fund graduate study, pursue government employment, or plan an academic semester abroad

"The Career Center News." This section appears weekly in the *Cornell Daily Sun*, informing the campus of job interviews, application deadlines, and career programs.

**Programs.** There are speakers, panel discussions, and other events on such subjects as job hunting, graduate school admissions, fellowships and scholarships, and study and job opportunities abroad.

Employment interviews and job place-

ment. During October and November and again in February and March the Career Center, along with the schools and colleges, provides up to thirty interviewing rooms a day for the hundreds of employers who come to the campus each year to talk with Cornell students. The diversity of the University and the quality of the students bring most of the major employers of college graduates to the campus.

**Placement bulletins.** In addition to bulletins listing jobs, every two weeks the center publishes and distributes to three thousand employers a bulletin listing the qualifications of students and alumni seeking employment.

**Graduate school recruiting.** Cornell students are extensively recruited by graduate and professional schools. The Career Center arranges interviews with admission directors from various graduate institutions, including the major law and graduate business schools.

**Advising and instruction.** Instruction is provided on job-hunting techniques and

career planning through programs that include résumé critiques and a self-assessment workshop. The staff also advises students on individual problems related to graduate school admissions and fellowships.

#### **Health Careers Program**

Guidance and advice for premedical, predental, preveterinary, and other students interested in health careers is offered by the Health Careers Program, which also provides a credentials service through the Health Careers Evaluation Committee. Students are encouraged to come in whenever they have determined their interest in a health profession.

#### Career Planning and Placement Network

The Career Center is an integral part of a career planning and placement network at Cornell. The schools and colleges that have placement offices include the Colleges of Agriculture and Life Sciences; Architecture, Art, and Planning; Arts and Sciences; Engineering; and Human Ecology and the School of Hotel Administration, the School of Industrial and Labor Relations, and the Graduate School of Business and Public Administration.

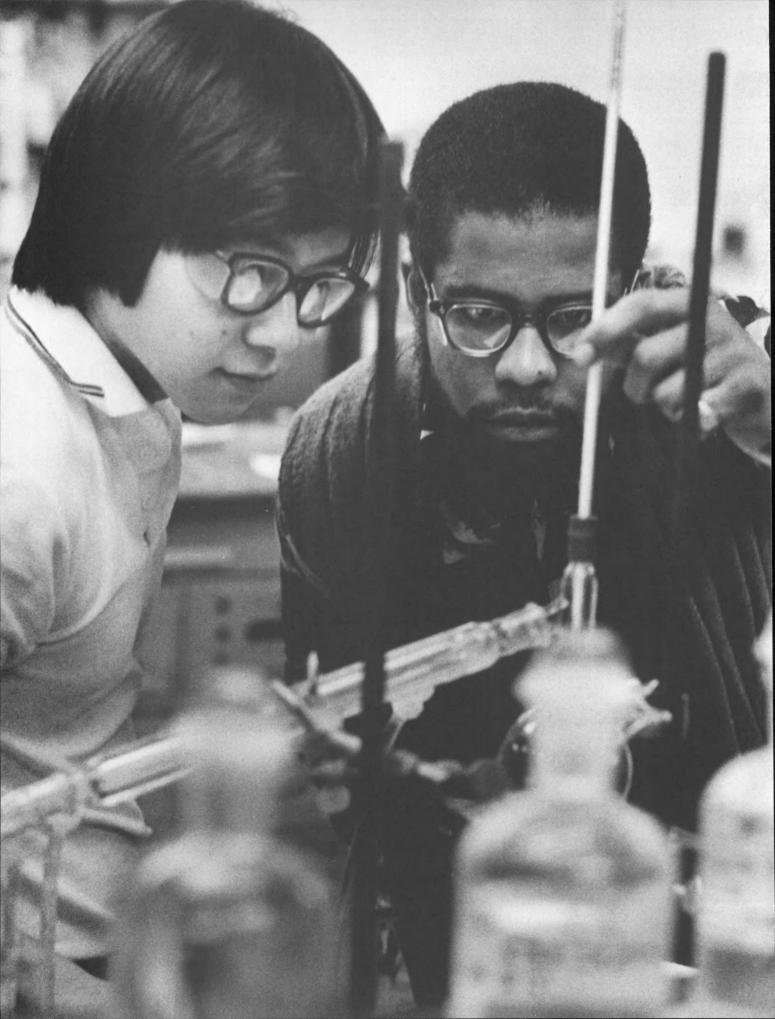
# Educational and Vocational Guidance

Educational and vocational counseling begin in the separate colleges and schools. Each undergraduate is assigned a faculty adviser who will help in the selection of courses that will give the best preparation in a chosen field.

Students who want assistance in the diagnosis of academic problems, selection of a curriculum, or determination of vocational goals may be referred to the University Guidance and Testing Center for an intensive program of testing and counseling.

### Reading and Study Skills Program

The Reading and Study Skills Program offers all students the opportunity to acquire and improve the reading and study skills essential for academic success. Each semester numerous sections of six-week courses and three-week workshops in reading and study skills and instruction in the techniques of speed reading are offered.



### College of Agriculture and Life Sciences

#### **Nondepartmental Courses**

Basic Review Mathematics Introduction to Farm Techniques Introductory College Mathematics America and World Community Agriculture, Society, and the Environment Environmental Biology

#### **Agricultural Economics**

Economics of Agricultural Geography Introduction to Business Management Accounting Marketing Introduction to Energy Resources Farm Business Management Introductory Statistics **Business Law** 

Taxation in Business and Personal Decision Making

Managerial Accounting and Economics Financial Management
Economics of the Public Sector Economics of Marketing
Marketing Management
Pricing Milk and Dairy Products Marketing Horticultural Products Resource Economics Farm and Food Policies

Agricultural Prices

Independent Honors Research in Social Science Advanced Farm Business Management Farm Finance

Farm and Rural Real Estate Appraisal Advanced Agricultural Finance Seminar Farm Management Seminar Introduction to Linear Programming

Advanced Business Law

Business Policy Personal Financial Management Management of Cooperative Action Agricultural Trade Policy Food Industry Management

Food Merchandising Field Study of Marketing Institutions

Evaluating Resource Investment and Environmental Quality Agricultural Land Policy

Economics of Agricultural Development Undergraduate Research Marketing Research Production Economics

Economic Analysis of Public Policy Economic Aspects of Energy Use Special Problems in Land Economics Food, Population, and Employment

Microeconomic Issues in Agricultural Development Seminar on Latin American Agricultural Policy

Seminar in Agricultural Development Special Topics in Agricultural Economics Advanced Production Economics Econometrics

Quantitative Methods Econometric Models
Research Methods in Agricultural Economics
Seminar on Agricultural Trade Policy Seminar on Methods of Trade and Commodity

Policy Analysis Agricultural Markets and Prices Agricultural Markets and Public Policy Export Marketing Seminar on Agricultural Policy

Readings in Philosophy

#### Agricultural Engineering

Mechanical Drawing Farm Metal Work Elements of House Design Farm Carpentry Introduction to Agricultural Engineering and Computing Engineering Drawing Undergraduate Seminar Energy and Man Application of Physical Sciences

Plane Surveying Engineering Applications in Biological Systems Safety and Accident Prevention Introduction to Computer Uses in Data Analysis

Principles of Navigation Advanced Farm Metal Work

Farm Machinery Internal Combustion Engines for Agriculture Electricity on the Farm Soil and Water Conservation Introduction to Environmental Pollution Farmstead Production Systems Farm Buildings Design Introduction to Hydrology Career Development in Agricultural Engineering Power Transmission Systems Agricultural Machinery Design Agricultural Power

Processing and Handling Systems for Agricultural Materials
Engineering Design and Analysis of Food
Processing Equipment

Soil and Water Engineering Introduction to Environmental Systems

Analysis Agricultural Structures Design Environmental Control for Animals and Plants

Highway Engineering
Bituminous Materials and Pavement Design Special Problems in Agricultural Engineering Agricultural Engineering Design Project Similitude Methodology Instrumentation

Drainage Engineering Irrigation Engineering Treatment and Disposal of Agricultural Wastes Nonpoint Source Water Quality Models Use of Land for Waste Treatment and Disposal Biological Engineering Analysis

General Seminar Special Topics in Agricultural Engineering Orientation for Research Power and Machinery Seminar Soil and Water Engineering Seminar Agricultural Waste Management Seminar

Agricultural Structures and Related Topics Seminar Biological Engineering Seminar

#### Agronomy

#### Atmospheric Sciences

Basic Principles of Meteorology Basic Principles of Meteorology Laboratory Dynamic Climatology Agricultural Meteorology Meteorological Communications Theoretical Meteorology Physical Meteorology Synoptic Meteorology Isentropic Theory and Analysis Biometeorology Undergraduate Research in Meteorology Special Topics in Meteorology and Climatology Seminar in Meteorology Research in Meteorology

#### **Crop Science**

Grain Crops Forage Crops Production of Tropical Crops Weed Science Seed Science and Technology Undergraduate Research in Crop Science Physiology of Environmental Stresses Crop Simulation Modeling Grain Formation Ecology and Physiology Yield Special Topics in Crop Science Graduate Research in Crop Science Agronomy Seminar

Nature and Properties of Soils Identification, Appraisal, and Geography of Soils Field Identification of Soils Soil and Water Conservation Soil Fertility Management Aquatic Plant Management Geography and Appraisal of Soils of the Tropics Organic Soils Forest Soils Soil Microbiology Microbial Ecology Management Systems for Tropical Soils Special Topics in Soil Science Undergraduate Research in Soil Science
Use of Soil Information and Maps as Resource Chemical Methods of Soil Analysis

Morphology, Genesis, and Classification of Soils Advanced Soil Microbiology Soil Physics Water Status in Plants and Soils Soil Organic Matter Soil Chemistry and Mineralogy Soil Fertility Advanced Course Graduate Research in Soil Science Agronomy Seminar

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#### **Animal Sciences**

Introductory Animal Science Contemporary Perspectives on Animal Science Livestock Nutrition Nutrition of Companion Animals Animal Physiology Animal Reproduction and Development Introductory Animal Genetics Poultry Biology Dairy Cattle Dairy Cattle Selection and Type Evaluation Horses Meat and Meat Products Seminar on Genetics of the Horse Commercial Poultry Production
Dairy Cattle Production and Management
Advanced Dairy Cattle Selection Beef Cattle Swine Production Sheep Meat Animal and Carcass Evaluation Livestock Production in Warm Climates Seminar Dairy Production Undergraduate Seminar Forages of the Tropics for Livestock Production Principles of Animal Nutrition Poultry Nutrition Animal Cytogenetics Quantitative Animal Genetics Seminar in Animal Genetics Research Techniques in Quantitative Animal Genetics Fundamentals of Endocrinology Artificial Breeding of Farm Animals Application of Systems Analysis in Livestock Production Management Immunophysiology Physiology and Biochemistry of Lactation Comparative Physiology of Reproduction of Vertebrates Immunogenetics Commercial Meat Processing Special Topics in Animal Sciences Proteins and Amino Acids in Nutrition Forages, Fiber, and the Rumen Seminar in Poultry Biology Seminar Forage Analysis Field of Nutrition Seminar Seminar in Animal Breeding

# and Animal Breeding **Communication Arts**

Seminar in Reproductive Physiology

Special Topics in Animal Science Experimental Methods in Quantitative Genetics

Writing for Media
Theory of Human Communication Parliamentary Procedure Communicating Public Information Introduction to Mass Media Visual Communication Art of Publication Oral Communication Persuasion Small Group Communication Radio and Television Communication Advertising and Promotion Technical and Scientific Writing and Editing Basic Newswriting for Newspapers Scientific Writing for the Mass Media Radio Writing and Production Television Writing and Production Independent Honors Research in Social Science Communication Law Print Media Laboratory Broadcast Media Laboratory Photo Communication Communication Teaching Experience

Independent Research Intercultural Communication Seminar: Interpersonal Communication Scientific Writing for Scientists
Communication in Organizations Communication in the Developing Nations Studies in Communication Methods of Communication Research Seminar in Organizational Communication
Frontiers in Communication Advanced Communication Seminar Seminar: Communication Issues
Communication Teaching Laboratory
Advanced Communication Projects Directed Graduate Study

#### Education

Introduction to Psychology The Art of Teaching
Educational Psychology Learning to Learn Psychology of Adolescence Introduction to Teaching Agriculture Youth Organizations Theories of Teaching Reading Statistics Introduction to Educational Statistics Issues in Educational Policy Sociology of Education Independent Honors Research in Social Science Field Experience Our Physical Environment Environmental and Natural History Writing Field Natural History Teaching Elementary Science Educational Measurement Counseling Psychology
Special Problems in Agricultural Education
Teaching Agriculture: Methods, Materials, Practice
Adult Education Programs in Agriculture
Educating for Community Action Curriculum Design Implementing Instruction Philosophy of Education Contemporary Philosophy of Education Law and Educational Policy Economics of Education Independent Study Educational Psychology Standardized Tests: Use and Interpretation A Theory of Education
Group Processes in Education Affective Education Methods of Educational Inquiry Continuing Education Programs Structure of Knowledge and Curriculum Teaching Mathematics Curriculum Theory and Analysis
Evaluation for Program Management
Administration of Educational Organizations Ethical Issues in Educational Administration Governance of Public Education Educational Finance Systems Analysis in Educational Administration Personnel Development: Issues in Higher Education
History of American Education
Educational Policy Development and Decision Making Internship in Education Research Seminar Proseminar in Organization and Management of Sponsored Research Seminar in Science and Environmental Education

Seminar in Educational Psychology and

Behavioral Change in International Rural

Comparative Extension Education

Special Problems in Agricultural and Occupational Education

Teaching Agricultural and Occupational

Education
Curriculum in Agricultural and Occupational

Adult Education Programs: Organization and

Adult Learning and Development
Conceptual Problems in Educational Inquiry
Designing Extension and Continuing Education

Seminar in Counseling Psychology

Curriculum

Programs

Education

Direction

Modernization
Community Education

Courses

Teacher Preparation in Agriculture Occupational Education Program: Administration and Supervision Evaluating Programs in Occupational Education Seminar in Curriculum Theory and Research Studies in Educational Administration Seminar in Dewey's Philosophy of Education Economics of Rural Education Economics of Higher Education Seminar in Educational Psychology Seminar in Educational Research and Evaluation Seminar in Agricultural and Occupational Education
Seminar in the Sociology of Education
Seminar in Philosophy of Education

#### Entomology Insects and Man

Insect Biology Applied Entomology Introductory Beekeeping
Communication and Social Behavior of the Honey Bee Practical Beekeeping Insect Morphology Introductory Insect Taxonomy Special Topics in Economic Entomology Pesticides in the Environment Insect Pest Management
Pathology and Entomology of Trees and Shrubs Medical Entomology Insect Pathology Insect Ecology
Ecology and Systematics of Freshwater Invertebrates Insect Physiology
Special Topics for Undergraduates Undergraduate Research Techniques of Biological Literature Acarology Taxonomy of the Smaller Orders of Insects Taxonomy of the Immature Stages of Holometabola Taxonomy of the Coleoptera and Lepidoptera Taxonomy of the Diptera and Hymenoptera Araneology Pest Management Systems Insect Behavior Seminar
Seminar in Coevolution Between Insects and Plants Seminar in Aquatic Ecology Biological Control Seminar in Insect Physiology Insect Toxicology and Insecticidal Chemistry Special Topics for Graduate Students Teaching Entomology Jugatae Seminar

#### Floriculture and Ornamental Horticulture

Introductory Floriculture and Ornamental Horticulture Floral Design Woody Plant Materials Garden and Interior Plants Woody Plant Materials for Landscape Use Turfgrass Management Nursery Crop Production and Maintenance Advanced Turfgrass Management Flower-Store Management Taxonomy of Cultivated Plants Physiology of Horticultural Plants Principles of Florist Crop Production Greenhouse Production Management Special Topics on Ornamental Plants Special Problems in Floriculture and Ornamental Horticulture Current Topics in Floricultural and Ornamental Horticultural Physiology Drawing for Landscape Architects Freehand Drawing
Perspective for Landscape Architects Freehand Drawing and Illustration Watercolor Advanced Drawing Scientific Illustration

#### Landscape Architecture

Introduction to Landscape Design Design I and II: Basic Landscape Architectural Design

Design III and IV: Intermediate Landscape Architectural Design Design V and VI: Advanced Landscape

Architectural Design Graduate Landscape Architectural Design Studio

Principles of Landscape Architecture Plants and Design

Contemporary Issues in Landscape Architecture

History of Landscape Architecture Site Construction

Landscape Design for Nurserymen and Landscape Contractors Introduction to Parks and Recreation Issues in Parks and Recreation

Urban Landscape Planning and Design Regional Landscape Inventories and Information Systems: An International Perspective

Analysis and Use of Vegetation in Comprehensive Land Planning Summer Internship Seminar Graduate Seminar in Landscape Architecture Fieldwork and Workshop in Landscape Architecture

#### **Food Science**

Introductory Food Science

Topics in Food Science

Food Choices and Issues Food Analysis Food Science for Industry Postharvest Food Systems Physical Chemistry of Foods Nutritional Aspects of Raw and Processed Foods Introduction to Food Engineering Food Sanitation As Related to Public Health Milk and Frozen Desserts Milk Quality Food Microbiology Concepts of Product Development Product Development Laboratory International Food Science and Development Food Processing I-Drying, Freezing, Heat Preservation
Food Processing II—Concentrating, Separating, Mixing Food Processing III—Fermentations Processing Fats and Oils Food Chemistry Sensory and Objective Evaluations of Foods Food Mycology Function of Food Ingredients
Principles of Food Packaging Food Chemistry Laboratory Special Topics in Food Science Undergraduate Research in Food Science Food Protein Chemistry Food Lipids Food Carbohydrates Chemistry of Dairy Products
Application of Physical Chemistry to Foods Instrumental Methods Food Color and Food Pigments Rheology Introductory Chemical Toxicology Mathematical Evaluation of Processed Packaged Foods Secondary Plant Metabolites in Foods

#### International Agriculture

Seminar: International Agriculture

Rural Development

Agricultural Development in Southeast Asia Special Studies of Problems of Agriculture in the Tropics Administration of Agricultural and Rural Development Seminar on African Agriculture and Rural Development Special Topics in International Agricultural and Rural Development Seminar for Special Projects in Agricultural and Rural Development International Agricultural and Rural Development Project Paper

Perspectives in International Agriculture and

#### Microbiology

General Microbiology Tissue Culture Jechniques and Applications Advanced General Microbiology Applied and Industrial Microbiology Aguatic Microbiology Microbial Ecology Microbial Physiology Cytology of Prokaryotes Selected Topics in Microbial Metabolism **Bacterial Diversity** Microbiology Seminar

#### **Natural Resources**

Principles of Conservation Environmental Conservation Introductory Field Biology Introductory Wildlife Biology Introductory Fishery Biology Introductory Forestry Natural Resources Inventories Forest Ecology Woodland Management Maple Syrup Production Winter Energetics **Ecological Integration** Religion, Ethics, and the Environment Principles of Wildlife Management Techniques in Wildlife Science Selected Topics in Wildlife Resource Policy Dynamics of Animal Populations Fishery Resource Management Fishery Science Techniques in Fishery Science Managing the Aquatic Environment
Practicum in Natural Resources Analysis and Management Research in Fishery Science Research in Wildlife Science Research in Forestry Research in Resource Analysis and Planning Thesis Research and Professional Projects Waterfowl Biology Seminar on Selected Topics in Fishery Biology Seminar in Natural Resource Analysis for **Ecologically Based Planning** Habitat Ecology Seminar on Selected Topics in Resource Policy and Planning Ecology and Management of Disturbed Aquatic Systems Marine Resources Policies Perspectives on Conservation Policies and Management of Natural and Wild Lands

### **Plant Breeding and Biometry**

Seminar in Environmental Values

Conservation Seminar

Plant Genetics Methods of Plant Breeding Physiological Genetics of Crop Plants Biochemical Analyses for Plant Breeders Experimental Methods Special Topics in Plant Science Extension Special Problems in Research and Teaching Perspectives in Plant Breeding Strategies Quantitative Aspects of Plant Breeding Genetics and Breeding for Disease and Insect

Effects of Ecological Perturbations on Fishes

#### **Plant Pathology**

Introductory Plant Pathology Introductory Mycology Plant Disease Control Pathology and Entomology of Trees and Shrubs
Pest Management for Plant Protection Cytology of Plant Diseases Plant Disease Epidemiology Plant Virology Plant Nematology Plant Nernatology
Bacterial Plant Diseases
Pathogen and Disease Physiology
Mycology
Diseases of Vegetable Crops Diseases of Fruit Crops Dendropathology Diseases of Florist Crops Plant Diseases in Tropical Agricultural Development

Plant Pathology Seminar Plant Pathology Colloquium The Science of Plant Pathology Nature of Plant Disease Diagnosis of Plant Disease Plant Virology Plant Nematology Bacterial Plant Pathogens Disease Physiology Advanced Mycology Applied Plant Virology Advanced Plant Virology Advanced Plant Nematology Advanced Disease Physiology Taxonomy of Fungi

#### Pomology

Tree Fruits Essentials of Fruit Growing Economic Fruits of the World Fruit Tree Nursery Operation Orchard Management Small Fruits Viticulture Postharvest Physiology and Storage of Fruits and Vegetables Fruit Crop Systematics Utilization of Fruit Crops Fruit Variety Improvement Undergraduate Seminar Special Topics in Experimental Pomology Growth and Development of Woody Plants

#### **Rural Sociology**

Introduction to Sociology Introduction to Rural Sociology Rural Sociology and World Development Problems Social Indicators and Data Management Social History of American Agriculture Proseminar: Issues and Problems in Rural Social Organization and the Environment Rural Development and Cultural Change Rural Society in America Subsistence Agriculture in Transition Independent Honors Research in Social Science Intermediate Sociological Theory Science, Technology, and Social Change Community Development Small Towns Seminar Politics and Development Rural Development Policy Analysis Changing Health Perspectives Contemporary Sociological Theories of Development Research Design Environmental Sociology
Political Economy of Rural and Regional Development Macrosystems Theory and Policy Analysis Social Organization of Agriculture Structural Change in United States Agriculture State, Economy, and Society Factor Analysis and Multidimensional Scaling Macrosocial Accounting and Evaluation Regression and Path Analysis Social Movements in Agrarian Society Community Development and Local Control Applications of Sociology to Development Programs Sociotechnical Aspects of Irrigation Public Service Experience **Rural Sociology** 

#### Statistics and Biometry

Organization Behavior and Social Action Methods of Sociological Research

Development Sociology

Statistics and the World We Live in Theory of Probability Theory of Statistics Matrix Algebra Statistics Seminal Statistical Methods Applied Regression Analysis Sampling Biological Populations Nonparametric and Distribution-Free Statistica Methods Mathematical Ecology Special Problems in Statistics and Biometry

Advanced Biometry Experiment Design Treatment Design and Related Experiment Designs Linear Models Statistical Design Theory Statistical Consulting

## Vegetable Crops General Horticulture

Organic Gardening Vegetable Types and Identification Commercial Vegetable Crops
Postharvest Handling and Marketing of Vegetables Vegetable Crop Physiology Kinds and Varieties of Vegetables Plant-Plant Interactions Special Topics in Vegetable Crops Postharvest Physiology of Horticultural Crops Research Methods in Applied Plant Science

## College of Architecture, Art, and Planning

## Architecture

Thesis Introduction

Design I-X

#### Architectural Design

Special Program Elective Design Studio Elective Design Special Problems in Architectural Design Urban Housing Developments Transportation Low-Cost Housing Seminar in Urban and Regional Design Problems in Architectural Design Problems in Urban Design Thesis or Research in Architectural Design Thesis or Research in Urban Design

## Structures

Mathematical Techniques Structural Concepts Structural Systems Advanced Steel Building Design **Building Substructure** 

Introduction to Architecture

#### **Architectural Principles, Theories** and Methods

Architectural Elements and Principles Design Methods and Programming Special Problems in Principles, Theories, and Methods Computer Graphics Theory of Architecture Special Investigations in the Theory and History of Architecture Special Projects in Computer Graphics Computer-Aided Structural Design Computer-Aided Environmental Design

## **Architectural History**

Critical Theory in Architecture Principles of Design Process

History of Architecture History of Preindustrial Building Architecture of the Ancient Near East Architecture of the Classical World Introduction to the History of Urban Planning Islamic Architecture The Renaissance The Baroque American Architecture Modern European Architecture Historical Seminars in Architecture

Russian Architecture Nineteenth-Century Architecture Special Investigations in the History of Architecture History Workshop

Lectures in Architectural History Methods of Archival Research Measured Drawing Problems in Contemporary Preservation Practice

erspectives on Preservation Documentation for Preservation Planning Preservation Planning Workshop Problems in Modern Architecture

Seminar in Architecture of the Ancient Near

Seminar in Architecture of the Classical World Building Materials Conservation Seminar in the Renaissance

Seminar in the Baroque

Seminar in the History of American Architecture Seminar in the History of Modern Architecture Informal Study in the History of Architecture Seminar in the History of Architecture and Urban Development
Thesis in Architectural History

Dissertation in Architectural History

### **Design Communication**

Design Fundamentals Introductory Photography
Second-Year Photography
Large-Format Architectural Photography Graphic Design Studio Architectural Simulation Techniques Special Project in Photography Special Project in Design Communication

#### Architectural Science and Technology

Introduction to Social Sciences in Design Introduction to Environmental Science Building Technology, Materials and Methods Environmental Controls Environmental Technology Workshop Special Problems in Architectural Science Environmental Control Systems Architecture in its Cultural Context Architectural Science Laboratory Thesis or Research in Architectural Science

#### The Profession of Architecture

Professional Practice Washington, D.C., Field Program Architectural Drawing

#### Art

### Courses in Theory and Criticism

Color Form, and Space Introductory Art Seminar Seminar in Art Criticism

## Studio Courses in Painting

Introductory Painting Second-Year Painting Third-Year Painting Fourth-Year Painting Senior Thesis in Painting Graduate Painting

## Studio Courses in Graphic Arts

Introductory Intaglio Printing Introductory Silk-Screen Printing Introductory Lithography Second-Year Intaglio Printing Second-Year Silk-Screen Printing Second-Year Lithography Third-Year Printmaking Fourth-Year Printmaking Senior Thesis in Printmaking Graduate Printmaking

## Studio Courses in Sculpture

Introductory Sculpture Second-Year Sculpture Third-Year Sculpture Fourth-Year Sculpture Senior Thesis in Sculpture Graduate Sculpture

## Studio Courses in Photography

Introductory Photography Second-Year Photography Photo Processes Third-Year Photography Fourth-Year Photography Graduate Photography

## Studio Courses in Drawing

First-Year Drawing Second-Year Drawing Third-Year Drawing

## Special Studio Courses

Independent Studio in Painting Independent Studio in Sculpture Independent Studio in Printmaking Independent Studio in Photography

## City and Regional Planning

### **Urban and Regional Theory**

Studies Introduction to Urban and Regional Theory Spatial Analysis of Urban and Regional Urban Economics

Contemporary Issues in Urban and Regional

Fieldwork or Workshop in Urban and Regional Theory

Special Topics in Urban and Regional Theory Advanced Seminar in Urban and Regional Theory

#### **Planning Theory and Politics**

Planning and Political Economy Introduction to Planning Theory Introduction to Planning Urban Politics and Planning Neighborhood and Community Theory Politics of the Planning Process Planning and Organization Theory Fieldwork or Workshop in Planning Theory and Politics

Special Topics in Planning Theory and Politics Advanced Planning Theory

### Quantitative Methods and Systems Analysis

Introduction to Quantitative Methods Mathematical Concepts for Planning Introduction to Computers in Planning Planning Analysis Statistical Analysis for Planning Planning Information Systems Methods of Social Policy Planning Quantitative Techniques for Policy Analysis and Program Management Simulation in Planning and Policy Analysis Decision Analysis for Policy Planning and

Program Management Fieldwork or Workshop in Systems Planning and Analysis Special Topics in Quantitative Methods and

## **Regional Development Planning**

Regional Economic Development Introduction to Regional Development Regional Development Administration Methods of Regional Science Optimization Techniques in Planning Regional Industrial Development Fieldwork or Workshop in Regional Development Planning Special Topics in Regional Development Planning Location Theory Methods of Regional Analysis

## Social Policy Planning

Institutional Decision Processes The Impact and Control of Technological Changes Social and Political Studies of Science Introduction to Social Policy Planning The Politics of Technical Decisions Planning, Organizing, and Public Service Delivery Recurring Themes in Social Policy Planning

Critical Theory and the Foundation of Planning Analysis Seminar in Social Policy Research and

Analysis Critical Theory and Public Policy
Urban Financial Planning and Management

Urban Fiscal Analysis Informal Seminar in Planning Theory: Philosophy, Ethics, and Values in Planning Fieldwork or Workshop in Social Policy

## **Urban Development Planning**

Suburbanization and Metropolitan America Urban Land-Use Planning Introduction to Planning Design Planning Design Workshop
Built-Environment Education Workshop Small-Town Community Design Workshop Urban Land Policy and Programs The Urban Development Process Legal Aspects of Land-Use Planning

Critical Areas Protection Planning and Development Workshop Urban Land Policy and Programs-Special Problems Fieldwork or Workshop in Urban Development Planning

#### Special Interprogram Topics: History and Preservation

Introduction to the History of Urban Planning Methods of Archival Research The American Planning Tradition Documentation for Preservation Historic Preservation Planning Workshop: Surveys and Analyses Perspectives on Preservation Problems in Contemporary Preservation Building Materials Conservation Seminar in the History of American City Planning Historic Preservation Planning Workshop: Plans and Programs Seminar in American Urban History Historic Preservation Law Economics and Financing of Neighborhood Conservation and Preservation Public Policy and Preservation Planning Fieldwork or Workshop in History and Preservation

## Special Interprogram Topics: International

Seminar in Latin American Urban Planning and Development Workshop in Latin American Urban Planning and Development Regional Planning and Development in Developing Nations Seminar in International Planning Seminar in Science and Technology Policy in **Developing Nations** Seminar in Policy Planning in Developing Nations: Technology Transfer and Adaption Seminar in Project Planning in Developing **Nations** 

Theories of Development and Underdevelopment Fieldwork or Workshop in Planning for Developing Regions

## Special Interprogram Topics: Environmental Health, Housing, and Institutional Planning

Environmental Issues and Public Decisions Environmental Aesthetics Administrative Planning Introduction to Environmental Health Issues Environmental Epidemiology Environmental Law, Policy, and Management Environmental Management Workshop Environmental Law II: Natural Resources and Toxic Substances The Political Economy of Health Planning Planning and Evaluation of Environmental Health Programs and Projects Environmental Health Planning Health Systems Planning Fieldwork or Workshop in City and Regional Planning Professional Planning Colloquium Planning Internships Informal Studies in Environmental Health Planning Informal Studies in City and Regional Planning Planning Research Seminar

## **Landscape Architecture**

Basic Landscape Architectural Design Principles of Landscape Architecture Principles of Landscape Architecture Seminar Plants and Design Landscape Design Intermediate Landscape Architectural Design Site Construction Advanced Landscape Architectural Design Senior Thesis Project Introduction to Parks and Recreation Parks and Recreation Workshop Urban Environmental Planning Urban Environment Workshop

Graduate Landscape Architecture Design Studio Contemporary Issues in Landscape

Architecture History of Landscape Architecture
Urban Landscape Planning and Design Regional Landscape Inventories and Information Systems
Analysis and Use of Vegetation in

Comprehensive Land Planning Summer Internship Seminar Graduate Seminar in Landscape Architecture Fieldwork or Workshop in Landscape Architecture

## College of Arts and Sciences

#### Akkadian

Elementary Akkadian Readings in Akkadian Texts

## Anthropology

#### Introductory Courses

Nature and Culture Social Anthropology
The Comparison of Cultures
Humankind: The Biological Background **Ancient Societies** Encounters With Other Cultures The Anthropologist's America Apes and Languages Rites of Passage The Discovery of America Ethnographic Films The Discipline of Anthropology Social Relations Seminar Topics in Anthropology

### **Archaeological Courses**

The Earliest Civilizations Interpretation of the Archaeological Record Archaeology of the Americas Archaeological Research Methods Field Archaeology in South America Investigation of Andean Institutions: Archaeological Strategies Seminar in Archaeology: Central America

## **Biological and Ecological Anthropology**

Human Biology: Variation and Adaptations of Contemporary Populations Ecology and Human Biology Human Behavior: A Sociobiological Perspective

## Linguistic Anthropology

Language and Culture

Politics and Culture

Peasant Cultures

## Sociocultural Anthropology

Biology and Society I: The Biocultural Perspective Biology and Society II: Biology, Society, and Human Values
Psychological Anthropology
Urban Anthropology
Applied Anthropology Meaning Across Cultures
Anthropology of Women and Gender
Comparative Religious Systems
Kinship and Social Organization Images of Exotics Economic Anthropology Law and Culture

Ethnohistory Special Problems in the Anthropology of Women Myth, Ritual, and Sign Ethnography of Communication Anthropological Boundaries
Portraits, Profiles, and Life Histories
Constructions and Visualizations

### Theory and History of Anthropology

Ethnographic Description Contemporary Anthropological Theory History of Anthropology in the United States Structuralism Development of Anthropological Thought Ritual Structures and Cultural Pluralism

Ethnology of Native North America Ethnohistory of the Northern Iroquois The United States Ethnology of the Andean Region Ethnology of Island Southeast Asia Ethnology of Mainland Southeast Asia Ethnology of Oceania Ethnology of Africa Culture and Society in South Asia Traditional Chinese Society and Culture Modern Chinese Society Japanese Society Indians of Mexico and Central America Andean Thought and Culture
Mesoamerican Thought and Culture

Southeast Asia Seminar: Burma Southeast Asia Seminar: Philippines

Principles of Social Anthropological Theory

Special Problems in Anthropology

#### **Graduate Seminars**

History of Anthropological Thought Methods of Assessing Child Growth Anthropological Approaches to the Study of Buddhism in Asia Law in the Context of Culture Political Anthropology: Culture and Revolution in Indonesia Anthropometric Assessment Andean Symbolism Andean Research Southeast Asia: Readings in Special Problems Regional Systems and Local Communities Japanese Ethnology
Anthropological Boundaries
Constructions and Visualizations Problems in Archaeology: Agricultural Origins
Problems in Archaeology: Early Man in America The Discovery of America

### **Arabic**

Elementary Arabic
The Spoken Arabic of Egypt Intermediate Arabic Advanced Arabic

Origins of Mesoamerican Civilization

Topics in Ecological Anthropology

Topics in Biomedical Anthropology

## Aramaic

Aramaic

## Archaeology

Introduction to Archaeology Popular Archaeology
The Origins and Diversity of the Family in Antiquity Archaeoastrology

## Theory and Interdisciplinary Approaches

**Ancient Societies** The Earliest Civilizations History of Archaeology Dendrochronology of the Aegean Historical Archaeology: Method and Theory Geomorphology Interpretation of the Archaeological Record Archaeological Research Methods Ceramics Seminar in Archaeology Architectural Problems in Archaeological

Problems in Archaeology: Agricultural Origins

## **Old World Archaeology**

Freshman Seminar in Archaeology Mediterranean Archaeology Rise of Classical Greece Introduction to Classical Archaeology Minoan-Mycenaean Art and Archaeology Archaeology in Action The History of Ancient Israel Ancient Seafaring Introduction to Biblical Archaeology Archaeology of the Ancient Near East Archaeology of Ancient Europe Archaeology of Classical Greece Archaeology of Cyprus Arts of the Roman Empire Greek Vase Painting
Greek and Roman Coins
History and Archaeology of Ebla Archaeology of Ancient Egypt The Vikings Seminar in Aegean Archaeology Seminar in Classical Greek Archaeology

### New World Archaeology

Indian Lifeways of Ancient North America Archaeology of the Americas Mesoamerican Thought and Culture Seminar in Andean Symbolism Seminar in Andean Research Problems in Archaeology: Early Man in

#### Asian Studies

Three Ways of Thought: Confucianism, Taoism, Zen
Dimensions of Religious Experience in Asia Early Buddhism Mahayana Buddhism Japanese Religions Seminar on Asian Religions Asian Dance and Dance Drama Southeast Asian Literature in Translation Seminar in East Asian Literature

#### Astronomy

The Universe Beyond the Solar System Our Solar System Astronomy: Stars, Galaxies, and Cosmology Theories of the World: The Solar System, Planets, and Life Information and Knowledge in Science and Engineering Life in the Universe Elements of Astrophysics Introduction to Astrophysics and Space Sciences The Sun The Evolution of Planets Applications of General Relativity High Energy Astrophysics Galactic Structure and Stellar Dynamics Radio Astronomy Radio Astrophysics Signal Processing in Astronomy Theory of the Interstellar Medium
Theory of Stellar Structure and Evolution
Mechanics of the Solar System
Radiative Transfer and Planetary Atmospheres Celestial Mechanics
Seminar: Advanced Radio Astronomy
Seminar: Infrared Astronomy Advanced Study and Research Cosmic Electrodynamics Special Topics in Planetary Astronomy Seminar: Current Problems in Planetary Fluid Dynamics Seminar: Cosmic Rays and High-Energy Electromagnetic Radiation Seminar: Current Problems in Theoretical Astrophysics

## Burmese

Intensive Elementary Course: Listening, Speaking, Reading, Writing Intermediate Burmese Reading Course Composition and Conversation Advanced Burmese Reading Course

## Cambodian

Intensive Elementary Course: Listening, Speaking, Reading, Writing Intermediate Cambodian Reading Course Composition and Conversation Advanced Cambodian Structure of Cambodian

## Cebuano (Bisayan)

Introduction to Chemistry Man in His Chemical Environment

Intensive Basic Course: Listening, Speaking, Reading, Writing

#### Chemistry

Origins of Life General Chemistry General Chemistry and Inorganic Qualitative Analysis Introduction to Experimental Organic Chemistry Elementary Experimental Organic Chemistry Elementary Organic Chemistry Introductory Physical Chemistry Quantitative Chemistry **Experimental Chemistry** Introductory Organic Chemistry
Organic Chemistry Physical Chemistry Advanced Measurements Laboratory Techniques of Modern Synthetic Chemistry Introduction to Inorganic Research Introduction to Analytical Research Introduction to Organic Research Introduction to Research in Physical Chemistry General Chemistry Colloquium Advanced Inorganic Chemistry I: Symmetry and Structure Advanced Inorganic Chemistry II: Structure and Dynamics Advanced Inorganic Chemistry III: Structure and Properties
Chemical Communication Advanced Analytical Chemistry
Organic and Organometallic Chemistry Seminar Advanced Organic Chemistry
Synthetic Organic Chemistry
Chemical Aspects of Biological Processes Enzyme Catalysis and Regulation Chemistry of Nucleic Acids Thermodynamics
Physical Chemistry of Proteins Baker Lectures Introductory Graduate Seminar in Analytical, Inorganic, and Physical Chemistry Selected Topics in Advanced Inorganic Chemistry Physical Organic Chemistry Selected Topics in Organic Chemistry Chemistry of Natural Products Principles of Chemical Kinetics
Special Topics in Biophysical and Bioorganic
Chemistry

## Chinese

X-Ray Crystallography

Selected Topics in Physical Chemistry

Quantum Mechanics Statistical Mechanics

Revolutions and Social Values in Modern Chinese Literature
Three Ways of Thought: Confucianism,
Taoism, Zen Introduction to China Traditional Chinese Society and Culture Modern Chinese Society Chinese Government and Politics The Foreign Policy of China
Readings on the Great Cultural Revolution
Capitalism and Communism: Chinese and Japanese Patterns of Development The Thoughts of Mao Ze Dong China and the West before Imperialism Chinese Views of Themselves Early Warfare, East and West History of China up to Modern Times Undergraduate Seminar in Medieval Chinese History
Self and Society in Late Imperial and
Twentieth-Century China
Undergraduate Seminar: The First Chinese Revolution, 1880-1930 Chinese Historiography and Source Materials Problems in Modern Chinese History Seminar in Medieval Chinese History Art of China Chinese Painting and Ceramics

Chinese Art of the T'ang Dynasty

Studies in Chinese Painting Problems in Chinese Art

Chinese Philosophical Literature Chinese Poetry Twentieth-Century Chinese Literature Chinese Narrative Literature Chinese and Japanese Bibliography and Methodology

Chinese Philosophical Texts Classical Narrative Texts T'ang and Sung Poetry Readings in Literary Criticism Readings in Folk Literature Seminar in Chinese Fiction

Languages and Linguistics Elementary Course Cantonese Basic Course Intermediate Chinese Chinese Conversation Intermediate Cantonese Introduction to Classical Chinese Chinese Composition History of the Chinese Language Linguistic Structure of Chinese: Phonology and Morphology Linguistic Structure of Chinese: Syntax Chinese Dialects Readings in Modern Chinese Literature FALCON: Intensive Mandarin Course Classics Word Power: Greek and Latin Elements in the English Language Freshman Seminar in Greek Literature Freshman Seminar in Ancient Philosophy Freshman Seminar in Latin Literature Freshman Seminar in Classical Archaeology

Life Under the Caesars: The Satirist's View The Individual and Society in Classical Athens Greek Philosophy Hellenistic and Roman Philosophy The Genius of Christianity Greek and Roman Mystery Religions Greek and Roman Historians Cicero and His Age Greek and Roman Drama Roman Law Arts and Monuments of Athens Greeks and Their Eastern Neighbors Art and Archaeology of Archaic Greece Greek Foundations of Western Literature Pagans and Christians at Rome Ancient Philosophy of Science Women in Classical Greece and Rome Augustine The Church of the Fathers

## Comparative Literature

Language of Myth Patristic Seminar

Great Books Culture as Semiotic System Introduction to Psycopathological Texts Comedy Christianity and Judaism

Decline and Fall of the Roman Empire

Literature of the Old Testament Medieval Literature Medieval Literature: Dante in Translation Classic and Renaissance Drama European Drama, 1660 to 1900 Modern Drama The Literature of Europe in the Renaissance

The Literature of Europe Since 1800 Being, God, Mind: Humanistic Revolutions From Plato to Vico

Biology and Theology: Approaches to the Origin of Life, Evolution, Heritage and Freedom, Sexuality, and Death The European Novel The Russian Connection

Literature and Society History and Theory of Drama Introduction to Twentieth-Century Criticism

Hume and Rousseau Old Testament Seminar New Testament Seminar Readings in the New Testament

Allegory and Symbolism Renaissance Public Theater Hegel's Phenomenology in Context iction and the Irrational Verga, D'Annunzio, and Pirandello The Aesthetics of Coincidence

Critical Perspectives: Roland Barthes

Jean Paul and the Eighteenth-Century **Humorous Novel** Hermeneutics

## **Computer Science**

Introduction to Computer Programming The Computer Age Introduction to FORTRAN Programming Introduction to PASCAL Introduction to APL Programming Introduction to Interactive Computing with CMS Introduction to Statistical Packages Multistep Job Processing and JCL Computers and Programming Discrete Structures Social Issues in Computing Introduction to Computer Systems and Organization Numerical Methods Data Structures
Systems Programming and Operating Systems
Interactive Computer Graphics Introduction to Simulation and Database Systems Introduction to Database Systems Introduction to Theory of Computing Computer Science and Programming Advanced Programming Languages Translator Writing Concurrent Programming and Operating Systems Principles Machine Organization Picture Processing Numerical Analysis Short Course on Linear and Nonlinear Least Squares

Short Course on Spline Approximation Analysis of Database Systems Information Organization and Retrieval Theory of Algorithms and Computing Computer Science Graduate Seminar Theory of Programming Languages Theoretical Aspects of Compiler Seminar in Operating Systems Seminar in Programming Advanced Numerical Analysis Seminar in Numerical Analysis Selected Topics in Information Processing Seminar in File Processing Seminar in Information Organization and

Advanced Theory of Computing Seminar in Automata Theory Special Investigations in Computer Science

## Dutch

Intensive Elementary Course: Listening, Speaking, Reading, Writing Seminar in Dutch Linguistics

## **Economics**

Introductory Economics Economics of Market Failure The Impact and Control of Technological Change Economics and the Law Economics of Defense Spending Economic Analysis of Government Capitalism and Socialism Intermediate Microeconomic Theory History of Economic Thought Intermediate Mathematical Economics Quantitative Methods

## **Economic History**

Economic History of Ancient Medieval History Economic History of Modern Europe: 1750 to American Economic History Economic History of Latin America History of American Business Enterprise The Soviet Union: Politics, Economics, and Culture

## Money, Banking, and Public Finance

Money and Credit Theory and Practice of Asset Markets Public Finance: Resource Allocation Collective Choice: Theory and Applications Macroeconomic Policy

#### **Labor Economics**

Labor Economics Problems in Labor Economics

#### Organization, Performance, and Control of Industry

Industrial Organization Public Regulation of Business Economics of Regulation Economics of the American System of Private Enterprise
Economics of Imperfect Information Current Economic Issues

### International and Comparative Economics

International Trade Theory and Policy International Monetary Theory and Policy The United States in the World Economy Economic Policy and Development in Southeast Asia Introduction to the Japanese Economy Comparative Economic Systems: Soviet Union and Europe

Comparative Economics: United States, Europe, and the Soviet Union Public Policy and Economic Development Applied Economic Development International Specialization and Economic

Development National and International Food Economics Economics of Participation and Worker's Management

Nonparametric Methods for Peace Scientists

The Practice and Implementation of Self-Management

## **Graduate Courses and Seminars**

and Regional Scientists
Interdependent Decision Making Microeconomic Theory Macroeconomic Theory: Static Income Determination Macroeconomic Theory: Dynamic Models, Growth, and Inflation Economic History of Ancient Medieval Europe Economic Problems of Latin America Economics of Workers' Management in Yugoslavia Readings in Economics Seminar in Peace Science Advanced Social Theory for Peace Scientists Advanced Microeconomic Theory Mathematical Economics **Econometrics** American Economic History Methods in Economic History Monetary Theory and Policy
Public Finance: Resource Allocation and Fiscal Policy Public Finance: Local Government and Urban Structure Seminar in Labor Economics The Labor Market and Public Policy: A Comparative View Economics of Evaluation Issues in Latin America Industrial Organization and Regulation

International Economics: Pure Theory and Policy The International Economic Order International Economics: Balance of Payments and International Finance Economic Demography and Development Economics of Development Development in a Polarized World Economic Systems
Economic Growth in Southeast Asia
Theory of Quantitative Economic Policy

Economics of Participation and Labor-Management Systems: Theory Seminars in Advanced Economics

## **English**

The English Literary Tradition Readings in English and American Literature Medieval Romance: The Voyage to the Otherworld Shakespeare Feminist Issues in Nineteenth- and Twentieth-Century Literature Writing About the Arts at Cornell Expository Writing
Twentieth-Century Biography
Major Nineteenth-Century Female Novelists

The Modern Novel Modern Poetry Twentieth-Century Southern Fiction Folklore and Literature Literature and Value The Reading of Fiction The Reading of Poetry Introduction to Drama The American Literary Tradition Creative Writing

## Major Periods of English Literature

Old English Literature in Translation Middle English Literature in Translation Renaissance Literature Restoration and Eighteenth-Century Literature The Eighteenth-Century English Novel The Romantic Poets The Victorian Period The Early Twentieth Century (to 1914)
Modern Literature since 1914

#### Major English Authors

Chaucer Shakespeare Milton

### Major Periods of American Literature

Early American Literature The American Renaissance The Age of Realism and Naturalism American Literature in the Twentieth Century

## Creative and Expository Writing

Narrative Writing Verse Writing Seminar in Writing: Autobiography The Art of the Essay

#### Courses for Advanced Undergraduates

The Earlier American Novel: Brockden Brown to Henry James The Modern American Novel The Nineteenth-Century English Novel Topics in Criticism: Semiotics and Cultural Criticism Readings in the Humanities: The Sacred and the Profane Seminar in the Theory and Practice of Translation Evolution of Epic The English Language Readings in Seventeenth-Century Poetry: Donne, Jonson, Marvell, Dryden Poetry and Music in the English Renaissance Milton and Romantic Poetry The Age of Johnson Restoration and Eighteenth-Century Drama Wordsworth and Keats Victorian Poetry History of the Book English Literature and Its Intellectual Contexts: Edwardians and After Contemporary Fiction
Four Modern Masters: Pirandello, Brecht, Beckett, Pinter

Dickinson and Whitman
American History and the Literary Imagination
Mark Twain and Henry James
The Artist in Society: Poetry of the Sixties and Seventies Afro-American Literature Modern American Poetry Modern British Fiction History into Fiction

The Bildungsroman in English Women and Writing: Wollstonecraft to Woolf Reading Women Poets
Poetics for Poets and Critics Honors Seminar I: Forms of Distance in Modern Fiction
Honors Seminar II: Poetry and Poetics:

Victorian and Modern

## **Courses Primarily for Graduate Students**

The Vikings Theory and Practice of Translation Beowulf Middle English Literature History of the English Language Shakespeare: The Histories and Comedies Studies in the Eighteenth Century Austen and Scott The Other Romantics: DeQuincey, Hazlitt, Lamb Romantic Masterworks

English Literature and Its Intellectual Contexts in the Early Twentieth Century Twain and James Frost and Eliot Williams and Stevens Modern American Literature: Forms of Hope and Despair Conrad, Lawrence, Joyce Freud and Literature Semiotics and Marxist Literary Criticism

#### **Graduate Seminars**

Introduction to Research and Scholarly Methods Introduction to Criticism and Literary Theory Studies in Shakespeare (The Sources) Milton Keats Hardy Woolf Writing Seminar Writing Seminar: Poetry Writing Seminar: Prose

#### English as a Second Language

English as a Second Language English for Non-Native Speakers

#### Freshman Seminar

English for Bilinguals

#### French

#### Literature

Freshman Seminar: Readings in Modern Literature Introduction to French Literature Studies in French Literature Masterpieces of French Drama I: The Classical Era Masterpieces of French Drama II: The Modern Era The Novel as Masterwork: French Novels from Pre-Romanticism to Symbolism
The Novel in France: From the Origins to the French Revolution Experimental and Contemporary French Novels: Subversion of the Novelistic Genre from Diderot to the Present French Poetry from the Middle Ages to Romanticism Masterpieces of Medieval Literature The Baroque in France French Classicism Victor Hugo and the Romantic Movement Self, Family, and Polity in Renaissance Times From Parnassus to Surrealism Marx in France Special Topics in French Literature Honors Work in French Medieval Literature Theater in Sixteenth-Century France Literature and the Arts in Sixteenth-Century France Montaigne The Theater of Mollière

Old French Dialectology Special Topics in French Literature Medieval Seminar: The Old French Epic Medieval Seminar: Villon Medieval Seminar: La Roman de la Rose Poetry and the Powers

Diderot and the Enlightenment

Century
The Aesthetics of Coincidence

Feminism and French Literature

French Film and Literature in the Twentieth

Racine and His Critics Seventeenth-Century Seminar **Bohemians and Dandies** The Poetics of Derrida Memory, Creation, and the Novel

## Languages and Linguistics

Intensive Elementary Course: Listening, Speaking, Reading, Writing Continuing French Intermediate Course: Language and Literature Intermediate Composition and Conversation Intermediate French Advanced Conversation Advanced Composition and Conversation History of the French Language Applied Linguistics: French

Linguistic Structure of French Semantic Structure of French Composition and Style Linguistic Structure of Old and Middle French Contemporary Theories of French Grammar Seminar in French Linguistics

#### **Geological Sciences**

Geomorphology

#### Freshman and Sophomore Courses

Introductory Geological Sciences Introduction to Historical Geology Earth Science Frontiers of Geology Geology and the Environment Mineral and Energy Resources and the Environment

## Junior, Senior, and Graduate Courses Structural Geology and Sedimentation

Mineralogy, Petrology, and Geochemistry Historical Geology and Stratigraphy Geophysics and Geotectonics
"Experiments and Techniques in Earth Sciences Petroleum Geology Tectonics of Orogenic Zones: Modern and Ancient Geomechanics The Earth's Crust: Structure, Composition, and Digital Processing and Analysis of Geophysical Data Interpretation of Seismic Reflection Data Modern Petrology Isotope Geology Chemical Geology Mineral Deposits Invertebrate Paleontology and Biostratigraphy Stratigraphy Marine Tectonics Physics of the Earth Introduction to Geophysical Prospecting Tectonic and Stratigraphic Evolution of Sedimentary Basins Petrology and Geochemistry Coastal Geomorphology or Quaternary Geology Marine Geology Sedimentary Petrology and Tectonics Topics in Mineral Resource Studies and Precambrian Geology Plate Tectonics and Geology Paleobiology Geophysics, Exploration Seismology Earthquakes and Tectonics Exploration Seismology, Gravity, Magnetics Geophysics, Seismology, and Geotectonics Geomechanics, Gravity, Magnetism, Heat Flow Mineralogy and Crystallography, X-ray Diffraction, Microscopy, High-Pressure-Temperature Experiments Glacial and Quaternary Geology Geotectonics

## Seismology **Field Courses**

Intersession Field Trip Western Adirondack Field Course Western Field Course

### Germanic Studies

Advanced Geophysics

Lyrical Poetry

German Literature Folk Literature and Folk Poetry Kafka, Hesse, Brecht, and Mann Introduction to German Literature Intensive Workshop in Germanic Studies for Freshmen Modern Germany Old Icelandic Literature: Eddic Poetry Schiller The Age of Goethe Goethe's Faust Romanticism Nineteenth-Century Literature
Modern German Literature I: Contemporary German Prose Modern German Literature II: Twentieth-Century Prose Modern German Literature III: Contemporary

Modern German Drama in English

Nietzche, the Man and the Artist Topics in German Literature I: The Modern German Novel in English Translation Yiddish Literature in English Translation The Shtetl in Modern Yiddish Fiction Topics in Yiddish Literature Introduction to Medieval German Literature The Great Moments of German Literature Baroque Literature Twentieth-Century German Literature Seminar in Old Icelandic Literature Seminar in Medieval German Literature The Northern Renaissance and Reformation The Enlightenment From Wilhelm Meister to Buddenbrooks Goethe's Poetry Basic Texts of Romanticism The Romantic Novel Jean Paul and the Eighteenth-Century Humorous Novel Nineteenth-Century Drama Seminar in Realism: The Novelle Twentieth-Century German Literature: Thomas Mann Modern Lyric Poetry The Postwar German Novel Graduate Seminar in Medieval Literature Seminar on Richard Wagner Tutorial in German Literature

## Languages and Linguistics

Elementary Course Continuing German Intermediate Composition and Conversation Advanced Composition and Conversation Introduction to Germanic Linguistics History of the German Language Modern German Phonology Modern German Syntax German Dialectology Runology Applied Lingustics: German Linguistic Structure of German Gothic Old Saxon, Old High German, Old Low Franconian, Old Frisian Structure of Old English Topics in Historical Germanic Topics in Historical Germanic Morphology Topics in Historical Germanic Syntax Old Norse Readings in Old High German and Old Saxon Germanic Tribal History Elementary Reading Seminar in Germanic Linguistics Seminar in Comparative Germanic Linguistics Seminar in German Linguistics Seminar in Dutch Linguistics

## Government

### Introductory Courses

The Government of the United States Introduction to Comparative Government and **Politics** Introduction to Political Theory

Introduction to International Relations

### American Government and Institutions

The Impact and Control of Technological Change American Democracy and the Limits to Growth Interpretation of American Politics Power and Poverty in America Urban Politics Urban Affairs Laboratory The Nature, Functions, and Limits of Law Common Law and Lawyers in America The American Presidency Political Parties and Elections The American Congress American Political Behavior Public Policy and Public Revenues
The "Fourth" Branch Civil Liberties in the United States
Constitutional Politics: The United States Supreme Court Politics of Education Political and Economic Power in Cities Size of the State Political Change in the United States Science, Technology, and Public Policy Government and Public Policy: An Introduction

to Analysis and Criticism

#### Comparative Government

Soviet Union: Politics, Economics, and Culture Politics and Society in France and Italy Government and Politics of the Soviet Union Business and Labor in Politics Cuba: Culture and Revolution
The Ethnic Dimension in Politics Latin American Politics Society and Politics in Central Europe Government and Politics of Canada Government and Politics of Southeast Asia Politics in Contemporary Japan Chinese Government and Politics Politics of Industrial Societies Political Role of the Military Comparative Revolutions Democracy in Britain and France The Roots of Greek Civilization Women and Politics From Politics to Policy: The Political Economy Elites and Society: The Political Economy of Power Political Development in Western Europe Politics of the Middle East Social Movements and Politics in Industrial Societies The Politics of Productivity: Germany and Japan Politics of Decentralization and Local Reform Comparative Communism Policymaking in Britain and France Politics in Contemporary Europe: The Politics of the Left

## **Political Theory**

Modern Ideologies: Liberalism and Its Critics Classics in Political Thought Liberty, Equality, and the Social Order The Logic of Liberalism Economic Models of Politics Feminist Political Thought American Political Thought Marx Freud The Repressed Female in the Writings of Marx Current Topics in Political Philosophy

## International Relations

Integration in the World System

Theories of International Relations

Defense Policy and Arms Control Contemporary American Foreign Policy Structure and Process in the Global Political Economy
The United States and Asia International Law The Foreign Policy of China Accumulation on a World Scale Dependencia and the State Foreign Economic Policies of Advanced Industrial Societies Foreign Policy of the USSR Imperialism and Dependency Political and Economic Interdependence Logic and Methods of Research in Internationa Relations

## **Political Methodology**

Human and Social Statistics

## **Field Seminars**

Scope and Method of Political Analysis Field Seminar in Methodology Field Seminar in American Politics Field Seminar in Public Policy Field Seminar in Comparative Politics
Field Seminar in International Relations Field Seminar in Political Thought

## **American Government and Institutions**

Supreme Court, Politics, and the Constitution American Political Behavior Elections and Public Policy Capitalism, the State, and the Economy

## **Public Policy**

Politics of Technical Decisions

## Comparative Government

Comparative Theories of Decentralization Politics of the Soviet Union The Politics of Communalism Politics of China Political Anthropology: Indonesia

Political Economy of Change: Rural Development in the Third World Readings from Mao Zedong Political Problems of Southeast Asia atin American Society and Politics Comparative Institutions and the Welfare State Politics in Postwar Western Europe Research Topics on Advanced Industrial Democracies

#### Political Theory

American Political Thought The Political Philosophy of Nietzsche
Philosophical Foundations of Contemporary oundations of English Liberalism Modern Social Theory
Toward a Feminist Social Theory Economic Models of Politics

## Greek Political Philosophy International Relations

International Strategy International Relations of Asia The Administration of Agricultural and Rural Development

## Greek

Culture

See Classics.

#### Literature in Translation

The Myths of Greece and Rome The Greek Experience Greek Philosophy Greek Mythology The Ancient Epic Greek and Roman Historians Greek and Roman Drama Greek Foundations of Western Literature Ancient Wit: An Introduction to the Theory and Form of Comic and Satiric Writing in Greece and Rome Genre and Period in Greek and Roman

Freshman Seminar in Greek Literature

## Literature in Greek

Literature

Attic Authors

Homer

Plato Greek Composition Greek Historians Greek Tragedy Attic Comedy Greek Melic, Elegiac, and Bucolic Poetry Plato New Testament Greek

Advanced Readings in Greek Literature Greek Philosophy
Graduate Seminar in Greek Literature: The

Political Structure of Classical Athens Graduate Seminar in Greek Literature: Pindar and Choral Lyric Patristic Seminar

## Independent Study for Graduate Students

Greek for Beginners Attic Greek Modern Greek

Language

Hebrew

## **Biblical Literature**

#### Literature of Ancient Israel Bible, Dead Sea Scrolls, Apocalyptic Literature Freshman Seminar in Biblical Literature:

Heroes and Heroines of the Bible Readings in Classical Hebrew Literature Undergraduate Seminar in Biblical Literature: Prophecy in Ancient Israel

## Rabbinic Literature

Evolution of Jewish Law Biblical Interpretation in Rabbinic Literature

## Modern Hebrew Literature

Modern Hebrew Literature in Translation: The Modern Hebrew Short Story Readings in Classical Hebrew Literature The Hebrew Literary Imagination

Seminar in Modern Hebrew Literature: The Short Story

Seminar in Modern Hebrew Literature: The Novel

Agnon and Hazaz

Metaphor, Modernism, and Cultural Context: The Use of Metaphor

Elementary Modern Hebrew Elementary Classical Hebrew Intermediate Modern Hebrew Readings in Classical Hebrew Literature Advanced Modern Hebrew

#### Hindi-Urdu

Hindi-Urdu Elementary Course Intermediate Hindi Reading Course Composition and Conversation Readings in Hindi Literature Advanced Composition and Conversation Advanced Hindi Readings History of Hindi Seminar in Hindi Linguistics

The Growth of Political Democracy in the

## History

#### Freshman Seminars

**United States** The Family in American History Civil Liberties in the United States Topics in Science and Society in Mid-Victorian Britain The North Atlantic Community and the Wider World Seminar on American Foreign Policy History of North American Indians America in the Camera's Eye Introduction to Western Civilization The Heroic Ideal in Ancient Literature Revolution and Russian Society
Foodways: A Social History of Food and Eating Britain and the Second World War Japan and the West China and the West Before Imperialism Chinese Views of Themselves

## **Underclass Seminars**

English Constitutional History to 1600 English Constitutional History, 1600 to the Present Public Life and Literature in Nineteenth-Century

Great Britain
Public Life and Literature in Twentieth-Century

Great Britain Urban Problems and Policy in Historical Perspective

## **Comparative History**

Early Warfare, East and West Death in Past Time Comparative Slave Systems in the Americas

## **History of Science**

Science in Western Civilization Undergraduate Seminar in the History of Biology History of Biology Social History of Western Technology Problems in the History of Biology Science in Classical Antiquity Seminar in the History of Nineteenth-Century Physical Science

### **American History**

Introduction to American History: From the Beginning to 1865 Introduction to American History: From the Civil War to Recent Times Crime and Punishment: The American Vision from the Puritans to Mickey Spillane The Structure of American Political History History of American Foreign Policy Puritanism, the Enlightenment, and the Republic: American Cultural and Intellectual History to 1820

American Intellectual and Cultural History: The Nineteenth Century American Constitutional Development The Origins of American Civilization Native American History

Age of the American Revolution

Women in the American Society, Past and Present

The United States in the Middle Period The American Civil War and Reconstruction The Urbanization of American Society American Social History

Recent American History, 1920 to the Present The Modernization of the American Mind Major Themes in American Religious History Undergraduate Seminar in American Political

Motivations of American Foreign Policy Undergraduate Seminar in the History of the American South

Undergraduate Seminar in American Social History
Undergraduate Seminar in Early American

History Undergraduate Seminar: American Indians in

the Eastern United States
Law and Authority in America: Freedom,

Restraint, and Judgment Undergraduate Seminar in Recent American

History
Undergraduate Seminar: Deviance and Conformity in a Liberal Society

Heritage and Memory in American Culture Graduate Seminar in American Foreign Relations

Seminar in American Cultural and Intellectual History Seminar in Recent American Cultural History

Seminar in American Social History Graduate Seminar in the History of American

Seminar in Nineteenth-Century American History Colloquium in American History

#### Asian History

Introduction to Asian Civilizations Introduction to Asian Civilizations in the Modern

Period Art and Society in Modern China History of China Up to Modern Times History of China in Modern Times Indochina and the Archipelago to the Fourteenth Century

Southeast Asian History from the Fifteenth Century History of Modern Japan

Seminar in Tokugawa Thought and Culture Undergraduate Seminar in Medieval Chinese History
Self and Society in Late Imperial and
Twentieth-Century China

Chinese Historiography and Source Materials Problems in Modern Chinese History

The Historiography of Southeast Asia Seminar in Medieval Chinese History Seminar in Modern Chinese History Seminar in Southeast Asian History

## Ancient European History

Ancient Greece from Homer to Alexander the Great The Roman Republic Rome of the Caesars The Greek City from Alexander to Augustus The Tragedy of Classical Athens, 479–379 BC Crisis of the Greek City-State, 415-301 B.C. Roman Imperialism
The Roman Revolution The High Roman Empire Decline and Fall of the Roman Empire Social and Economic History of Rome, 60 B.C. to A.D. 117 Roman Africa Graduate Seminar in Ancient Classical History

Medieval, Renaissance, and Early Modern **European History** English History from Anglo-Saxon Times to the Revolution of 1688 The Earlier Middle Ages The High Middle Ages Greece in Late Antiquity and Early Byzantine Times Early Renaissance Europe The Culture of the Early Renaissance Introduction to the Culture of the Later Renaissance Medieval Culture

Church and State During the Middle Ages

Francis of Assisi and the Franciscans

The History of Florence in the Time of the Republic History of England under the Tudors and Stuarts War, Trade, and Empire, 1500-1815 Law and Social Change in Early Modern England
History of Spain and Portugal: The Golden Age

and After, 1492-1700 Undergraduate Seminar in Renaissance

History Undergraduate Seminar in Reformation History

Seminar in the English Civil War, 1640-1660 The Transformation of Feudal Society Seminar in Latin Paleography

## Modern European History

English History from the Revolution of 1688 to the Present The End of the Austro-Hungarian Monarchy,

1848-1918 European Intellectual History in the Nineteenth

and Twentieth Centuries The Old Regime: France in the Sixteenth,

Seventeenth, and Eighteenth Centuries The Era of the French Revolution and Napoleon

Survey of German History, 1648-1890 Survey of German History, 1890 to the Present Russian History to 1800 Russian History since 1800

Social and Cultural History of Contemporary

Europe
Europe in the Twentieth Century Modern Spain and Portugal, 1700–1975

Seminar in European Imperialism Lord and Peasant in Europe: A Seminar in

Social History Seminar in Germany, 1890–1918 Seminar in European Fascism Seminar in Weimar and Nazi Germany The Making of the English Ruling Class,

1660-1780 Seminar in Modern European Political History Russian Social and Economic History
Topics in Modern European Intellectual History Documenting the Depression: Film, Literature,

and Memory
The Politics of the Enlightenment
Seminar in Eighteenth-Century French Social

History Twentieth-Century Britain

Seminar in Modern European Social History Seminar in Eighteenth-Century British History Seminar in Nineteenth-Century British History

Seminar in the French Revolution Seminar in European Intellectual History Seminar in Russian History Seminar in Modern European Social History Seminar in European History

## Latin American History

Colonial Latin America Latin America in the Modern Age Agrarian Societies in Latin America Twentieth Century Brazil
Seminar in Latin American History

## **History of Art**

## Freshman Seminars

Freshman Seminar in Visual Analysis How to Look at Works of Art Art in a Landscape: Traditional Arts in Southeast Asia Principles of Architecture

## **Introductory Courses**

Environment

Introduction to Art History: Mediterranean Archaeology Introduction to Art History: Rise of Classical Greece

Introduction to Art History: Beginnings of Civilization Introduction to Art History: African Art

Introduction to Art History: The Classical World Introduction to Art History: Minoan-Mycenaen

Art and Archaeology Introduction to Art History: Monuments of Medieval Art

Introduction to Art History: The Renaissance Introduction to Art History: The Baroque Era Introduction to Art History: Modern Art Introduction to Art History: American Art Introduction to Art History: Asian Traditions Introduction to Art History: Architecture and

### Intermediate Courses

Techniques and Materials: Painting Books, Prints, and the Graphic Image Archaeology of Cyprus Arts of the Roman Empire Painting in the Greek and Roman World Architecture in the Greek and Roman World Greek Vase Painting Greek and Roman Coins Greek Sculpture
Art in Pompeii: Origins and Echoes Architecture of the Middle Ages Early Medieval Art and Architecture Romanesque Art and Architecture Gothic Art and Architecture Late Medieval Italian Art and Architecture The Culture of the Early Renaissance Introduction to the Culture of the Later Renaissance Dutch Painting in the Seventeenth Century French Art of the Sixteenth and Seventeenth Centuries European Art of the Eighteenth Century Major Masters of the Graphic Arts Modern Artists and Their Critics Modern Sculpture Art from 1940 to the Present

Thought: 1850–1950
Art and Technology: 1850–1950
Introduction to the Arts of China Buddhist Art in Asia The Arts of Early China The Arts of Japan

Painting and Sculpture in America: 1850-1950

American Architecture, the City, and American

Chinese Painting
Studies in Indian and Southeast Asian Art

#### Seminars

Original Works of Art Introduction to Museums History of Art Criticism Ceramics Mannerism and the Early Baroque Era in Italy Studies in Italian Renaissance Art Studies in English Art Literature and the Arts in Sixteenth-Century France Classic and Romantic Art Studies in Modern Art Problems in Modern Art and Architecture American and European Decorative Arts from the Renaissance Period to the Early Nineteenth Century Seminar on American Art: 1840–1940 The Arts in Modern China Ceramic Art of Asia Chinese Art of the T'ang Dynasty Studies in Chinese Painting Traditional Arts in Southeast Asia Problems in Medieval Art and Architecture Seminar in Renaissance Art Seminar in Baroque Art Problems in Modern Art Problems in Asian Art

### Indonesian

Methodology Seminar Problems of Art Criticism

Elementary Course Indonesian Reading Composition and Conversation Linguistic Structure of Indonesian Readings in Indonesian and Malay Advanced Indonesian Conversation and Composition
Advanced Readings in Indonesian and Malay Literature FALCON: Intensive Course

## Italian

### Literature

Introduction to Modern Italian Literature Italian Civilization Dante: La Divina Commedia Dante in Translation Boccaccio The Italian Renaissance Seventeenth-Century Prose Eighteenth-Century Thought Verga, Svevo, and Pirandello Nineteenth-Century Poetry: Leopardi Contemporary Narrative in Italy

Twentieth-Century Prose: Contemporary Italian Short Fiction
Postwar Italy: The Film as a Cultural, Artistic, and Political Reflector Special Topics in Italian Literature Petrarch: Canzoniere Eighteenth-Century Theater The Nineteenth Century
Verga, D'Annunzio, and Pirandello Futurism in Italy Contemporary Poetry Special Topics in the Divine Comedy The Italian Renaissance Contemporary Narrative in Italy Special Topics in Italian Literature

### Languages and Linguistics

Intensive Elementary Course: Listening, Speaking, Reading, Writing Continuing Italian Composition and Conversation Advanced Composition and Conversation History of the Italian Language Structure of Italian Italian Dialectology Seminar in Italian Linguistics

## Japanese

#### Culture

Japanese Conceptions of Beauty Feminine and Masculine Ideals in Japanese Culture The Japanese Film Japanese No Theater Japanese Culture and Society
Introduction to Japanese Economy Contemporary Japan Politics in Contemporary Japan Politics of Productivity: Germany and Japan Capitalism and Communism: Chinese and Japanese Patterns of Development History of Modern Japan

## Literature in Translation

Japanese Poetry and Drama Modern Japanese Fiction Japanese Narrative Literature

## Literature in Japanese

Introduction to Literary Japanese Intermediate Literary Japanese Seminar in Modern Literature Seminar in Classical Literature Japanese and Chinese Bibliography and Methodology

## Languages and Linguistics

Intensive Elementary Course: Listening. Speaking, Reading, Writing Accelerated Introductory Japanese Japanese for Business Purposes Intermediate Japanese I Japanese Conversation Advanced Japanese Linguistic Structure of Japanese Oral Narration and Public Speaking Directed Readings FALCON: Intensive Japanese

### Javanese

Intensive Elementary Course: Listening, Speaking, Reading, Writing Intermediate Course Directed Individual Study Old Javanese

### Latin

## Culture

See Classics.

### Literature in Translation

The Myths of Greece and Rome The Roman Experience Latin Foundations of Western Thought: Plato and His Influence Ancient Wit: An Introduction to the Theory and Form of Comic and Satiric Writing in Greece and Rome Genre and Period in Greek and Roman Literature

### Literature in Latin

Catullus Roman Drama Vergil The Augustan Age Roman Satire Roman Philosophical Writers Roman Historiography
Roman Elegy: Tibullus, Propertius, Ovid
Readings in Cicero
Medieval Latin Literature Advanced Readings in Latin Literature The Latin Poems of Milton Seminar: Horace's Epistles Seminar: Tacitus

#### Language

Latin for Beginners Elementary Latin Intensive Latin Latin in Review Intermediate Latin Latin Composition Late Latin Advanced Latin Composition

#### Linguistics

Theory and Practice of Linguistics Themes in Linguistics Phonetics Instrumental Phonetics Language and the Sexes
Multilingual Societies and Cultural Policy Phonology Morphology Functional Syntax Dialectology The Structure of English English for Teachers of English Teaching English as a Foreign Language Style and Language Introduction to Comparative Semitic Linguistics India as a Linguistic Area Language: A Functional and Semiotic System Language Typology Contrastive Analysis Applied Lingistics and Second Language Acquisition
Comparative Methodology Sociolinguistics Historical Linguistics: Methods and Approaches
Transformational Grammar: Syntax and Semantics Generative Phonology Social Functions of Language History of the English Language Linguistics Semantics Dravidian Structures Indo-Aryan Structure Field Methods Proseminar: Introduction to Graduate Study History of Linguistics Schools of Linguistics
Discourse Analysis
Topics in Transformational Grammar Hittite Comparative Indo-European Linguistics Elementary Pali Elementary Sanskrit Old Javanese Seminar in Southeast Asian Linguistics Seminar in Malayo-Polynesian Linguistics
Seminar in Austroasiatic Linguistics Comparative Slavic Linguistics Thai Dialectology Comparative Thai Tibeto-Burman Linguistics

## **Mathematics**

### **Basic Sequences**

Mathematics for Architects Finite Mathematics for Biologists Calculus for Biologists Finite Mathematics Introduction to Calculus Precalculus Mathematics Calculus Calculus for Engineers
Introduction to Differential Equations Differential Equations Vector Analysis Infinite Series and Complex Numbers Linear Algebra and Calculus Calculus Engineering Mathematics

#### General Courses

History of Mathematics Development of Modern Mathematical Thought

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#### **Applied Mathematics and Differential** Equations

Mathematics in the Real World Applicable Mathematics Numerical Solutions of Differential Equations Introduction to Ordinary Differential Equations
Introduction to Partial Differential Equations

#### **Analysis**

Elementary Analysis Introduction to Analysis Introduction to the Theory of Functions of One Complex Variable

#### Algebra

Linear Algebra Algebra and Number Theory Applicable Algebra Introduction to Algebra

### Geometry and Topology

Classical Geometries Introduction to Topology Introduction to Differential Geometry

### **Probability and Statistics**

Elementary Statistics Basic Probability Statistics Further Topics in Statistics

## Mathematical Logic

Elementary Mathematical Logic

Real and Complex Analysis

Mathematical Methods in Physics

#### **Graduate Courses**

Ordinary Differential Equations Partial Differential Equations Elementary Functional Analysis Applied Functional Analysis
Analysis of Numerical Methods for Partial **Differential Equations** Algebra Elementary Number Theory Lie Groups and Differential Geometry Introductory Algebraic Topology Differentiable Manifolds Geometric Topology Probability Theory
Probability and Statistics
Experimental Design, Multivariate Analysis
Sequential Analysis, Multiple Decision Problems Nonparametric Statistics Logic Seminar in Analysis Functional Analysis Fourier Analysis Riemann Surfaces Several Complex Variables Seminar in Partial Differential Equations Seminar in Algebra Topics in Algebra Algebraic Number Theory Homological Algebra Seminar in Topology Algebraic Topology Advanced Topology Seminar in Geometry Algebraic Geometry Topics in Statistics Seminar in Probability and Statistics Multivariate Analysis Statistical Decision Theory Stochastic Processes Seminar in Logic Model Theory Recursion Theory Metamathematics Set Theory Supervised Reading and Research

#### Music

#### Freshman Seminars

Sound, Sense, and Ideas Contemporary Music The Art of Music Introduction to the Musics of the World Elementary Musicianship

Music Theory Elementary Tonal Theory Theory and Practice of Gamelan

Intermediate Tonal Theory Advanced Tonal Theory
Materials of Twentieth-Century Music

Counterpoint Form and Analysis

Orchestration
Electronic Music Composition Orchestral Conducting

**Choral Conducting** Choral Style

## Music History Chopin, Chaikovski, Musorgskii History of Jazz

Popular Music

Opera Baroque Instrumental Music of the Baroque Period Music of the Classical Period Music of the Romantic Era Debussy to the Present Music and Poetry in France: Late Middle Ages and Renaissance Mozart, His Life, Works, and Times Music of the Baroque Period Music of the Classical Period Music of the Romantic Era The Study of Non-Western Musics Poetry and Music in the English Renaissance Music in Western Europe to Josquin Des Pres

## Musical Performance

Individual Instruction in Voice, Organ, Harpischord, and Piano, and String, Woodwind, and Brass Instruments

Josquin Des Pres to Monteverdi

## **Musical Organizations and Ensembles**

Sage Chapel Choir Cornell Chorus or Glee Club Cornell Orchestra University Bands Chamber Music Ensemble Chamber Singers
Cornell Gamelan Ensemble
Collegium Musicum Eighteenth-Century Orchestra

## **Graduate Courses**

Introduction to Bibliography and Research Topics in Theory and Analysis Composition Debussy to the Present Music and Poetry in France: Late Middle Ages and Renaissance Mozart: His Life, Works, and Times Seminar on Richard Wagner Introduction to Ethnomusicology Seminar in Medieval Music Seminar in Renaissance Music Seminar in Baroque Music Seminar in Music of the Classical Period Seminar in Music of the Romantic Era Performance Practice

Liturgical Chant in the West
Music and Poetry in France: Late Middle Ages and Renaissance Twentieth-Century Classics Rhythms Analysis of Structure and Function in Tonal

## **Near Eastern Studies**

Music

History of Music Theory

## **Ancient Near Eastern Literature**

Ancient Near Eastern Literature Folklore in the Ancient Near East

## History of the Jewish People

History of Ancient Israel to 450 B.C.E. Jews of the Ancient and Muslim Near East: 450 B.C.E.-1204 C.E.

The Emergence of the Modern Jew: 476-1948 The Jewish Community Throughout History Age of the Patriarchs Judaism and Christianity in Conflict Seminar in Jewish History: The Medieval Church and the Jews

#### History of Ancient Near Eastern Civilizations

Interconnections in the Eastern Mediterranean World in Antiquity History and Archaeology of Ebla History and Culture of Ancient Mesopotamia History of the Ancient Near East in Biblical Times The Roots of Greek Civilization

#### Islamics

Islamic Civilization Jews of the Ancient and Muslim Near East: 450 B.C.E.—1204 C.E.
Studies in the Popular and Courtly Literatures of the Islamic Middle East Islamic Law and Society

#### Philosophy

#### **Introductory Courses**

Freshman Seminar in Philosophy Introduction to Philosophy Logic: Evidence and Argument Ancient Thought Ancient Philosophy Modern Philosophy Existentialism Philosophical Issues in Christian Thought Formal Logic Ethics Social and Political Theory Aesthetics Biomedical Ethics Environmental Ethics Knowledge and Reality Philosophy of Mind Religion and Reason Science and Human Nature

## Intermediate Courses

Plato

Aristotle

Modern Rationalism Modern Empiricism Medieval Philosophy Topics in Ancient Philosophy Special Topics in the History of Philosophy Kant Hegel Twentieth-Century Philosophy Philosophy of Marx Introduction to Formal Logic Ethical Theory Law, Society, and Morality Metaphysics and Epistemology Topics in the Philosophy of Religion Philosophy of Science
Philosophy and Psychology
Philosophy of Choice and Decision Philosophy of Mathematics Social Theory Philosophy of History

## **Advanced Courses and Seminars**

Plato and Aristotle Deductive Logic Philosophy of Logic Intensional Logic
Problems in the Philosophy of Language Ethics and the Philosophy of Mind Topics in Aesthetics Contemporary Legal Theory Metaphysics Theory of Knowledge Problems in the Philosophy of Science Special Studies in Philosophy Ancient Philosophy Medieval Philosophy Modern Philosophers History of Philosophy Logic Semantics Philosophy of Language Ethics and Value Theory Theory of Knowledge Philosophy of Mind

Metaphysics Philosophy of Science Philosophy of Social Science

## **Physics**

General Physics

Physics I: Mechanics and Heat Great Ideas of Physics Physics in the World Around Us The Physics of Space Exploration Physics of Musical Sound Reasoning about Luck Fundamentals of Physics Physics II: Electricity and Magnetism Physics III: Optics, Waves, and Particles Intermediate Experimental Physics Phenomena of Microphysics Analytical Mechanics Electricity and Magnetism Electromagnetic Waves and Physical Optics Modern Experimental Optics Thermodynamics and Statistical Physics Introductory Electronics Informal Advanced Laboratory Advanced Experimental Physics Introductory Theoretical Physics Introductory Quantum Mechanics Nuclear and High-Energy Particle Physics Introductory Solid-State Physics Physics of Macromolecules Special Topics Seminar Design of Electronic Circuitry Advanced Experimental Physics Projects in Experimental Physics Classical Mechanics General Relativity Classical Electrodynamics Statistical Mechanics Quantum Mechanics Experimental Atomic and Solid-State Physics Experimental High-Energy Physics Solid-State Physics High-Energy Particle Physics Advanced Quantum Mechanics Quantum Field Theory Statistical Physics Theory of Many-Particle Systems High-Energy Phenomena Topics in Theoretical Astrophysics
Theory of Stellar Structure and Evolution

### Polish

Intensive Elementary Course I and II: Listening, Speaking, Reading, Writing

## **Portuguese**

Intensive Elementary Course: Listening, Speaking, Reading, Writing Intermediate Composition and Conversation Advanced Composition and Conversation Readings in Luso-Brazilian Culture Seminar in Portuguese Linguistics

## **Psychology**

Auditory Perception Hormones and Behavior

Introduction to Psychology: The Frontiers of Psychological Inquiry Introduction to Psychology: Biopsychology Understanding Personality and Social Behavior Thought and Intelligence Introduction to Psychology as a Laboratory Science Perception Psychology in Business and Industry Motivation Theory: Contemporary Approaches and Applications
Developmental Psychology Introduction to Cognitive Psychology Language and Communication
Introduction to Personality Psychology Psychology of Sex Roles Introduction to Social Psychology Social Psychological Theories and Applications Conformity and Deviance Learning Visual Perception Chemosensory Perception Perceptual Learning Development of Perception and Attention Perceptual and Cognitive Processes The Social Psychology of Language

Introductory Psychopathology Biopsychology of Animal Behavior Fieldwork in Psychopathology and the Helping Relationship
Afro-American Perspectives in Experimental Psychology Psychology of Visual Communications Statistics and Research Design Biochemistry and Human Behavior Person Perception and Impression Management Social Interaction Cross-cultural Psychology Theories of Personality Human Ethology Introduction to Sensory Systems Current Research on Psychopathology Selected Issues in Human Motivation Memory and Human Nature Psychology of Language Developmental Biopsychology Brain and Behavior Seminar and Practicum in Psychopathology Language Development **Human Behavior Genetics** Sleep and Dreaming The Politics of IQ Research Contours of Black Psychology Quasi-experimentation Mathematical Psychology Seminar: The Examined Self—A Psychohistorical View American Madness Psychotherapy: Its Nature and Influence Undergraduate Research in Psychology Statistical Methods in Psychology Analysis of Nonexperimental Data Representation of Structure in Data The General Linear Model Psychometric Theory Advanced Social Psychology Death and Dying Socialization and Maturity Individual Differences and Psychological Interpersonal and Social Stress and Coping History and Systems of Psychology

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### **Advanced Courses and Seminars**

Practicum in Article Writing Perception Visual Perception Learning Motivation Language and Thinking Psycholinguistics Cognition Psychobiology Topics in Perception and Cognition Physiological Psychology Mathematical Psychology History of Psychology Animal Behavior Statistical Methods Psychological Tests
Topics in Psychopathology and Personality Methods in Social Psychology Methods of Child Study Human Development and Behavior Experimental Social Psychology Sociocultural Stress, Personality, and Somatic Pathology
Proseminar in Social Psychology
Social Structure and Personality Interpersonal Interaction Personality Social Change, Personality, and Modernization Educational Psychology Teaching of Psychology Improvement of College Teaching How to Generate Stimuli and Control Experiments with a Small Computer General Research Seminar Seminar on Obesity and Weight Regulation Social Psychology Seminar in Interaction Seminar: Self and Identity

Sex Differences and Sex Roles

Research in Biopsychology
Research in Human Experimental Psychology

Research in Social Psychology and Personality

Research in Clinical Neuropsychology

Nutrition and Behavior

#### **Summer Session Courses**

Introduction to Psychology: The Frontiers of Psychological Inquiry Introduction to Psychology: The Cognitive Approach Introduction to Psychology: Personality and Social Behavior Developmental Psychology Introduction to Linguistics and Psychology Interpersonal Relations and Small Groups Nonverbal Behavior and Communication Introductory Psychopathology Social Psychology Theories of Personality Psychotherapy: Its Nature and Influence Psychological Testing

#### Quechua

Intensive Elementary Course: Listening, Speaking, Reading, Writing Intermediate Course Seminar in Quechua Linguistics

#### Romanian

Intensive Elementary Course I and II: Listening, Speaking, Reading, Writing

## **Romance Studies**

The Picaresque Novel in a European Perspective

## Language and Linguistics

History of the Romance Languages Comparative Romance Linguistics Area Topics in Romance Linguistics Problems and Methods in Romance Romance Dialectology

## Russian

## Culture

Themes from Russian Culture The Soviet Union: Politics, Economics, and Culture

Literature Freshman Seminar: Classics of Russian Thought and Literature Freshman Seminar: Nineteenth-Century Russian Literary Masterpieces Freshman Seminar: Twentieth-Century Russian Literary Masterpieces Freshman Seminar: Revolution in the Russian Arts Freshman Seminar: Literature and Society in Russia: 1840-1905 Readings in Russian Literature Themes from Russian Culture Intellectual Background of Russian Literature, 1825-1930 Russian Poetry Russian Theater and Drama Gogol Tolstoy and the Disciplines The Russian Novel in Translation Soviet Literature in Translation Dostoevsky Chekhov The Russian Connection Fairytale and Narrative Russian Prose Fiction Pushkin Supervised Reading in Russian Literature

Tolstoy's War and Peace and Children's Stories: Thematic Invariance and Plot

Structure The Modern Arts in Russia, 1890-1925 Russian Stylistics Russian Literature from the Beginnings to 1700

Eighteenth-Century Literature Russian Romanticism Russian Realism

Seminar in Nineteenth-Century Russian Literature Seminar in Twentieth-Century Russian

Literature Proseminar: Problems of Literary Criticism

#### Languages and Linguistics

Intensive Elementary Course: Listening, Speaking, Reading, Writing Continuing Russian Composition and Conversation Advanced Russian Morphology and Syntax Advanced Composition and Conversation Directed Individual Study History of the Russian Language Linguistic Structure of Russian Old Church Slavic Old Russian Seminar in Slavic Linguistics

#### Serbo-Croatian

Intensive Elementary Course I and II: Listening, Speaking, Reading, Writing

## Sinhala (Sinhalese)

Introduction to Sociology

Myth and Image in Modern Society

Introduction to Sociology: Conflict and

Intensive Elementary Course: Listening, Speaking, Reading, Writing Intermediate Sinhala Reading Course Composition and Conversation

## Sociology

Cooperation

Society, Industry, and the Individual Introduction to Sociology: Applications to Policy Introduction to Sociology: Urban Society Ideology and Social Concerns Population Problems Personality and Social Change Social Welfare in Europe and North America Family Inequality in America **Public Opinion** Sociology of Science and Technology Hispanic Americans Introduction to Social Psychology Social Psychological Theories and Applications Sociology of War and Peace Field and Laboratory Techniques in Sociology Evaluating Statistical Evidence Sociological Analysis of Organizations Sociology of Law Prisons and Other Institutions of Coercion Social and Political Studies of Science Contemporary Sociology for Scientists and Engineers Medical Sociology Race and Ethnicity Criminology After the Revolution: Mexico and Cuba Twentieth-Century Brazil
Economics, Population, and Development Social Interaction Multivariate Analysis with Quantitative Data Categorical Data Analysis Policy Research Social Demography Techniques of Demographic Analysis Human Fertility in Developing Nations Educational Institutions Structure and Functioning of American Society Law and Social Theory
Religion and Secularism in Western Society Society and Consciousness Seminar: Attitude Theory Advanced Social Psychology Socialization and Maturity Interpersonal and Social Stress and Coping Research Practicum in Socialization

## **Graduate Seminars**

Organizational Behavior Analysis of Data with Measurement Error Population Policy Social Organization and Change Social Structure and Personality Growth of the World Capitalist-Industrial System Research Seminar in Population Social Networks History and the Life Course Seminar in Field Research Social Interaction Sex Differences and Sex Roles Seminar: Social Stratification

## Spanish

Literature Freshman Seminar: The Idea of Quest Freshman Seminar: Parents and Children Introduction to Hispanic Literature Spanish Civilization Readings in Sixteenth and Seventeenth-Century Hispanic Literature Readings in Modern Spanish Literature Readings in Spanish-American Literature Latin American Civilization Modern Drama in Spanish America The Spanish-American Short Story Popular Culture in Contemporary

Spanish-American Prose Fiction Spanish Drama of the Golden Age The Picaresque Novel in a European Perspective Spanish Lyric Poetry of the Golden Age The Birth of the Novel in Spain: Toward Don Quixote

The Nineteenth-Century Spanish Novel Form and Formlessness in the Novel of the Generation of 1898

Sociology and Literature in Twentieth-Century Spain The Post-Civil War Drama in Spain

The Post-Civil War Novel in Spain Modern Hispanic Poetry Special Topics in Hispanic Literature Medieval Literature Medieval Literature 1300-1508 The Early Spanish Love Lyric: Origins to 1700 Being, God, Mind: Humanistic Revolutions From Plato and Vico The Rhetoric of Honor Cervantes: Don Quixote

Colonial Spanish-American Literature: Sor Juana, Ruiz de Alarcon, Inca Garcilaso Eighteenth- and Nineteenth-Century Spanish Drama Hispanic Romanticism The Theatre of Garcia Lorca

Resonances of the Quixote in the Modern Hispanic Novel
Principles of Aesthetic and Literary Criticism Special Topics in Hispanic Literature Gongora and Quevedo

Seminar in Nineteenth-Century Spanish Literature: Galdos Carlos Fuentes Ortega Y Gasset's The Dehumanization of Art

## and Ideas of the Novel Languages and Linguistics

Intensive Elementary Course: Listening, Speaking, Reading, Writing Continuing Spanish Intermediate Composition and Conversation Advanced Composition and Conversation Advanced Conversation and Pronunciation Advanced Composition History of the Spanish Language Applied Linguistics: Spanish The Grammatical Structure of Spanish Hispanic Dialectology Linguistic Structure of Ibero-Romance Contemporary Theories of Spanish Phonology Contemporary Theories of Spanish Gramma Seminar in Spanish Linguistics

## **Tagalog**

Intensive Elementary Course: Listening, Speaking, Reading, Writing Intermediate Tagalog Reading Course Linguistic Structure of Tagalog

### Tamil

Intensive Elementary Course: Listening, Speaking, Reading, Writing

## Telugu

Intensive Elementary Course: Listening, Speaking, Reading, Writing
Intermediate Telugu Reading Course Linquistics

#### Thai

Intensive Elementary Course: Listening, Speaking, Reading, Writing Intermediate Thai Reading Course Composition and Conversation Advanced Thai Directed Individual Study

#### Theatre Arts

#### Freshman Seminars

Modern Drama and Modern Production Tragedy and Comedy Script and the Stage

### Acting

Introduction to Acting Acting I—Basic Technique Acting II—Characterization Acting III—Style Introduction to Voice and Speech for Performance Voice and Speech for Performance American Mime Orientation Stage Movement and Combat Dramatic Text Analysis Rehearsal and Performance Acting Technique Voice Technique Speech Technique

#### Directing

Directing Projects in Directing

## Theatre Design and Technology

Fundamentals of Theatre Design and Technology Visual Concepts for the Theatre Production Concepts for the Theatre History of Visual Style for the Theatre Lighting Design and Technology Production Concepts for the Theatre Advanced Lighting Design and Technology Scene Design and Technology Advanced Scene Design and Technology Costume Design and Technology Advanced Costume Design and Technology Sound Design and Technology Stage Management Design Studio Design Techniques Studio Lighting Techniques Scenic Techniques Costume Techniques Costume Technology

## **Theatre Laboratories**

Rehearsal and Performance Production Laboratory I-VII

## Playwriting

Playwriting Advanced Playwriting

## Theatre History, Literature, and Theory

Introduction to the Theatre Classic and Renaissance Drama European Drama, 1660 to 1900 Modern Drama History of the Theatre American Drama and Theatre English Drama Play and Period Shakespeare: King Lear and the Stages of History
Theatre and Society
Theory of the Theatre and Drama Ibsen and Chekhov Critical Writing Workshop Seminar in Theatre History Seminar in Dramatic Criticism Seminar in Dramatic Theory Seminar in Theory of the Theatre Tragedy: Philosophy and Theory Seminar in the Theories of Directing Introduction to Research and Bibliography in Theatre Arts Thesis and Special Problems in Drama and the Theatre

#### Dance

Introduction to Dance
Contemporary Composers and
Choreographers
Beginning Dance Composition and Music
Resources
Intermediate Ballet Technique
Intermediate Modern Dance Technique
Asian Dance and Dance Drama
High Intermediate Modern Dance Technique
Advanced Dance Composition
Physical Analysis of Movement
History of Dance
Human Biology for the Performing Arts
Historical Dances

## Seminar in History of Dance

Cinema

Introduction to Film Analysis: Meaning and Value
History and Theory of the Commercial Narrative Cinema

Individual Problems in Composition

History and Theory of Documentary and Experimental Film Fundamentals of 16-mm Filmmaking

Russian Film of the 1920s and French Film of the 1960s International Documentary Film from 1945 to

the Present Seminar in the Cinema

Intermediate Film Projects

## Turkish

Introduction to the Turkish Language

## Ugaritic

Ugaritic

## Urkrainian

Intensive Elementary Course: Listening, Speaking, Reading, Writing

## Vietnamese

Intensive Elementary Course: Listening, Speaking, Reading, Writing Intermediate Vietnamese Reading Course Composition and Conversation Advanced Vietnamese Vietnamese Literature Directed Individual Study

## Yiddish

### Literature

The Shtetl in Modern Yiddish Fiction
Topics in Yiddish Literature
Metaphor, Modernism, and Cultural Context:
The Use of Metaphor

### Language

Elementary Yiddish

## Special Programs and Interdisciplinary Studies

## **Biology and Society**

Biology and Society I: The Biocultural Perspective Biology and Society II: Biology, Society, and Human Values Biomedical Ethics

Environmental Ethics Senior Seminar: Human Fertility in Developing Nations Senior Seminar: Biomedical Research, Regulations, and Ethics: A Delicate Balance

### Society for the Humanities

Freshman Seminar: Science as Literature Law and Social Change in Early Modern England Renaissance Spectating: Audience as Artifice The Gothic Novel The Role of Literature as Presented in Post–1945 Chinese Writing
Cog or Scout: Functional Concepts of Socialist Literature
Conventions of Expression in Renaissance Art Nineteenth-Century French Realism and Modern Discourse Theory
The Reception of the Idea of the Woman in the Late Nineteenth Century

Late Nineteenth Century
Music in Society in Western Europe in the
Second Half of the Eighteenth Century
The Symphonies of Mozart
Nietzsche: Aspects of His Reception
The Interpretation of J. S. Bach's Keyboard
Music

#### Women's Studies

Freshman Seminar: Writing as Women Freshman Seminar: Feminine and Masculine Ideals in Japanese Culture Freshman Seminar: The Family in American The Biological Basis of Sex Differences The Historical Development of Women as Professionals, 1800-1980 Language and the Sexes Major Nineteenth-Century Female Novelists Feminist Issues in Nineteenth- and Twentieth-Century Literature Psychology of Sex Roles Psychological Anthropology The Anthropology of Women Women in American Society, Past and Present Women and Politics Special Problems in the Anthropology of Undergraduate Seminar in Early American

Undergraduate Seminar in Early American History Dickinson and Whitman Women and Writing Reading Woman Poets Feminism and French Literature Seminar in the History of American Women

Seminar in Family Studies: The History of the American Family Seminar in Sex Differences, Sex Roles, and Sexuality Virginia Woolf

## Division of Biological Sciences

### **General Courses**

Biological Sciences, Lectures and Laboratory Introductory Biology Introductory Biology Interactive Computing for Students of Biological Sciences
Biology for Nonmajors
Special Studies in Biology
History of Biology
Biomedical Ethics
Environmental Ethics
Biological Discovery Laboratory
Laboratory Methods in Biology
Biology and Society I: The Biocultural Perspective
Biology and Society II: Biology, Society, and Ethics
Basic Immunology
Techniques in Animal Handling and Surgery
Undergraduate Research in Biology
Introduction to Scanning Electron Microscopy
Electron Microscopy for Biologists
Advanced Electron Microscopy for Biologists
X-Ray Elemental Analysis in Biology

### **Animal Physiology and Anatomy**

Invertebrate Zoology
Biological Basis of Sex Differences
The Vertebrates
Introductory Animal Physiology
Anatomy and Behavior of the Gull
Histology: The Biology of the Tissues
Ecological Animal Physiology
Cellular Physiology
Biological Bhythms with a Period of One Day to
One Year
Seminar in Anatomy and Physiology
Motor Physiology
Special Histology: The Biology of the Organs
Vertebrate Morphology
General Animal Physiology: A Quantitative
Approach

Comparative Physiology of Reproduction of Vertebrates Mammalian Physiology

Mammalian Neurophysiology Nutrition and Physiology of Mineral Elements Radioisotopes in Biological Research Applied Electrophysiology

Applied Electrophysiology Biological Membranes and Nutrient Transfer Lipids

Molecular Mechanisms of Hormone Action Graduate Research in Animal Physiology and Anatomy

## Neurobiology and Behavior

Neurobiology and Behavior Hormones and Behavior Biopsychology Laboratory Vision

Introduction to Sensory Systems
Seminar in Neurobiology and Behavior
Comparative Verlebrate Ethology
Animal Communication
Animal Social Behavior

Animal Social Behavior
Vertebrate Social Behavior
Principles of Neurobiology
Neuropharmacology
Cellular Neurobiology
Neurochemistry
Chemical Communication
Behavioral Neurogenetics
Quantitative Approaches to Animal Behavior
Field Methods in Animal Behavior
Developmental Neurophysiology
Behavioral Neurophysiology
Physiological Ordics

Physiological Optics' Neuroelectric Systems Seminar in Advanced Topics in Neurobiology and Behavior Graduate Seminar in Vertebrate Social Behavior

## **Biochemistry and Cell Biology**Orientation Lectures in Biochemistry

Some Applications of Biochemistry to Medicine and Agriculture Principles of Biochemistry Principles of Biochemistry, Individualized Instruction Principles of Biochemistry Basic Biochemical Methods Survey of Cell Biology Cell Structure and Physiology Undergraduate Biochemistry Seminar Cell Proliferation and Oncogenic Viruses Molecular Biology of Yeast Protein Structure and Function Bioenergetics and Membranes Biosynthesis of Macromolecules Biochemistry of the Vitamins and Coenzymes Metabolic Regulation Vertebrate Biochemistry Intermediate Biochemical Methods Current Topics in Biochemistry Intracellular Protein Degradation Regulation of Membrane Transport in Microorganisms Unusual Genetic Events Lipids in Biomembranes Biochemistry of Inborn Errors of Carbohydrate Metabolism Monosaccharides and Oligosaccharides Structure-Reactivity Relationships

Structure-Reactivity Relationships
Genetic Engineering Applied to Plant Cells
Chloroplast Biogenesis
Chemical Carcinogenesis
Biochemistry Seminar
Advanced Biochemical Methods
Research Seminar in Biochemistry

## Botany

Plant Biology
Plant Physiology
Plants and Human Affairs
Poisonous Plants
Taxonomy of Cultivated Plants
Taxonomy of Vascular Plants
Plant Anatomy
Field Phycology
Cytology
Phycology
Taxonomy and Evolution of Vascular Plants
Comparative and Developmental Morphology
of the Embryophyta

Photosynthesis Cytogenetics Plant Evolution and the Fossil Record Topics in Ultrastructure of Plant Cells Plant Physiology, Advanced Laboratory Techniques
Plant Growth and Development Families of Tropical Flowering Plants Families of Tropical Flowering Plants: Field Laboratory Seminar in Systematic Botany Plant Biochemistry Transport of Solutes and Water in Plants Quantitative Whole-Plant Physiology Botanical Latin Plant Nomenclature Topics in Paleobotany Literature of Taxonomic Botany Plant Biology Seminar Graduate Research in Botany Current Topics in Plant Physiology

## Ecology, Systematics, and Evolution

Introductory Ecology

The Vertebrates

General Ecology Chemical Oceanography in the Field \*
Field Marine Science for Teachers
Field Marine Science Underwater Research Insect Ecology Oceanography Limnology Plant Ecology Chemical Ecology Systems Ecology
Undergraduate Ecology Seminar Mammalogy Herpetology Ornithology Biology of Fishes Organic Evolution Mathematical Ecology
Seminar in Coevolution between Insects and Plants Limnology Seminar Marine Ecology
Topics in Theoretical Ecology Plant Ecology Seminar Graduate Seminar in Vertebrate Biology Ichthyology Special Topics in Evolution and Ecology Seminar in Population and Community Ecology Autecology Population Ecology Community Ecology Population Biology of Health and Disease

#### Courses Offered in Cooperation with the Sea Education Association (SEA)

SEA Semester SEA Introduction to Marine Science SEA Man and the Sea SEA Introduction to Nautical Science SEA Marine Science Laboratory SEA Nautical Science Laboratory

## **Genetics and Development**

Genetics
Human Genetics
Invertebrate Embryology
Developmental Biology
Vertebrate Development Anatomy
Population Genetics
Molecular Aspects of Development
Molecular Evolution
Microbial Genetics
Immunogenetics
Genetics of Lower Eucaryotes
Current Topics in Genetics

## College of Engineering

## **Division of Basic Studies**

## **Engineering Basic Studies**

Introduction to Computer Programming
Engineering Perspectives
Mass and Energy Balances
Mechanics of Solids
Dynamics
The Physics of Life
Introduction to Electrical Systems
Computers and Programming
The Physics of Energy
Thermodynamics
Introduction to Digital Systems
Introduction to Digital Systems
Introduction to Mechanical Properties of
Materials
Introduction to Electrical Properties of Materials
Basic Engineering Probability and Statistics
Numerical Methods

### **Applied and Engineering Physics**

The Physics of Life The Physics of Energy Contemporary Topics in Applied Physics Introduction to Nuclear Science and Engineering Mechanics of Particles and Solid Bodies Intermediate Electromagnetism Intermediate Electrodynamics
Introductory Quantum Mechanics Electronic Circuits Physics of Atomic and Molecular Processes Statistical Thermodynamics Continuum Physics Informal Study in Engineering Physics Photosynthesis Introduction to Plasma Physics Advanced Plasma Physics Plasma Astrophysics Low-Energy Nuclear Physics Nuclear Reactor Theory Special Topics in Biophysics Membrane Biophysics Modern Physical Methods in Macromolecular Structure Determination Molecular Energy Transfer Electron Optics Nuclear Engineering Nuclear Engineering Design Seminar Seminar on Thermonuclear Fusion Reactors Intense Pulsed Electron and Ion Beams: Physics and Technology Nuclear Measurements Laboratory Advanced Nuclear and Reactor Laboratory Microcharacterization Microprocessing of Materials Special Topics in Applied Physics Topics in Statistical Physics

## **Chemical Engineering**

Polymeric Materials

Principles of Diffraction

Mass and Energy Balances Chemical Engineering Thermodynamics Materials Reaction Kinetics and Reactor Design Industrial Organic Chemical Processes Introduction to Rate Processes Analysis of Separation Processes Chemical Engineering Laboratory Project Laboratory Transport Phenomena Chemical Process Evaluation Chemical Process Synthesis Process Equipment Design and Selection Design of Chemical Reactors and Multiphase Contracting Systems Design Project Computer-Aided Process Design Special Projects in Chemical Engineering Phase Equilibria Petroleum Refining Synthetic Fuels Nuclear Chemical Engineering

Special Topics Seminar in Applied Physics

Kinetic Theory Physics of Solid Surfaces and Interfaces

Physical Polymer Science Polymeric Materials Laboratory Microbial Engineering Controlled Cultivation of Microbial Cells Wastewater Engineering in the Process Polymer Processes Numerical Methods in Chemical Engineering Air Pollution Control Process Control Process Control Laboratory Applied Surface Chemistry and Physics Chemical Microscopy Electron Microscopy Advanced Chemical Microscopy Laboratory in Optical Crystallography Research Project Advanced Chemical Engineering Thermodynamics Applied Chemical Kinetics Advanced Transport Phenomena Mathematical Methods of Chemical **Engineering Analysis** Theory of Molecular Liquids Advanced Seminar in Thermodynamics

#### Civil and Environmental Engineering:

## Environmental Sensing, Measurement, and Evaluation

Surveying for Civil and Environmental Engineering Facilities Boundary Surveys Photogrammetry Geodesy Remote Sensing: Fundamentals Remote Sensing: Environmental Applications Physical Environment Evaluation Image Analysis I: Landforms Seminar in Remote Sensing

## Public and Environmental Systems Engineering

Microeconomic Analysis
Economic Analysis of Government
Engineering Economics and Management
Social Implications of Technology
Seminar in Technology Assessment
Legal Process
Environmental Law
Public Systems Analysis
Environmental and Water Resources Systems
Analysis Colloquium
Environmental and Water Resources Systems

Analysis Design Project Environmental and Water Resources Systems

Analysis Research
Special Topics in Environmental or Water
Resources Systems Analysis

## Fluid Mechanics and Hydrology

Fluid Mechanics
Hydraulic Engineering
Descriptive Hydrology
Advanced Fluid Mechanics
Dynamic Oceanography
Analytical Hydrology
Flow in Porous Media and Ground Water
Engineering Micrometeorology
Coastal Engineering
Environmental Fluid Mechanics
Unsteady Hydraulics
Environmental Planning and Operation of
Energy Facilities
Hydraulics Seminar
Special Topics in Hydraulics
Experimental and Numerical Methods in
Hydraulics and Hydrology
Research in Hydraulics

## Geotechnical Engineering

Introductory Soil Mechanics
Foundation Engineering
Retaining Structures and Slopes
Highway Engineering
Bituminous Materials and Pavement Design
Design Project in Geotechnical Engineering
Seminar in Geotechnical Engineering
Special Topics in Geotechnical Engineering
Engineering Behavior of Soils
Rock Engineering
Graduate Soil Mechanics Laboratory
Advanced Foundation Engineering
Soil Dynamics
Embankment Dam Engineering

Case Studies in Geotechnical Engineering Tunnel Engineering Research in Geotechnical Engineering

### **Environmental Quality Engineering**

Environmental Quality Engineering
Assimilation of Pollutants in Natural Waters
Chemistry of Water and Wastewater
Aquatic Chemistry
Industrial Waste Management
Environmental Quality Management
Air Quality Control
Environmental Effects of Energy Conversion
Sludge Treatment, Utilization, and Disposal
Environmental Quality Engineering Seminar
Water Chemistry Laboratory
Chemical and Physical Phenomena and
Processes
Biological Phenomena and Processes
Design Project in Sanitary Engineering
Sanitary Engineering
Research
Special Topics in Sanitary Engineering

### Transportation

Introduction to Transportation Engineering Urban Transportation Planning Travel Demand Theory and Applications Transportation Systems Analysis Transportation Systems Design Operations, Design, and Planning of Public Transportation Systems Freight Transportation Transportation Economics Transportation Design Project Transportation Research Transportation Research Transportation Colloquium Special Topics in Transportation Highway Engineering

## Structural Engineering

Structural Engineering I-IV Structural Behavior Laboratory Engineering Materials
Timber Engineering Fundamentals of Structural Mechanics Advanced Structural Analysis Structural Model Analysis and Experimental Methods Advanced Plain Concrete Structure and Properties of Materials Low-cost Housing Primarily for Developing Nations Low-cost Housing for Developing Nations-Workshop for Physical Planning, Site Selection, and Design Structural Engineering Seminar Engineering Fracture Mechanics Structural Stability: Theory and Design Finite Element Analysis Structural Reliability and Safety Prestressed Concrete Structures Advanced Reinforced Concrete Advanced Design of Metal Structures Advanced Behavior of Metal Structures Shell Theory and Design Structural Design for Dynamic Loads Optimum Structural Design Numerical Methods in Structural Engineering Advanced Topics in Finite Element Analysis Civil and Environmental Engineering Materials Project Design Project in Structural Engineering Research in Structural Engineering Special Topics in Structural Engineering

## Water Resources Planning and Analysis

Water Resources Problems and Policies Stochastic Hydrologic Modeling Water Quality Modeling Water Resources Systems Planning

### **Professional Practice**

Numerical Solutions to Civil Engineering
Problems
Uncertainty Analysis in Engineering
Civil and Environmental Engineering Design
Project
Professional Practice in Engineering
Legal Methods
Numerical Solutions to Civil Engineering
Problems

### **Computer Science**

Introduction to Computer Programming

The Computer Age Introduction to FORTRAN Programming Introduction to PASCAL Introduction to APL Programming Introduction to Interactive Computing with CMS Introduction to Statistical Packages Multistep Job Processing and JCL Computers and Programming Discrete Structures Social Issues in Computing Introduction to Computer Systems and Organization Numerical Methods Data Structures Systems Programming and Operating Systems Interactive Computer Graphics Introduction to Data-Base Systems Introduction to Theory of Computing Independent Reading and Research Computer Science and Programming Advanced Programming Languages Translator Writing Concurrent Programming and Operating Systems Principles
Machine Organization Picture Processing Numerical Analysis Short Course on Linear and Nonlinear Least Squares Short Course on Spline Approximation Data-Base Systems Information Organization and Retrieval Theory of Algorithms and Computing Computer Science Graduate Seminar Theory of Programming Languages
Theoretical Aspects of Compiler Construction
Seminar in Operating Systems
Seminar in Programming Advanced Numerical Analysis Seminar in Numerical Analysis Selected Topics in Information Processing Seminar in File Processing Seminar in Information Organization and Retrieval Advanced Theory of Computing Seminar in Automata Theory Special Investigations in Computer Science

**Electrical Engineering** Introduction to Electrical Systems Introduction to Digital Systems Electrical Signals and Systems Electromagnetic Theory Fundamentals of Quantum and Solid-State Electronics Probability and Random Signals Electrical Laboratory Quantum Mechanics and Applications Introduction to Lasers and Optical Electronics Thermal, Fluid, and Statistical Physics for Engineers Electronic Circuit Design Neuroelectric Systems Active and Digital Network Design Computer Methods in Electrical Engineering Advanced Digital Signal Processing Fundamentals of Analog and Digital Signal Circuits Analog and Digital Signal Circuit Theory and Applications
Physical Electronics of Solids Semiconductor Electronics Solid-State Microwave Devices and Subsystems Integrated Circuit Technology Electric Energy Systems Advanced Power Systems Analysis Error Control Codes Fundamental Information Theory Decision Making and Estimation Communication Systems Feedback Control Systems Computer Structures

Microprocessor Systems

Hierarchy

Architecture

Discharges

Electrodynamics

Computer Processor Organization and Memory

Computer Input/Output and Distributed

Current Topics in Computer Engineering Elementary Plasma Physics and Gas

Introduction to Plasma Physics Advanced Plasma Physics

Microwave Theory
Upper Atmosphere Physics
Electromagnetic Wave Propagation
Fundamentals of Acoustics
Special Topics in Electrical Engineering
Theory of Linear Systems
Quantum Electronics
Opto-Electronic Devices
Theory and Applications of Nonlinear Optics
Solid-State Devices
Physics of Solid-State Devices
Very-Large-Scale Integration Digital System
Design
Random Processes in Electrical Systems
Advanced Topics in Information Theory
Foundations of Inference and Decision Making

Systems
Optimal Control and Estimation for Continuous
Systems
Random Processes in Control Systems

Kinetic Theory
Electrical Engineering Colloquium
Electrical Engineering Design
Special Topics in Electrical Engineering

Estimation and Control in Discrete Linear

## Geological Sciences

### Freshman and Sophomore Courses

Introductory Geological Sciences Introduction to Historical Geology Earth Science Frontiers of Geology Geology and the Environment Mineral and Energy Resources and the Environment

## Junior, Senior, and Graduate Courses

Structural Geology and Sedimentation Geomorphology Mineralogy Petrology and Geochemistry Sedimentology and Stratigraphy Geophysics and Geotectonics Experiments and Techniques in Earth Sciences

Petroleum Geology Tectonics of Orogenic Zones; Modern and Ancient Geomechanics

The Earth's Crust: Structure, Composition, and Evolution

Digital Processing and Analysis of Geophysical Data

Interpretation of Seismic Reflection Data Modern Petrology Isotope Geology

Isotope Geology Chemical Geology Mineral Deposits Invertebrate Paleontology and Biostratigraphy Sedimentation and Tectonics

Marine Tectonics
Physics of the Earth
Introduction to Geophysical Prospecting

Tectonic and Stratigraphic Evolution of Sedimentary Basins Petrology and Geochemistry Advanced Geomorphology Topics

Marine Geology
Sedimentary Petrology and Tectonics
Topics in Mineral Resource Studies and

Precambrian Geology Plate Tectonics and Geology Palebiology Geophysics, Exploration Seismology

Geophysics, Expioration Seismology Earthquakes and Tectonics Exploration Seismology, Gravity, Magnetics Geophysics, Seismology and Geotectonics Geomechanics, Gravity, Magnetism, Heat Flow Mineralogy and Crystallography, X-ray

Diffraction, Microscopy, High-Pressure-Temperature Experiments Glacial and Quaternary Geology Geotectonics

Geotectonics Advanced Geophysics Seismology

### Field Courses

Intersession Field Trip Western Adirondack Field Course Western Field Course

## Materials Science and Engineering

## Undergraduate Courses

Elements of Materials Science Introduction to Mechanical Properties of Materials Introduction to Electrical Properties of Materials
Structure and Properties of Materials
Electrical and Magnetic Properties of Materials
Research Involvement
Thermodynamics of Condensed Systems
Kinetics, Diffusion, and Phase Transformations
Materials and Manufacturing Processes
Microprocessing of Materials
Macroprocessing of Materials
Senior Materials Laboratory
Mechanical Properties of Materials
Current Topics in Materials
Introduction to Ceramics
Properties of Solid Polymers
Physical Metallurgy
Processing of Glass, Ceramic, and
Glass-Ceramic Materials
Analysis of Manufacturing Processes

#### **Graduate Core Courses**

Thermodynamics of Materials Elasticity and Physical Properties of Crystals Structure of Solids Plastic Flow and Fracture of Materials Kinetics of Solid-State Reactions

## **Further Graduate Courses**

Principles of Diffraction
Electron Microscopy
Ceramic Materials
Electrical and Magnetic Properties of Materials
Amorphous and Semicrystalline Materials
Physics of Solid Surfaces and Interfaces
Advanced Topics in Crystal Defects
The Effects of Radiation on Materials
Amorphous Semiconductors
Solar Energy Materials
Advanced Topics in Mechanical Properties
Special Studies in Materials Sciences
Materials Science and Engineering Colloquium
Materials Science Research Seminars
Research in Materials Science

## Mechanical and Aerospace Engineering

## General and Required Courses

Naval Ship Systems
Thermodynamics
Technology, Society, and the Human
Introduction to Aeronautics
Materials and Manufacturing Processes
Introductory Fluid Mechanics
Heat Transfer and Transport Processes
Mechanical Design and Analysis
Systems Dynamics
Mechanical Engineering Laboratory

## Mechanical Systems Design and Manufacturing

Design for Manufacture
Mechanical Reliability
Automotive Engineering
Computer-Aided Design
Analysis of Manufacturing Processes
Materials Engineering
Numerical Control in Manufacturing
Mechanical Components
Biomechanical Systems—Analysis and Design
Mechanical Arospace Structures
Microprocessor Applications
Mechanical vibrations
Feedback Control Systems
Dynamics of Vehicles
Finite Element Methods in Thermomechanical
Processes
Experimental Methods in Machine Design
Advanced Mechanical Vibrations
Digital Simulation of Dynamic Systems
Design of Complex Systems
Hydrodynamic Lubrication: Fluid-Film Bearings
Advanced Mechanical Reliability
Optimum Design of Mechanical Systems

## Energy, Fluids, and Aerospace Engineering

Introduction to Aeronautics Acoustics and Noise Combustion Engines Plasma Energy Systems Aerospace Propulsion Systems Dynamics of Flight Vehicles Fluid Dynamics Boundary Layers Turbomachinery and Applications Combustion Processes Solar Energy Utilization Direct Energy Conversion and Storage Power Systems Future Energy Systems Seminar Incompressible Aerodynamics Compressible Aerodynamics Physics of Fluids Gasdynamics Atmospheric Turbulence and Micrometeorology Seminar on Combustion Transport Processes Boiling and Two-Phase Flow Experimental Methods in Fluid Mechanics, Heat Transfer, and Combustion Viscous Flows Aerodynamic Noise Theory Turbulence and Turbulent Flow Dynamics of Rotating Fluids Numerical Methods in Fluid Flow and Heat Transfer Nonlinear Wave Propagation

## Special Offerings

Aerospace Engineering
Design Project in Mechanical Engineering
Seminar and Design Project in Aerospace
Engineering
Special Investigation in Mechanical and
Aerospace Engineering
Special Topics in Mechanical and Aerospace
Engineering
Mechanical and Aerospace Engineering
Research Conference
Mechanical and Aerospace Engineering
Colloquium
Research in Mechanicald Aerospace
Engineering

Special Investigations in Mechanical and

## **Nuclear Science and Engineering**

Interaction of Radiation and Matter

## Operations Research and Industrial Engineering

Introductory Engineering Probability
Basic Engineering Probability and Statistics Optimization Cost Accounting, Analysis, and Control Introductory Engineering Stochastic Processes Introduction to Statistical Theory with **Engineering Applications** Industrial Systems Analysis Layout and Material Handling Systems Production Planning and Control Discrete Models Introduction to Game Theory Introductory Engineering Stochastic Processes Applications of Statistics to Engineering Problems Statistical Decision Theory
Mathematical Models—Development and Application Industrial Engineering Fieldwork Advanced Engineering Economic Analysis Queueing Theory and Its Applications Inventory Theory Applied Time Series Analysis Statistical Methods in Quality and Reliability Control Digital Systems Simulation Facilities Location and Design Operations Research Scheduling Theory Advanced Production and Inventory Planning Mathematical Programming Nonlinear Programming Game Theory Dynamic Programming Convex Analysis Integer Programming Graph Theory and Network Flows Combinatorial Optimization Applied Probability
Applied Stochastic Processes Applied Statistics Intermediate Applied Statistics Statistical Decision Theory Nonparametric Statistical Analysis Design of Experiments Qualitative Data Analysis Statistical Analysis of Life Data Selected Topics in Applied Operations Selected Topics in Game Theory Selected Topics in Mathematical Programming Advanced Queueing Theory

Advanced Stochastic Processes

Deterministic and Stochastic Control
Selected Topics in Applied Probabilit

Statistical Selection and Ranking Procedures Selected Topics in Applied Statistics Special Investigations Operations Research Graduate Colloquium Applied Operations Research and Industrial Engineering Colloquium

## **Theoretical and Applied Mechanics**

## Basics in Engineering Mathematics and Mechanics

Mechanics of Solids Dynamics Engineering Mathematics

## **Engineering Mathematics**

Advanced Engineering Analysis Methods of Applied Mathematics I–IV Experimental Mechanics

### Continuum Mechanics and Inelasticity

Introduction to Continuum Mechanics Continuum Mechanics and Thermodynamics Topics in Continuum Mechanics Analytical Methods in Continuum Mechanics Viscoelasticity and Creep Theory of Plasticity

#### **Elasticity and Waves**

Mechanical Vibrations and Waves Applied Elasticity Theory of Elasticity Fundamentals of Acoustics Mathematical Theory of Elasticity Elastic Waves in Solids

#### **Dynamics and Space Mechanics**

Intermediate Dynamics Advanced Dynamics Celestial Mechanics Mechanics of the Solar System Nonlinear Vibrations Qualitative Theory of Dynamical Systems

## Special Courses, Projects, and Thesis Research

Project in Engineering Science Selected Topics in Theoretical and Applied Mechanics Research in Theoretical and Applied Mechanics

## School of Hotel Administration

## Administrative and General Management

Lectures in Hotel Management Personal Real Estate Investments Club Management Franchising in the Hospitality Industry Resort and Condominium Management General Insurance
Development of a Hospitality Property Principles of Management Rooms Division Management—Front Office and Reservations Rooms Division Management—Housekeeping and Laundry Operations General Survey of Real Estate
Hotel Security and Crime Prevention Seminar in Management Principles Hotel Management Seminar The Small Business Management Organization of Small Business Integrated Case Studies in the Hospitality Industry Seminar in Hotel Operations Casino Management Graduate Seminar in Hotel Operations

## **Human Resources Management**

Introductory Psychology Management of Human Resources Union-Management Relations in Private Industry: A Survey Psychology in Business and Industry Special Studies in the Management of Human Resources Dispute Resolution in Service Industries

#### Accounting and Financial Management

Basic Principles of Accounting and Financial Management Financial Accounting Hospitality Accounting Systems Finance Financial Accounting Principles Managerial Accounting Managerial Accounting in the Hospitality Industry
Front Office Machine Accounting Food and Beverage Control Hotel Management Contracts Investment Management Financial Analysis and Planning Financial Charts and Graphs Introduction to Statistical Analysis and Inference Internal Control in Hotels Personal and Corporate Taxation

### Food and Beverage Management

Interpretation and Analysis of Financial

Statements

Introduction to Food and Beverage Operation and Management Techniques of Food Production Meat Science and Management
Operational Food Production Systems Food Production Systems: Institutional Food Production Systems: Restaurant and Banquet Restaurant Management Corporate Restaurant Management Survey of Beverages Purchasing Introduction to Wine and Spirits Corporate Food and Beverage Management

#### Law

Law and the Woman Employee Law and Business Law of Federal Securities Law of Innkeeping

## **Properties Management**

Property Management Graphics Hotel Mechanical and Electrical Problems Introductory Food Facilities Engineering Food Facilities Equipment Design and Layout Physical Plant Planning and Construction Seminar in Environmental Control Seminar in Hotel Planning Seminar in Restaurant Planning Graduate Study in Project Development and Construction Graduate Study in Electrical and Mechanical

## Communication

Typewriting Basic Business Writing Report Typing Typewriting and Business Procedures Shorthand Theory Effective Communication Written Communication Advanced Business Writing

## Science and Technology

Food Chemistry Sanitation in the Food Service Operation Information Systems Hotel Computing Applications Principles of Nutrition Business Computer Systems Design Computers and Hotel Computing Applications

## Economics, Marketing, and Tourism

Macroeconomics Microeconomics Principles of Marketing Tourism Hotel Sales Advertising and Public Relations Cases in Hospitality Marketing

Seminar in Selected Topics in Hospitality Marketing Seminar in Advertising and Public Relations Psychology of Advertising Marketing Management

#### Independent Research

Undergraduate Independent Research Administrative and General Management Work Study—Operations Work Study—Academic Human Resources Management Accounting and Financial Management Food and Beverage Management Law Properties Management Communication Science and Technology Economics, Marketing and Tourism

## New York State College of **Human Ecology**

#### Interdepartmental Courses

Field Study Office Orientation to Field Study: Skills for Learning in the Field Preparation for Fieldwork: Perspectives in Human Ecology Directed Readings Empirical Research Supervised Fieldwork Teaching Apprenticeship Sponsored Field Learning Internships Field Experience in Community Problem The Ecology of Urban Organizations: New York

### **Division of Student Services**

Special Studies for Undergraduates Directed Readings Empirical Research Supervised Fieldwork Special Problems for Graduate Students

## **Consumer Economics and Housing**

Introduction to Consumer Economics Housing and Society Sociological Perspectives on Housing Marketing and the Consumer Housing and Local Government Special Studies for Undergraduates Household Decision Making Economic Organization of the Household Personal Financial Management Consumer Decision Making Fundamentals of Housing Economics Wealth and Income Special Studies for Undergraduates Empirical Research Supervised Fieldwork Time as a Human Resource Family Management: An Ecological Approach Economics of Recreation and Leisure The Economics of Consumer Policy Housing Finance Social Effects of the Housing Environment Housing Policy and Housing Programs Consumer and the Law Community Decision Making Welfare Economics Public and Private Decision Making Special Problems for Graduate Students Seminar in Family Decision Making **Explorations in Consumer Economics** Economics of Household Behavior Family Financial Management Fundamentals of Housing Advanced Housing Market Analysis Demographic Aspects of Housing Seminar on Consumer Law Problems Applied Welfare Economics—Policy Issues Consumption and Demand Analysis Human Capital Seminar in Current Housing Issues Readings in Housing

## **Design and Environmental Analysis**

Design I: Fundamentals Theory of Design Drawing Drawing the Clothed Figure Textiles I and II Apparel Design I-III Environmental Analysis: Human and Social Factors Science for Consumers Science, Technology, and Human Needs Clothing Through the Life Cycle Dress: A Reflection of American Women's Roles Environmental Psychology: Perspectives and Methods Historic Design I: Furniture and Interior Design Historic Design II: Furniture and Interior Design Fundamentals of Interior Design Household Equipment Principles Textiles III: Structure and Properties Textiles for Interiors and Exteriors Design: Weaving
Design: Introductory Textile Printing Graphic Design
Environmental Analysis: Human Factors Selected Topics in History of Costume
Historic Design III: Contemporary Design Residential Design Empirical Research Supervised Fieldwork The Textile and Apparel Industries The Textile and Apparel Industries-Field Experience Care of Textiles Textiles IV: Textile Chemistry Apparel Textiles Textile Materials for Biomedical Use Apparel Design IV: Theory of Functional Clothing Psychology of the Near Environment Apparel Design V: Product Development and Presentation Design IV Special Problems for Graduate Students Shelter Textile Fiber Evaluation by Modern Analytical Techniques

Physical Science in the Home Special Topics in Textiles Advanced Textile Chemistry Textile Seminar Mechanics of Fibrous Structures Person-Environment Fit: Systems Analysis Nonverbal Communication: The Role of Objects and Space in Everyday Life Social Psychology of the Near Environment Topics in Human Environments

**Human Development and Family** Studies

Methods

Environmental Psychology: Perspectives and

Human Development: Infancy and Childhood Human Development: Adolescence and Youth Introduction to Expressive Materials
The Family in Modern Society Early Adolescence

From Adolescence to Adulthood: Developmental Issues Participation with Groups of Children in the Early Years

Participation with Groups of Children in the Middle Years

The Family
Processes of Adaptation and Atypical Development Family and Community Health

Collective Behavior and Social Movements Problematic Behavior in Adolescence Human Sexuality: A Psychological Perspective Cognitive Processes in Development The Development of Creative Thinking Models and Settings in Programs for Children Infant Behavior and Development

The Role and Meaning of Play Human Growth and Development: Biological and Social Psychological Considerations

Specialized Participation in Preschool Settings Contemporary Family Forms in the United

The Family in Cross-cultural Perspective Theories of Adult Interpersonal Relationships Personality Development in Childhood The Development of Social Behavior

The Study of Lives Behavioral Disorders of Childhood Intellectual Deviations in Development Aging in America Experimental Child Psychology Empirical Research Supervised Fieldwork Teaching Apprenticeship Field Experience in Adolescent Development: The Individual in Community Field Experience in Adolescent Development: Social Policy Toward Youth Policies and Programs for Adolescents Work and Human Development Learning in Children
Intellectual Development and Education Piaget's Theory of Cognitive Development Language Development Creative Expression and Child Growth
The Development of the Black Child

Innovative Programs of Parent Intervention and

Field Experience in Atypical Development Historical Roots of Modern Psychology

Community Action
Families and Social Policy

**Topics Courses** Topics in Adolescent Development Topics in Cognitive Development Topics in Early Childhood Education and Development Topics in Family Studies Topics in Social and Personality Development Topics in Atypical Development Topics in the Ecology of Human Development

Graduate Program Research Design and Methodology Research Design and Data Analysis Development in Context Directed Readings Empirical Research Practicum Adolescence Cognitive Development Infancy Early Childhood Education Contemporary Family Theory and Research Personality and Socialization Atypical Development Research Practicum in the Ecology of Human Development

### **Topical Seminars**

Seminar in Adolescence Seminar on Language Development Seminar in Cognitive Development Seminar on Infancy Seminar in Early Childhood Education Seminar in Family Studies Seminar in Personality and Social Development Seminar in Atypical Development Seminar in Human Development and Family

Seminar on Ecology of Human Development

## **Human Service Studies**

Structure of Community Services Groups and Organizations What Is Teaching? Ecological Determinants of Behavior Research Design and Analysis Health-Care Services and the Consumer Ecology and Epidemiology of Health Ecological Approach to Instructional Strategies Clinical Analysis of Teaching Social Welfare as a Social Institution Empirical Research Supervised Fieldwork Introduction to Adult Education The Adult Learner in Microperspective Practicum The Adult Learner in Macroperspective The Helping Relationship
Program Planning in Community and Family Life Education Program Planning The Art of Teaching Teaching Internship Critical Issues in Education Career Environment and Individual

Development
Teaching for Reading Competence: A Content

Area Approach

Social Work Practice

Senior Seminar in Social Work Program Development in Social Services Social Policy

#### he Graduate Program

Introduction to Human Service Studies Teaching Human Services in Higher Education
Adult Development and the Provision of Human

Preparing Professionals in the Human Services Consulting and Supervisory Roles in Human Services

Administration of Human Service Programs in Higher Education Public Policy and Program Planning in Human

Services

Designing and Implementing Human Service

Frograms
The Intergovernmental System and Human
Service Program Planning
Measurement for Program Evaluation and

Research

Program Evaluation and Research Design Program Evaluation in Theory and Practice Strategies for Policies and Program Evaluation Qualitative Methods for Program Evaluation Internship in Human Service Studies Seminar in Evaluation

#### Topical Seminars and Practica

Seminar in Adult and Community Education Seminar in Home Economics Education Seminar in Social Welfare Services Seminar in Health and Mental Health Services
Practicum in Higher Education in Human Services

eminar in Higher Education in Human

Services Practicum in Program Planning and Development

Seminar in Program Planning and Development Practicum in Program Evaluation and Evaluative Research

eminar in Program Evaluation and Evaluative Research

## Continuing Education for Professionals

Groups and Organizations Professional Improvement Research Design and Analysis Social Welfare as a Social Institution Ecological Determinants of Behavior Program Development in Social Services Organization and Structure for Delivery of Social Services

## Independent Interdisciplinary Centers and Programs

#### Africana Studies and Research Center

Afro-American Writing and Expression
Applied Writing Methods on Afro-American Topics

Infancy, Family, and The Community Teaching and Learning in Black Schools Introduction to Modern Political Systems Swahili Literature

History and Politics of Racism and Segregation Issues in Black Literature Black Political Thought in the United States

Black Resistance: South Africa and North America Black Drama

The Sociology of the Black Experience Seminar: Psychological Aspects of the Black

Experience Social and Psychological Effects of Colonization and Racism

Blacks in Communication Media and Film Workshop Neocolonialism and Government in Africa:

Problems of Africanization and Development Afro-American Perspectives in Experimental

Psychology African Socialism and Nation Building Politics in the Afro-Caribbean World: An

Introduction
Ancient African Nations and Civilizations Afro-American History
Afro-American History: The Twentieth Century Contemporary African History Comparative Slave Trade of Africans in The Americas

Political Economy of Idealogy and Development in Africa

Black Politics and the American Political System

Social Policy and the Black Community in the Urban Economy

African Literature Advanced Seminar in the Black Theater History of Afro-American Literature Modern Afro-American Literature

History of African Origins of Major Western

Black Critique: Toward Defining and Developing a Black Aesthetic Black Leaders and Movements in

Afro-American History
Political Economy of Black America Independent Study

Workshop in Teaching About Africa Historiography and Sources: The Development of Afro-American History

Comparative Political History of the African

Diaspora
Historical Method, Sources and Interpretation
Transnational Corporations in Africa and Other Developing Countries Political History of Social Development in the

Caribbean Seminar: Psychological Issues in the Black Community

## Program on Science, Technology, and Society

Biology and Society I: The Biocultural Perspective Biology and Society II: Biology, Society, and Human Values Biomedical Ethics

**Environmental Ethics** Senior Seminar in Human Fertility: Developing Nations Senior Seminar: Biomedical Research

Regulations, and Ethics: A Delicate Balance Senior Seminar: Social Demography Science, Technology, and Public Policy Impact and Control of Technology Change Politics of Technical Decisions The Computerized Society
Social Implications of Technology Seminar in Technology Assessment Environmental Law Defense Policy and Arms Control International Politics of Energy

Social History of Western Technology Problems in the History and Philosophy of Biology Science, Technology, and Law Science and Human Nature Science, Technology, and Social Change

Sociology of Science and Technology Social and Political Studies of Science

## New York State School of Industrial and Labor Relations

## Collective Bargaining, Labor Law, and **Labor History**

History of Industrial Relations in the United States

Special Studies in the History of Industrial Relations in the United States Collective Bargaining

Labor Relations Law and Legislation Labor Union Administration Research Seminar in the Social History of

American Workers Seminar in the History, Administration, and Theories of Industrial Relations in the United

Research Seminar in the American Labor Movement and Politics Industrial Relations Biographies Famous Trials in American Labor History Jewish Workers in Europe and America, 1798-1948

Union Organizing Collective Bargaining Structures

Contemporary Trade Union Movement Internship Collective Bargaining
Labor Relations Law and Legislation
Labor Union History and Administration Advanced Seminar in Labor Arbitration Integration of Industrial Relations Theories Arbitration

Governmental Adjustment of Labor Readings in the Literature of American Radicalism and Dissent Readings in the History of Industrial Relations

in the United States Theories of Industrial Relations Systems

Arbitration and Public Policy Special Topics in Collective Bargaining, Labor Law, and Legislation

Public Policy and Labor Relations Problems in Union Democracy Labor Relations Law

Seminar in Labor Relations Law and Legislation

Special Topics in the History, Administration, and Theories of Industrial Relations Employment Discrimination and the Law Collective Bargaining in Public Education Collective Bargaining in the Public Sector Current Issues in Collective Bargaining Labor Education

Theory and Research in Collective Bargaining Research Seminar in Public Sector Collective Bargaining Industrial Relations in Health Care Institutions

Internship Workshop in Collective Bargaining, Labor Law,

and Labor History

### **Economic and Social Statistics**

Statistics Economics and Social Statistics Design of Sample Surveys Techniques of Multivariate Analysis Statistical Analysis of Qualitative Data Introductory Statistics for the Social Sciences Seminar in Modern Data Analysis Seminar in Statistical Methods Types of Sampling

#### International and Comparative Labor Relations

Comparative Industrial Relations Systems Labor in Developing Economies European Labor History Seminar in International and Comparative Labor Problems

### Labor Economics

Development of Economic Institutions Economics of Wages and Employment Economic Security Protective Labor Legislation Problems in Labor Legislation Problems in Labor Economics Comparative Economic Systems: Soviet Economics of Collective Bargaining

Capitalism and Socialism Health, Welfare, and Pension Plans Income Distribution Internship Labor Economics

Social Security and Protective Labor Legislation Economics of Manpower

Work and Welfare: Interactions Between Cash Transfer Programs and the Labor Market Special Topics in Labor Economics
The Economics of Occupational Safety and

Economics of the American System of Private

Enterprise Professional and College-Trained Manpower:

Labor Market Issues and Analysis Evaluation of Social Programs Economics of the American System of Private

Enterprise Seminar on Investment in Man Seminar in Labor Economics Economic Theory and Labor Market Issues Workshop in Labor Economics

## Organizational Behavior

Society, Industry, and the Individual Social Issues and Social Theory in Industrial

Studies in Organizational Behavior: Regulating the Corporation

The Psychology of Industrial Engineering Stress at Work

Cross-cultural Studies of Organizational Behavior Introduction to the Study of Attitudes

Organizations and Deviant Behavior Organizations and Social Inequality Sociology of Occupations Psychology of Industrial Conflict Cooperation, Competition, and Conflict

Resolution Sociological Analysis of Organizations
The Study of Work Motivation

Individual Differences and Organizational Behavior Organizational Behavior Simulations

Group Processes Social Organization of the Urban Community

Groups in Work Organizations Evaluation of Social Action Programs Study of Public Sector Bureaucracy Sociology of Industrial Conflict

Theories of Industrial Society
The Professions: Organization and Control
Ecological Psychology: Behavior Setting
Analysis within the Organizational Context

Organizational and Political Behavior in School Districts Unions and Public Policy in School Districts

Internship Organizational Behavior Theories of Organizational Change, Innovation,

and Evaluation Growth of the World Capitalist-Industrial System

The Organization and Its Environment Labor and Monopoly Capital: The Growth of Large United States Firms in the Past

Leadership in Organizations Personality in Organization Sociological Study of Power Urban Politics and Public Policy Cross-cultural Explorations of Individual Differences

Social Regulation and Control of Institutions Seminar in Field Research Theories of Organizational Behavior Behavioral Research Theory, Strategy, and Methods

Analysis of Published Research in Organizational Behavior Work and Industrial Conflict Seminar on Work Motivation

## Personnel and Human Resources Management

Personnel Management Public Policy and the Development of Human Resources
Urban Problems and Public Policy Programs

Effective Supervision Techniques and Theories of Training in

Organizations Communication in Organizations New York State—Human Resource and

Employee Relations Issues and Policies Organization Development: Strategy and Practice

Human Resources and State Legislative Process

Social Contract, 1964–1980 The Social Tensions of Labor Market Reform Occupational Analysis and Human Resource

Planning
Planning Area-wide Employment and Training

Sectoral Variations in Human Resource Policy Job Creation: Policy Emergence and Current

Issues
Human Resources and Immigration Policy in the United States

Internship Career Planning and Development

Seminar in Personnel or Human Resource Management Management Training Simulation: Public Policy

Issues in Social Agencies

History of Contemporary Management Thought Management and Leadership Development Case Studies in Personnel Administration Administrative Theory and Practice Current Issues and Research in Human Resources Development Staffing: Employee Selection and Utilization Administration of Compensation Top Management Personnel Strategies and Policies Human Resource Planning The Appraisal and Diagnosis of Organizations Design and Administration of Training Programs Seminar on the Theory and Practice of Organization Development

Local Government Human Resource Planning and Administration Personnel Administration and Government Regulations

The Debate over Full Employment

Human Resource Economics and Public Policy

#### Interdepartmental Courses

Labor Problems in American Society
Personnel Management for Managers
Plant Shutdowns and Job Loss: Worker and
Community Effects
Human Resource and Collective Bargaining
Problems in the Construction Industry

## Division of Nutritional Sciences

Ecology of Human Nutrition and Food Introductory Foods Maternal and Child Nutrition Introduction to Physiochemical Aspects of Food Nutritional Aspects of Raw and Processed Foods Orientation to Field Study in Extension Sociocultural Aspects of Food and Nutrition Physiological and Biochemical Bases of Human Nutrition Laboratory in Nutrition Consumer Food Issues Human Growth and Development: Biological and Social Psychological Considerations Biochemistry and Human Behavior Management Principles in Food Service Operation Empirical Research Supervised Fieldwork Nutrition and Disease Diet Formulation and Analysis Community Nutrition and Health Physiochemical Aspects of Food Physiochemical Aspects of Food Laboratory Experimental Foods Methods National and International Food Economics Applied Dietetics in Food Service Systems Special Problems for Graduate Students Advanced Nutrition Series Proteins and Amino Acids in Nutrition Lipids The Vitamins

Carbohydrate Chemistry Molecular Toxicology Methods of Assessing Physical Growth in Children Readings in Food Teaching Seminar Teaching Experience Field of Nutrition Seminar General Nutrition Seminar in Food Habits Research Special Topics in Food Advanced Nutrition Laboratory Anthropometric Assessment Dietary Assessment Clinical Assessment Biochemical Assessment Vitamins and Coenzymes Enzymology and Metabolic Regulation Epidemiology of Nutrition Seminar of United States Nutritional Services and Programs
Seminar in Physiochemical Aspects of Food Clinical and Public Health Nutrition Nutrition and the Chemical Environment

Nutrition Counseling The Nutrition and Physiology of Mineral

Elements

Special Topics in Nutrition
Field Seminar
Clinical Field Studies
International Nutrition Problems, Policy and
Programs
Seminar in Nutrition and Behavior
Seminar in International Nutrition and
Development Policy
Special Topics in International Nutrition

## Officer Education

Seminar in Nutritional Science

#### **Aerospace Studies**

United States Military Forces Aerospace Operations Development of Military Aviation American Air Power Since 1947 Leadership and Communicative Skills Management in the Armed Forces Principles of Air Navigation and Aircraft Systems Military and American Society American Defense Policy

## **Leadership Laboratory Courses**

Initial Military Experiences Intermediate Military Experiences Junior Officer Leadership Advanced Leadership Experiences Precommissioning Laboratory

#### Military Science

United States Organization for Defense American Military History Mapping: Land Navigation Social and Organizational Psychology in the Military Environment Leadership in Small Unit Operations Theory and Dynamics of the Military Team Contemporary Military Environment Leadership Laboratory I–IV

### **Naval Science**

Fundamentals of Naval Science
Naval Ship Systems
Seapower-Maritime Affairs
Armed Conflict and Society
Principles of Navigation
Amphibious Warfare
Naval Operations
Naval Leadership, Organization, and
Management
Naval Professional Laboratories

## **Physical Education**

Archery Athletic Injury Badminton Basketball Bowling Equitation Exercise and Figure Control First Aid Fitness and Conditioning Gymnastics Jogging Karate Basic Lacrosse Nautilus Racquetball Recreational Sports and Games Sailing Soccer Squash T'ai Chi Chuan Weightlifting Yoga

#### **Aquatic Courses**

Beginning Swimming
Intermediate Swimming
Advanced Swimming
Swimming Conditioning
Advanced Life Saving
American Red Cross Water Safety Instructor
Water Safety Instructor Refresher Course
Beginning Synchronized Swimming
Advanced Synchronized Swimming
Basic Scuba
Scuba Diving
Diving

#### Dance

Modern Dance Fundamentals Ballet Fundamentals Elementary Ballet Intermediate Ballet Elementary Modern Dance Intermediate Modern Dance High Intermediate Modern Dance Elementary Jazz Ballroom Dancing Folk Dancing

#### Fencing

Beginning Fencing Intermediate Fencing

#### Golf

Instructional Golf Recreational Golf

#### Mountaineering

Introduction to Backpacking Basic Mountaineering Advanced Mountaineering Outdoor Leadership Training Survival Weekend Winter Camping Ski Camping Flatwater Canoeing Whitewater Canoeing Bicycle Touring and Camping Advanced Rock Climbing Ice Climbing

## Riflery

Riflery Skeet and Trap Hunter Safety

## Skating

Basic Skating Beginning and Low Intermediate Figure Skating Intermediate and Advanced Figure Skating Hockey

## Skiing

Downhill Skiing Cross-Country Skiing Ski Conditioning

## Tennis

Beginning Tennis Intermediate Tennis Advanced Tennis

## Volleyball

Beginning Volleyball Intermediate Volleyball Advanced Volleyball

## Graduate Units

## Graduate School of Business and Public Administration

### Common Core Courses

Managerial Accounting Quantitative Methods for Management Economic Principles for Management Introduction to Computer Programming Introduction to Management Information Systems

## Business Administration Program Core Courses

Marketing Management Production and Operations Management Managerial Finance Business Policy Introduction to the Business-Government Interface

## Business Administration Elective Courses

Intermediate Accounting

Advanced Accounting Cost Accounting Introduction to Taxation Affecting Business and Personal Decision Making Auditing Financial Information Evaluation Federal Income Tax Advanced Cost Accounting Law of Business Associations Advanced Business Law An Introduction to Estate Planning Financial Policy Decisions Investment Management Financial Markets and Institutions Seminar in Bank Management Finance Theory Topics in International Financial Management Options, Bonds, and Commodities Investment Banking Marketing Research Advertising Management Marketing Strategy Seminar in Marketing Planning: Topics and Cases Management of Marketing Intermediaries Marketing Decision Models Demand Analysis and Consumer Behavior Industrial Marketing
Special Topics in Marketing Management Topics in Consumer Behavior
Seminar in Current Research in Marketing
Product Management and Policy Advertising Practicum Product Management
Case Studies in Production and Operations

## Public Administration Program Core Courses

Economic Foundations of Public Policy Public Financial Management Policy Considerations: The Business-Government Interface The Conduct of Public Affairs

**Business Logistics Management** 

Management

Strategic Management

## Public Administration Elective Courses

Urban Government Operations
Science, Technology, and Public Policy
Integrative Seminar: Education for Public
Management Program
Seminar in Public Systems Analysis
The Politics of Technical Decisions
Legal Process
Energy and Public Policy

## Hospital and Health Services Administration Program Core Courses

Social Psychology of Health Organizations Hospital Corporate Planning Psychiatric Institutions: Administration and Practice Primary Health Care Services: Policy and

Planning

egal Aspects of Hospital Administration
Health Services Research and Evaluation Health Economics Health and Welfare Policy

Health Maintenance Organization Development

and Management
Health Operations Management and Planning Seminar in Hospital Governance and Decision

Making ield Studies in Health Administration and Planning

Planning
Long-Term Care Services: Policy and Planning
Vashington Health Policy Field Seminar
Drientation to Tertiary Hospital Services
Selected Topics in the Administration of Teaching Hospitals

troduction to Clinical Medicine: The Physician, the Hospital, and the Delivery of Medical Care

inancial Management of Hospitals nternational Comparisons of Health Services abor Relations in the Health Industry state Government Health Policy Seminar

#### Common Course Electives

und Accounting hternational Trade and Finance merican Business Operations Abroad Administration of Agricultural and Rural Development Security Analysis Macroeconomics conomic Evaluation of Capital Investment Projects Problems and Practices: The **Business-Government Interface** merican Industry: Economic Analysis and Public Policy opics in Managerial Economics Organizational Theory and Behavior ersonnel Administration and Human Relations Processes and Techniques in Organizational Development

Organizational Behavior and Administration Seminar in Organizational Theory Sehavioral Science and Managing Sociotechnical Issues in Office Automation Behavioral Decision Theory pplied Probability Applied Statistics Operations Research pplied Multivariate Analysis pplied Econometrics

Management Science htroduction to COBOL Programming ata-Base Systems computer Systems Analysis Seminar in University Administration Management Writing

## Research

nvestment Analysis: Language Model Building Laboratory dvanced Capital Market Theory Octoral Seminar in Accounting inance Workshop Octoral Seminar in Monetary Economics Advanced Corporate Finance Theory
Advanced Seminar in Banking and Financial Markets Social Psychology of Organizing

### Law School

## **First-Year Courses**

Civil Procedure Constitutional Law Contracts Criminal Justice Practice Training Property

Administrative Law

American Legal History

#### Second-Year Electives

Agency and Partnership Commercial Law
Commercial Paper and Banking Transactions Corporations Economics for Lawyers Enterprise Organization Evidence Federal Income Taxation Process of Property Transmission Trusts and Estates

#### Second- and Third-Year Electives

Antitrust Law Collective Bargaining in the Public Sector Comparative Law Conflict of Laws Contemporary Legal Theory Criminal Procedure Debtor-Creditor Law Employment Discrimination and the Law English Legal History Environmental Law Estate and Gift Taxation Family Law Federal Courts Insurance Intellectual and Industrial Property International Human Rights International Law Land Financing
Land-Use Planning
Law of the European Community Law Practice Dynamics Law, Society, and Morality Legislation Local Government Native American Law New York Practice Regulated Industries Securities Regulation Social Security Law Supervised Writing or Teaching Taxation of Partnership Income Trial Practice

## **Seminars and Problem Courses**

Trial Techniques

American Legal Theory

Comparative Law Seminar Constitutional Criminal Procedure Constitutional Theory Consumer Law Corporate Practice Equal Protection Seminar Ethics of Corporate Practice Family Law Clinic Fiduciary Administration International Business Transactions International Tax Planning Labor Arbitration Land-Use Planning Seminar Law and Medicine Legal Aid Prisoners' Legal Services Problems in Corporate Litigation Problems in Environmental Law Problems in Legislation Problems in Urban Development Science, Technology, and Law Water-Waste-Toxic Materials

## New York State College of **Veterinary Medicine**

#### Anatomy

Gross Anatomy Developmental and Microscopic Anatomy Microscopic Anatomy Neuroanatomy Applied Anatomy Special Projects in Anatomy Advanced Anatomy Advanced Clinical Neurology Vertebrate Morphology

## Avian and Aquatic Animal Medicine

Poultry Hygiene and Disease Avian Diseases Diseases of Aquatic Animals Aguavet: Introduction to Aquatic Veterinary Medicine Diseases of Aquarium Fish Advanced Work in Avian Diseases Graduate Seminar in Diseases of Aquatic Animals Advanced Work in Aquatic Animal Diseases

#### Clinical Sciences

Health and Diseases of Animals

Clinical Orientation Clinical Methods Obstetrics and Reproductive Diseases Large Animal Medicine Large Animal Surgery Radiology Clinical Nutrition Veterinary Medical Orientation Clinical Pathology Large Animal Clinic Large Animal Surgical Clinic Ambulatory Clinic Ambulatory and Mastitis Clinic Diagnostic Services Anesthesiology Clinic General Medicine Radiology Clinic Basic Nutrition Large Animal Surgical Techniques Small Animal Medicine and Surgery Small Animal Surgical Exercises General Surgery and Anesthesiology Small Animal Medical Clinic Small Animal Surgical Clinic Ophthalmology Large Animal Medical Clinic Opportunities in Veterinary Medicine Dermatology Clinic Special Problems in Large Animal Medicine Special Problems in Large Animal Surgery Special Problems in Large Animal Obstetrics Dairy Herd Health Poisonous Plants Horse Health Management Goats: Management and Diseases Diseases of Swine Special Problems in Small Animal Medicine Special Problems in Small Animal Surgery Veterinary Dermatology Gastroenterology Conference Veterinary Gastroenterology Veterinary Research Methods Advanced Work Special Topics of Veterinary Ophthalmology

### Microbiology

Basic Immunology Pathogenic Microbiology Veterinary Immunology Veterinary Bacteriology Veterinary Virology Veterinary Mycology and Protozoology Infectious and Zoonotic Diseases Special Projects in Microbiology Small Animal Infectious Diseases Advanced Immunology Laboratory Advanced Work in Bacteriology, Virology, or Immunology Animal Virology

Microbiology Seminar Laboratory Methods of Diagnosis Seminars of Current Topics in Immunology and Microbiology

## Pathology

Veterinary Pathology Introduction to Laboratory Animal Medicine Clinical Pathology Comparative Necropsy
Special Problems in Pathology Wildlife Pathology Postmortem Pathology Microscopy
Select Topics in Laboratory Animal Medicine
Principles of Toxicological Pathology Clinical Immunology Pathology of Nutritional Diseases Advanced Work in Pathology Reproductive Pathology Laboratory Animal Clinical Rotation Seminar in Surgical Pathology Seminar in Necropsy Pathology Special Topics in Pathology Mechanisms of Disease Immunopathology

## Physical Biology/Section of Physiology

Invertebrate Zoology Histology: The Biology of the Tissues Introductory Animal Physiology Lectures Seminar in Anatomy and Physiology General Animal Physiology: A Quantitative Approach Undergraduate Research in Animal Physiology Applied Radiation Biology and Veterinary Nuclear Medicine Graduate Research in Animal Psysiology and Anatomy Lipids Special Projects in Physical Biology Applied Electrophysiology Clinical and Research Techniques in Veterinary Nuclear Medicine Mammalian Physiology Physiological Optics Radioisotopes in Biological Research Biological Membranes and Nutrient Transfer Physical Biology Graduate Seminar Molecular Mechanisms of Hormone Action Mineral Metabolism

## Physiology, Biochemistry, and Pharmacology

Vertebrate Biochemistry Physiology for Veterinary Students Basic Pharmacology Clinical Pharmacology Special Projects in Physiology Toxicology Special Projects in Pharmacology Veterinary Animal Behavior Acid-Base Relations Special Problems in Physiology Physiologic Disposition of Drugs and Poisons Physiology

## Preventive Medicine

Introductory Parasitology and Symbiology Parasitic Helminthology Animal Parasitology Diagnostic Parasitology Preventive Medicine in Animal Health Management Principles of Epidemiology Veterinary Medical Orientation Safety Evaluation in Public Health Data Processing in Preventive Medicine



aculty members and students benefit both academically and personally from a diverse student body. The colleges and schools at Cornell admit men and women who have diverse social, economic, and cultural backgrounds, racial and national identities, and talents. All students entering the University must be prepared to contribute to and benefit from the environment of Cornell. Therefore admission selection is an evaluative process that considers each individual's achievements and potential for success at the University.

The most important criteria for admission are intellectual potential and commitment—a complex combination of ability, achievement, motivation, diligence, and educational opportunity. Nonacademic qualifications are also important. The University seeks individuals with outstanding personal qualities and a record of significant involvement in extracurricular endeavors. Students with unusual talents and achievements in music, acting, creative writing, science, athletics, politics, and other areas are often given special consideration in the admission process.

## Admission Policy

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age, or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

Each of the undergraduate schools and colleges is limited in the number of students it can accommodate in order to preserve the quality of life on campus. In every unit the number of qualified applicants for freshman and transfer admission exceeds the number that can be admitted. Students may submit only one application for a given semester and be



considered for admission by only one undergraduate division at a time. Applicants compete only with those seeking admission to the same Cornell school or college. Each undergraduate unit has its own selection committee, admitting those who have best demonstrated they deserve acceptance. Those schools and colleges that focus on professional programs select students who, having met all other qualifications, show the best evidence of being suited for the field of work to which the course of study is directed.

## Criteria for Selection

Academic competence. Cornell University is devoted primarily to the intellectual development of its students. Those selected for admission have demonstrated the intellectual capacity to profit from the instruction. Intellectual preparedness for study at Cornell is judged by the applicant's academic record, the recommendations of school authorities, and standardized college admission tests.

**Extracurricular activities.** To supplement the basic requirement of demonstrated intellectual capability, evidence of the applicant's involvement in nonacademic areas is carefully considered in admission decisions. This factor is judged by the student's participation in school and community extracurricular activities and by the use made of vacation periods. Work experience or other activity related to the applicant's vocational or professional objective is also important.

Character, personality, and motivation. The intangible but important factors that form good character and an effective personality receive full consideration by the selection committee. Evidence of a sound motivation for attaining higher

education and for pursuing a specific field of education is also desirable. Capacity for leadership and concern for others receive due weight. Those factors are usually judged by the report from the applicant's secondary school and by interview reports, when available. Some University divisions require interviews. whereas in others the need for an interview is left up to the applicant. (See pp. 54-56 for information on interviews and group conferences.) Personal interviews are also conducted by alumni secondary schools committees operating in many sections of the United States and some foreign countries; such contacts often provide the applicant with additional information about Cornell.

**Geographical distribution.** Cornell University draws its students from all parts of the United States and more than ninety foreign countries. The University believes in the educational values inherent in bringing to the campus persons of widely different backgrounds and directs its admission policies to this end. The diverse student body is the pride of the entire University.

The undergraduate divisions financially supported by New York State-the College of Agriculture and Life Sciences, the College of Human Ecology, and the School of Industrial and Labor Relations -recognize these same values and encourage applications from well-qualified out-of-state students. Most of their degree candidates are, however, selected from among applicants who reside in New York State. The private divisions—the College of Architecture, Art, and Planning; the College of Arts and Sciences; the College of Engineering; and the School of Hotel Administration—impose no restrictions as to residence. Among applicants of approximately equal qualifications, some preference may be given to those whose homes are in areas not adequately represented in the student body.

Children of alumni. The University wants to include among its students as many of the children of its alumni who are qualified for admission as existing admission competition will allow. In choosing between applicants of approximately equal qualifications, including scholarship, extracurricular activities, character, person-

ality, and motivation, the son or daughter of an alumnus will receive preference in some divisions of the University. The Cornell relationship receives serious consideration by selection committees, although the state-supported units, because of their New York State affiliation, cannot weigh it as heavily as the private divisions.

## Selecting an Undergraduate Unit

Choosing the undergraduate unit to which to apply should be given careful thought. Requirements for admission and graduation vary significantly from one division to another. These should be considered in relation to a student's abilities, interests, achievements, and academic and vocational goals. College advisers should be consulted, and Cornell admission officers are always ready to assist prospective applicants. University group admission conferences, described below, can help prospective students select the appropriate undergraduate unit.

While some students at Cornell do transfer from one undergraduate unit to another after enrolling, such internal transfer cannot be guaranteed. Counseling is available to those who find themselves in an inappropriate course of study, and every effort is made to help students transfer within the University so they can satisfactorily complete an undergraduate program. Those who are unable to transfer directly from one Cornell school or college to another, but who appear to have a reasonable chance for academic success in another area of study, may be admitted to the Division of Unclassified Students for one or two semesters. Students in the division enroll in the same courses they would normally take if they were registered in the new academic unit while attempting to meet the transfer requirements of that school or college.

## Getting to Know the Campus

# Conferences, Interviews, and Tours

Prospective students and their families are encouraged to visit the campus and arrange discussions with members of the faculty or admission staff and to become



familiar with the University in a personal way. The University's Office of Admissions and the undergraduate schools and colleges offer a variety of opportunities for group conferences and individual interviews. All individual interviews are by appointment. Interested students should write or telephone suggesting a date and time, and alternates if possible, at least three weeks before the date requested.

Handicapped students who want to visit the campus can make special arrangements for interviews, attendance at group meetings, tours, and other special needs by communicating well in advance with Mrs. Marjorie Sullivan, Assistant to the Director of Admissions, Cornell University, 410 Thurston Avenue, Ithaca, New York 14850 (telephone: 607/256–5050).

## Information and Referral Center

The Information and Referral Center assists students, faculty, staff, and visitors by distributing free literature, answering questions, and giving directions. The center's goal is to minimize confusion and help people avoid having to contact several offices with their questions. Questions to which answers are not readily available will be researched by the center staff. The center, located in Day Hall near the East Avenue entrance, is open Monday through Saturday from 9:00 a.m. to 5:00 p.m. (telephone: 607/256–6200).

University tours. The center conducts University campus tours every day except certain University holidays. The tours, given by student guides, provide visitors with a general survey of Cornell's history while showing them the beauty of the campus. During holidays and intersession periods it is advisable for visitors to call ahead to ensure that the tour they want to take will be offered. The tours leave from the Information and Referral Center on weekdays at 11:15 a.m. (April 1 through October 31 only) and 1:30 p.m.; on Saturdays at 11:15 a.m.; and on Sundays at 1:00 p.m.

## Want to Ask a Student a Question?

Prospective students often have questions they would like to ask undergraduates about life on campus. If you have such questions, the Cornell Ambassadors would like to hear from you. The Ambassadors are undergraduates from the schools and colleges across the campus. If you know the unit or field you are interested in, please include it in your letter; the Office of Admissions forwards the letters to appropriate Ambassadors for a reply. Write to Cornell Ambassadors, Box DSH, Office of Admissions, 410 Thurston Avenue, Ithaca, New York 14850.

## **University Group Conferences**

These group sessions are for those who have limited knowledge about the University or who are unsure how their interests might best be accommodated by a Cornell

undergraduate program. Conferences, which are open to students, parents, and other interested persons, include information on the admission process, financial aid, educational programs, and campus facilities and also provide an opportunity to ask questions. Sessions lasting from forty-five minutes to an hour are held throughout the year at the University's Office of Admissions, 410 Thurston Avenue, on Monday and Friday at 9:30 a.m. and 11:00 a.m.: Tuesday, Wednesday, and Thursday at 9:30 a.m.; and Saturday at 9:00 a.m. Those who want to participate are encouraged to make appointments by writing to the Office of Admissions, Cornell University, 410 Thurston Avenue, Ithaca, New York 14850, or by telephoning 607/256-5241 a few days before the visit, but appointments are not required. Parking is available at the office, and arrangements for on-campus parking will be made for those who want to visit other facilities.

## Required Interviews

College of Architecture, Art, and Planning. Applicants and prospective applicants for admission are encouraged to visit the campus in the fall of the year before anticipated enrollment for the required interview. An on-campus interview with a faculty member in the Department of Architecture or the Department of Art is required. When an applicant is unable to come to Ithaca, it may be possible to schedule an interview with an architect or artist who graduated from Cornell and lives in the prospective student's area. Portfolios of original architectural or art work are required by the Department of Architecture and the Department of Art. Examples of class assignments or independent work are acceptable. These should be brought to the interview in original form, copies, or slides. In addition, an 81/2-by-11-inch copy of the portfolio must be sent to the Office of Admissions, Cornell University, 410 Thurston Avenue, Ithaca, New York 14850, for review by the admission committee. Interview arrangements for the Department of Architecture may be made by contacting the Admission Secretary, Department of Architecture, Cornell University, Sibley Hall, Ithaca, New York 14853, or calling 607/ 256-4376 two weeks before the intended visit. Interview arrangements for the Department of Art may be made by writing to the Department Secretary, Department of Art, Cornell University, Franklin Hall,



Ithaca, New York 14853, or calling 607/256-3558.

School of Hotel Administration. It is the responsibility of the prospective student to arrange the required interview. Oncampus interviews are strongly encouraged, but when a visit to the campus is impossible, arrangements can be made for interviews in other locations. Contacts with other representatives of the University do not substitute for the required individual interview arranged through the school's admission office. Appointments are made by writing to the Admission Secretary, School of Hotel Administration, Cornell University, Statler Hall, Ithaca, New York 14853, or calling 607/256-6376

School of Industrial and Labor Relations. The school writes to each applicant about the required interview after it receives the application. Alumni interviews and informational visits to the school do not normally substitute for the formal interview. Arrangements for infor-

mational visits may be made by writing to the Office of Admissions, School of Industrial and Labor Relations, Cornell University, 101 Ives Hall, Ithaca, New York 14853, or calling 607/256–2222.

## **Optional Conferences and Interviews**

College of Agriculture and Life Sciences. The college offers admission conferences, in small groups and individually, by prior appointment. Individual appointments for prospective freshman and transfer applicants are available, as time allows, weekdays from 10:00 a.m. to noon and 2:00 to 4:00 p.m. from June 1 through mid-December. Transfer applicants are usually granted individual appointments to discuss their preparation for transfer, although group transfer conferences sometimes may be scheduled. Group conferences for high school students are scheduled on Monday and Friday mornings at 11:00. Students and their families are cordially invited to attend. A videotape presentation about the college and its programs will be followed by a discussion regarding admission proce-

dures, financial aid, and student life. Questions are encouraged. Following the group conference, visitors may tour the campus with a student ambassador. A monthly group conference on Saturday is also offered during the fall months. Individual appointments and conferences are not scheduled on University holidays. Arrangements may be made by contacting the Admission Secretary, College of Agriculture and Life Sciences, Cornell University, 195 Roberts Hall, Ithaca, New York 14853, or by calling 607/256–2036.

College of Arts and Sciences. The college encourages prospective students to visit the campus for personal interviews. Although not required for admission, an interview does provide the admission representative with an opportunity to talk with the prospective student and to answer questions and record any observations that may be useful to the Admission Committee.

Personal interviews for prospective freshmen are conducted on campus Monday through Friday from 9:00 a.m. to 4:00 p.m. from June 1 through mid-December; they are also conducted on Saturday morning from 9:00 a.m. to noon between October 1 and January 1. Appointments should be scheduled well in advance by writing or calling the Arts and Sciences Office of Admissions, Goldwin Smith Hall (telephone: 607/256–4833). Transfer applicants may arrange for interviews until mid-March.

All prospective students and their families are invited to attend group conferences to discuss the curriculum, special programs and options, student life, and admission and financial aid policies. These sessions are intended to be informative rather than evaluative. Conferences are held on Mondays at 10:30 a.m., Fridays at 3:00 p.m., and Saturdays at 10:00 a.m. from September 15 through January 1 and are followed by a tour of the college. Appointments are recommended and may be arranged by contacting the college admission office.

College of Engineering. The college urges prospective students to visit the campus for an admission conference. Group conferences, which include faculty members and current students, are available Mondays and Fridays at 10:00 a.m. and 2:00 p.m. throughout the year and on several Saturdays during the fall term. Conferences are followed by a tour of the engineering facilities, and visitors are invited to have lunch with a student. With sufficient notice, the college can arrange



for prospective students to spend the night on campus with a student host. The number of requests to attend the sessions is large, and prospective students are urged to make reservations well in advance with the Appointment Secretary, College of Engineering, Cornell University, 221 Carpenter Hall, Ithaca, New York 14853 (telephone: 607/256–5008).

Conferences present information about the engineering profession and the programs of study available in the college. Questions are encouraged, and parents are welcome to attend the sessions. An applicant who wants to discuss personal records with a staff member can do so after the group conference, provided the applicant has scheduled the meeting in advance.

The College of Engineering at Cornell is a unique environment, and a visit to the campus provides a valuable comparison with other engineering campuses. We encourage applicants to view firsthand the various field programs in engineering and their integration with the University as a whole.

College of Human Ecology. The college offers small group conferences that explain the academic programs of the college and its student support programs. They are scheduled on Monday and Friday at 10:30 a.m. and 3:00 p.m. all year. From May 1 until February 1 individual conferences may be scheduled as time permits on Tuesday, Wednesday, and Thursday from 10:00 a.m. to noon and 2:00 to 4:00 p.m. Prospective transfer

students may arrange appointments until April 1. A group conference is also available at 10:00 a.m. on two Saturdays each month through January 1. Appointments for all conferences should be made at least a week in advance. If advance notice is not possible, the college will try to accommodate applicants. Appointments can be arranged by contacting the Admission Secretary, College of Human Ecology, Cornell University, 172 Martha Van Rensselaer Hall, Ithaca, New York 14853, or calling 607/256–5471.

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## **Admission Categories**

## Admission of Freshmen

A student who will complete high school this academic year (or who is seeking early admission after the junior year in high school) or a student who already has graduated but has taken less than twelve academic credits at a college or university is considered a freshman applicant.

## **Applications**

The application process is designed to gather necessary information while affording applicants an opportunity to describe themselves and their interests, achievements, and educational, vocational, and professional goals in some detail. Selection committees consider each applicant carefully and thoughtfully, and the information supplied on the application forms is of critical importance.

January 1 is the deadline for submitting freshman applications; it is also the due date for Cornell financial aid applications. Since assembling complete records for all applicants takes considerable time and the review of applications is a long and detailed process, prospective applicants are urged to mail their applications by early December. Prompt return of completed materials is to the applicant's advantage.

Subject and test requirements for each academic division are contained in a chart on pages 64–65. Note these requirements carefully.

## **Early Decision**

The Colleges of Agriculture and Life Sciences, Arts and Sciences, Engineering, and Human Ecology and the School of Hotel Adminstration participate in an early decision plan designed for well-qualified high school seniors whose first preference is Cornell. Only a small percentage



of the freshman class of each of these divisions is admitted during the early decision selection process. By applying under the early decision plan, an applicant agrees to withdraw all other applications if accepted for admission to Cornell.

Early decision applicants are notified of decisions on admission and financial aid by mid-December. Applications of those not selected for early acceptance are postponed for review during the regular selection process.

The Scholastic Aptitude Test of the College Board (taken no later than November of the senior year) or the American College Testing Program examination (taken no later than October of the senior year) is required. College Board achievement tests required by the Colleges of Arts and Sciences and Engineering do not have to be submitted for early decision review, but these requirements must be completed by accepted applicants before entrance. Early decision applicants whose applications are postponed for regular review must complete the required achievement tests no later than the January test date.

## **Early Admission**

Each year a few students request consideration for admission after only three years of secondary school. Some of these students receive a high school diploma by completing all requirements in three years; others leave school lacking one or a few credits. Admission committees give serious consideration to those applicants

who have exhausted the offerings of their secondary schools and who, in addition, give a clear indication of a level of maturity that makes early college entrance desirable and appropriate. Those students who have the opportunity to take advanced, accelerated, or college-level courses during their fourth year in secondary school are usually encouraged to do so unless this action would inhibit the development of some academic strength.

Since there is variation from one Cornell division to another regarding early admission, students considering it should write to the school or college of their choice at Cornell or make an appointment for an on-campus interview to discuss their plans and reasons for wanting to enter early.

## Selection and Notification

A committee in the school or college to which the student has applied selects those it considers most entitled to admission from among all who have applied to that division.

Five divisions of the University—the Colleges of Agriculture and Life Sciences; Architecture, Art, and Planning; Engineering; and Human Ecology and the School of Hotel Administration—follow a policy of rolling admissions. They report decisions to applicants over a period of time, with some letters sent as early as February 15, but with most of them sent during March and the first half of April. The selection committee in each of these divisions must review a large number of

applications, and the fact that some applicants hear from Cornell considerably later than others has nothing to do with the quality of the applicant.

Applicants to the College of Arts and Sciences and the School of Industrial and Labor Relations are notified on the common notification date in mid-April.

Most financial aid notification announcements are also mailed to admitted applicants on the mid-April common notification date.

## **Deferred Enrollment**

Some students accepted for freshman admission may want to defer their enrollment to the following year or later. This is usually permitted in all divisions, provided the student is committed to Cornell for entrance at a later time and will not be applying elsewhere. An accepted student who wants to defer entrance should (1) accept Cornell's admission offer by the stated date; (2) complete and return the registration fee coupons, which are sent with an acceptance, along with the reguired \$50 fee; and (3) state in an accompanying letter the reasons for the requested enrollment deferral and the date entrance is desired.

If the request for deferred entrance is approved, the student will be guaranteed a place in the specified future freshman class.

## **Spring Term Admission**

The College of Arts and Sciences is the only undergraduate unit that has a specific policy of accepting freshmen for entrance in the spring term. Applications must be submitted by November 1, and students are notified by mid-December. January admission may be especially attractive to those who graduate from high school at midyear and want to enter college immediately as part of their plans for acceleration and to those who want to defer college entrance for a semester in order to gain a different kind of experience, such as work or travel.

The College of Agriculture and Life Sciences, the College of Human Ecology, the School of Hotel Administration, and the School of Industrial and Labor Relations admit freshmen in the spring term by exception only. For further information, contact the appropriate director of admissions.

The College of Engineering and the College of Architecture, Art, and Planning admit freshmen in the fall term only.

## Freshman Summer-Start Program

This special program is available for incoming Cornell freshmen who want to begin their college careers in the summer. The program provides the opportunity to earn credit toward a degree and, at the same time, eases the student's transition to the rigors of university life. Participants take two undergraduate courses. One is of the student's own choosing. The other is a Freshman Seminar designed to improve and develop the writing skills that are basic to successful performance at Cornell. Students live together in a dormitory with resident counselors, in a situation intended to provide informal association with faculty members. The advantages of the early-start program are many and vary from student to student: to adapt early to college life, to make friends and meet faculty in the informality of the summer session, to get a head start in a probable major, to work toward an accelerated degree. The opportunity to study at Cornell while the campus is uncrowded and while the natural attractions of the Ithaca area are at their most inviting is an additional advantage.

For more-detailed information write to Cornell University Summer Session, B12 Ives Hall, Ithaca, New York 14853.

## **Advanced Placement**

Entering freshmen may qualify for advanced placement credit on the recommendation of the appropriate departments of instruction. Policies for using advanced placement credit to meet degree requirements vary from one Cornell undergraduate school or college to another; students should consult a member of the admission staff in the individual unit for detailed information.

Results of examinations sponsored by the College Board (the Advanced Placement Program and the College-Level Examination Program) and by the United States Armed Forces Institute and results of the New York State College Proficiency Examination may be presented for consideration by departments for the purpose of recommending placement credit. In addition, several Cornell departments offer their own examinations given on campus during orientation week.

Students may also qualify for credit based on previous college work completed at Cornell or elsewhere. Copies of transcripts and course descriptions should be sent to the appropriate school or college office at Cornell.



Information describing advanced placement in greater detail is available from the Office of Admissions, Cornell University, 410 Thurston Avenue, Ithaca, New York 14850.

Information on Cornell University's advanced standing policy for foreign credentials may be obtained by writing to the Assistant Director for Undergraduate Foreign Admissions, Cornell University, 410 Thurston Avenue, Ithaca, New York 14850.

## Admission of Transfer Students

If at the time of proposed entrance to Cornell a student no longer associated with a high school will have completed the equivalent of one semester or more of college work, that student is considered a transfer applicant. An exception is a high school student who graduates at midyear and pursues a college program for the rest of that academic year; such a student is considered a freshman applicant and, if accepted, will be considered for advanced standing credit as appropriate.

Foreign transfer applicants are expected to have completed a minimum of one term of college work by the time of application. Only foreign students enrolled in degree programs in the United States and Canada may apply for spring term admission. Foreign students should request applications from the Assistant Director, Undergraduate Foreign Admissions, Cornell University, 410 Thurston Avenue, Ithaca, New York 14850.

Transfer applicants should follow directions given in the section Application

Procedures and Deadlines. Transfer applicants are encouraged to submit application materials well ahead of the deadline of March 15 to allow sufficient time to gather and review credentials. Applicants to the College of Architecture, Art, and Planning should, if possible, apply by January 15 for fall term admission.

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All divisions also consider transfer applications for the spring term with a deadline of November 1 for submitting applications. The College of Architecture, Art, and Planning normally considers for spring term admission only applicants who have upperclass standing in professional architecture or art programs. The Colleges of Engineering and Human Ecology and the School of Hotel Administration consider applicants for spring term transfer even if they will have completed only one semester of college by that term. Other divisions normally require completion of at least one year of college work for spring term transfer consideration, although in special instances the College of Arts and Sciences and the School of Industrial and Labor Relations consider spring term applicants who will have completed only one semester of college work.

Individual interviews and portfolios are required by the College of Architecture, Art, and Planning. The School of Hotel Administration also requires individual interviews. The School of Industrial and Labor Relations requires a five-hundred-word essay and recommends but does not require an individual interview.

Transfer applicants should be prepared to furnish transcripts of all work completed at the college level. For students applying for fall term admission, the transcript should include work taken the previous fall term and a list of courses being taken during the srping term. For students applying for spring term admission, the transcript should include work taken through the previous summer and a list of courses being taken during the fall term.

An admitted transfer student is required to submit a transcript of all college work completed before entrance to Cornell.

Transfer applicants are required to submit results of the same standardized tests required of freshman applicants unless a waiver is granted by an admission officer in the unit to which the candidate is applying.

Although students from community colleges and other two-year college programs may apply to any division of the University, the Colleges of Agriculture and Life Sciences, Engineering, and Human Ecology and the School of Industrial and Labor Relations particularly encourage applicants from these programs. Students should write to the transfer admission committees of these divisions for information on admission procedures, financial aid, and advanced standing.

## Admission of Special Students

Special students are those who enroll for one or more semesters and take a full program of studies without being candidates for a Cornell degree. (Those interested in less than full academic programs should contact the Division of Extramural Studies, Cornell University, B12 Ives Hall, Ithaca, New York 14853.) Each year most of Cornell's undergraduate schools and colleges admit special students interested in attending the University on a short-term basis.

Many special students are degree candidates at other institutions but want to take particular courses not offered at their home colleges. Examples of special arrangements for such students are the visiting student programs in the College of Agriculture and Life Sciences, the College of Human Ecology, and the School of Industrial and Labor Relations.

It is also common for people already employed to study as special students to enhance career opportunities in their current fields of work or to help them change careers. Students may also use the special student category to make up de-



ficiencies from previous undergraduate study in preparation for graduate or professional schools; however, the College of Agriculture and Life Sciences does not admit special students for training in such areas as premedical, prelaw, and preveterinary study.

Occasionally a person who has an unusually strong talent or experience in a field of study but lacks the academic requirements for regular admission attends Cornell as a special student before being accepted into a degree program. This is especially true in the College of Architecture, Art, and Planning, the School of Industrial and Labor Relations, and the College of Human Ecology.

Each of Cornell's schools and colleges makes provisions for qualified special students to transfer to degree status. In no case, however, is transfer to a degree program automatic or guaranteed. Requirements and procedures for such transfer vary from one unit to another. Those interested should consult the appropriate admission representative.

An applicant requesting consideration as a special student should mark the appropriate space on part 1 of the application.

# Graduate Student, Professional Program, and Summer Session Admission

Correspondence regarding admission to the Summer Session, the Graduate School, the Graduate School of Business and Public Administration, the Law School, the Medical College, the Graduate School of Medical Sciences, and the College of Veterinary Medicine should be sent to the individual units at the addresses given below.

Division of Summer Session Cornell University B12 Ives Hall Ithaca, New York 14853

Graduate School Cornell University Sage Graduate Center Ithaca, New York 14853

Graduate School of Business and Public Administration Cornell University Malott Hall Ithaca, New York 14853

Law School Cornell University Myron Taylor Hall Ithaca, New York 14853

Cornell University Medical College Office of Admissions 445 East Sixty-ninth Street New York, New York 10021

Graduate School of Medical Sciences Cornell University 1300 York Avenue New York, New York 10021

New York State College of Veterinary Medicine Cornell University Schurman Hall Ithaca, New York 14853

## Special Opportunity Programs

Cornell University administers a variety of programs designed to provide academic and personal support and financial assistance to minority students and to low-income students who meet program quidelines.

These special programs help increase representation of students from minority groups present in New York State that have been underrepresented in higher education. Participation is also available to those residing outside New York State.

Each year a limited number of students are admitted to Cornell, who, because of their economic or educational backgrounds, might not normally have considered applying. In these cases criteria other than traditional academic standing and test scores are often weighed more heavily in admission decisions. Financial aid programs are open to any student meeting program specifications.

Basic Educational Opportunity Grants (BEOG), Supplemental Educational Opportunity Grants (SEOG), and the College Work Study Program—all federal programs—assist those who meet specific economic guidelines. (See details in the section on financial aid.)

Through the Higher Education Opportunity Program (HEOP) and the Educational Opportunity Program (EOP) New



York State provides special assistance to residents of the state who meet the academic and economic guidelines. Cornell's Committee on Special Educational Projects (COSEP) assists students from those minority groups that traditionally have been underrepresented in higher education. In conjunction with the individual schools and colleges, COSEP provides academic support and counseling services. Participation in the program is voluntary.

Those who believe they qualify and want to be considered for COSEP, EOP, or HEOP aid and services must request such consideration on part 1 of the application for admission.

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Students admitted through COSEP, EOP, and HEOP participate in the services described in the following paragraphs. These support services, although available throughout the college career, are especially designed to ease the student's adjustment during the first year.

**Summer programs.** These programs are for students whose previous preparation and academic goals indicate a particular need that can best be met by prefreshman six-week summer courses. Those expected to attend will be advised at the time of acceptance for admission.

**Special orientation.** All program participants attend the special orientation (starting about a week before regular orientation) to receive a special briefing and introduction to the campus. Also, diagnostic testing will be administered for purposes of course-load counseling for the fall.

Academic assistance and services. The Learning Skills Center makes available preparatory courses for core subjects, tutorials, and study skills training. The center also provides access to typewriters, a reserve library, tapes, and calculators. A general counseling service is also available to help students make ef-

## Guidelines for HEOP and EOP Eligibility

Academic		Economic*	
HEOP	EOP	Dependents in Household†	Gross Family Income in 1980‡
Architecture, art, and planning Below 550 verbal and mathematics SAT	Agriculture and life sciences Below 500 verbal or mathematics SAT	1 2	\$ 6,448 7,849
or below top third in class rank  Arts and sciences	Human ecology Below 500 verbal or mathematics SAT	3 4	9,250 11,500
Below 540 verbal SAT or below top third in class rank	Industrial and labor relations	5	13,750 16,000
Engineering Below 570 mathematics SAT or below top third in class rank	Below 1,050 composite SAT and below 450 either verbal or mathematics SAT	8 9 or more	18,000 19,750 21,500 plus
Hotel administration Below 1,000 composite SAT			\$1,750 for each family member in excess of 9

<sup>\*</sup>These guidelines are subject to change after July 1, 1981.

<sup>†</sup>Including the head of the household.

<sup>‡</sup>Income figures do not include the student's income unless he or she is the head of the household or the second worker supporting the household.

fective use of other University resources such as the Career Center, the Guidance and Testing Office, and the Health Careers Program Office.

Personal services and activities. The staff also addresses itself to student concerns such as work-study, leadership training, and development of leadership skills and provides assistance to student groups in financial budgeting and program planning.

# Application Procedures and Deadlines

## United States Citizens and Landed Immigrants

Part 1 of the application for admission is included in this booklet or, if it has been removed, may be requested from the Office of Admissions, Cornell University, 410 Thurston Avenue, Ithaca, New York 14850. This form is to be completed and returned to the Office of Admissions with the \$30 application fee. Students from very low income backgrounds may request a waiver of the fee. Students may receive waivers in any of four ways: (1) by submitting a fee waiver request from the Admissions Testing Program of the College Board (ATP) which most high school guidance counselors have; (2) via a request from a reputable agency such as the College Bound Program; (3) by way of a letter from a high school guidance counselor stating that due to financial circumstances a fee waiver is necessary; or (4) by completing the Request for Waiver of Application Fee form available from the Office of Admissions, 410 Thurston Avenue, Ithaca, New York

Students who are not United States citizens, or United States citizens who are completing secondary school studies abroad should follow the instructions on pages 61 and 62 before submitting part 1.

Part 2 of the application and other forms (including those to be completed and returned by the secondary school or post-secondary institutions or both) will be sent to the applicant upon receipt of part 1. It is the applicant's responsibility to see that official records of all secondary or post-secondary work or both and results of required standardized tests are sent to the Office of Admissions.

The application process is designed to gather necessary information while giving



applicants an opportunity to describe themselves and their interests, achievements, and educational, vocational, and professional goals in some detail. Selection committees consider each applicant carefully and thoughtfully, and the information supplied on the application is of critical importance.

Since assembling complete records for all applicants takes considerable time and the review of the applications is a long and detailed process, prospective students are urged to observe the following deadlines.

## Foreign Applicants

Cornell University defines a foreign applicant as a person holding a United States nonimmigrant visa, regardless of whether that person is currently residing in the United States or abroad. Foreign applicants are subject to some additional requirements in the application process, which are given below. Questions regarding the admission of foreign students should be addressed to the Assistant Director, Undergraduate Foreign Admissions, 410 Thurston Avenue, Ithaca, New York 14850 U.S.A.

 Form 1A, the information sheet, must be filed with part 1 of the application for admission. Part 1 should not be submitted without the preliminary application. Students who do not receive the information sheet with part 1 should write to the Assistant Director, Undergraduate Foreign Admissions before sending part 1. The information sheet will be reviewed to determine whether the student's academic credentials meet the minimum standards of the University. If not, the \$30 application fee will be refunded. Foreign students are strongly urged to submit form 1A, the information sheet, by December 1.

Unless the student's native language is English, proof of proficiency in English must be submitted with part 2 of the application for admission. A person who is qualified to judge English proficiency must fill out and submit the "Report of Proficiency in English" included with part 2 of the application. In addition, a score of 550 on the Test of English as a Foreign Language (TOEFL) is required for admission. Some students with outstanding academic records may be offered conditional admission if their TOEFL scores are between 500 and 550 These students are expected to attend a summer intensive English program at Cornell before initial registration. All students with TOEFL scores less than 600 will be required to take Cornell's English placement examination (administered during orientation week) and to continue English instruction during the academic year if necessary.

Exemption from the TOEFL. Nonnative English speakers are likely to have low scores on the verbal portion of the Scholastic Aptitude Test (SAT) even if they have been studying in the English language for several years. Therefore, even students who technically meet the criteria for exemption from the TOEFL are strongly urged to take this examination and submit the scores as part of their application for admission. A TOEFL score enables the admission selection committee to more accurately assess an applicant's English proficiency and ability to succeed in an undergraduate program at Cornell. Students who want to request an exemption from the TOEFL must do so in writing by contacting the Assistant Director, Undergraduate Foreign Admissions, 410 Thurston Avenue, Ithaca, New York 14850 U.S.A. Only applicants who meet one or more of the following criteria will be exempted.

a) The native language of the applicant is English.

 b) By January 1, 1982, a freshman applicant will have completed two full years of study in the United States or another country in which

English is the native language. By March 15, 1982, a transfer applicant will have completed three semesters or five quarters of study in the United States or another country in which English is the native language.

- c) The applicant earned a score over 600 on either the verbal section of the Scholastic Aptitude Test (SAT) or the College Board achievement test in English.
- 3. Financial aid resources for foreign students at Cornell are limited. Consequently the competition for these awards is keen, and only a small percentage of the entering class each year receives assistance. The majority of accepted students must be prepared to fully meet the costs of their education at Cornell from personal or other funds. Those students who do receive financial aid are likely to have exceptional academic records and evidence extraordinary potential to contribute positively to the Cornell community.
- 4. Upon acceptance for admission to Cornell, a foreign student must present evidence that sufficient funds will be available to cover all expenses anticipated for the entire period of study at the University. When satisfactory certification has been received, a form I-20 (certificate of eligibility for nonimmigrant F-1 student status) will be issued. Students who hold other types of nonimmigrant visas (e.g., G-4, A-2, E-1, et cetera) do not need form I-20, but are required to submit financial certification before registration will be permitted.

## Applicants with International Education

Applicants who are United States citizens and persons holding United States permanent resident or refugee visas who have had international educational experiences should request the supplementary international education forms when filing part 1 of the application for admission. These forms will include a summary of educational background and a report of proficiency in English (for nonnative English speakers only). Students whose native language is not English are strongly urged to submit scores of the Test of English as a Foreign Language (TOEFL) as part of their application. Questions regarding the evaluation of foreign educational credentials, advanced placement policies, and exemption from the TOEFL may be addressed to the Assistant Director, Undergraduate Foreign Admissions, 410 Thurston Avenue, Ithaca, New York 14850 U.S.A.

## **Admission Timetable**

**November 1:** Applications due for freshman early decision applicants. Applications due for freshman and transfer applicants for the spring semester (January 1982). Early decision applicants should submit the financial aid form (FAF) to the College Scholarship Service by this date.

**December 1:** Deadline for freshman foreign students residing outside the United States and Canada to submit the information sheet (1A) and part 1. Applicants are strongly encouraged, however, to mail applications by early December to avoid postal delays.

**Mid-December:** Announcements of decision for early decision and spring term freshman and transfer applicants.

**January 1:** Applications due for freshman applicants for the fall semester (September 1982). Freshman financial aid applicants are encouraged to submit the FAF to the College Scholarship Service by this time.

**February 15:** Deadline for freshman applicants applying for financial aid to send the FAF to the College Scholarship Service. Deadline for transfer foreign students residing outside the United States and Canada to submit the information sheet (1A) and part 1.

**February 15–April 15:** Announcement of decisions for freshman applicants applying to the College of Agriculture and Life Sciences; the College of Architecture, Art, and Planning; the College of Engineering; the College of Human Ecology; and the School of Hotel Administration.

**March 1:** Deadline for transfer applicants applying for financial aid to send the FAF to the College Scholarship Service.

**March 15:** Applications due for transfer applicants for the fall semester (September 1982).

**Mid-April:** Announcement of decisions for freshman applicants applying to the College of Arts and Sciences and the School of Industrial and Labor Relations.

**April 15–June 15:** Announcement of admission decisions and financial aid awards for transfer applicants for fall semester.

**May 1:** Applicant reply date for regular fall freshman applicants.

**Early June:** Transfer reply date is June 1 or two weeks following notification, whichever is later.

## Admission Requirements

## **Test Requirements**

The table on pages 64 and 65 summarizes the subject and test requirements and suggested preparation for each school and college.

College Board tests. Freshman applicants are urged to take the College Board Scholastic Aptitude Test (SAT) no later than the December test date of their senior year and any required College Board achievement tests no later than the January test date for fall entrance. Because of limited test offerings in New York State, high school seniors who are New York residents are urged to schedule their SAT and achievement tests early in their senior year. Not taking the required tests by these dates may seriously jeopardize a student's chances for admission. Students must request the College Board to send the official score report to Cornell University. Scores reported on school transcripts or in other ways are not acceptable.

Students may obtain application forms for these tests through their schools or by writing to the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540, or Box 1025, Berkeley, California 94701.

American College Testing Program tests. All divisions will accept the results of the American College Testing Program examination (ACT) as either a partial or a complete substitute for the College Board tests. (See pp. 64–65 for detailed requirements.) Applicants must ask the American College Testing Program to send the official score report to Cornell University. Scores reported on school transcripts or in other ways are not acceptable.

Applicants for fall entrance are urged to take the tests no later than the October test date of their senior year. Registration packets may be obtained from secondary schools or from the American College

1981-82 Admission Testing Program of the College Entrance Examination Board

Test Date	Registration Deadline (U.S. only)	Scholastic Aptitude Test (SAT) Achievement Tests (ACH) Late Registration Deadline (U.S. only)	International Registration Deadline	Tests	Offer	ed
October 10, 1981*	September 18, 1981	September 18, 1981		SAT		
November 7, 1981	October 2, 1981	October 16, 1981	September 29, 1981	SAT	and	ACH
December 5, 1981	October 30, 1981	November 13, 1981	October 27, 1981	SAT	and	ACH
January 23, 1982	December 18, 1981	January 1, 1982	December 15, 1981	SAT+	and	ACH
March 27, 1982†	February 19, 1982	March 5, 1982	February 16, 1982	SAT		
May 1, 1982	March 26, 1982	April 9, 1982	March 23, 1982	SAT	and	ACH
June 5, 1982	April 30, 1982	May 14, 1982	April 27, 1982	SAT	and	ACH

<sup>\*</sup>Offered only in California, Florida, Georgia, New York, Texas, North Carolina †Not offered in New York

Note: Sunday administrations of the Scholastic Aptitude Test will be offered on October 11, 1981; November 8, 1981; December 6, 1981; May 2, 1982; and June 6, 1982. Achievement Tests will be offered on the following Sundays; November 8, 1981; December 6, 1981; January 24, 1982; May 2, 1982; and June 6, 1982.

Special administrations of the Scholastic Aptitude Test for handicapped students may be arranged at the convenience of the testee and of the administrator of the test at any time during the academic year. Contact your high school counselor for specific information.

## 1981–82 ACT Test Dates American College Testing Program

Registration Deadline
September 18, 1981
November 13, 1981
January 22, 1982
March 5, 1982
May 14, 1982

Note: Offered only in the United States.

## Test of English as a Foreign Language (TOEFL)

## **International Test Dates**

Test Date	Registration Deadline
August 8, 1981	June 22, 1981
October 3, 1981	August 17, 1981
November 21, 1981	October 5, 1981
January 16, 1982	November 30, 1981
March 13, 1982	January 25, 1982
May 15, 1982	March 29, 1982

Testing Program, P.O. Box 168, Iowa City, Iowa 52240, *or* 216 Goddard Boulevard, King of Prussia, Pennsylvania 19406.

New York State Regents examinations. Regents examinations, prepared by the New York State Education Department, are not required by any division of the University. They are particularly desired, however, of students from New York State who are applying to the College of Agriculture and Life Sciences or the School of Industrial and Labor Relations, and they are useful in the evaluation of applicants to the other divisions as well.

## Health Requirements

Each entering student is expected to assume personal responsibility for fulfilling the University health requirements. Permission to register will not be granted unless all health requirements have been fulfilled.

Each student must submit a health history and have a medical examination. (This requirement also applies to special students who must meet other medical

and health requirements, such as physical education and military training.) A student accepted for admission is sent forms to be filled out and returned promptly to Gannett Health Center.

A University physician reviews the material before it becomes part of the student's permanent health record. All information given is confidential. If the medical history indicates a need, the student is given an appointment to consult a physician at the center. A student who has been away from the University for more than a year must, upon reentrance, submit an interim health history on a University form.

All undergraduate students are required to be immunized against tetanus. While not required, it is strongly recommended that graduate students also have tetanus immunization. The Department of University Health Services makes available at Gannett Health Center initial immunization and booster doses of tetanus toxoid at a nominal charge for those who are unable to obtain immunization at home

## Health Services

The following services are available to all full-time students who have paid Cornell University tuition and who are in Ithaca: (1) unlimited visits to Gannett Health Center; (2) overnight bed-care at the center; (3) afterhours and emergency care; (4) ordinary laboratory tests, X-ray examinations, and physiotherapy services performed on site, as ordered by Health Services physicians; (5) counseling services at the center and in the Psychological Service; and (6) sex counseling.

The center is located adjacent to Willard Straight Hall, 10 Central Avenue. The medical staff consists of attending physicians from the University Health Services staff and consulting physicians and surgeons in the various medical fields from Ithaca and the vicinity.

Health care for student spouses. Health Services offers medical care to student spouses on a prepaid or fee-for-service basis. Obstetrical services are not included in this program, but other gynecological services are. Information and forms relating to spouse coverage

<sup>\*</sup>Offered only in California, Florida, Georgia, New York, Texas, North Carolina †Not offered in New York

## Requirements and Recommended Preparation for Freshman Admission

	Secondary School Subjects	Standardized Tests
Agriculture and life sciences	16 units, including 4 units of English and 3 units of mathematics	SAT or ACT
Architecture, art, and planning	Architecture: 16 units, including 4 units of English, 4 units of mathematics (including college algebra, and trigonometry)  Art: 16 units, including 4 units of English, 3 units of mathematics, and 3 or 4 units of foreign language (3 years of one language or 2 years each of two languages)	Architecture and Art: SAT or ACT
Arts and sciences	16 units, including 4 units of English, 3 units of mathematics, and 3 units of one foreign language (deficiencies in subject requirements should be explained in a letter accompanying the application for admission)	SAT or ACT; 3 College Board achievement tests in different subjects, one of which must be English composition (with or without essay)
Engineering	16 units, including 1 unit of chemistry, 1 unit of physics, and 4 units of mathematics (to include 2 units of algebra, 1 unit of geometry, and 1 unit of a precalculus subject such as trigonometry)	Either ACT or both SAT and College Board achievement tests in mathematics (level I or II) and in chemistry or physics
Hotel administration	16 units, including 4 units of English, 3 units of mathematics, and 1 unit of chemistry	SAT or ACT
Human ecology	16 units, including 4 units of English, 3 units of mathematics, 1 unit of biology, and 1 unit of chemistry or physics	SAT or ACT. Applicants older than 24 who have been out of school for three or more years and have taken neither examination may request a waiver of this requirement by writing to the director of admissions of the college.
Industrial and labor relations	16 units, including 4 units of English	Either ACT or both SAT and College Board achievement tests in English and mathematics (level I or II). Applicants older than 24 who have been out of school for three or more years and have taken neither examination may request a waiver of this requirement by writing to the director of admissions of the college.

may be obtained from the University Health Services, Gannett Health Center.

Accident and sickness insurance. Accident and sickness insurance, which supplements the services available at Gannett Health Center, is available for students. The plan provides twelve-month coverage at or away from the Cornell campus. Examples of services not provided by Health Services but covered by the supplementary accident and sickness insurance plan are hospitalization, physicians' fees while hospitalized, consultations with specialists when referral is made through Health Services, and most expenses for illness or accident. Unless students have other insurance to supplement the health care provided by Health Services, they are strongly urged to take advantage of this plan. Spouses and dependents are eligible for coverage. Further information may be obtained at the Student Insurance Office, Gannett Health Center, Ithaca, New York 14853 or by calling 607/256-6363.

# University Requirement in Physical Education

As part of the normal course of study leading to a baccalaureate degree, the University Faculty has established a requirement in physical education that must be met by all students unless they are specifically exempted (see below).

For students admitted as freshmen, two terms of physical education are required and should be completed during the freshman year.

For a student admitted with advanced standing, the required number of terms of physical education is reduced by the number of terms that the student has satisfactorily completed (not necessarily including physical education) in a college of recognized standing.

The requirement in physical education is met by satisfactory work in courses under the supervision of the Department of Physical Education and Athletics. This department will make available to entering students publications describing the

courses offered. The requirement can also be satisfied by participation in the marching band or in intercollegiate athletics for the equivalent number of semesters. Whether by such activities or by taking courses, only one credit toward satisfying the University requirement can be earned in a single term, and none are given for activities or courses taken during the summer.

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Exemptions from the requirement may be granted by the University Faculty Committee on Physical Education when recommended by the Cornell medical staff, or because of unusual conditions of age, residence, or outside responsibilities. Students who have been discharged from the armed forces may be exempted. Entering students who believe that they qualify for exemption or for postponement of the fulfillment of the requirement beyond their first year should present their cases to the committee through its chairperson or the dean of the University Faculty.

Additional Requirements	Other Recommended Preparation	Admission Options	Undergraduate Degree
Must be 16 years old	A total of 18 high school units, including 3 units of science (biology, chemistry, and physics); for New York State residents, Regents examinations; for those who take SATs, College Board achievement tests in two of the following: English composition, mathematics, and science	Early decision, early admission, and deferred enrollment	B.S.
Architecture and Art: An interview preferably on campus—if an interview cannot be arranged, an essay describing the applicant's interest in the field; a portfolio of work	Architecture: 1 unit of high school physics, and study of a foreign language (preferably 3 years of one language or 2 years each of two languages)	Architecture and Art: Early admission and deferred enrollment	B.Arch. B.F.A. and B.S.
	College Board achievement test in any foreign language to be continued for credit in college	Early decision; early admission, de- ferred enrollment; and spring term admission of freshmen, transfers, and special students	A.B.
	1 unit of biology for those interested in bioengineering	Early decision, early admission, and deferred enrollment	B.S.
An interview, preferably on campus	Additional mathematics and science (especially physics), social studies, foreign language	Early decision, early admission, and deferred enrollment	B.S.
	Another unit of biology, chemistry, or physics	Early decision, early admission, and deferred enrollment	B.S.
An interview, on or off campus; a five-hundred-word essay describing the applicant's interest in the field		Early admission and deferred enrollment	B.S.

# Applying for Financial Assistance

No prospective freshman or transfer student should hesitate to apply for admission because of financial circumstances. It is the University's goal to offer financial assistance to all freshman applicants accepted for admission to the extent of calculated need (if they are United States citizens or persons holding permanent resident or refugee visas in the United States). Financial assistance is awarded on the basis of demonstrated financial need, using the standards of the College Scholarship Service.

Most students finance their education through a combination of a contribution from parents, the student's own contribution from savings, assets, and earnings from summer and vacation employment, and, if need is demonstrated, financial assistance.

Cornell University offers a combination of gift (scholarship and grant) and self-help (loan and job) assistance. The finan-

cial aid package usually consists of a loan and job and, if need remains, a scholarship or grant.

Seventy percent of all Cornell undergraduates receive some form of financial aid from University, state, federal, or other sources. Over 60 percent receive Cornell-allocated scholarships, jobs, or loans. Financial aid ensures that students of all levels of financial capability can attend Cornell.

Financial aid resources for foreign students at Cornell are limited. Less than 10 percent of the entering foreign students receive financial assistance of any kind. Foreign students who receive financial aid are likely to be those with exceptional academic records, high test scores, strong potential for positive contributions to the Cornell community, and demonstrated financial need.

## Financial Need

The total amount of aid awarded is based on need determined by subtracting the total family contribution from the estimated cost of attendance. If the student is eligible for a scholarship, grant, or loan from a source other than Cornell University, the University subtracts the amount of this assistance from the estimated financial need and attempts to meet fully the remaining need.

The Office of Financial Aid uses the information provided in the financial aid form (FAF) to determine a fair contribution from each family. It takes into account the family's income and assets, the number of dependents, educational and medical expenses, and other factors. This office uses the federally required computation guidelines of the College Scholarship Service. Parents must submit notarized copies of their most recent federal income tax return to verify financial data reported on the FAF.

The University expects all students to help meet the cost of their education. A student's contribution includes earnings from summer and vacation employment, social security and veterans' benefits, and a portion of personal savings and assets.

## **Expenses**

Expenses include tuition and fees, basic living costs, and travel. Expenses are slightly higher for foreign students than for United States residents. An estimate of expenses for foreign students may be obtained from the International Student Office, Cornell University, 200 Barnes Hall, Ithaca, New York 14853.

Students entering the Ithaca divisions of the University have other financial obligations that should be taken into account in their budget of expenses. Fees in the Medical College and the Graduate School of Medical Sciences in New York City are listed in the Announcements of those divisions.

A nonrefundable fee of \$30 must be paid when an application for admission to any division is submitted. Those accepted for admission to an undergraduate school or college at the University who plan to enroll are required to pay a \$50 registration fee by the date specified on the registration fee coupons that accompany the letter of acceptance. This fee is not applied to the tuition charges and is not refundable after the due date.

Excess hours tuition. Students in the state-supported divisions who want to take courses in the endowed divisions, beyond the credits allowed free under the rules of those state-supported divisions, may be allowed to do so if they pay for the additional credits at the rate of tuition in the college in which the course is given. Financial aid recipients can request additional loan or job assistance to cover this additional tuition.

**Special fees.** The following fees are imposed under certain conditions: makeup examination, \$10; late filing of study card, \$10; late change of program, \$10.

A late registration fee is charged according to the following scale:

Late Period	Amount
3 weeks	\$30
4 weeks	40
5 weeks	50
6 weeks	60
After 6 weeks, each	
additional week	25

Payment of University bills. The Office of the Bursar mails statements at the beginning of each month to students with billing addresses in the United States or Canada who have amounts due the University.

Tuition and room charges are billed on a per-term basis approximately one

month before the beginning of each term. Charges not billed on the first statement appear on a later statement.

All charges are payable in full within twenty days of the billing date. Any amounts remaining unpaid, in whole or in part, after the due date of the statement on which the charges first appeared are assessed a finance charge at the rate of 1 percent per month (12 percent annual interest rate).

An individual who has outstanding indebtedness to the University is not allowed to register or reregister in the University, receive a transcript of record, have academic credits certified, be granted a leave of absence, or receive a degree.

The amount, time, and manner of payment of tuition, fees, or other charges may be changed at any time without notice.

**Refunds.** Part of the amount personally paid for tuition is refunded if a student obtains an official certificate of leave of absence or withdrawal at the office of the dean or director of the academic division involved. Students who terminate their registration in the University during a regular term in this manner are charged tuition from the registration day to the effective date of the certificate as follows: first week, 10 percent; second week, 20 percent; third week, 30 percent; fourth week, 40 percent; fifth week, 60 percent; sixth week, 80 percent; seventh week, 100 percent. No charge is made if the effective date is within the first six days, including registration day.

The University makes available tuition insurance, which provides refunds in the event of leave of absence or withdrawal for medical or emotional reasons. Complete details about this coverage accompany the August tuition bill.

The \$40 application fee for University residence halls is nonrefundable except when lack of space prevents the offer of a room assignment. The \$100 security deposit is refundable, less damage charges, upon fulfillment of the contract.

Students participating in a prepaid dining plan who withdraw from the plan during a semester are eligible for a prorated refund based on the number of days the contract was in effect.

Students receiving financial aid from the University who withdraw during a term have their aid reevaluated and may be required to repay a portion of the aid received. Repayment to aid accounts depends on the type of aid received, government regulations, and the period of time in attendance. A partial semester generally counts as one of the eight semesters of financial aid eligibility normally allowed a student.

## Estimated Living Costs, 1981–82

| Registration fee (new students) | 50 | 290 \* | Room and board | 2,740 + | 700 | Total | \$3,740 |

Note: This table does not include travel costs.

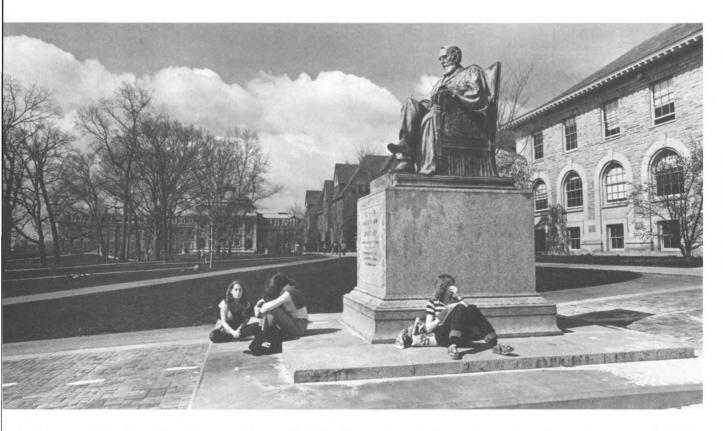
\*For undergraduate students in the College of Architecture, Art, and Planning and upperclass students in the Department of Design and Environmental Analysis, the cost of books and supplies is estimated to be \$150 higher.

†This estimate is for single students. Costs for married students may be higher. New students receiving financial aid who commute from their parents' home will have a room and board allowance of \$1,220.

## Estimated Tuition, 1981-82

Agriculture and life sciences Resident*	\$2,880
Nonresident	4,700
Architecture, art, and planning	7,000
Arts and sciences	7,000
Business and public administration First year Second year	7,200 6,200
Engineering	7,000
Graduate School Major in endowed division Major in agriculture and life sciences, human ecology, or industrial and labor relations	7,000 3,300
Major in veterinary medicine	4,960
Hotel administration	7,000
Human ecology Resident* Nonresident	\$2,880 4,700
Industrial and labor relations Resident* Nonresident	2,880 4,700
Law	7,250
Medical†	9,000
Medical sciences†	6,325
Veterinary medicine Resident* Nonresident	4,960 6,350
Summer session	125‡
Extramural	175‡
Unclassified	7,000

\*A resident is a person whose domicile is in the state of New York at the time of registration for the term. †In New York City. ‡Per credit.



Retention and graduation of undergraduates. By the fall of 1979, 79.2 percent of the students who entered private undergraduate units in 1974 (architecture, art, and planning; arts and sciences; engineering; and hotel administration) had either graduated or were still enrolled. In the state-supported units (agriculture and life sciences, human ecology, and industrial and labor relations) 81.3 percent had graduated or were still working toward a Cornell degree.

## Scholarships and Grants

## **Cornell-administered Awards**

Many students are eligible to receive a scholarship or grant from the University as well as from various federal and state programs.

The University budgets over \$8 million for undergraduate scholarships. The student applies for financial aid in general; the University matches the student to the most appropriate University or outside scholarship source.

**University scholarships.** Those who still have a demonstrated financial need after allowances for outside awards and Cornell loan and job offers are awarded University scholarships.

**COSEP scholarships.** Cornell awards COSEP scholarships to students admitted to the COSEP program.

HEOP and EOP grants. Cornell awards these New York State grants to educationally disadvantaged students from low-income families who show promise of success, with counseling and other support, at Cornell. HEOP grants are for those enrolled in the private units of the University; EOP, for those in the state-supported units.

Supplemental Educational Opportunity Grants (SEOG). Cornell awards these federal grants to students demonstrating exceptional financial need who would be unable to attend without the grant. The grants range from \$200 to \$1,500 a year, up to \$4,000 for four years, or \$5,000 for students in five-year programs. To continue receiving the grant, students must remain in good academic standing and must be making satisfactory progress.

## **Direct State and Federal Assistance**

Pell Grants (formerly the Basic Grant Program). These grants, ranging from \$200 to \$1,800, based on financial need, are awarded by the federal government. Cornell attempts to identify eligible

students and includes an estimate of this award in the aid package. All students are encouraged to apply for Pell Grants by checking the appropriate box on the Financial Aid Form (FAF).

Regents College Scholarships and Tuition Assistance Program (TAP) awards. These awards for New York State residents range from \$200 to \$2,050 annually. Scholarships for children of deceased or disabled veterans are also available in amounts up to \$450 annually. Prospective students should obtain an application for this award from high school guidance counselors and submit it to the New York Higher Education Services Corporation, Student Financial Aid Section, Tower Building, Empire State Plaza, Albany, New York 12223.

Other state scholarship programs.

Some states offer state scholarships for students attending institutions out of the state. These include (but are not necessarily limited to) Connecticut, Massachusetts, Rhode Island, and Vermont. Prospective students should consult their secondary school guidance counselor, state scholarship program office, or Cornell's Office of Financial Aid for further information about their state's programs.

## Other Benefits

Some students are eligible for benefits from other sources, including colleges and universities where parents are employed, the Social Security Administration, state offices of vocational rehabilitation, the Bureau of Indian Affairs, and the Native American Education Unit of the New York State Education Department. Inquiries should be directed to the agencies involved, high school guidance counselors, or Cornell's Office of Financial Aid.

## **Employment**

Many jobs, on and off campus, are available to Cornell students, regardless of financial need. Employment in moderation can be beneficial to a student's education and can often reduce or eliminate the necessity for borrowing to pay college expenses.

Cornell participates in the federally funded College Work Study Program. Jobs are available in most areas of University activity. Every effort is made to refer students to positions compatible with their interests and qualifications, although such opportunities are not always available. Pay rates range from \$3.35 to \$4.50 an hour, depending on the skills required and employment experience.

Students are paid once every two weeks for hours worked. Once students have earned the amount for which they are eligible, federal regulations require that they be terminated from the program. Continuing work-study or other University employment is not possible without clearance from the Office of Financial Aid.

Job opportunities are also available to those not participating in the work-study program. Information is available from the Office of Financial Aid or directly from employers. Federal regulations and University policies require students receiving financial assistance from Cornell to secure a clearance before accepting on- or off-campus jobs.

## Loans

Several loan programs are available to help students meet their financial needs. Students are not required to accept a loan in order to receive other types of aid.

## National Direct Student Loans (NDSL).

These University loans are offered to undergraduates in amounts totaling up to \$6,000 for four years and to graduate and professional students in amounts totaling

up to \$12,000. No interest is charged while the student maintains at least half-time status; interest of 4 percent is charged beginning six months after he or she leaves school. The student has up to ten years after leaving school to repay the loan. Deferment of repayment is allowed for graduate work and for military, Peace Corps, VISTA service, and for public service, full-time volunteer work, professional internship, and disability. Up to 100 percent of the loan to a student who becomes a special education teacher or a teacher in an economically and culturally deprived area may be canceled.

State loans. Twenty-seven states currently have loan programs for students attending institutions in or out of the home state. Loans made under the state loan program normally carry an interest rate of 9 percent. If the student does not borrow more than the amount recommended by the University, the federal government will pay the interest until nine months after graduation or the termination of at least half-time study. At that time repayment of both interest and principal will begin. Deferment of repayment may be permitted for graduate work and military, Peace Corps, and VISTA service.

Undergraduates may borrow up to \$2,500 a year to a maximum of \$12,500. Independent undergraduates may borrow up to \$3,000 a year to a maximum of \$15,000. Graduate students may borrow up to \$5,000 a year to a maximum of \$25,000 including loans during undergraduate years.

## Financial Aid Application Procedures

Applicants who indicate on part 1 of the application that they want to be considered for financial aid must also submit an FAF, obtainable from secondary school guidance offices or Cornell's Office of Financial Aid. Applicants for admission in the fall semester should send the completed FAF to the College Scholarship Service, Princeton, New Jersey 08540, by January 1. Later submission will jeopardize the possibility of being awarded assistance. Those applying for admission in the spring semester or for early decision who want to be considered for financial assistance should return the early decision FAF to the College Scholarship Service by November 1.

Foreign students who want to apply for financial aid should complete the special financial aid application for foreign candidates included with part 2 of the application for admission.

## Renewal in Subsequent Years

The financial aid package is for one year only but may be renewed upon application. Applications for renewal are available in the Office of Financial Aid in December of each year. Aid is normally continued as long as financial need continues and the student remains in good standing (is eligible to continue at Cornell) and maintains normal progress toward a degree. Students normally receive aid for a maximum of eight undergraduate semesters (ten for students in the Department of Architecture), including semesters spent at institutions other than Cornell. Students may request aid for semesters beyond the normal number. However, the amount of scholarship assistance is normally reduced.

Amounts of assistance are based on an annual review of the student's level of need and changes in regulations governing the awards. Self-help levels may be increased if funds are not available for gift assistance to meet increases in tuition and other expenses.

Since requirements for good standing vary among the units at the University, students should consult the registrars of their divisions for information about remaining in good standing.

## Further Information on Financial Aid

More-detailed information, required by state and federal regulations, is available from the Office of Financial Aid, Cornell University, 203 Day Hall, Ithaca, New York 14853, and from the Office of the Dean of Students, Cornell University, 103 Barnes Hall, Ithaca, New York 14853, and the Information and Referral Center on the first floor of Day Hall.

**Orientation sessions.** All incoming recipients of aid and their parents are encouraged to attend the financial aid orientation sessions included in the Cornell orientation program. The orientation schedule includes dates and times of these sessions.

Financial counseling services. The University has a staff of financial aid advisers to answer questions about financing an education at Cornell. Students or parents who have questions about a financial aid package or who need assistance in budgeting should contact the Office of Financial Aid.

## Cornell University 1982 Application for Admission

We are pleased to know of your interest in Cornell University and hope you will give serious consideration to applying for admission. Part 1 of the application will begin the application process; it will provide all the necessary information we need to establish your file and coordinate all the other information you submit.

Once you have completed the form, return it to us with the nonrefundable application fee of \$30 (a check, draft, or money order drawn on a United States bank and made payable to Cornell University). Upon receipt of part 1 and the application fee we will send part 2 of the application, which will give you an opportunity to tell us about yourself—your accomplishments and talents as well as your goals and plans for the future. Also included will be the form you will need to submit if you plan to apply for financial aid as well as a form that is to be completed by school officials. Finally, be sure to submit official results of the required tests.

Seniors in high school are strongly encouraged to mail their applications by early December to avoid any delays. A complete timetable of deadlines is provided in the inside back cover for your information.

Please read the following instructions carefully before completing the information on the reverse side. If you have any questions or concerns during the application process, please do not hesitate to call or write us.

## Instructions for Completing Part 1

## Social Security Number

Use a United States social security number only. If you do not have a social security number, we encourage you to apply for one.

## **Definitions of Applicant Status**

Freshman. A student who will complete high school this academic year (or one who is seeking early admission after the junior year in high school) or a student who has already graduated but has earned less than twelve academic credits at a college or university is considered a freshman applicant.

Transfer. If at the time of proposed entrance to Cornell, a student no longer connected with a high school will have completed the equivalent of one semester or more of college work, that student is considered a transfer applicant. An exception is a student who graduates from high school at midyear and pursues a college program for the remainder of that academic year; that student should apply as a freshman and will be considered for advanced standing. A student who is studying part-time or full-time in college but has not graduated from high school at the time of application must apply for freshman admission and may be eligible for advanced standing if ad-

**Special student.** A student who enrolls for one, two, or three semesters and takes a full program of studies without being a candidate for a Cornell degree is considered a special student.

Early decision. The Colleges of Agriculture and Life Sciences, Arts and Sciences, Engineering, and Human Ecology and the School of Hotel Administration participate in the early decision plan, available for well-qualified fall term freshman applicants who decide that Cornell is their first choice. Students accepted under this plan agree to withdraw other college applications and pay the nonrefundable registration fee by January 1.

Spring term admission. The College of Arts and Sciences is the only undergraduate unit that has a specific policy of accepting freshmen for entrance in the spring term. Students interested in entering the Colleges of Agriculture and Life Sciences and Human Ecology and the Schools of Hotel Administration and Industrial and Labor Relations should make specific requests to the director of admissions of that school or college. The Colleges of Architecture, Art, and Planning and Engineering admit freshmen in the fall term only.

All undergraduate divisions consider transfer applicants for spring term admission. Foreign students who want to apply for spring term transfer must be enrolled in programs in the United States or Canada.

## **Financial Aid**

If you plan to apply for financial aid, be sure to submit the Financial Aid Form (FAF) through the College Scholarship Service in addition to the Cornell financial aid application that is included in part 2.

The FAF is available in high school guidance offices.

Foreign students should submit the special financial aid forms for foreign candidates directly to Cornell.

## Undergraduate Schools and Colleges and Anticipated Fields of Interest

Admission to Cornell University at the undergraduate level is granted by each undergraduate school or college. Applicants should choose the division that best meets their academic plans and apply to *only one* division within the University.

In addition, the selection committees are interested in your intended major, recognizing that at this early stage that decision may be very tentative. Please use the list provided on the next page to complete the item concerning anticipated field of interest.

## **Optional Responses**

Cornell University seeks to enroll as diverse an entering class as possible. By providing us with information concerning your racial or ethnic background, you will assist us in that endeavor.

Committee on Special Educational Projects (COSEP). COSEP assists students from those minority groups that traditionally have been underrepresented in higher education. In conjunction with the individual schools and colleges, COSEP provides academic support and counseling services. 

■articipation in the program is voluntary.

**Higher Education Opportunity Pro**gram and Educational Opportunity Program (HEOP and EOP). HEOP and EOP are open to New York State residents only and are designed to assist students who are academically and economically eligible. Applicants to the Colleges of Agriculture and Life Sciences and Human Ecology and the School of Industrial and Labor Relations who meet the economic and academic guidelines are eligible for EOP. Those applying to the Colleges of Architecture, Art, and Planning, Arts and Sciences, and Engineering and the School of Hotel Administration, and who meet the guidelines, are eligible for HEOP. For guidelines see p. 60.

## Field-of-Interest Codes

## College of Agriculture and Life Sciences

## 531 Agricultural and Biological Engineer-

ing

Agricultural engineering

Agricultural engineering technology

Environmental technology

## 335 Animal Sciences

## 201 Applied Economics and Business Management

Agricultural economics

Business management and marketing

Farm business management and finance

Food industry management

Resource economics

## 319 Behavioral and Social Sciences

Agricultural education

Communication arts

Education

Environmental education

Rural sociology

## 512 Biological Sciences

Animal physiology and anatomy

Biochemistry

Botany

Cell biology

Ecology, systematics and evolution

Genetics and development

Microbiology

Neurobiology and behavior

## 309 Environmental Studies

Aquatic science

Atmospheric sciences

Entomology

Environmental technology

Landscape architecture

Natural resources

Soil science

314 Food Science

## 317 Plant Sciences

## Agronomy and field crops

Floriculture and ornamental horticulture

Plant breeding

Plant pathology

Plant protection

Pomology

Vegetable crops

## 223 General and Special Programs

General studies

International agriculture

Statistics and biometry

Cooperative extension

## College of Architecture, Art, and Planning

## 601 Architecture (five-year program)

602 Fine Arts

Painting

Sculpture

Graphic arts

Photography

## 603 City and Regional Planning (Transfer

students only.)

## College of Arts and Sciences

237 Africana Studies

209 American Studies

202 Anthropology

301 Archaeology

226 Asian Studies

## 302 Astronomy

## 512 Biological Sciences

Animal physiology and anatomy

Biochemistry

Biology and society

Botany

Cell biology

Ecology, systematics and evolution

Genetics and development

Neurobiology and behavior

## 405 Chemistry

106 Classics

305 Comparative Literature

307 Computer Science

205 Economics

108 English

513 French

425 Geological Sciences

109 German

210 Government

106 Greek

116 History

103 History of Art

514 Italian

106 Latin

228 Linguistics

413 Mathematics

110 Music

## 501 Near Eastern Studies

Near Eastern and biblical civilization Near Eastern language and literature

111 Philosophy

417 Physics

320 Psychology

516 Russian and Soviet Studies

501 Social Relations

222 Sociology

515 Spanish

120 Theatre Arts and Dance

501 Other

502 Undecided

## College of Engineering

## **Field Programs**

404 Chemical Engineering

406 Civil and Environmental Engineering

307 Computer Science

407 Electrical Engineering

543 Engineering Physics

425 Geological Sciences

420 Materials Science and Engineering

412 Operations Research and Industrial Engineering

## 542 Sponsored College Programs

Bioengineering

Energy conversion

Engineering science

Environmental and public systems

Regional science

Survey engineering

## School of Hotel Administration

## 801 Hotel Administration

## College of Human Ecology

## 235 Consumer Economics and

Housing
Consumer economics

Housing

## 236 Design and Environmental Analysis

Apparel design

Human and social factors in design

Interior and product design

Textiles

## 204 Human Development and Family

Studies

Atypical development

Cognitive development

Family studies

Personality and social development A selected stage of human development,

## from infancy to old age

521 Human Service Studies

Community and family life education

## Social work 313 Nutritional Sciences

Clinical nutrition

Community nutrition

Consumer food and nutrition

Consumer food science

Dietetics

Nutritional biochemistry

## 323 Interdepartmental Program in Social Planning and Public Policy

501 Other

502 Undecided

## School of Industrial and Labor Relations

701 Industrial and Labor Relations

## Cornell University 1982 Application for Admission

Part 1

Please read the instructions on page 69 before completing this form. Type or print clearly in ink. Enclose a \$30 nonrefundable check or money order payable to **Cornell University** and return it by the appropriate deadline to **Office of Admissions**, **Cornell University**, 410 Thurston Avenue, Ithaca, New York 14850.

Name:last (family)	first (given)	middle	
U.S. social security number:		madie	
Permanent address:	number and street		
city	state	zip or postal code	country
Permanent telephone number:	number		
	THE THE STATE OF T		
Mailing address (if different from above): _		number and street	
city	state	zip or postal code	country
Telephone number:			
area code	number		
Date of birth: day	year Sex: \( \subseteq \)	Male   Female	
· · · · · · · · · · · · · · · · · · ·		to type of LLC vice:	
U.S. citizen or permanent resident:   Ye	is 🗆 No II not, please indica	te type of 0.5. visa:	
Country of citizenship:			
Are you applying as a ☐ freshman ☐	transfer □ special student?		
If you are applying for freshman admission	, are you applying for early decision	on?: ☐ Yes ☐ No	
When do you want to enroll?	Fall semester   Spring semes	ster	
year			
Are you applying for financial aid?   Yes	s 🗆 No		
School or college at Cornell to which you a	are applying (you may apply to only	y one):	
☐ Agriculture and Life Sciences ☐ ☐ Architecture, Art, and Planning ☐	Arts and Sciences		d Labor Relations
Anticipated field of interest (see opposite p	page for codes):		
High school name:		CEEB code number:	
High school address:	state	zip or postal code	country
Date of graduation:			
	ear		
Optional Information			
<ul><li>☐ I want to be considered for COSEP (se</li><li>☐ I want to be considered for HEOP or Ed</li></ul>		on)	
Racial or ethnic background:			
☐ American Indian or Alaskan Native		n, not of Hispanic origin	
<ul><li>☐ Asian or Pacific Islander</li><li>☐ Black, not of Hispanic Origin</li></ul>	☐ Hispanic,	not Puerto Rican can	

Are you the son or daughter of a	Cornell faculty or staff member?	s □ No	
Did either of your parents attend	Cornell? ☐ Yes ☐ No		
Transfer Applicants:			
College or university you present	tly attend or last attended:	CEEB code number	er:
Address:			
city	state	zip or postal code	country
Degree received (if any):			
All Applicants:			
Date:			