

# Academic Calendar, 1983–84

# **Fall Semester**

Residence halls open Registration begins Registration ends Instruction begins

New-Student Parents' Weekend begins New-Student Parents' Weekend ends

Fall recess begins Instruction resumes Thanksgiving recess begins Instruction resumes

Instruction ends; study period begins

Study period ends Final examinations begin Final examinations end Tuesday, August 23 Monday, August 29 Tuesday, August 30 Wednesday, August 31 Friday, September 30 Saturday, October 1

Saturday, October 15, 1:10 p.m. Wednesday, October 19

Wednesday, November 23, 1:10 p.m.

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Monday, November 28

Saturday, December 10, 1:10 p.m.

Thursday, December 15 Friday, December 16 Friday, December 23

# Winter Session

Variable periods between Monday, December 26, and Friday, January 20

# **Spring Semester**

Residence halls open Registration begins Registration ends Instruction begins Spring recess begins Instruction resumes

Instruction ends; study period begins

Study period ends
Final examinations begin
Final examinations end
Senior Week begins
Senior Week ends
Commencement Day

Monday, January 16 Thursday, January 19 Friday, January 20 Monday, January 23

Saturday, March 24, 1:10 p.m.

Monday, April 2

Saturday, May 5, 1:10 p.m.

Wednesday, May 9 Thursday, May 10 Saturday, May 19 Sunday, May 20 Saturday, May 26 Sunday, May 27

# **Summer Session**

Three-week session begins Eight-week session begins Six-week session begins Wednesday, May 30 Monday, June 11 Monday, June 25

The dates in this calendar are subject to change at any time by official action of Cornell University.

In enacting this calendar, the University has scheduled classes on religious holidays. It is the intent of the University that students missing classes due to the observance of religious holidays be given ample opportunity to make up work.

# Cornell University Announcements (USPS 132-860)

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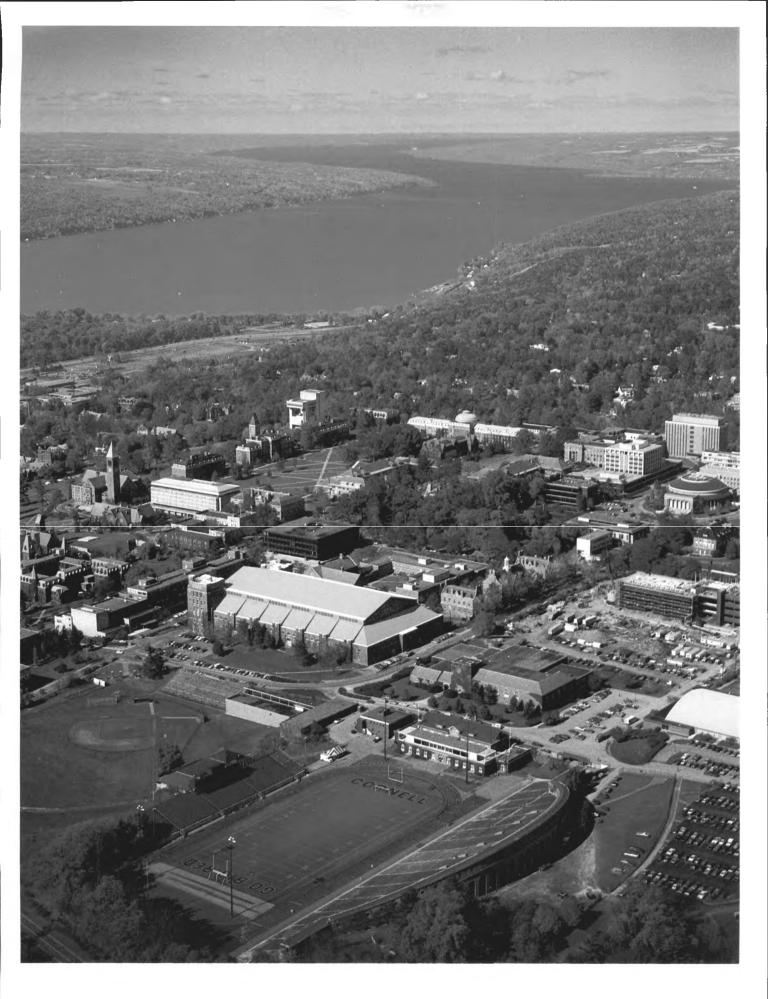
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Part 1 of the application for admission is in the center of this Announcement.

The courses and curricula described in this Announcement are subject to change at any time by official action of Cornell University.





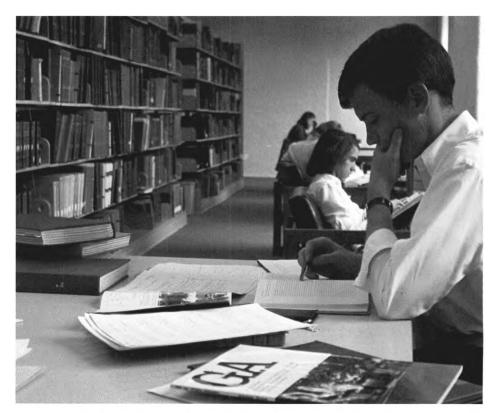
# **Introducing Cornell**

rom the Cornell campus one looks over the blue waters of Cayuga Lake, the range of far hills, and the small central New York city of Ithaca. The campus, with over a hundred major buildings, is bounded on the north and the south by deep gorges and many waterfalls. The nearby Sapsucker Woods, a bird sanctuary maintained by the University, has miles of nature trails. All around the campus there is open country and facilities for sailing, swimming, skiing, ice skating, hiking, camping, and other outdoor activities. No wonder students and visitors so often stay longer than they intended.

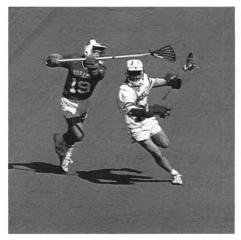
It was on one of these hills above the lake that two extraordinary men, Ezra Cornell and Andrew Dickson White, established their university in 1865. Ezra Cornell was a tough-minded, farm-bred mechanic who amassed a fortune when the telegraph lines he had built were consolidated to form Western Union.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

A part neither of the aristocratic tradition of the original colonies nor of the educational democracy then sweeping the great West, Cornell University was founded as an institution that would "combine practical with liberal education,... fit the youth of our country for the professions, the farms, the mines, the manufactories, for the investigations of science, and for mastering all the practical questions of life with success and honor." Cornell thus became the first American university conceived as both a public and a private institution, where "any person can find instruction in any study." As Cornell's third president, Jacob Gould Schurman, said, "The classification of American universities should be three-fold and not two-fold, for in the United States we have endowed universities, state universities, and Cornell University."

In little more than a century Cornell has become a great cosmopolitan university in a rural setting, where teaching, research, and service to humanity are the principal

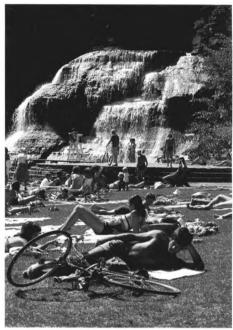


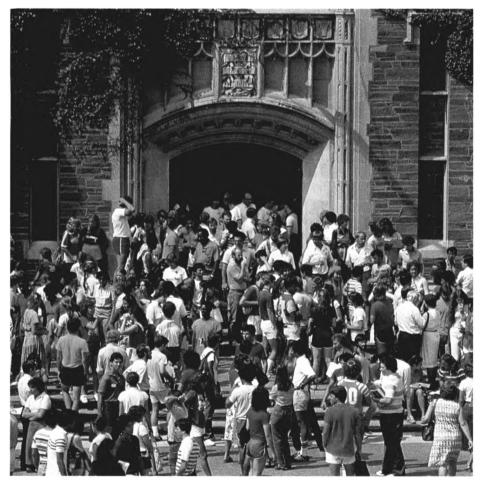












occupations of its faculty, students, and staff. Today distinguished professors initiate their students into research projects spanning the cosmos, from the study of galaxies almost inconceivably distant and immeasurably large to the study of nuclear particles, almost inconceivably small. They probe Jupiter and Mars. They study agricultural economics in Tompkins County and public policy in Washington, D.C. They write best-selling novels and play period music on authentic instruments. They design hotels in West Germany and go on archaeological digs in Turkey and Israel. They experiment in recombinant DNA and study the effects of nutrition on the psychological development of children. They analyze achievements in philosophy, literature, history, and art to deepen their understanding of what it means to be human and sharpen their sensitivity to the world outside themselves. 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, 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 has supported the belief that the student's own initiative in choosing a program of study or an extracurricular activity is essential to a university education. Nor should you expect to exhaust the resources of the University. There are simply too many courses, books, research laboratories, museums, darkrooms, practice rooms, athletic facilities, and extracurricular organizations.

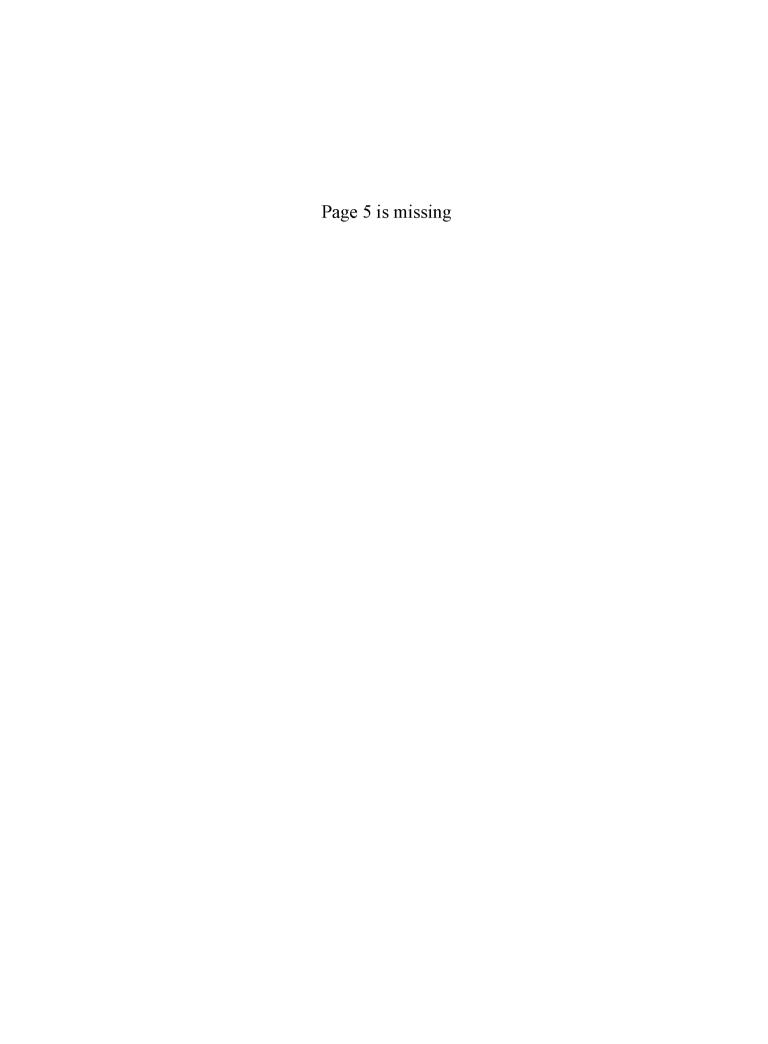
You will enroll in one of the seven undergraduate colleges, and as you cross the college quadrangles every day you will get to know the faculty and students. Whether you are enrolled in one of the privately supported divisions of Cornell (the College of Arts and Sciences, the College of Architecture, Art, and Planning, the College of Engineering, or the School of Hotel Administration) or in one of the publicly supported divisions (the College of Agriculture and Life Sciences, the College of Hu-



man Ecology, or the School of Industrial and Labor Relations), you will 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 one of the graduate divisions (the Law School, the Graduate School of Business and Public Administration, or the College of Veterinary Medicine). The resources of Cornell are inexhaustible, perhaps overwhelming at times, but always exciting.

Most of the applicants to Cornell 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 the University. As you read the pages ahead, think about Cornell not only as a university but also as *your* University.







ornell encourages the spirit and practice of academic freedom. The educational aims and programs are based largely on student choice, a philosophy that 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 interest and its pursuit in depth. This system does, of course, put great responsibility on the student—to become acquainted with available offerings and facilities and to choose wisely according to personal needs and interests.

# Undergraduate Programs

# New York State College of Agriculture and Life Sciences

The New York State College of Agriculture and Life Sciences (enrollment, about 3,000) ranks first in quality and third in size among similar institutions in the nation. These rankings indicate the uniqueness and strength of the programs for undergraduate students.

Students in the college participate in its clear and exciting mission: "To increase our understanding of nature and natural processes in the areas of agricultural sciences, biology, and the environment; to educate citizens for activity and leadership in these areas; and to translate new knowledge into action for the well-being and quality of the life of the people, their agriculture, their resources, and their communities."

The college's mission includes teaching, research, and extension. High priority is given to excellence in classroom teaching and a curriculum frequently updated to reflect rapidly expanding research and changing conditions in the world. As most of the teaching faculty also have responsibilities in research or public service, the courses include the most current information available.

Programs of study are flexible, allowing students to prepare for careers, graduate work, and the responsibilities of educated, concerned citizens. Students pursue the Bachelor of Science degree, selecting a major or specialization and choosing from over five hundred available courses. Some students are interested in the broad study of a subject. Others want to specialize in an academic discipline or pick a special

career option. It is also possible to pursue a program combining courses from two or more fields.

There are other noteworthy features of the college's curriculum. Credit for internships, field study experience, and cooperative arrangements with industry are available in some fields to complement what is learned in lectures, seminars, and laboratories. Field trips are also frequently part of educational experience. Students may participate in one of the college's study-abroad programs, offered in cooperation with universities in Great Britain, Mexico, Ireland, and Sweden, or travel independently to study in another country while continuing progress toward a degree. Many students participate in research projects. These experiences may occur in the laboratory, greenhouse, barn, library, or computer room. Some students participate in research for course credit or as a parttime job. Others volunteer their time to get hands-on experience with research and experimentation techniques and technology used in modern agriculture and industry.

There are collegewide and field-specific student organizations germane to the study of agriculture and life sciences. Students join clubs focusing on dairy science, business opportunities, and pomology, to name a few.

Students use the extensive facilities on the Ithaca campus as well as at experimen-

The Ezra in me... spends his hours fixing fences, building and cleaning out barns, admiring a neighbor's ability to make a log splitter out of salvaged parts, and trying to understand the mysteries hidden beneath the hood of an old Case tractor; the Andrew in me is concerned with books and ideas and the mysteries of value and meaning contained within a specific literary text.

James R. McConkey Professor of English tal farms and field stations across the state. The major buildings are clustered around the Ag Quad, anchored by Mann Library, which houses the second largest agricultural collection in the world. In addition to its classrooms and teaching laboratories, the college has fourteen thousand acres for research and teaching, including its own greenhouses, research farms, forest, fishery, dairy plant, and marine laboratory.

It is a college priority that students have access to computers. Computer facilities provide on-line communication with large data bases in many fields and with worldwide computer networks. Interactive microcomputers are available in the academic departments, and the college has two computing centers in its area of the campus. Students interested in careers in computer applications usually major in an academic discipline while taking a substantial number of computer courses as electives.

Applicants for admission choose an initial field of study from nine major fields. Students may select a specialization within the field when applying or later. Each new student is matched with a faculty adviser in the student's field of interest; changes can be made as interests develop and are clarified. The nine major areas and related specializations are:

Agricultural and biological engineering—agricultural engineering, agricultural engineering technology, environmental technology

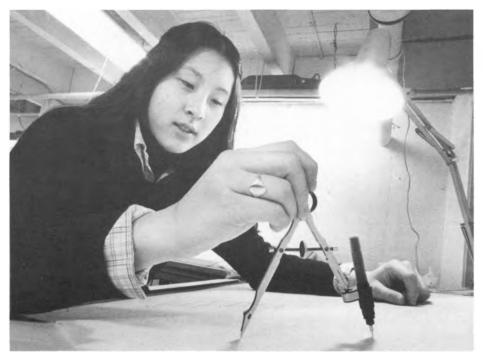
Animal sciences—includes animal breeding and genetics, animal nutrition, animal physiology, animal production

Applied economics and business management—agricultural economics, business management and marketing, farm business management and finance, food industry management, public affairs management, resource economics

Behavioral and social sciences agricultural education, communication arts, education, rural sociology

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

Environmental studies—biometeorology, entomology, landscape architecture, natural resources, soil science



Food science—includes food analysis. product development, science of food processing

Plant sciences—field crops, floriculture and ornamental horticulture, general plant science, plant breeding, plant pathology, plant protection, pomology, vegetable crops

Special programs—cooperative extension, general studies in agriculture, international agriculture, statistics and biometry

Each major has its own course guidelines. All students must also complete distribution requirements in four areas: physical sciences (mathematics included), biological sciences, social sciences and humanities, and written and oral expression. By selecting general education courses and applied courses in one or more areas of specialization, students may prepare for employment in their area of interest. By selecting advanced courses in principles and theory, students may prepare for graduate study or research.

Career opportunities for graduates of the college are as diverse as the courses of study. These include careers in agriculture, business, communications, education, and industry. Many graduates are prepared to contribute to the solutions of major problems facing the world, including food supply, environmental quality, energy conservation, and economic development. Since the agriculture and food industry is New York State's largest industry, graduates with specializations in areas such as food science, agricultural engineering, and applied economics have many job opportunities

Students in the College of Agriculture and Life Sciences are an academically select and diverse group. Most come from New York State, but about 20 percent come from other parts of the United States and the world. About half the undergraduates are women. Nearly 25 percent are transfer students who have attended agricultural and technical colleges, community colleges, or other academic institutions.

# College of Architecture, Art, and Planning

The College of Architecture, Art, and Planning (enrollment, about 430) is convinced that breadth is essential to an undergraduate education. The professional concentration of courses within the college, balanced by the wider view gained from study in other units at Cornell, establishes a broad understanding of human values and social problems as well as a theoretical and technical base of professional competence. The professional courses in the three departments explore a wide range of issues and levels of involvement and provide the opportunity to develop a particular emphasis.

Department of Architecture. Architects are continually assuming a wider range of responsibilities for problems of the built environment and for improving the habitats 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 present challenges to architectural study and practice.

The primary course of study in the department takes five years and leads to the Bachelor of Architecture degree. Students admitted are those who, before they applied, had established their interest in the field and motivation to earn a professional degree as their first degree. The program is intended to develop the student's ability to deal creatively with architectural problems on analytical, conceptual, and developmental levels. The sequence courses in design, consisting of studio work augmented by lectures and seminars on theory and method, are the core of the program. Sequences of studies in human behavior, environmental science, structures, and building technology provide a base for the work in design. Through the professional core courses, an understanding of architecture in its contemporary and historical cultural context is established. Students establish a foundation in the humanities and sciences through University-wide electives.

Qualified fourth- and fifth-year students may participate in the Washington Program, a semester of study in Washington, D.C., that provides a period of intensive exposure to the characteristics of urban development within the framework of a design studio. Design programs abroad, taught by Cornell architecture faculty members, are offered each summer for upperclass students. Through special planning, qualified students may be able to complete the requirements for the first year of the department's Master of Architecture program during the fifth year of study for the B.Arch. degree. Faculty members are actively involved in computer graphics research and its application to architecture, and a program in computer graphics is offered at the graduate level.

While most of the students who enter the program complete the requirements for the B.Arch. degree, there are two alternatives for a student who completes part of the requirements but no longer wants to pursue the professional degree. After the first two years of the B.Arch. program a student may petition to depart from the professional degree requirements and de-





velop a major concentration in history of architecture and urban development. This four-year program leads to the nonprofessional Bachelor of Science degree. A student may also choose to terminate the course of study after completing four years of the B.Arch. program and receive the nonprofessional Bachelor of Fine Arts degree.

Students who like to explore the field of architecture before committing themselves to professional education may participate in a six-week summer program, Introduction to Architecture, which includes an introductory studio in architectural design, lectures, and other experiences designed to acquaint participants with opportunities, issues, and methods in the field of architecture.

**Department of Fine Arts.** 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 common course of study that provides a broad introduction to the arts and a basis for studio experience in painting, sculpture, photography, and graphic arts during the last three years. Studio courses intensify students' visual perception of the formal and expressive means of art, encouraging insight into a variety of technical processes. These courses occupy about half the student's time during the four years. The remainder of the time is devoted to a diversified program of academic subjects with an extensive provision for electives.

All faculty members of the Department of Art are practicing artists whose work represents a broad range of expression. Perhaps the most notable of recent faculty works is the Steuben glass bowl designed by Zevi Blum, associate professor of art, and presented by the United States to the Prince and Princess of Wales in honor of their wedding. Faculty work is often displayed in Cornell's Herbert F. Johnson Museum of Art, adjacent to the fine art studios and not far from the sculpture foundry.

A dual-degree program with the College of Arts and Sciences is available for students who want to pursue both a Bachelor of Arts degree and a Bachelor of Fine Arts degree.

Department of City and Regional Planning. The Program in Urban and Regional Studies is a junior- and senior-year program in the Department of City and Regional Planning for students who want to transfer from colleges outside Cornell, as well as from other programs and majors within Cornell.

This program, leading to the Bachelor of Science degree in urban and regional studies, offers students coming from a two-year course of study in social science,



design, humanities, engineering, and other disciplines an opportunity to direct their education toward an understanding of urban and regional problems and solutions. The curriculum acquaints students with the social, political, economic, and environmental forces that confront cities and regions and contribute to their growth and decline. Because the complex and evolving process of urbanization has a profound impact on modern society, students study the psychological, cultural, and physical aspects of contemporary life. While the curriculum draws on strengths in the department, it is supplemented by course work in related areas in other departments at Cornell, including economics, sociology, government, and history.

# **College of Arts and Sciences**

The College of Arts and Sciences at Cornell (enrollment, about 3,740) is a traditional liberal arts college. It is composed of departments that teach and study the humanities, the basic sciences, the social sciences, and the expressive arts. It is also a college within a university, and this wider community provides strength and diversity not available in an isolated undergraduate institution. Students may draw on the knowledge and facilities of the professional colleges to supplement their studies. Finally, the college is a graduate school and research center attracting faculty members whose active involvement in writing

and research requires first-rate academic facilities and whose energetic participation in undergraduate teaching brings to their students the most current ideas in modern scholarship. It is this combination of functions that gives the college its distinctive character.

Faculty members in the college have been recognized nationally and internationally for their outstanding teaching and research: twenty-five Guggenheims in the last four years, two Nobel Prizes in the last two years (thirteen connected with the college), nineteen members of the National Academy of Sciences (second highest in the country), and many awards in literature and music (Pulitzer, Wolff, MacArthur Foundation). Similarly, the college's students and alumni have been recognized for their singular accomplishments through prestigious awards such as the Kevasby Award, Rhodes Scholarship, and Truman Scholarship.

The variety and richness of the curriculum in the College of Arts and Sciences is extraordinary. Distinguished faculty members teach courses ranging from music and comparative literature to Asian studies and astrophysics. The following list includes the major departments and the programs of interdisciplinary studies:

# **Departments Offering Formal Majors**

Africana studies anthropology Asian studies biological sciences chemistry classics comparative literature computer science economics English geological sciences German government history history of art mathematics modern languages and linguistics music Near Eastern studies philosophy physics psychology Romance studies (French, Italian, and Spanish literature) Russian sociology theatre arts



# **Interdepartmental Majors**

American studies archaeology biology and society Germanic studies Russian and Soviet studies social relations

# **Concentrations (Informal Minors)**

American Indian studies astronomy international relations law and society medieval studies religious studies women's studies

# **Interdisciplinary Programs**

China-Japan human biology Jewish studies Latin American studies science, technology, and society social psychology South Asia Southeast Asia

The Independent Major and College Scholar programs afford opportunities for a student to design a program of study tailored to interests that do not easily fit into one of the established majors.

While there is a great deal of flexibility in selecting courses, and no specific courses are required, college requirements ensure that each student takes advantage of the variety of academic offerings available at Cornell. Distribution requirements in the humanities, social sciences or history, natural or physical sciences, and

mathematics; a foreign language requirement; and a freshman writing program constitute the framework within which students design their individual programs of study.

By the beginning of the junior year students choose a major area of concentration and work intensively in that area for about half their time in the final two years.

Students may enrich their on-campus studies by participating in an archaeological dig off the Aegean, by attending a foreign university, or by addressing questions of public policy through the Cornellin-Washington program. Students may use these courses to fulfill college distribution and major requirements.

Among the eighteen hundred courses regularly offered (see pages 18–35) are those that improve and develop skills in writing English prose. Through the Freshman Seminar Program first-year students choose one course each semester from more than a hundred offerings in the humanities and social sciences. In these courses students may pursue a current interest or experiment with a subject matter altogether new to them; experience a small-class setting where individual attention and informal discussions are essential; and develop their analytical skills among peers from every college in the University.

Foreign language study enhances other forms of communication by creating an appreciation for the complex structures of language and fostering cross-cultural understanding. The Department of Modern Languages and Linguistics offers instruction in about forty languages, including an



unusually comprehensive offering in the languages of the Near and Far East, in addition to intensive instruction in the Full-Year Asian Language Concentration (FALCON) in Indonesian, Chinese, and Japanese. The college requires proficiency in one language or basic competence in two.

The College of Arts and Sciences recognizes the great diversity of its students and the many ways of learning by providing a number of academic options over and above the traditional department majors and interdisciplinary majors established by the faculty. Dual-degree programs with the College of Engineering or with the De-

partment of Art and the Department of City and Regional Planning in the College of Architecture, Art, and Planning are available for students who want both a liberal arts education and professional training. The Undergraduate Research Program enables students to undertake basic research as participants in faculty projects. This program fosters apprentice-teacher relationships with professors that help students gain awareness of their own research interests and abilities, selfdiscipline, and new insights into a subject matter. Students enjoy firsthand experience in scholarly research and earn credit for their work.

To allow students to develop a course of study, adapted to their own interests and goals, within the general pattern established by the faculty, is the guiding philosophy of the College of Arts and Sciences.

# **College of Engineering**

At Cornell engineering is seen as an organized way of thinking, as well as a body of knowledge. An engineer is a true professional, educated broadly and in an area of expertise.

This attitude is reflected in the education of Cornell engineers. The program emphasizes the development of an effective, comprehensive approach to problem solving. It provides opportunities to apply state-of-the-art technology. And it encompasses study in the humanities and the social sciences, regarded as integral components of all higher education. This breadth is essential today for the education of engineering professionals, who encounter rapidly changing conditions-social and economic, as well as technical—in the course of their practice. They must be prepared to deal with all facets of technological enterprise in a comprehensive and responsible way. At Cornell's College of Engineering (enrollment, about 2,380) the excellent faculty and facilities ensure a strong, vital scientific and technical curriculum. The University environment, which supports all aspects of individual development, is a major strength of the total program.

Engineering students begin their studies with general course work that provides a sound background in the sciences, mathematics, the engineering sciences, the social sciences, and the humanities. Students then choose a specialty, usually at the beginning of their junior year, and usually from one of the following ten fields: agricultural engineering (a program begun in the College of Agriculture and Life Sciences); applied and engineering physics; chemical engineering; civil and environmental engineering; computer science; electrical engineering; geological sciences; materials science and engineering; mechanical and aerospace engineering; and operations research and industrial engineering. Built into the engineering curriculum is a large elective component. Many of the courses for a major are selected from the large number available in every field of engineering, and students also take courses in psychology, sociology, business, political science, literature, and other areas.

In fact, many engineering students say they chose to come to Cornell because of the flexibility of the curriculum, which provides opportunities for developing broad interests or for concentrating on specific ones. For example, most engineering students want to obtain a broad background in the engineering sciences in their sophomore year before selecting a field of specialization, but a small number of students who have determined their field choice and want a more specialized program join their field at the end of their freshman year. Through their selection of elective courses, they can work out programs of study adapted to their interests and abilities. It is even possible to design an individual undergraduate major through the College Program: two engineering disciplines can be combined, or study in engineering can be augmented with course work in such areas as the physical, biological, or social sciences; architecture; city and regional planning; business; or ecology and conservation.

The quality of education in all areas is enhanced by the accessibility of the faculty members. Most of them teach undergraduate courses, and many serve as advisers to undergraduates as well as to graduate students. Undergraduates have ready access to excellent library and computer facilities throughout the campus and opportunities to benefit directly and indirectly from other Cornell facilities, including a synchrotron, a national laboratory for research in submicron structures, and a computergraphics facility for student use.

Students who want to continue their education beyond the baccalaureate with a professionally oriented one-year project are encouraged to remain in the College of Engineering for the Master of Engineering program, offered in one of eleven specialty fields. Those who want to work toward a career in technology-based business can take advantage of a program jointly sponsored by the College of Engineering and the Graduate School of Business and Public Administration: a coordinated curriculum that leads to the Bachelor of Science degree in engineering and master's degrees in both business administration (the Master of Business Administration) and engineering practice (the M.Eng.). Another opportunity for undergraduates is the Engineering Cooperative Program, which provides for periods of paid employment in industry without delaying



graduation. Students in this program gain valuable work experience with one of sixty participating companies. Still another option is a dual-degree program, in which superior students may earn baccalaureate degrees from both the College of Engineering and the College of Arts and Sciences.

The College of Engineering is interested in students who can both benefit from and contribute to the life of the University. Compared with students at other engineering schools, our students are noted for their activities and interests rather than a single-minded pursuit of science and technology. They participate in the chorus and in instrumental music groups. Their artwork shows up in displays on campus. A magazine, the Cornell Engineer, is published by students. Engineers participate in almost all intercollegiate and intramural sports. In short, they are an intrinsic part of University life.

Variety among the students is apparent in other ways, too. The number of women in the college is increasing rapidly; women now constitute about a quarter of the entering class. A sizable number of transfer students adds another dimension to the diversity of the student body.

The elective component and the breadth of course offerings allow students to prepare for careers in a number of professions and occupations. After graduation many embark on careers in engineering or enter graduate programs in engineering, but some begin graduate or professional study in other fields such as science, law, or medicine.

# **School of Hotel Administration**

The School of Hotel Administration (enrollment, about 640) offers undergraduate and graduate training in many disciplines required for modern management, including accounting, finance, marketing, administration, and human resource development. The school's graduates hold positions in a variety of industries but are especially well represented in the management of hospitality-related enterprises, including the lodging, food-service, and travel industries.

Students are encouraged to pursue a broad range of courses as preparation for assuming their places in the business community. Included in the basic curriculum are courses in financial management, science and technology, food and beverage management, and physical plant management. Students also have access to courses offered by all the other colleges of the University and are encouraged, through elective courses, to tap Cornell's tremendous educational resources.

Because hospitality management cannot be taught wholly in the classroom, lectures and laboratories are supplemented with work experience on campus and in the industry. Students receive firsthand training through the operation of Statler Inn, a practice hotel on the University campus containing fifty-two guest rooms, banquet facilities, and a variety of restaurants. An optional Management Intern Program provides additional managerial experience in Statler Inn as well as in selected organizations away from the campus.



The Cornell Society of Hotelmen is one of the most active alumni organizations in existence and is a strong network influencing the future of the hospitality industry throughout the world.

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

The New York State College of Human Ecology (enrollment, about 1,160) is a place to discover solutions to contemporary human problems. Outstanding faculty members and students address issues that concern people in their homes, at work, and in their physical and community environments. While the issues being investigated change as the college keeps pace with new discoveries and emerging problems, the concern for human development, economic vitality, and quality of life is central at all times.

The college seeks to educate students for leadership in business, education, government, health, and human service professions by encouraging student and faculty excellence. Research and public service activities are an important part of the college mission and are directly related to exciting and relevant teaching. Nowhere else in the nation does there exist the same combination of professionally oriented programs, distinguished scholars, and excellent facilities.

Just a few of the issues that challenge human ecologists are the relationship between human nutrition and cancer; the long-range consequences of high unem-

ployment; and how government legislation, educational organizations, cultural traditions, and hiring practices enhance or weaken personal and family stability. Others are concerned with the evaluation and management of technological change and hazards; the effect of preschool programs on the development of children during adolescence and into adulthood; the essential characteristics of good housing for special populations; and the effect of color, texture, and spatial arrangements on perception of classrooms, offices, and hospitals.

Recognizing that human concerns cannot be divided into narrow disciplines, the college stresses a unique interdisciplinary blend of course work, research, and practical study that permits students to understand and develop expertise in critical areas of current concern. Major areas of study within the college are flexible and interdisciplinary, with a strong liberal arts foundation and opportunities to develop a professional focus. Options with strong emphasis in the sciences include nutritional science, biology and society, and textiles. Other programs stress the social sciences: social work, adolescent and adult development, family studies, social planning, public policy, apparel and textile management, consumer economics, human-environment relations, housing, and home economics education. Options in interior design and apparel design emphasize studio courses, in which students

work on creative and practical solutions to design problems. Students may also develop an individual curriculum when their interests and needs do not fit within an existing major.

Although human ecology students concentrate on courses offered within the college, the flexibility of the curriculum promotes exploration of courses available in other divisions of the University. Students may choose from nearly forty-five hundred courses offered throughout the University to supplement their programs and meet their needs. The college offers a variety of study options not available in either highly professional or liberal

Opportunities for special study are also numerous. Integrating experiential and theoretical learning through field study is a great strength of the college. Field study helps students learn by carrying out responsible tasks within an organization and by reflecting on that activity through discussion, research, and writing. This learning can be pursued in community or business settings in the Ithaca area, Albany, Washington, D.C., New York City, and many other locations. Recognizing that its graduates live and work in an increasingly interdependent world, the college encourages students to study abroad. It has formal exchange programs with universities in Puerto Rico, Israel, and Jamaica.

There are honors programs involving work with a faculty member and culminating in independent research and a thesis. and honors students may assist professors through undergraduate teaching assistantships. As students have indicated a growing interest in computer literacy, the college has responded by developing fine computing facilities. Interactive microcomputers and on-line communication with University and worldwide computer networks encourage students to use computers as a tool in human problem solving.

Human ecology graduates have been successful in being admitted to graduate programs and finding employment in their fields of study. The college offers counseling and placement assistance to supplement the services available through the University. Students who want to prepare for graduate study in business, law, medicine, or other professional areas will find strong course work and advising available, while professionally focused majors provide excellent opportunities for those planning to work immediately upon graduation.

Graduates interested in business-related careers find employment as consumer and public affairs professionals; personnel, marketing, banking, and sales representatives; and advertising, design, and housing specialists. Others interested in helping people learn or solve problems find employment as counselors, human service professionals, dietitians, public health specialists, social workers, nutrition educators, home economics teachers, and cooperative extension agents. Still others work in laboratories or research institutes, investigating human problems in occupations such as biochemist, economist, research analyst, facility planner, toxicologist, textile chemist, and production development specialist. While most members of each graduating class go directly from graduation into professional employment, many continue their formal education. After graduate study some enter the professions of law, medicine, pharmacology, psychiatry, college teaching, and religious service.

# **Division of Nutritional Sciences**

Nutritional sciences deal with the intricate relationship of food, nutrition, and health. This subject is not a simple, selfcontained one that fits neatly into any one of the colleges at Cornell. The Division of Nutritional Sciences was created to bring together specialists from many disciplines in the biological and social sciences who share an interest in nutritional problems, whether they involve the molecular structure of nutrients or the specter of world hunger.

The division is affiliated with the College of Human Ecology and the College of Agriculture and Life Sciences and also includes faculty members jointly appointed with the College of Veterinary Medicine and with other institutions in New York City and England. Their work covers undergraduate and graduate teaching, nutrition research, and public education, including cooperative extension programs in food and nutrition.

The Bachelor of Science degree program offers five major emphases, all built on a thorough foundation of courses in the basic sciences, professional nutrition, humanities, and communications. This core curriculum ensures that students are well trained to pursue any aspect of advanced study in nutrition. By their junior year students enjoy more-specialized courses suggested for the major they choose: clini-



cal nutrition, community nutrition, consumer food and nutrition, foods, or nutritional biochemistry. Through the division's dietetics program students in any of these five emphases can meet the academic requirements for membership or registration in the American Dietetic Association.

The program of study in nutrition stresses two closely related goals: increasing our knowledge of nutrition and health and applying what we know to people's everyday problems. Students who major in nutritional sciences learn how to interpret basic research from the laboratory and from the social sciences. They also come to understand the practical implications of nutrition; the division encourages supervised field study and helps students find and evaluate educational experiences that provide a service to the community. Other students have a chance to test their ideas by conducting original research projects as independent study or through the honors

Most undergraduates who major in nutritional sciences enroll in the College of Human Ecology. Students in the Colleges

of Agriculture and Life Sciences and Arts and Sciences can pursue a nutrition concentration in the Division of Biological Sciences.

With a B.S. degree in nutrition, students are qualified for a variety of entry-level positions in laboratory research, consumer affairs, nutrition education, and health services. All graduates are prepared for advanced study in nutritional science, biomedical fields, and public policy.

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

The New York State School of Industrial and Labor Relations (enrollment, about 620) offers professional study for both undergraduate and graduate students. The curriculum prepares men and women for careers in personnel and unionmanagement relations with business and industry, labor organizations, and state and federal government agencies. 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 is also available.

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, divided between courses offered by the ILR school and 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 about half the school's graduating class elected to continue their study in graduate or professional schools, with the largest group entering law school and the rest divided between business school, continuing study in industrial and labor relations programs, and fields such as psychology, sociology, economics, and history.

ILR graduates who choose to work immediately after graduation find many organizations interviewing on campus for such entry-level positions as labor relations specialists, personnel management trainees, and industrial relations assistants. Other graduating students have found positions as union organizers, trainers, and researchers through networks of people familiar with the school and its graduates.



# **Division of Biological Sciences**

Biology is one of the most popular subjects for undergraduate and graduate study and research. It is a science of discovery, dealing with our understanding of ourselves and the living world of which we are a part. Many of the major problems facing society today require consideration of the limits that our biological world can endure. Attempts to solve those problems without consideration of their biological components are futile. The study of biology provides excellent preparation for careers in the medical professions and for research in the medical, agricultural, environmental, pharmaceutical, and basic biological sciences. At the same time, a major in biology is as suitable for students seeking a general education as for those who want to pursue graduate or professional studies.

The Division of Biological Sciences at Cornell University offers opportunities for study in almost any aspect of biology. Its faculty members are drawn primarily from the Colleges of Agriculture and Life Sciences, Arts and Sciences, and Veterinary Medicine. Their teaching and research interests range from field biology to molecular biology and provide interfaces with the applied sciences of agriculture and veterinary medicine and the departments of geology, history, physics, chemistry, and nutrition.

Cornell's undergraduate program in biological sciences is academically demanding, with high standards and high expectations of its students and faculty. Students majoring in biology complete a series of courses in introductory biology, mathematics, general and organic chemistry, physics, genetics, and biochemistry. These basic courses, prerequisites for upper-level courses, are essential for understanding modern biology. Biology majors also complete courses within one of the following concentration areas to gain deeper insight into a specific area of biology: animal physiology and anatomy; biochemistry; botany; cell biology; ecology, systematics, and evolution; genetics and development; neurobiology and behavior; or an independent concentration in biophysics, microbiology (College of Arts and Sciences only), nutrition, or an area of study designed by the student and approved by the curriculum committee of the Division of Biological Sciences. Students must also achieve breadth in biology by completing two biology courses outside the chosen concentration area. Students who prefer not to concentrate in one area of biology may choose instead to complete the Program in General Biology, which includes the basic courses listed above as well as courses in ecology, neurobiology and behavior, anatomy, physiology, and plant sciences.

An important aspect of Cornell's biology program is the opportunity provided for many students to participate in research with one of the hundred or so professors in the division. There is no better way to round out, and bring reality to, the undergraduate experience.

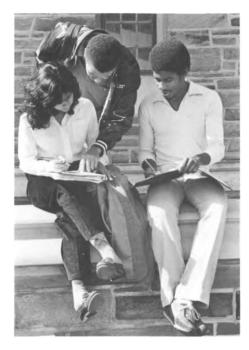
The undergraduate biology program at Cornell provides an excellent education through a flexible program, offering many options and alternatives so that students can take courses that match their interests and serve their career goals. Cornell students can pursue a program of study secure in the knowledge that they are obtaining a first-rate education in the biological sciences.

# **Interdisciplinary Centers** and Programs

Along with the pursuit of excellence in traditional subjects at Cornell, there is an acute awareness of current problems with implications stretching across disciplines. Students and faculty members in many segments of the University are exploring such problems. Their efforts take shape in new fields, programs, and centers, which include the Africana Studies and Research Center, the American Indian Studies Program, the Center for International Studies, the Program on Science, Technology, and Society, and the Women's Studies Program.

Since its beginning in 1969, the Africana Studies and Research Center has been concerned with such topics as Pan-Africanism, contemporary black ideologies, and the people and movements in the black urban ghetto. The undergraduate major and the graduate programs are multidisciplinary and comparative, presenting a variety of subjects in focal areas of history, literature, the social sciences, and Swahili language and literature. Joint majors within the College of Arts and Sciences and with the Department of Human Service Studies in the College of Human Ecology can be planned with the assistance of the center's staff. All courses offered by the center are approved for credit as electives in the College of Arts and Sciences. The center also brings visiting lecturers to the campus, sponsors a lecture series, and has arranged study tours to Africa and the Caribbean.

The American Indian Studies Program is a multidisciplinary program of instruction, research, and extension. The program's core courses focus on American





Indian life, emphasizing the Iroquois and other Indians of the Northeast. These courses in various colleges and departments of the University provide a broad base for understanding the past, present, and future of Indian people.

The Center for International Studies supports and coordinates Cornell's teaching and research programs in international and comparative studies through a network of faculty committees. These multidisciplinary committees are organized in clusters: area studies programs covering China and Japan, Latin America, South Asia, Southeast Asia, and the Soviet Union; professional programs such as international agriculture, law, nutrition, planning, business, hotel, and education; and problem-solving programs that examine substantive policy issues such as peace studies, rural development, participation and labor-managed systems, ethnicity, political economy, population, and industrialized societies. The center also sponsors the Field of International Development, a program of graduate studies leading to a professional master's degree.

The Program on Science, Technology, and Society is an interdisciplinary unit that promotes teaching and research on the interactions of science and technology with political and social institutions, drawing from departments throughout the University. 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. 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

The Women's Studies Program, in the College of Arts and Sciences, has three goals: to encourage the development of teaching about women and about sex roles; 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 semester the program offers 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 Program or the Independent Major Program. Any undergraduate student in the University can design a concentration in women's studies to enrich a major.

Other interdisciplinary programs include the Peace Studies Program, the Rural Development Committee, and the International Population Program.



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

The Division of Summer Session, Extramural Courses, and Related Programs sponsors a wide range of courses and special programs designed to make the University's educational resources available to as many people as possible at times that best suit their goals and circumstances.

Cornell's Summer Session, three concurrent sessions of three, six, and eight weeks, affords students from Cornell and other colleges and universities an opportunity to move more quickly toward their degrees, to take courses that may not be available during the fall and spring semesters, and to delve into areas of special interest. Academic standards are rigorous, yet the atmosphere is relaxed.

High school students who have completed their junior year may apply for either the Advanced Placement Program or the Introduction to Architecture Program. Participants in both programs live and study on campus and earn credit that may be used later for advanced standing. Many Summer Session courses and special programs also offer students of all ages opportunities for personal and professional growth.

During the fall and spring semesters the division makes courses throughout the University available on an extramural basis to area residents who want to pursue part-time study at Cornell. Those who do not want to receive academic credit may

participate in the division's Visitors' Program, attending classes for a nominal fee when space is available. The division also operates a continuing education information center that provides information and counseling to adults who have been out of school for several years and want to resume their studies.

Cornell has much to offer professionals in many areas of science, technology, government, business, and industry. There are many opportunities to receive intensive updates on specific issues, ideas, and technological advances from faculty members whose teaching and research at Cornell center around current and anticipated developments in special areas.

Still other specialized or interdisciplinary courses and programs are available to adults and their families through Cornell's Adult University (CAU). During the summer CAU sponsors five one-week noncredit residential programs on campus, enabling participants to combine an intellectually vigorous learning experience with a wide variety of cultural and recreational activities. Adults may attend CAU alone, or they may bring their children or grandchildren along to take part in learning activities designed for five different age groups. CAU also organizes and conducts study tours and off-campus weekend programs throughout the year for alumni and other adults who want to travel and study with distinguished members of the Cornell faculty.

In addition to the courses and programs sponsored directly by the Division of Summer Session, Extramural Courses, and Related Programs, there are many conferences held at Cornell throughout the year by independent organizations. These events are coordinated by Cornell University Conference Services under the auspices of the division.

# Graduate Programs

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

The following colleges require a baccalaureate degree for admission, except in a few cases: Graduate School of Business and Public Administration (enrollment, about 400), the Graduate School (3,580), the Law School (520), the Medical College (435), the Graduate School of Medical Sciences (140), and the New York State College of Veterinary Medicine (320). The Medical College and the Graduate School of Medical Sciences are located in New York City.

Correspondence about courses of study in, and admission to, these schools and colleges should be sent to the individual units at the addresses below:

Graduate School of Business and Public Administration Cornell University Malott Hall Ithaca, New York 14853

Graduate School Cornell University Sage Graduate Center 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

# College of Agriculture and Life Sciences

# Nondepartmental Courses

Basic Review Mathematics Introduction to Farm Techniques American Indian Studies Nurturing Scientific Creativity Internship Introductory College Mathematics American 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 Marketing 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 in Farm Business Decision Making Seminar in Farm Business Organization and Estate Planning Price Analysis Estate Planning 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 Economics of Resource Use Special Problems in Land Economics Food, Population, and Employment Macroeconomic Issues in Agricultural Development Microeconomic Issues in Agricultural

Development Seminar on Latin American Agricultural

Seminar in Agricultural Development

Topics in Agricultural Economics

Advanced Production Economics

Research Methods in Agricultural

Seminar on Agricultural Trade Policy

Seminar on Methods of Trade and Commodity Policy Analysis Agricultural Markets and Public Policy

Export Marketing
Economics of Renewable Resources

Seminar on Agricultural Policy

Econometrics Quantitative Methods

**Economics** 

# Agronomy

Basic Principles of Meteorology Agricultural Meteorology Meteorological Communications Theoretical Meteorology Physical Meteorology Synoptic Meteorology Byinghic Meteorology
Biometeorology
Undergraduate Research in Meteorology
Special Topics in Meteorology and Climatology Seminar in Meteorology Research in Meteorology 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

Agricultural Engineering

Undergraduate Seminar Introduction to Energy Technology Application of Physical Sciences

Engineering Applications in Biological

Introduction to Computer Uses in Data

Farm Carpentry Introduction to Agricultural Engineering

Farm Metal Work Elements of House Design

and Computing Computing with Graphics Engineering Drawing

Agricultural Mechanization Plane Surveying

Analysis Principles of Navigation Advanced Farm Metal Work

Farm Machinery Internal Combustion Engines for

Electricity: Its Use and Control Soil and Water Conservation

Farmstead Production Systems

Engineering Power Transmission Systems

Energy Systems Engineering Agricultural Machinery Design

Analysis Agricultural Structures Design

Farm Buildings Design Water and Chemical Movement in the

Career Development in Agricultural

Processing and Handling Systems for Agricultural Materials

Engineering Design and Analysis of

Food Processing Equipment Soil and Water Engineering Introduction to Environmental Systems

Environmental Control for Animals and

Engineering Agricultural Engineering Design Project Instrumentation

Irrigation Engineering Treatment and Disposal of Agricultural

Nonpoint Source Water Quality Models Use of Land for Waste Treatment and

Disposal Biological Engineering Analysis General Seminar

Power and Machinery Seminar Soil and Water Engineering Seminar

Agricultural Structures and Related

Biological Engineering Seminar

Agricultural Waste Management Seminar

Special Topics in Agricultural

Engineering Orientation for Research

Topics Seminar

Highway Engineering
Bituminous Materials and Pavement

Design Special Problems in Agricultural

Drainage Engineering

Systems

Agriculture

Landscape

Agricultural Power

Plants

Genesis, Classification, and Geography of Soils of Soils
Soil Morphology
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 Inventories Resource Inventories
Pedology
Advanced Soil Microbiology
Soil Physics
Water Status in Plants and Soils Soil Organic Matter Soil Chemistry and Mineralogy Soil Fertility Graduate Research in Soil Science

**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 Horses Meat and Meat Products Seminar on Genetics of the Horse Commercial Poultry Production The Chicken in Biological Research Systems Analysis in Animal Production 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 Dairy Herd Management Immunophysiology Physiology and Biochemistry of Lactation Comparative Physiology of Reproduction of Vertebrates Immunogenetics Commercial Meat Processing Special Topics in Animal Sciences Undergraduate Teaching Undergraduate Research Proteins and Amino Acids in Nutrition Vitamins Forages, Fiber, and the Microbiology of the Rumen Seminar in Poultry Biology Forage Analysis Seminar in Animal Breeding Seminar in Reproductive Physiology Special Topics in Animal Science Experimental Methods in Quantitative

# **Biological Sciences** (see p. 29)

Genetics and Animal Breeding

# Communication Arts

Writing for Media Theory of Human Communication Parliamentary Procedure Introduction to Mass Media Visual Communication Art of Publication

Oral Communication Persuasion Small Group Communication Effective Listening Radio and Television Communication Advertising and Promotion Basic Newswriting for Newspapers Science Writing for the Mass Media Radio Writing and Production Radio Writing and Production
Survey Research Methods
Scientific Writing for Public Information
Organizational Writing Writing in the Sciences and Engineering Editing Principles of Public Communication Organizational Communication Independent Honors Research in Social

Communication Law Topics in Communication Theory Psychology of Communication Writing for Magazines Print Media Laboratory Broadcast Media Laboratory Photo Communication Video Communication Internship Independent Study 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

Science

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 Economics 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 Psychology of Human Interaction 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 Independent Study Undergraduate Teaching Undergraduate Research 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 Personnel Development: Issues in Higher Education History of American Education Educational Policy Development and

Decision Making Internship in Education
Proseminar in Organization and
Management of Sponsored Research Seminar in Science and Environmental

Education Seminar in Educational Psychology and Curriculum Seminar in Counseling Psychology

Adult Learning and Development Conceptual Problems in Educational Inquiry

Designing Extension and Continuing
Education Programs
Behavioral Change in International Rural

Modernization Community Education Comparative Extension Education
Special Problems in Agricultural and
Occupational Education

Teaching Agricultural and Occupational

Education
Curriculum in Agricultural and
Occupational Education

Adult Education Programs: Organization and Direction

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
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 Biology of the Honey Bee Diology of the roney nee
Practical Beekeeping
Insect Morphology
Introductory Insect Systematics
Arthropods of World Importance
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 Acarology Systematics of the Coleoptera Systematics of the Diptera and Hymenoptera Pest Management Systems Insect Behavior Seminar Seminar in Coevolution between Insects and Plants Seminar in Systematic Entomology 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 Turfgrass Management Principles of Plant Propagation Principles of Nursery Crop Production 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 Ornamental Horticultural and Ornamental Horticultural Physiology Architectural Sketching in Watercolor Nature Drawing Freehand Drawing
Freehand Drawing and Illustration Watercolor Advanced Drawing

# Scientific Illustration Landscape Architecture Architectural Design

Design I and II: Basic Landscape

Design III and IV: Intermediate
Landscape Architectural Design
Design V and VI: Advanced Landscape Architectural Design Graduate Landscape Architectural Design 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 Aud 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 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 Carbohydrates Chemistry of Dairy Products

Instrumental Methods

Food Color and Food Pigments Rheology Introductory Chemical Toxicology Mathematical Evaluation of Processed Packaged Foods Secondary Plant Metabolites in Foods

# International Agriculture Perspectives in International Agriculture

Seminar: International Agriculture Agricultural Development in Southeast

and Rural Development

Special Studies of Problems of Agriculture in the Tropics Administration of Agricultural and Rural Development Seminar on African Agriculture and Rural Development Chinese Agricultural and Rural Development Farming Systems Research Special Topics in International
Agricultural and Rural Development Seminar for Special Projects in Agricultural and Rural Development

International Agricultural and Rural Development Project Paper

# Microbiology

Microbes and Human Affairs Clinical Microbiology General Microbiology Tissue Culture Techniques and Applications Advanced General Microbiology Applied and Industrial Microbiology Aquatic Microbiology Microbial Ecology Microbial Physiology Cytology of Prokaryotes Selected Topics in Microbial Metabolism Special Topics
Teaching Experience
Research in Microbiology **Bacterial Diversity** Microbiology Seminar

# **Natural Resources** Principles of Conservation

**Environmental Conservation** 

Introductory Field Biology Introductory Wildlife Biology Introductory Fishery Biology Introductory Forestry Introduction to Consumptive Wildlife Recreation
Natural Resources Inventories Forest Ecology Woodland Management Maple Syrup Production Winter Energetics Religion, Ethics, and the Environment Principles of Wildlife Management Techniques in Wildlife Science Selected Topics in Wildlife Resource Policy Wetland Resources 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
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 Effects of Ecological Perturbations on Fishes Conservation Seminar

Seminar in Environmental Values

Wildlife Science Seminar Ecology and Management of Wetlands

# Plant Breeding and Biometry

Plant Genetics Plant Cell and Tissue Culture 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 Resistance

# Plant Pathology

Introductory Plant Pathology
Introductory Mycology
Plant Disease Control
Pathology and Entomology of Trees and
Shrubs
Special Topics
Teaching Experience Undergraduate Research Pest Management for Plant Protection Cytology of Plant Diseases Plant Disease Epidemiology Plant Virology Plant Nematology 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 Development
Plant Pathology Seminar
Plant Pathology Colloquium
Biology of Plant Pathogens
Plant Virology
Plant Nematology
Bacterial Plant Pathogens
Molecular Mechanisms of Pathogenesis Advanced Mycology Advanced Plant Nematology Taxonomy of Fungi

# **Pomology**

Introductory Pomology Economic Fruits of the World Fruit Tree Nursery Operation Orchard Management Small Fruits Smail Fides 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 Research Graduate Seminar

# **Rural Sociology**

Introduction to Sociology Introduction to Rural Sociology Rural Sociology and World Development Problems Issues in Contemporary Native American Societies
Social Indicators and Data Management Social History of American Agriculture Proseminar: Issues and Problems in Rural Society 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 Leadership and Authority in Group Relations Community Development Small Towns Seminar Aging: Issues and Strategies in the 1980s Social Impact of Rapid Resource Development

Politics and Development Rural Social Stratification Health and Social-Economic Development Informal Study 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 Community and Property

Applications of Sociology to Development Programs Sociotechnical Aspects of Irrigation Public Service Experience Rural Sociology Development Sociology Organization Behavior and Social Action Methods of Sociological Research

## Statistics and Biometry

Statistics and the World We Live In Theory of Probability Theory of Statistics Matrix Algebra Supervised Teaching Undergraduate Research Statistics Seminar Statistical Methods Applied Regression Analysis Sampling Biological Populations Nonparametric and Distribution-Free Statistical Methods Mathematical Ecology Special Problems in Statistics and Biometry
Advanced Biometry Experiment Design Treatment Design and Related **Experiment Designs** Linear Models Statistical Consulting

# Vegetable Crops

General Horticulture 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 Undergraduate Research Special Topics in Vegetable Crops Postharvest Physiology of Horticultural Crops Research Methods in Applied Plant Science Teaching Experience

# College of Architecture, Art, and Planning

# Architecture

# Architectural Design

Design I-X Thesis Introduction 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 Concents Structural Systems Advanced Steel Building Design **Building Substructure** 

#### Architectural Principles, Theories, and Methods

Introduction to Architecture 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 Computers in Architecture Seminar Architectural Computer Application Special Projects in Computer Graphics Computer-aided Structural Design Computer-aided Environmental Design Critical Theory in Architecture Principles of Design Process

# Architectural History

History of Architecture I and II

Architecture of the Classical World Architecture in the Middle Ages The Renaissance The Baroque Nineteenth-Century Architecture Twentieth-Century Architecture American Architecture I and II The American Planning Tradition Russian Architecture Special Investigations in the History of Architecture Special Topics in Architectural History Methods of Archival Research

Measured Drawing Problems in Contemporary Preservation Perspectives on Preservation Documentation for Preservation

Planning Building Materials Conservation Historic Preservation Planning Workshop: Surveys and Analyses Seminar in Architecture of the Classical World

Seminar in the Renaissance Seminar in the Baroque Seminar in Nineteenth-Century Architecture
Seminar in the History of Modern

Architecture Seminar in the History of American

Architecture Seminar in the History of American City Planning

Seminar in the History of Architecture and Urban Development

Informal Study in the History of Architecture 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

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

Contemporary Issues in Urban and Regional Studies Introduction to Urban and Regional Theory Spatial Analysis of Urban and Regional Systems I

Spatial Analysis of Urban and Regional Systems II Urban Economics

Fieldwork or Workshop in Urban and Regional Theory Special Topics in Urban and Regional

Theory Advanced Seminar in Urban and

Regional Theory I Advanced Seminar in Urban and Regional Theory II Informal Study in Urban and Regional

# Planning Theory and Politics

Theory

Planning and Political Economy I Planning and Political Economy II Introduction to Planning Theory Introduction to 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 Informal Study in Planning Theory and Politics

#### Quantitative Methods and Systems Analysis

Introduction to Quantitative Methods I Introduction to Quantitative Methods II Mathematical Concepts for Planning Introduction to Computers in Planning Planning Analysis

Planning Information Systems Methods of Social Policy Planning Statistical Analysis for Planning I Statistical Analysis for Planning II
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 Analysis

Informal Study in Quantitative Methods and Analysis

#### Regional Development Planning

Regional Economic Development Introduction to Regional Development Planning 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 in Physical and Policy

Spaces

Conflict Management in Multiregion Planning Informal Study in Regional Development

## Social Policy Planning

Institutional Decision Processes The Impact and Control of Technological Change Social and Political Studies of Science

Introduction to Social Policy Planning The Politics of Technical Decisions I The Politics of Technical Decisions II Planning, Organizing, and Public Service Delivery
Dynamics of Social Policy Institutions

Critical Theory and the Foundation of Planning Analysis Legal Aspects of Public Administration

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

Planning Special Topics in Social Policy Planning

Informal Study in Social Policy Planning

# **Urban Development Planning**

Suburbanization and Metropolitan America

Urban Land-Use Planning Urban Land-Use Planning II Introduction to Planning Design Planning and Design Workshop Small-Town Community Design Workshop

Urban Transportation and Land-Use Planning Urban Land Policy and Programs

The Urban Development Process Legal Aspects of Land-Use Planning Environmental Land Resources Protection Law Urban Land Policy and

Programs-Special Problems Fieldwork or Workshop in Urban Development Planning Special Topics in Urban Development Informal Study in Urban Development Planning

#### Special Interprogram Topics: History and Preservation

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 Practice Building Materials Conservation American Planning in the Early Twentieth Century

Urban Planning in Colonial and Nineteenth-Century Hispanic America 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 Topics in History and
Preservation

Informal Study in History and Preservation

# Special Interprogram Topics: International Studies

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

Seminar in Science and Technology Policy in Developing Nations Seminar in Policy Planning in Developing Nations: Technology Transfer and Adaption

Transfer and Adaption Seminar in Project Planning in Developing Countries Theories of Development and Underdevelopment

Underdevelopment Fieldwork or Workshop in Planning for Developing Regions Special Topics in Planning for

Developing Regions
Advanced Fieldwork or Workshop in
Planning for Developing Regions
Informal Study in Planning for
Developing Regions

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

Environmental Politics Urban Aesthetics Introduction to Environmental Health Issues Environmental Epidemiology

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
Planning and Evaluation of
Environmental Health Programs and
Projects

Environmental Health Planning Health Systems Planning Fieldwork or Workshop in City and Regional Planning Special Topics in City and Regional Planning

Planning
Informal Study in Environmental Health

Planning Informal Study in City and Regional Planning

Planning Tutorial in Urban and Regional Studies Professional Planning Colloquium I Professional Planning Colloquium II Master's Thesis, Project, or Research Paper I

Paper I Master's Thesis, Project, or Research Paper II

Planning Internship Master's Thesis in Preservation Planning I

Master's Thesis in Preservation Planning II Planning Research Seminar I

Planning Research Seminar I Planning Research Seminar II Doctoral Dissertation I Doctoral Dissertation II

# Landscape Architecture

Basic Landscape Architectural Design Graphic Communication Principles of Landscape Architecture Plants and Design Intermediate Landscape Architectural Design Site Construction Thesis Project Seminar Advanced Landscape Architectural Design Senior Thesis Project Professional Practice Seminar Introduction to Parks and Recreation Urban Environmental Planning Urban Environment Workshop Special Topics in Landscape Architecture

Architecture
Independent Study in Landscape

Architecture Graduate Landscape Architectural Design

Contemporary Issues in Landscape Architecture

Architecture
History of Landscape Architecture
Urban Landscape Planning and Design
Regional Landscape Planning
Summer Internship Seminar
Graduate Design Research Seminar
Fieldwork or Workshop in Landscape
Architecture
Master's Thesis in Landscape

# College of Arts and Sciences

#### Akkadian

Architecture

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

Early People: Human Cultural and Biological Evolution The Earliest Civilizations Interpretation of the Archaeological Record The Peopling of America

Archaeology of Mexico and Central America The Archaeology of South America Archaeological Research Methods

Archaeological Research Methods Field Archaeology in South America Investigation of Andean Institutions: Archaeological Strategies Seminar in Archaeology: Central

America Seminar in Archaeology: The Aztecs

#### 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

# Sociocultural Anthropology

Biology and Society I: The Biocultural
Perspective
Biology and Society II: Biology, Society,
and Human Values
Psychological Anthropology
Urban Anthropology
Applied Anthropology
The Anthropology of Everyday Life
Meaning across Cultures
Anthropology of Women and Gender
Comparative Religious Systems
Kinship and Social Organization
Images of Exoties
Economic Anthropology
Law and Culture
Politics and Culture
Peasant Cultures
Ethnohistory
Special Problems in the Anthropology of

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

#### Area Courses

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
Religion, Family, and Community in
China
Japanese Society
Indians of Mexico and Central America
Andean Thought and Culture
Mesoamerican Thought and Culture

#### **Graduate Seminars**

Southeast Asia Seminar: Burma
Southeast Asia Seminar: Philippines
Special Problems in Anthropology
Myth and Mythology
Principles of Social Anthropological
Theory
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 Economic Anthropology

Origins
Problems in Archaeology: Early Man in
America
The Discovery of America
Origins of Mesoamerican Civilization
Topics in Ecological Anthropology
Topics in Biomedical Anthropology

Problems in Archaeology: Agricultural

# Arabic

Elementary Arabic The Spoken Arabic of Egypt Intermediate Arabic Advanced Arabic

# Aramaic

Aramaic

# Archaeology

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

#### Theory and Interdisciplinary Approaches

Method and Theory in Stone Age
Archaeology
Evolution of Prehistoric Technology
Ancient Societies
The Earliest Civilizations
History of Archaeology
Dendrochronology of the Aegean
Historical Archaeology: Method and
Theory
Geomorphology
Interpretation of the Archaeological

Archaeological Research Methods

Evolution of Prehistoric Technology

Ceramics
Seminar in Archaeology
Architectural Problems in
Archaeological Fieldwork
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
Archaeology of Africa
Greek Architecture
Dendrochronology of the Aegean
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
Art and Archaeology of Carchaeology
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 Greece Archaeology

# New World Archaeology

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

# **Asian Studies**

Women and Social Transition in the Twentieth Century
Revolution and Social Values in Modern Chinese Literature
Feminine and Masculine Ideals in Japanese Culture
Introduction to Japan
Introduction to China Chinese Religions
The Japanese Economy
Three Ways of Thought: Confucianism, Taoism, Zen
Dimensions of Religious Experience in Asia
Early Buddhism
Mahayana Buddhism
Japanese Religions
Seminar on Asian Religions
Seminar on Asian Religions
Sominar on Asian Literature in Translation
Seminar in East Asian Literature

# Astronomy

Evolution

The Universe beyond the Solar System Our Solar System An Introduction to the Universe Essential Ideas in Relativity and Cosmology Astronomy: Stars, Galaxies, and Cosmology Theories of the World: The Solar System, Planets, and Life
Our Home in the Universe
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

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 **Biological Sciences** (see p. 29)

# 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)

Intensive Basic Course: Listening, Speaking, Reading, Writing

#### Chemistry

Introduction to Chemistry Man in His Chemical Environment Origins of Life In the Realm of Organic Chemistry 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

X-Ray Crystallography

Special Topics in Biophysical and Bioorganic Chemistry

Quantum Mechanics Statistical Mechanics Selected Topics in Physical Chemistry

#### Chinese

#### Culture

Revolutions and Social Values in Modern Chinese Literature
Three Ways of Thought: Confucianism,
Taoism, Zen Introduction to China
Traditional Chinese Society and Culture The Economies of China A Documentary Study of Contemporary China 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 Tang 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 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

Decline and Fall of the Roman Empire Language of Myth

# Comparative Literature

Culture as Semiotic System

Great Books

Introduction to Psychopathological Texts Comedy Rhetoric and Technology Christianity and Judaism Literature of the Old Testament Medieval Literature
Medieval Literature: Dante in Translation English Renaissance Drama and Its European Contexts 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 The Reader in the Novel
The Divided Self in Women's Writing The Japanese Noh and Modern Dramatists Metaphor, Modernism, and Cultural Context 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 Fiction and the Irrational Verga, D'Annunzio, and Pirandello Preud as Imaginative Reader and Writer Petrarch, Ronsard, and Donne The Aesthetics of Coincidence Critical Perspectives: Roland Barthes Italy and the Transalpine Renaissance Ariosto, Spenser, and Rabelais Baudelaire and Hugo Proust and Mystery Jean Paul and the Eighteenth-Century

# Computer Science

Introduction to Computer Programming

The Computer Age Multistep Job Processing and JCL

Computers and Programming Discrete Structures

**Humorous Novel** Hermeneutics

Social Issues in Computing Introduction to Computer Systems and Organization Numerical Methods Data Structures Systems Programming and Operating Interactive Computer Graphics Introduction to Simulation and Database Introduction to Database Systems Introduction to Theory of Computing Introduction to Analysis of Logarithms Computer Science and Programming Advanced Programming Languages Auvanced 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 Design and Analysis of Computer Networks Networks
Theory of Algorithms and Computing
Computer Science Graduate Seminar
Theory of Programming Languages
Theoretical Aspects of Compiler
Construction

Analysis of Algorithms

Seminar in Programming

Theory of Computing Seminar in Operating Systems

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 Seminar in Theory of Algorithms and Computing Special Investigations in Computer Science

#### **Dutch**

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

#### **Economics**

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

## Economic History

Economic History of Modern Europe: 1750 to the Present American Economic History Economic History of Latin America History of American Business Enterprise Eastern Europe Today: Economics, Government, and Culture 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

# **Economics**

International and Comparative International Trade Theory and Policy International Monetary Theory and The United States in the World Economy Selected Topics in Socialist Economics 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 Economics, Population, and Development International Specialization and Economic Development
National and International Food
Economics Economics of Participation and Workers' Management
The Practice and Implementation of

Self-Management Intertemporal Economics

Labor-managed Systems

Topics in Microeconomic Analysis

Topics in Macroeconomic Analysis Economic Effects of Participation and

Graduate Courses and Seminars

Nonparametric Methods for Peace Scientists and Regional Scientists Interdependent Decision Making Microeconomic Theory Macroeconomic Theory: Static Income Determination
Macroeconomic Theory: Dynamic

Models, Growth, and Inflation

Mathematical Economics Quantitative Methods

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

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 Forms of Poetry
Medieval Romance: The Voyage to the Otherworld Shakespeare Contemporary Afro-American Literature Contemporary Afro-American Litera Expository Writing 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 Irish Culture
Folklore and Literature
Literature and Value

# Major Periods of English Literature

The American Literary Tradition

Old English Literature in Translation Middle English Literature in Translation Renaissance Literature
The Sixteenth Century: Tudor Culture
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

The Reading of Fiction The Reading of Poetry Introduction to Drama

Creative Writing

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

## Genres and Special Topics

The Modern American Novel English Drama

# Creative and Expository Writing

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

#### Courses for Advanced Undergraduates

Topics in Criticism: Art and Ideology 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: 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 Spenser Studies in Shakespeare: Critical Approaches 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 Wordsworth and Keats
Victorian Poetry
History of the Book
The Art and Poetry of William Blake
English Literature and Its Intellectual

Contexts: Edwardians and After Contemporary Fiction Four Modern Masters: Pirandello, Brecht, Beckett, Pinter Twentieth-Century Woman Writers

Yeats and Lawrence The Trial of Oscar Wilde The Politics of Realism The Political Novel in America Dickinson and Whitman American History and the Literary

Imagination
Mark Twain and Henry James Poetry of the Sixties and Seventies: The

Feminine Sensibility Afro-American Literature Modern American Poetry Modern British Fiction History into Fiction The Bildungsroman in English Studies in the Novel: Dickens and

Thomas Mann Trends in Contemporary Criticism Irish Fiction

Satire
Hawthorne and Melville
Women and Writing: Wollstonecraft to

Woolf Reading Woman 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

Advanced Old Norse: Poetry and Poetics Old English The Vikings Theory and Practice of Translation Beowulf Middle English Literature Piers Plowman History of the English Language Spenser Shakespeare: The Histories and Comedies Metaphysical Poets Ben Jonson Milton Studies in the Eighteenth Century Austen and Scott The Other Romantics: DeQuincey,

Hazlitt, Lamb Romantic Masterworks

Literary Imagination

The French Revolution and the British

Reading Workshop
The Aesthetics of Coincidence
Old French Dialectology Special Topics in French Literature The Moralist Tradition Medieval Seminar: The Old French Epic Medieval Seminar: Villon Medieval Seminar: La Roman de la Rose

Major Victorian Poets Emerson and His Circle The London Vortex 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 Postmodernist Fiction The American Writer and the 1930s Evolution of the Novel 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 Writing Seminar Writing Seminar: Poetry Writing Seminar: Prose

# English as a Second Language

English as a Second Language English for Nonnative Speakers

Freshman Seminar: Introduction to

# Freshman Seminar

English for Bilinguals

#### French

## Literature

Semiotics 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 Flaubert Comic Theater in the Seventeenth Century Victor Hugo and the Romantic Self, Family, and Polity in Renaissance Times From Parnassus to Surrealism

Special Topics in French Literature Honors Work in French Medieval Literature
Theater in Sixteenth-Century France Literature and the Arts in Sixteenth-Century France Rabelais Early Sixteenth-Century Poetry: Marot, Sceve, DuBellay Montaigne The Theater of Moliere
Diderot and the Enlightenment
Voltaire: Strategies, Traps, and Play
Feminism and French Literature French Film and Literature in the Twentieth Century

French Romanticism

Marx in France

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

#### Languages and Linguistics

Poetry and the Powers

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** (see p. 30)

# Germanic Studies

#### 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 Heinrich von Kleist Romanticism Nineteenth-Century Literature Fin de Siecle Vienna Modern German Literature I: Contemporary German Prose Modern German Literature II: Twentieth-Century Prose Modern German Literature III: Contemporary Literature Lyrical Poetry Modern German Drama in English Nietzsche, 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 Modern Austrian Narrative

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 American Folica Benavior Public Policy and Public Revenues The "Fourth" Branch Civil Liberties in the United States Constitutional Politics: The United States Supreme Court Race and Gender in Politics
The Feminist Movement and Public

Policy Politics of Education
Political and Economic Power in Cities Size of the State

The Administrative 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 Society and Politics in Saudi Arabia America in the World Economy The Ethnic Dimension in Politics Latin American Politics Society and Politics in Central Europe Government and Politics of Canada Government and Politics of Southeast

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 Languages of Politics in the Renaissance The Roots of Greek Civilization

Women and Politics From Politics to Policy: The Political

Economy of Choice 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

India: Social and Economic Change in a Democratic Polity 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 Eighteenth-Century Scottish Moral Science Self-Interest and Social Theory The Repressed Female in the Writings

Current Topics in Political Philosophy

#### International Relations

Integration in the World System

of Marx

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 International 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 Ze Dong Political Problems of Southeast Asia Latin 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 Politics Foundations 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

Freshman Seminar in Greek Literature 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 Literature Literature in Greek

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

# Language

Greek for Beginners Attic Greek Modern Greek

# Hebrew

# Biblical Literature

Tradition and the Literary Imagination Literature of Ancient Israel Bible, Dead Sea Scrolls, Apocalyptic Freshman Seminar in Biblical Literature: Heroes and Heroines of the Bible Readings in Classical Hebrew Literature: The Art of Biblical Narrative Undergraduate Seminar in Biblical Literature: Prophecy in Ancient Israel Judaic Literature in Late Antiquity Dead Sea Scrolls

# Rabbinic Literature

Evolution of Jewish Law Biblical Interpretation in Rabbinic Literature

# Modern Hebrew Literature

Modern Hebrew Literature in Translation: Poetry 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

# Language

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

Context: The Use of Metaphor

## 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

# History

## Freshman Seminars

History of North American Indians The Growth of Political Democracy in the United States The Family in American History Civil Liberties in the United States Topics in Science and Society in Mid-Victorian Britain Religious Experience and Western Culture The North Atlantic Community and the Wider World Seminar on American Foreign Policy America in the Camera's Eye Introduction to Western Civilization The Heroic Ideal in Antiquity 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

Democracy and Education Political History of North American Indians English Constitutional History to 1600 English Constitutional History, 1600 to the Present Public Life and Literature in Tudor England Public Life and Literature in Stuart England Public Life and Literature in Nineteenth-Century Great Britain Public Life and Literature in Twentieth-Century Great Britain The City in Modern American History

# Comparative History

Early Warfare, East and West Death in Past Time Comparative Slave Systems in the Americas Sex Roles in Historical Perspective

# History of Science

Science in Western Civilization Undergraduate Seminar in the History of Biology History of Biology Social History of Western Technology Seminar 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 American Dreams
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 American Frontier History 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 History

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 Women

Seminar in Nineteenth-Century American History Colloquium in American History

## Asian History

Introduction to Asian Civilizations Introduction to Asian Civilizations in the Modern Period

War as Myth and History in Postwar Japan

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 Japan to 1750 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 B.C. 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

#### 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** The Early Development of Anglo-American Common Law 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

Communities in Early Modern Europe 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

Introduction to Western Civilization 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

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 Seminar

Freshman Seminar in Visual Analysis

# **Introductory Courses**

Classical World

Introduction to Art History: Mediterranean Archaeology Introduction to Art History: The Classical World Introduction to Art History: Beginnings of Civilization Introduction to Art History: African Art Introduction to Art History: The

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 Introduction to Art History: Modern Art

Introduction to Art History: American

Introduction to Art History: Asian Traditions

Introduction to Art History: Architecture and Environment

## Intermediate Courses

Techniques and Materials: Painting Books, Prints, and the Graphic Image Classical Greece 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

Painting and Sculpture in America: 1850-1950 American Architecture, the City, and

American 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 Chinese Painting Studies in Indian and Southeast Asian

# Seminars

Original Works of Art Introduction to Museums History of Art Criticism Ceramics Mannerism and the Early Baroque Era in 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

The Romantic Movement in Painting, Poetry, and Graphic Arts 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

Seminar in Renaissance Art Seminar in Baroque Art Problems in Modern Art Problems in Asian Art Methodology Seminar Problems of Art Criticism

# Indonesian

Architecture

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

Medieval and Renaissance Literature The Twentieth-Century Novel Introduction to Modern Italian Literature Italian Civilization Dante: La divina commedia Dante in Translation Boccaccio Modern Short Fiction Petrarch and Renaissance Lyric Vico and Renaissance Esthetics The Italian Renaissance Seventeenth-Century Prose Eighteenth-Century Thought Goldoni and Alfieri 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 Eugenio Montale Petrarch: Canzoniere Eighteenth-Century Theater
The Nineteenth Century: I promessi sposi 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 Poetry and Drama Japanese Fiction Jananese 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 Japanese Economy Narrative Literature

# 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 Advanced Latin Composition

Field Methods

History of Linguistics Schools of Linguistics

Discourse Analysis

Study

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 Semiotics of Language Language Typology Contrastive Analysis Applied Lingistics and Second Language Acquisition Comparative Methodology Languages in Contact Sociolinguistics Historical Linguistics: Methods and Approaches Transformational Grammar: Syntax and Semantics
Generative Phonology
Social Functions of Language History of the English Language Linguistic Semantics Dravidian Structures Indo-Aryan Structure

Proseminar: Introduction to Graduate

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 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

#### 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

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

# Graduate Courses

Seminar in Analysis

Real and Complex Analysis Mathematical Methods in Physics 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

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

# Medieval Studies

The World Upside Down The Literary Adventure
King Arthur and His Knights
Drama and Music from the Middle Ages through the Renaissance

#### Music

Sound, Sense, and Ideas Opera 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 The Study of Non-Western Musics Poetry and Music in the English Renaissance Music in Western Europe to Josquin Des Pres Josquin Des Pres to Monteverdi Musical Performance

Individual Instruction in Voice, Organ, Harpsichord, Piano, Strings, Woodwinds, and Brass Instruments

#### 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 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 History of Music Theory Liturgical Chant in the West Twentieth-Century Classics Rhythms Analysis of Structure and Function in Tonal Music

# Near Eastern Studies (see also Hebrew, Arabic, and other Middle Eastern languages)

#### 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 Biblical Literature

# **History of Ancient Near Eastern**

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 The Modern Middle East Near Eastern and Biblical History and Archaeology

# **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**

Introduction to Psychology: The Frontiers of Psychological Inquiry Introductory Psychology Seminars 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 Auditory Perception Hormones and Behavior Introductory Psychopathology Biopsychology of Animal Behavior Evolution of Human 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 Assessment Interpersonal and Social Stress and Coping History and Systems of Psychology

# Principles of Neurobiology, Laboratory Advanced Courses and Seminars

Professional Writing in Psychology 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 Biopsychology Human Experimental 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 Nutrition and Behavior Research in Biopsychology Research in Human Experimental Psychology Research in Social Psychology and Personality Research in Clinical Neuropsychology

#### 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
Art and Psychology
Psychotherapy: Its Nature and Influence
Psychological Testing

# Quechua

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

# Romance Studies (see also French; Italian; and Spanish)

# Literature

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

# Romanian

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

# Russian

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

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 The Age of Symbolism 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)

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

# Sociology

Introduction to Sociology Myth and Image in Modern Society Introduction to Sociology: Conflict and Cooperation Society, Industry, and the Individual Introduction to Sociology: Applications to Policy Introduction to Sociology: Urban Society Ideology and Social Concerns The Language of Television Images 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: 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

Freshman Seminar: The Idea of Quest

Don Quixote The Nineteenth-Century Spanish Novel Form and Formlessness in the Novel of

the Generation of 1898 The Reader in the Novel Literature and Ideas in Modern Spain The Post-Civil War Drama in Spain The Post-Civil War Novel in Spain Modern Hispanic Poetry after the Civil War

Special Topics in Hispanic Literature Medieval Literature Medieval Literature 1300-1508 Valle-Inclan

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 Studies in the Literature of Fifteenth-Century Spain Baroque and Neo-Baroque The Theater 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

#### Languages and Linguistics

of Art and Ideas of the Novel

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 Grammar 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 Linguistics

# Thai

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

# **Theatre Arts**

# Freshman Seminars

Writing about Modern Theatre Modern Drama and Modern Production Tragedy and Comedy Script to Stage

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 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 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 Dramaturgy 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

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 Individual Problems in Composition Seminar in History of Dance

# Cinema

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

## Ukrainian

Intensive Elementary Course: Listening, Speaking, Reading, Writing

#### Vietnamese

Intensive Elementary Course: Listening, Speaking, Reading, Writing Intermediate Vietnamese Reading 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

"The Heart of My Mystery": The Alliance of Sexuality and Power in the Principal Plays of Shakespeare Scientists and Political Revolutions Self-Interest and Social Theory Feminist Theory: Franco-American Currents
On the Bias: New Designs on Literary Criticism Cultural History as a Subversive Activity

#### Women's Studies (see also History; English; Anthropology; and Government)

Freshman Seminar: Writing as Women Freshman Seminar: Feminine and Masculine Ideals in Japanese Culture Freshman Seminar: The Family in American History
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 Sex and Gender in Cross-cultural Perspective

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

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

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# Division of Biological Sciences

#### General Courses

Biological Sciences, Lectures and Laboratory
Introductory Biology
Interactive Computing for Students of
Biological Sciences Biology for Nonmajors Special Studies in Biology History of Biology Biomedical Ethics
Environmental Ethics
Biology and Society I: The Biocultural Perspective Alternative Food-Production Systems Chemicals, Enzymes, and Maladies Basic Immunology, Lectures and Laboratory
Techniques in Animal Handling and Surgery
Teaching Experience
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, Lectures and Laboratory Histology: The Biology of the Tissues Ecological Animal Physiology, Lectures and Laboratory Cellular Physiology Biological Rhythms with a Period of One Day to One Year Seminar in Anatomy and Physiology Special Histology: The Biology of the Organs Vertebrate Morphology General Animal Physiology: A Quantitative Approach, Lectures and Laboratory
Mammalian Neurophysiology
Comparative Physiology of
Reproduction of Vertebrates, Lectures and Laboratory Mammalian Physiology Nutrition and Physiology of Mineral Elements Radioisotopes in Biological Research Applied Electrophysiology Biological Membranes and Nutrient Transfer Lipids Molecular Mechanisms of Hormone Action Special Topics in Physiology

# **Biochemistry and Cell Biology**

Orientation Lectures in Biochemistry

Graduate Research in Animal Physiology

General Biochemistry
Principles of Biochemistry Individualized Instruction Principles of Biochemistry, Lectures Basic Biochemical Methods Survey of Cell Biology
Cell Structure and Physiology
Undergraduate Biochemistry Seminar Cell Proliferation and Oncogenic Viruses Laboratory in Cell Biology Protein Structure and Function Bioenergetics and Membranes Biosynthesis of Macromolecules Biochemistry of the Vitamins and Coenzymes Metabolic Regulation Integration and Coordination of Energy Metabolism Intermediate Biochemical Methods Plant Biochemistry Current Topics in Biochemistry Dilemmas in Toxicology Isotope Kinetics Biochemistry Seminar

Advanced Biochemical Methods

Research Seminar in Biochemistry

# **Botany**

Plant Biology Plant Physiology, Lectures and Laboratory Ethnobotany Poisonous Plants
Taxonomy of Cultivated Plants
Taxonomy of Vascular Plants Plant Anatomy Cytology Phycology Plant Geography Biology of Plant Species Research Methods in Systematic Botany Comparative and Developmental Morphology of the Embryophyta Photosynthesis Cytogenetics
Plant Evolution and the Fossil Record Applied Plant Anatomy 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**

Insect Ecology, Lectures and Laboratory

Introductory Ecology

Human Paleontology

The Vertebrates General Ecology

Oceanography Limnology, Lectures and Laboratory Plant Ecology, Lectures and Laboratory Microbial Ecology Systems Ecology
Agriculture, Society, and the
Environment Undergraduate Ecology Seminar Mammalogy Herpetology Laboratory and Field Methods in Biological Anthropology Ornithology Biology of Fishes Organic Evolution Physical Anthropology: History and Theory Field Studies in Ecology and Systematics Environmental Biology Mathematical Ecology Seminar in Coevolution between Insects and Plants Limnology Seminar
Marine Ecology
Topics in Theoretical Ecology Phytoplankton Ecology: An Experimental Approach Plant Ecology Seminar Graduate Seminar in Vertebrate Biology Principles of Systematics Ichthyology Special Topics in Evolution and Ecology Seminar in Population and Community Ecology Autecology Population Ecology Community Ecology Ecosystems

# Genetics and Development

Genetics **Human Genetics** Developmental Biology Embryology Seminar in Developmental Biology Population Genetics Molecular Aspects of Development Molecular Evolution
Microbial Genetics, Lectures and Laboratory Immunogenetics Current Topics in Genetics

# Neurobiology and Behavior

Introduction to Behavior

Introduction to Neurobiology Hormones and Behavior Biopsychology Laboratory Vision Introduction to Sensory Systems Seminar in Neurobiology and Behavior Comparative Vertebrate Ethology Neuroelectric Systems Animal Communication Field Studies of Animal Behavior Vertebrate Social Behavior Animal Social Behavior Principles of Neurobiology, Laboratory Cellular Neurobiology Neurochemistry Chemical Communication Behavioral Neurogenetics Quantitative Approaches to Animal Behavior

Developmental Neurobiology Physiological Optics Neuroethology Seminar in Advanced Topics in Neurobiology and Behavior Graduate Seminar in Vertebrate Social Rehavior

# Courses in Marine Sciences

Anatomy and Behavior of the Gull Ecological Behavior Field Marine Science for Teachers Field Marine Science Underwater Research Adaptations of Marine Organisms Field Phycology Chemical Oceanography in the Field Topics in Marine Vertebrates Invertebrate Embryology Coastal and Oceanic Law and Policy Geology of Our Coast: Terrestrial and Maritime Aspects
Introduction to Marine Pollution and Its

Control Marine Resource Economics Practical Archaeology under Water: A

Basic Introduction Wetland Resources

#### Courses Offered in Cooperation with the Sea Education Association

SEA Introduction to Oceanography SEA Introduction to Maritime Studies SEA Introduction to Nautical Science SEA Oceanographic Laboratory I SEA Oceanographic Laboratory II

# College of Engineering

# **Engineering Common** Courses

Drawing and Engineering Design Introduction to Computer Programming The Laser and its Applications in Science, Technology, and Medicine Elements of Materials Science Introduction to Chemical Engineering Computer-aided Design in Environmental Systems Introduction to Microprocessors
Introduction to Mechanical Engineering Introductory Geological Sciences Introduction to Manufacturing Engineering
Problem Solving and Modeling
Fission, Fusion, and Radiation
Mechanics of Solids Dynamics Introduction to Electrical Systems Computers and Programming Mass and Energy Balances Thermodynamics Introductory Engineering Probability Introduction to Mechanical Properties of Materials Introduction to Electrical Properties of Materials Basic Engineering Probability and Statistics Numerical Methods

# Applied and Engineering **Physics**

The Laser and Its Applications in Science, Technology, and Medicine Introduction to Biophysics The Physics of Energy 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 Vision Nuclear Reactor Theory Special Topics in Biophysics Membrane Biophysics Modern Physical Methods in Macromolecular Structure Determination 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 Special Topics Seminar in Applied Physics Microcharacterization Microprocessing of Materials Special Topics in Applied Physics Principles of Diffraction Project Kinetic Theory
Physics of Solid Surfaces and Interfaces

# **Chemical Engineering**

Nonresident Lectures Mass and Energy Balances Chemical Engineering Thermodynamics 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 Computer Applications in Chemical Engineering Process Equipment Design and Selection Design of Chemical Reactors and Multiphase Contacting Systems Design Project Computer-aided Process Design Special Projects in Chemical Engineering Phase Equilibria Petroleum Refining Synthetic Fuels Nuclear Chemical Engineering Polymeric Materials Physical Polymer Science Polymeric Materials Laboratory Microbial Engineering Wastewater Engineering in the Process Industries Polymer Processes Numerical Methods in Chemical Engineering
Air Pollution Control
Process Control Process Control Laboratory Applied Surface Chemistry and Physics 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

Numerical Solutions to Civil Engineering Problems Uncertainty Analysis in Engineering Surveying for CEE Facilities Microeconomic Analysis
Economic Analysis of Government Engineering Economics and

Management Social Implications of Technology Fluid Mechanics Hydraulic Engineering Introductory Soil Mechanics Environmental Quality Engineering Water Supply Engineering Introduction to Transportation Engineering

Structural Engineering Structural Behavior Laboratory Engineering Materials Seminar in Technology Assessment Descriptive Hydrology Civil and Environmental Engineering

Design Project Professional Practice in Engineering Numerical Solutions to Civil Engineering Problems

Remote Sensing: Fundamentals Remote Sensing: Environmental Applications

Physical Environment Evaluation Image Analysis: Landforms Image Analysis: Physical Environments Project - Remote Sensing Research – Remote Sensing Special Topics – Remote Sensing Seminar in Remote Sensing Legal Process Environmental Law Public Systems Analysis

Environmental and Water Resources Systems Analysis Colloquium Advanced Fluid Mechanics Dynamic Oceanography Analytical Hydrology

Flow in Porous Media and Groundwater Engineering Micrometeorology Coastal Engineering Environmental Fluid Mechanics Project—Hydraulics Hydraulics Seminar

Special Topics in Hydraulics Foundation Engineering Retaining Structures and Slopes Highway Engineering Bituminous Materials and Pavement

Design Project in Geotechnical Engineering Seminar in Geotechnical Engineering

Special Topics in Geotechnical

Engineering Microbiology of Water and Wastewater Chemistry of Water and Wastewater Aquatic Chemistry Industrial Waste Management Environmental Quality Management Sludge Treatment, Utilization, and

Disposal Environmental Quality Engineering Seminar

Urban Transportation Planning Travel Demand Theory and Applications Transportation Systems Analysis Transportation Systems Design Transportation Economics
Operations, Design, and Planning of

Public Transportation Systems Freight Transportation 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 Water Resources Problems and Policies Stochastic Hydrologic Modeling Water Quality Modeling Water Resources Systems Planning

Environmental and Water Resources Systems Analysis Design Project Environmental and Water Resources Systems Analysis Research

Special Topics in Environmental or Water Resources Systems Analysis

Coastal Engineering
Environmental Fluid Mechanics Unsteady Hydraulics Environmental Planning and Operation

of Energy Facilities
Experimental Methods in Hydraulics
Research in Hydraulics 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 Water Quality Laboratory Environmental Engineering Processes Design Project in Sanitary Engineering Sanitary Engineering Research Special Topics in Sanitary Engineering

Transportation Design Project Transportation Research Transportation Colloquium

Special Topics in Transportation Engineering Fracture Mechanics Structural Stability: Theory and Design Finite-Element Analysis Structural Reliability

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 Thesis—Remote Sensing
Thesis—Environmental Engineering

Thesis - Structural Engineering

# **Computer Science**

Introduction to Computer Programming The Computer Age Computers and Programming Discrete Structures Social Issues in Computing Introduction to Computer Systems and Organization Numerical Methods

Data Structures
Systems Programming and Operating

Systems
Systems
Interactive Computer Graphics
Introduction to Data-Base Systems Introduction to Theory of Computing Introduction to Analysis of Algorithms Independent Reading and Research Computer Science and Programming

Advanced Programming Languages
Translator Writing
Concurrent Programming and Operating
Systems Principles
Machine Organization

Numerical Analysis Short Course on Linear and Nonlinear Least Squares

Short Course on Spline Approximation Data-Base Systems Information Organization and Retrieval Design and Analysis of Computer Networks

Analysis of Algorithms Theory of 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

Seminar in Systems Modeling and Analysis

Advanced Theory of Computing Seminar in Theory of Algorithms and Computing
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 Bioinstrumentation Neuroelectric Systems Active and Digital Network Design Computer Methods in Electrical Engineering Advanced Digital Signal Processing Fundamentals of Analog and Discrete-Time Circuits Analog and Discrete-Time Circuit Applications
Introduction to Lasers and Optical Electronics Electronic Circuit Design Semiconductor Electronics Fundamentals of Acoustics Electric Energy Systems Advanced Power Systems Analysis Computer Structures Microprocessor Systems Thermal, Fluid, and Statistical Physics for Engineers Elementary Plasma Physics and Gas Discharges Introduction to Controlled Fusion: Principles and Technology Magnetohydrodynamics Senior Project Theory of Linear Systems Quantum Electronics Solid-State Microwave Devices and Circuits Integrated Circuit Technology Algebraic Coding Theory

Fundamental Information Theory
Decision Making and Estimation
Communication Systems Feedback Control Systems Digital Control Systems Estimation and Control in Discrete

Linear Systems Optimal Control and Estimation for Continuous Systems
Computer Processor Organization and
Memory Hierarchy

Computer Networks and Distributed Architecture

Current Topics in Computer Engineering Introduction to Plasma Physics Advanced Plasma Physics Electrodynamics

Microwave Theory Upper Atmosphere Physics Electromagnetic Wave Propagation Graduate Topics in Electrical

Engineering Opto-electronic Devices Theory and Applications of Nonlinear Optics Solid-State Devices

Materials and Device Physics for VLSI VLSI Digital System Design Random Processes in Electrical Systems Advanced Topics in Information Theory

Foundations of Inference and Decision Making Random Processes in Control Systems Adaptive Parameter Estimation Kinetic Theory

Electrical Engineering Colloquium Electrical Engineering Design Graduate Topics in Electrical Engineering

# Geological Sciences

# Freshman and Sophomore Courses

Introductory Geological Sciences Introduction to Historical Geology Earth Science Earth Science Laboratory Frontiers of Geology Geology and the Environment

Introduction to Methods in Geological

Sciences
Mineral and Energy Resources and the

# Junior, Senior, and Graduate

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 Chemical Geology Mineral Deposits Invertebrate Paleontology and Biostratigraphy Sedimentation and Tectonics Marine Tectonics Physics of the Earth Introduction to Geophysical Prospecting Earthquakes and Tectonics Earthquakes and Tectonics Tectonic and Stratigraphic Evolution of Sedimentary Basins Petrology and Geochemistry Advanced Geomorphology Topics Marine Geology Sedimentary Petrology and Tectonics Tecinics in Mineral Procurs Precambrian Geology
Plate Tectonics and Geology Paleobiology Geophysics, Exploration Seismology Exploration Seismology, Gravity, Magnetics Geophysics, Seismology and Geotectonics Geomechanics, Gravity, Magnetism, Heat Flow Mineralogy and Crystallography, X-Ray Diffraction, Microscopy, High-Pressure-Temperature Experiments Research on Seismic-Reflection Profiling of the Continental Crust Advanced Topics in Petrology and Advanced Topics in rectorogy and Tectonics Seminar in Tectonics Seminar in Petrology and Geochemistry Seismic Record Reading Glacial and Quaternary Geology

# Seismology Field Courses

Advanced Geophysics

Geotectonics

Field Geology 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
Structural Characterization 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
Macroprocessing
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 Physics of Modern Materials Analysis

#### Graduate Core Courses

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

#### **Further Graduate Courses**

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

# Mechanical and Aerospace Engineering

#### General and Required Courses

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

# Mechanical Systems Design and

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 and Aerospace 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 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 Direct Energy Conversion and Storage Power Systems Future Energy Systems Seminar Introduction to Controlled Fusion: Principles and Technology Foundations of Fluid Dynamics and Aerodynamics 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 Stability of Fluid Flow Turbulence and Turbulent Flow Dynamics of Rotating Fluids Numerical Methods in Fluid Flow and Heat Transfer Nonlinear Wave Propagation

#### Special Offerings

Current Topics in Biomechanics Special Investigations in Mechanical and Aerospace Engineering Mechanical Engineering Design 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 Mechanical and Aerospace

Engineering

# **Nuclear Science and** Engineering

Introduction to Nuclear Science and Engineering Introduction to Controlled Fusion: Principles and Technology 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 OR&IE Project Advanced Engineering Economic

Analysis Queuing 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 Planning

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 Advanced Stochastic Processes Advanced Queuing Theory 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 Inventory Control Deterministic and Stochastic Control

Selected Topics in Applied Probability 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

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

# Special Courses, Projects, and Thesis

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

# School of Hotel Administration

# **Administrative and General** Management

Orientation 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 Quality Assurance for the Hospitality Industry
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
Training Human Resources in the
Hospitality Industry Hotel Manpower Management Simulation Organizational Behavior and Small-Group Processes Psychology in Business and Industry Special Studies in the Management of Human Resources Dispute Resolution in Service Industries Advanced Human Resource Management

# Accounting and Financial Management

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

# Food and Beverage Management

Introduction to Food and Beverage Operation and Management Food Production Techniques Meat Science and Management Food Production Systems: Cafeterias Food Production Systems: A la Carte, Banquet, Beverage, and Service Food and Beverage Control Corporate Restaurant Management Survey of Beverages Purchasing Introduction to Wine and Spirits Production and Merchandising of Desserts Seminar in Cultural Cuisines

# Law

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

# **Properties Management**

Hospitality Facilities Planning Hotel Mechanical and Electrical Food Facilities Layout and Design Project Development and Construction Seminar in Environmental Control Seminar in Interior Design Seminar in Hotel Planning Seminar in Restaurant Planning Seminar in Restaurant Planning Graduate Study in Project Development and Construction Graduate Study in Electrical and Mechanical Systems

# Communication

Typewriting Introduction to Business Writing Report Typing
Typewriting and Business Procedures
Shorthand Theory Effective Oral Communication Written Communication Strategies for Business Writing 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
Graduate Food Sanitation
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
Managing the Marketing Functions in the
Hospitality Industry
Problems and Opportunities in
International Hospitality
Seminar in Selected Topics in Hospitality
Marketing
Seminar in Advertising and Public
Relations
Psychology of Advertising
Marketing Management

# Independent Research

Administrative and General Management Management Intern Program — Operations Management Intern Program — Academic Human Resources Management Accounting and Financial Management Food and Beverage Management Law Properties Management Communication Science and Technology

Economics, Marketing and Tourism

Undergraduate Independent Research

# New York State College of Human Ecology

# Interdepartmental Courses

# Field Study

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 or Internships Field Experience in Community Problem Solving The Ecology of Urban Organizations: New York City

New York City The Ecology of Organizations in the Upstate Region

# Other

Special Topics in Toxicology

# **Nondepartmental Courses**

# General Courses

Critical Reading and Thinking America and World Community

# International Program

Preparing for International or Intercultural Experience Study Abroad Human Ecology: An International Perspective

# Division of Student Services

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

# Consumer Economics and Housing

Economic Analysis of Public Decision

Seminar in Consumer Economics and

History and Development of Home

Readings in Family Decision Making

Explorations in Consumer Economics Economics of Household Behavior

Housing Finance and Market Analysis

Household and Family Demography

Seminar on Consumer Law Problems

Community, Housing, and Local Political

Power, Participation, and Public Policy

Applied Welfare Economics-Policy

Consumption and Demand Analysis

Seminar in Current Housing Issues

Design and Environmental

Design I-II: Fundamentals Theory of Design

Drawing the Clothed Figure Elements of House Design

Design Communications Building Technology

Apparel Design 1-III Human-Environment Relations

Dress: A Reflection of American Women's Roles

Environment and Social Behavior

Design Fundamentals of Interior Design

Design V-VI: Intermediate Interior

Furnishings, Materials, and Finishings

Professional Practice of Interior Design Human Factors: Ergonomics-

Anthropometrics
Household Equipment Principles
Textiles III: Structure and Properties

Textiles for Interiors and Exteriors Design: Introductory Textile Printing

Environmental Graphics and Signing

Selected Topics in History of Costume

Human Factors: The Ambient

Design III-IV: Basic Interior Design

Science for Consumers
Science, Technology, and Human Needs
Clothing through the Life Cycle

Historic Design I: Furniture and Interior

Historic Design II: Furniture and Interior

Family Financial Management

Information and Regulation Fundamentals of Housing

Family Management

Special Problems for Graduate Students

Making

Housing

Issues

Analysis

Drawing

Textiles I and II

Design

Design

Granhic Design

Environment

Human Capital

Residential Design Empirical Research Supervised Fieldwork Introduction to Consumer Economics Housing and Society The Textile and Apparel Industries Sociological Perspectives on Housing Marketing and the Consumer The Textiles and Apparel Industries - Field Experience Special Studies for Undergraduates Family Resource Management Care of Textiles Textiles IV: Textile Chemistry Household Decision Making Fabric Technology Economic Organization of the Household Apparel Textiles Textile Materials for Biomedical Use Personal Financial Management Apparel Design IV: Functional Clothing Consumer Decision Making Fundamentals of Housing Economics Design Research Methods in Human-Wealth and Income Environment Relations Special Studies for Undergraduates Empirical Research Programming Methods in Design Apparel Design V Design VII – Advanced Interior Design Supervised Fieldwork Time as a Human Resource An Ecological Approach to Family Textile-Fiber Evaluation and Decision Making
The Economics of Consumer Policy Stress-Strain Analysis Consumer Behavior Physical Science in the Home Special Topics in Textiles Housing, Consumer Credit, and Real Estate Finance Advanced Textile Chemistry Seminar: Frontiers in Textiles Mechanics of Fibrous Structures Social Aspects of Housing and Neighborhood Housing for the Elderly Adaptive Building Reuse Housing and Local Government Standards and the Quality of Life Psychology of Office Design
Dynamics of Collaboration in the Design Housing Policy and Housing Programs Economics of Health, Health Care Expenditures, and Health Policy Process The Environment and Social Behavior Consumer and the Law Community Decision Making Welfare Economics

# Human Development and Family Studies

Historic Design III: Contemporary

Design

Observation Human Development: Infancy and Childhood Human Development: Adolescence and Youth Human Development: Adult Development and Aging Introduction to Expressive Materials The Family in Modern Society Sociological Analysis of Contemporary Issues 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 Historical Development of Women as Professionals, 1800-1980 Atypical Development Family and Community Health Collective Behavior and Social

Movements
Problematic Behavior in Adolescence
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

Advanced Participation in Preschool Settings

Settings
The Family in Cross-cultural Perspective
Theories of Adult Interpersonal
Relationships

American Families in Historical Perspective Personality Development in Childhood The Development of Social Behavior

The Development of Social Behavior
The Study of Lives
Behavioral Disorders of Childhood
Intellectual Deviations in Development

Aging and Health Experimental Child Psychology Junior Honors Seminar Directed Readings

Empirical Research Supervised Fieldwork Teaching Apprenticeship Projects in Public Policy 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 Thinking and Reasoning The Development of the Black Child Internship in Cornell Nursery School 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 Ecology of Human
Development

# Graduate Program

Research Design and Methodology Directed Readings Empirical Research Practicum Teaching Assistantship Research Assistantship Extension Assistantship Supervised Teaching Adolescence Cognitive Development Infancy Early Childhood Education Contemporary Family Theory and Research Personality and Socialization Atypical Development
The Course of Life: Developmental and Historical Perspective Research Practicum in the Ecology of Human Development Master's Thesis and Research Doctoral Thesis and Research

#### 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 Studies
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 Human Sexuality Health-Care Services and the Consumer Ecology and Epidemiology of Health Ecological Approach to Instructional Strategies
Social Welfare as a Social Institution Directed Readings Empirical Research Supervised Fieldwork Teaching Apprenticeship Introduction to Adult Education Fieldwork The Helping Relationship The Politics of Power in the Human Aging and the Human Services Program Planning in Community and Family-Life Education The Art of Teaching Teaching Internship Critical Issues of Education Career Environmental and Individual Development Teaching for Reading Competence: A Content-Area Approach Advanced Field Experience in Community and Family Life Education Social Work Practice Senior Seminar in Social Work

Introduction to Social Planning

Social Policy

#### Graduate Program

Special Problems for Graduate Students Teaching Human Services in Higher Education

Adult Development and the Provision of Human Services

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 Programs
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 Policy and Program

Evaluation

Qualitative Methods for Program Evaluation

Internship in Human Service Studies Advanced Seminar in Program 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 Seminar 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 Seminar 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
Principles and Practices of Public Health

#### **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

Empirical Research

Human Growth and Development: Biological and Social Psychological Considerations

Biochemistry and Human Behavior Management Principles in Food Service Operation

Supervised Fieldwork Teaching Apprenticeship Field-based Learning in Nutrition Nutrition and Disease Diet Formulation and Analysis Community Nutrition and Health Physiochemical Aspects of Food

Physiochemical Aspects of Food Laboratory **Experimental Food Methods** 

National and International Food

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

Obesity and the Regulation of Body

Weight
Topics in Maternal and Child Nutrition Readings in Food

Teaching Seminar Field of Nutrition Seminar Seminar in Food Habits Research Special Topics in Food Advanced Nutrition Laboratory

Anthropometric Assessment Dietary Assessment Clinical Assessment

Biochemical Assessment Vitamins and Coenzymes Mechanisms of Metabolic Regulation

Integration and Coordination of Energy Metabolism Epidemiology of Nutrition

Seminar of United States Nutritional Services and Programs Seminar in Physiochemical Aspects of

Food

Geriatric Nutrition 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 Nutritional and Public Health Importance of Human Parasitic

Isotope Kinetics

Seminar in Nutrition and Behavior Seminar in International Nutrition and

Development Policy Special Topics in International Nutrition Seminar in Nutritional Toxicology Seminar in Nutritional Science

#### 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 Ideology 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 Religions
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 Energy and Ecological Systems

History of Biology Issues in Biology and Society: Chemicals, Enzymes, and Maladies Scientists and Political Revolutions Seminar in the History of Biology The Ecological Consequences of Nuclear

War Urban Affairs Laboratory Alternative Food Production Systems Issues in Biology and Society:

Professional Ethics Science, Technology, and Human Needs Scientists and Political Revolutions Standards and the Quality of Life Special Problems in the Anthropology of Sex and Gender

Technology, Society, and the Human Condition The Population Biology of Health and

Disease War and Peace in the Nuclear Age Rhetoric and Technology

#### **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

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 States 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

#### International and Comparative Labor Relations

Types of Sampling

Seminar in Statistical Methods

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 Russia

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

Special Topics in Labor Economics The Economics of Occupational Safety and Health

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 Society

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 Processe

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

Ecological Psychology: Behavior Setting Analysis within the Organizational

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 Century

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

Organization Development: Strategy and

Human Resources and State Legislative Process

Social Contract, 1964-1980 The Social Tensions of Labor Market

Occupational Analysis and Human Resource Planning Planning Areawide Employment and

Training Programs
Sectoral Variations in Human Resource

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

#### **Interdepartmental Courses**

Labor Problems in American Society Personnel Management for Managers

#### Officer Education

#### **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

National Security Forces in Contemporary American Society I National Security Forces in Contemporary American Society II

#### Leadership Laboratory Courses

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

#### Military Science

United States Organization for Defense Armed Conflict in Society Mapping: Land Navigation Social and Organizational Psychology in the Military Environment Leadership in Small-Unit Operations Theory and Dynamics of the Military

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 Badmintor. Baskethall 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

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 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**

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

#### **Business Administration Core Courses**

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

#### **Business Administration** Elective Courses

Advanced Accounting Advanced Business Law Advertising Practicum Auditing Bank Management
Business Logistics Management Consumer Behavior Economic Evaluation of Capital Investment Projects Entrepreneur and Small Business Federal Income Tax Finance Theory Financial Information Evaluation Financial Markets and Institutions Financial Policy Decisions Intermediate Accounting
Introduction to Taxation Affecting Business and Personal Decision Making Investment Banking Investment Management Law of Business Associations Managerial Cost Accounting Marketing Decision Analysis Marketing Management of Industrial

#### **Public Administration Core** Courses

**Economic Foundations of Public Policy** Industrial Policy: Lessons for the United States from Japan and Europe Public Financial Management The Conduct of Public Affairs

#### **Public Administration Elective Courses**

Legal Process Management of Urban Issues Public Affairs Colloquium Seminar in Public Systems Analysis The Politics of Technical Decisions I The Politics of Technical Decisions II

#### **Hospital and Health Services Administration Core** Course

Introduction to Health Services

#### **Hospital and Health Services Administration Elective** Courses

Field Studies in Health Administration and Planning Financial Management of Hospitals Health and Welfare Policy Health Economics Health Operations Management and Planning Health Services Research and Evaluation

Hospital Strategic Planning HMO Development and Management International Comparisons of Health Services

Introduction to Clinical Medicine: The Physician, the Hospital, and the Delivery of Medical Care Labor Relations in the Health Industry Legal Aspects of Hospital Administration Long-Term Care Services: Policy and Planning

Orientation to Tertiary Hospital Services Primary Health Care Services: Policy and Planning Psychiatric Institutions: Administration

and Practice Selected Topics in the Administration of

Teaching Hospitals
Seminar in Hospital Management
State Government Health Policy Seminar Washington Health Policy Field Seminar

#### **Common Elective Courses**

Administration of Agricultural and Rural Development American Business Operations Abroad American Industry: Economic Analysis and Public Policy Applied Econometrics Applied Econometrics Applied Organizational Theory Behavioral Decision Theory Computer Systems Analysis Data-Base Management

Fund Accounting Government Regulation of Business International and Comparative Management

International Business Environment Southeast Asia International Trade and Finance Introduction to Cobol

Macroeconomic Theory and Policy Management Science Management Writing

Negotiations Oral Communication Organizational Theory and Behavior Personnel Administration and Human Relations

Political Economy in National and International Perspectives

Politics and Development in the Arabian Gulf

Power and Influence Processes and Techniques in Organizational Development Seminar in Organizational Theory Seminar in University Administration Stress in Organizations Topics in Managerial Economics

Research

Accounting Workshop Advanced Capital Market Theory Directed Readings and Research Doctoral Seminar in Accounting Finance Workshop Seminar in Current Research in Marketing Social Psychology of Organizing

#### Law School

#### First-Year Courses

Civil Procedure Constitutional Law Contracts Criminal Justice Practice Training Property

#### Second-Year Electives

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

#### Second- and Third-Year **Electives**

Administrative Law American Legal History Antitrust Law Civil Rights Comparative Law Conflict of Laws Criminal Procedure Debtor-Creditor Law Employment Discrimination and the Law Environmental Law Estate and Gift Taxation Family Law Federal Courts
Intellectual and Industrial Property International Law Labor Law Land-Use Planning Law Practice Dynamics Law, Society, and Morality Lawyer as a Negotiator Lawyers and Clients Legislation Local Government Professional Responsibility Real Estate Transfer and Finance Regulated Industries Securities Regulation Supervised Writing or Teaching

#### Seminars and Problem Courses

Trial Advocacy

Advanced Antitrust Law and Policy American Legal Theory Constitutional Criminal Procedure Contemporary Legal Theory Copyright, Trademark, and Patent Law Corporate Practice Equal Protection Seminar Ethics of Corporate Practice Family Law Clinic Fiduciary Administration International Business Transactions Labor Arbitration Land-Use Planning Seminar Law and Medicine Legal Aid Prisoners' Legal Services Problems in Legislation Problems in Urban Development Social Security Law Waste, Water, Toxic Materials

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

#### **Anatomy**

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

#### Avian and Aquatic Animal Medicine

Poultry Hygiene and Disease Avian Diseases Diseases of Aquatic Animals Aquavet: 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

#### 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 General Medicine Large-Animal Surgical Techniques Small-Animal Medicine and Surgery Small-Animal Surgical Exercises General Surgery and Anesthesiology 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 Advanced Work Special Topics of Veterinary Ophthalmology Horse Lameness Senior Seminar Advanced Large-Animal Internal Medicine Clinical Services Small-Animal Medicine Small-Animal Surgery Radiology Anesthesiology Ambulatory Large-Animal Medicine Large-Animal Surgery Theriogenology Practice Management Dermatology Ophthalmology Pathology-Clinical Pathology Opportunities in Veterinary Medicine

#### Microbiology

Basic Immunology Pathogenic Microbiology Veterinary Immunology Veterinary Bacteriology and Mycology Veterinary Dirology
Infectious and Zoonotic Diseases
Special Projects in Microbiology
Small-Animal Infectious Diseases Virus Diseases of Cattle Advanced Immunology

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 Special Problems in Pathology Wildlife Pathology Post-mortem Pathology Select Topics in Laboratory Animal Medicine Principles of Toxicological Pathology Clinical Immunology Pathology of Nutritional Diseases Advanced Work in Pathology Laboratory Animal Clinical Rotation Seminar in Surgical Pathology Seminar in Necropsy Pathology Special Topics in Pathology Mechanisms of Disease Immunopathology Lectures in General Pathology Lectures in Special Pathology

#### Physiology/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 Biology Graduate Research in Animal Physiology Lipids Special Projects in Physiology Applied Electrophysiology Mammalian Physiology Physiological Optics Radioisotopes in Biological Research Biological Membranes and Nutrient Transfer Molecular Mechanisms of Hormone Action Mineral Metabolism Physiology for Veterinary Students I-III Special Projects in Physiology Veterinary Animal Behavior Acid-Base Relations Comparative Physiology of Reproduction of Vertebrates Introductory Animal Physiology, Laboratory Biological Rhythms General Animal Physiology, Laboratory Special Histology: The Biology of the Ecological Animal Physiology, Lectures Ecological Animal Physiology, Laboratory
Cellular Physiology
Techniques in Animal Handling and Surgery Cellular Physiology

#### **Preventive Medicine**

The Population Biology of Health and Disease Medical Parasitology Systematics and Bionomics of Animal Parasites Parasitic Helminthology Animal Parasitology
Diagnostic Parasitology
Preventive Medicine in Animal Health Management
Veterinary Epidemiology
Veterinary Medical Orientation
Safety Evaluation in Public Health
Introduction to Epidemiology Advanced Epidemiology Advanced Work in Animal Parasitology Structure and Function of Protozoan Parasites Immunoparasitology Master's Level Thesis Research Doctoral Level Thesis Research Graduate Seminar Independent Study in Epidemiology



# Cornell University 1984 Application for Admission Part 1

We are pleased to know of your interest in Cornell University and hope you will apply for admission. Part 1 begins the application process; it will provide the information we need to establish your file and coordinate the other information you submit.

When you have completed the form, return it to us with the nonrefundable application fee of \$35 (in the form of a check, draft, or money order drawn on a United States bank and made payable to Cornell University). It will be helpful for you to make a copy of the completed part 1 for yourself, as you will use some of the information to complete part 2.

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 need to submit if you plan to apply for financial aid and a form to be completed by school officials. Finally, be sure that the results of the required tests are sent to us by the testing agency.

Seniors in high school are strongly encouraged to mail their applications by early December to avoid postal delays. There is a complete timetable of deadlines on page 61 in *Introducing Cornell*.

Please read the following instructions carefully before completing part 1. If you have any questions or concerns during the application process, 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, leave this response blank. An applicant who obtains a social security number after submitting the application should notify us of the number promptly.

#### **Applicant Status**

Freshman. A freshman applicant is any applicant who (1) will complete high school during the current academic year (even one who will graduate at midyear and pursue a college program for the rest of the academic year), or (2) is seeking early admission after the junior year in high school, or (3) has already graduated from high school but has earned fewer than twelve academic credits at a college or university.

**Transfer.** If at the time of proposed entrance to Cornell a student no longer associated with a high school will have completed the equivalent of twelve credits or more of college or university 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 remainder of that academic year; such a student is considered a freshman applicant.

**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; Architecture, Art, and Planning; Arts and Sciences; Engineering; and Human Ecology and the School of Hotel Administration participate in an early decision plan, designed for well-qualified high school seniors whose first choice is Cornell. Students accepted under this plan agree to withdraw other college applications and pay the acceptance deposit by January 1. (See also the section on second choice for freshman applicants.)

Spring term admission. The College of Arts and Sciences is the only undergraduate unit that regularly admits freshmen for entrance in the spring term. The College of Agriculture and Life Sciences, the School of Hotel Administration, the College of Human Ecology, and the School of Industrial and Labor Relations only rarely admit freshmen in the spring term; for further information contact the appropriate director of admissions. The Colleges of Architecture, Art, and Planning and Engineering admit freshmen in the fall term only.

All divisions except the College of Engineering consider applicants for spring term transfer. The Department of Architecture in the College of Architecture, Art, and Planning requires completion of two full years in an accredited architecture program before consideration for spring term transfer. 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. The FAF is available in high school guidance offices and college financial aid offices. You must also submit the Cornell financial aid application to Cornell.

Foreign students should submit the special financial aid forms for foreign applicants directly to Cornell.

#### **Undergraduate School or College**

Undergraduate admission to Cornell is granted by each undergraduate college. Applicants should apply to the division that best suits their academic plans. Those applying for freshman admission may specify a second choice (see the explanation below).

#### **Anticipated Field of Interest**

Use the list provided on the back of part 1 to complete the item about anticipated field of interest. The code you insert in the appropriate spaces must be for a field of interest in the Cornell college to which you are applying. The admission committees are interested in your intended major, although they recognize that at this stage a decision may be tentative. Applicants to the College of Architecture, Art, and Planning must identify their field of interest.

#### **Optional Information**

Higher Education Opportunity Program and Educational Opportunity Program. HEOP and EOP are open to New York State residents only. Applicants to the Colleges of Architecture, Art, and Planning, Arts and Sciences, and Engineering and the School of Hotel Administration who meet the economic and academic guidelines are eligible for HEOP. Those applying to the Colleges of Agriculture and Life Sciences and Human Ecology and the School of Industrial and Labor Relations who meet the guidelines are eligible for EOP. For guidelines see page 59 in Introducing Cornell.

Committee on Special Educational Projects. COSEP helps students from those minority groups that have traditionally been underrepresented in higher education. In conjunction with the individual colleges, COSEP provides academic support and counseling services. Participation in the program is voluntary.

Racial or ethnic background. Cornell University enrolls as diverse an entering class as possible. By giving us information about your racial or ethnic background, you will assist us in that endeavor.

Parents or grandparents who have attended Cornell. We would appreciate knowing if any of your parents or grandparents attended Cornell. List those who were enrolled in undergraduate or graduate programs.

#### Second choice for freshman appli-

cants. Recognizing that Cornell's undergraduate colleges offer a multitude of curricular programs, and that many applicants have diverse academic talents and career interests that may be satisfied by more than one unit of the University, Cornell gives freshman applicants the option of indicating a second-choice college. Consideration by the second-choice college occurs only in a limited number of cases and when certain conditions exist, as specified on part 1 of the application. The decision to consider an application is at the discretion of the admission committee of the second-choice college. Additional requests from applicants to be considered by the second-choice college cannot be honored.

Applicants should familiarize themselves with the admission requirements before selecting a second-choice college (see pp. 54–55 in *Introducing Cornell*) and are urged to complete their applications promptly. It is the responsibility of the ap-

plicant to make arrangements to complete admission requirements, including any special requirements such as interviews or portfolios.

Early decision applicants will be considered for admission to only one college in the early review process. Those who indicate a second choice and whose applications are postponed may be considered for admission to the second-choice college in the regular selection period.

#### **Joint Statement on Common Admission Procedures**

#### **Ivv Group Institutions**

The Ivy Group is a loosely formed organization of colleges and universities. It was established in 1954 primarily for the purpose of fostering amateurism in athletics. Relations between the member institutions have grown over the years to the point where we now meet regularly (along with Massachusetts Institute of Technology) at a variety of levels to discuss topics which range from the purely academic to the purely athletic and from fundamental educational philosophy to procedures in admissions.

Each member institution has its own identity and character and protects its right to pursue its own educational objectives. Thus, although the Ivy Group institutions are similar in many respects, each member institution will continue to make its own independent admission decisions according to its own particular admission policy.

In recent years, however, it has become clear that the transition between secondary school and institutions of higher education has become increasingly complex and that greater efforts should be made to simplify the admission process through more uniform procedures. It is our hope that by outlining carefully the procedures under which we are operating and by clearly specifying not only what an applicant's obligations are to us but also what our obligations are to thim or her, we can help students pursue their college interests free of unnecessary confusion and pressure.

#### General Procedures

All contacts with students by representatives of lvy institutions are intended to provide assistance and information and should be free of any activity which could be construed as applying undue pressure on the candidate. No information referring to the admission or financial aid status of an applicant to an lvy institution may be considered official or reliable unless it is received directly from that institution's admission or financial aid office.

Ivy institutions mail admission decision letters twice annually, in mid-December and mid-April. Those who wish a decision in December must apply by November 1 and complete their applications with supporting materials shortly thereafter.

#### December Notification

Under December Notification an applicant may be notified that he or she has been granted or denied admission or that a final decision has been deferred until the mid-April notification date. Two plans are offered.

- a. The College Board-approved Early Decision Plan, which is offered by Columbia College, Cornell University (College of Arts and Sciences and some other units of the University), Dartmouth College, and the University of Pennsylvania, requires a prior commitment to matriculate. Financial aid awards for those qualifying for financial assistance will normally be announced in full detail at the same time as the admission decisions. An applicant receiving admission and an adequate financial award under the Early Decision Plan will be required to accept that offer of admission and withdraw all applications to other colleges or universities. All the Ivy institutions will honor any required commitment to matriculate which has been made to another college under this plan.
- b. An Early Action Plan is offered by Brown University, Harvard University, Princeton University, and Yale University. This plan does not require a commitment to matriculate. Under this plan a student may file an Early Action application at only one of these institutions. Students may apply, however, to other colleges at any time under their regular admission program (spring notification of final admission decision). Those admitted candidates applying for financial aid and qualifying for financial assistance will not receive any information concerning financial aid awards until the mid-April common notification date.

Students are urged to consult the admission literature available at each Ivy institution for details concerning its particular December notification plan.

#### Early Evaluation Procedure

Beginning in January and continuing until March 15, some institutions may advise an applicant of his or her chance of admission (e.g., "Likely," "Unlikely," or "Possible"). As these are merely tentative assessments, it should be understood that no commitments are involved on the part of either the institution or the applicant.

#### **April Notification**

On a common date in mid-April, applicants to the Ivy institutions will be notified by mail of admission decisions and financial aid awards.

#### Financial Aid

All the Ivy institutions follow the common policy that any financial aid will be awarded solely on the basis of demonstrated need. Moreover, in order to insure that financial awards to commonly admitted candidates are reasonably comparable, all of the Ivy institutions will continue to share financial aid information concerning admitted candidates in an annual "Ivy overlap" meeting just prior to the mid-April common notification date.

#### Common Reply Date

Except for those applicants admitted under the College Board-approved Early Decision Plan, which requires a prior commitment to matriculate, no candidate admitted to any of the Ivy institutions will be requested to announce his or her decision to accept or decline an offer of admission until the Candidates' Reply Date of May 1. All such candidates may delay their commitment to attend until May 1 without prejudice.

#### Participating Institutions

Brown University
Columbia College
Cornell University (College of Arts and Sciences)
Dartmouth College
Harvard and Radcliffe Colleges
Princeton University
University of Pennsylvania
Yale University

# Cornell University 1984 Application for Admission Part 1

Please read the instructions before completing this form. Type or print clearly in ink. Enclose a \$35 check or money order (nonrefundable), payable to Cornell University, or a fee waiver, and return it by the appropriate deadline to the **Office of Admissions**, **Cornell University**, **410 Thurston Avenue**, **Ithaca**, **New York 14850**. Forms for completing the application will be forwarded upon receipt of part 1 and the fee or waiver.

#### **Deadlines for Receipt**

#### November 1

Freshman early decision applicants Spring semester freshman applicants Spring semester transfer applicants

#### January 1

Fall semester freshman applicants

March 15

Fall semester transfer applicants

Name:last (family)		first (given)		middle
U.S. social security number:		-		
Permanent address:				
		number and street		
city	state :	zip or postal code county (if U.S.)	country area co	le and telephone number
Mailing address (if different from	above):	number and str	eet	
city	state	zip or postal code cou	intry area coe	de and telephone number
Date of birth:day	Sex: Male	Female Country of	citizenship:	
If not U.S., do you hold a permane	ent U.S. resident visa?	Yes No If not, type of	of U.S. visa;	
Have you had more than two year	rs of education in the United	d States? Yes No		
Are you applying as a fresh	nman	special student? For which ter	m?	Fall Spring
If you are applying for freshman a	dmission, are you applying u	nder Cornell's early decision plan	(see instructions)?	Yes No
Are you applying for financial aid	? Yes No			
Have you applied for undergradua	ate admission at Cornell bef	Fore? Yes No If yes,	when?	year
College at Cornell to which you a	re applying:			
Agriculture and life sciences Architecture, art, and planni		es Hotel administration Human ecology	Industrial and	labor relations
Field of interest within the colleg	e indicated above (see rever	rse for codes):		
Secondary school:	city	state	zip or postal code	country
CEEB code number:	Date of graduat	ion: month year	_	
Transfer Applicants				
College or university from which	you are transferring:	name city	zip or postal code	country
CEEB code number:	Type:	Four-year	any or postar code	country
Cumulative grade point average o	n a 4.0 scale at end of last t	erm: Degree recei	ved (if any):	

	r HEOP or EOP (New York State recosep (see instructions).	esidents only) (see instructions).	
Racial or ethnic background:	(See Handenons).		
American Indian or Alaska			ispanic, not Puerto Rican uerto Rican
Parents or grandparents who h	ave attended Cornell:	L M	lexican American
name	relationship to you	dates enrolled	degree(s)
Is your mother or father a Corn	ell faculty or staff member?	es No If yes, name of that pa	rent:
not made a positive decision, ()	ate a second-choice college. Consi ) if the applicant's credentials me econd-choice college (see instruct	et the requirements of the second	nly (a) if the first-choice college has l-choice college, and (c) if space is
Agriculture and life science Architecture, art, and plan		Hotel administration Human ecology	Industrial and labor relations
Anticipated field of interest wit	hin the college indicated above (se	ee below for codes):	
All Applicants  My signature below indicates  Date:	that all the information contain  Signature:	ed in my application is factuall	y correct and honestly presented.
Field-of-Interest Codes  Be certain that the code you er  College of Agriculture and Life	iter in the appropriate spaces repr	esents a field in the Cornell colleg	ge of your choice.  School of Hotel
Sciences	and Planning	385 Linguistics 386 Mathematics	Administration
110 Agricultural and biological engineering (agricultural engineering, agricultural engineering technology, environmental technology)  120 Animal sciences	<ul> <li>205 Architecture (five-year program)</li> <li>215 Fine arts (graphic arts, painting, photography, sculpture)</li> <li>225 City and regional planning (transfer students only)</li> </ul>	387 Music 388 Near Eastern studies (Near Eastern and biblical civilization, Near Eastern languages and literature) 389 Philosophy	College of Human Ecology 610 Consumer economics and housing (consumer economics,
130 Applied economics and busi- ness management (agricultural economics, business management and marketing, farm business management and finance, food industry management, resource	College of Arts and Sciences 310 Africans studies 312 American studies 314 Anthropology	390 Physics 391 Psychology 392 Russian and Soviet studies 393 Social relations 394 Sociology 395 Spanish	housing) 620 Design and environmental analysis (apparel and textile management, apparel design, human environment relations, interior design, textiles)
economics)  140 Behavioral and social sciences (agricultural education, com- munication arts, education, en- vironmental education, rural	316 Archaeology 318 Asian studies 320 Astronomy 350 Biological sciences (animal physiology and anatomy;	396 Theatre arts and dance 398 Other 399 Undecided  College of Engineering	630 Human development and fam- ily studies (adolescent de- velopment, adult development and aging, atypical development, childhood development, cognitive
sociology)  150 Biological sciences (animal physiology and anatomy; biochemistry; botany; cell biology; ecology, systematics, and evolution; genetics and development; microbiology; neurobiology	biochemistry; biology and soci- ety; botany; cell biology; ecology, systematics, and evolution; genet- ics and development; neurobiol- ogy and behavior) 360 Chemistry 361 Classics	Field Programs 405 Chemical engineering 410 Civil and environmental engineering 415 Computer science 420 Electrical engineering	development, family studies, public policy and social/personality development)  640 Human service studies (community and family life education, social work)  650 Biology and society
and behavior)  160 Environmental studies (aquatic science, atmospheric sciences, entomology, landscape architecture, natural resources, soil	362 Comparative literature 363 Computer science 364 Economics 365 English 366 French	425 Engineering physics 477 Geological sciences 480 Materials science and engineering 485 Mechanical engineering	660 Nutritional sciences (experimental and consumer food studies, nutrition, nutritional biochemistry, clinical nutrition, community nutrition, dietetics)
science) 170 Food science 180 Plant sciences (agronomy and field crops, floriculture and ornamental horticulture, plant breeding, plant pathology, plant protection, pomology, vegetable crops)	377 Geological sciences 378 German 379 Government 380 Greek 381 History 382 History of art 383 Italian	490 Operations research and in- dustrial engineering 495 Sponsored College Programs (bioengineering, energy conver- sion, engineering science, en- vironmental and public systems, regional science, survey	670 Social planning and public policy 698 Individual curriculum 699 Undecided  School of Industrial and Labor Relations
crops) 190 General and special programs (general studies, international agriculture, statistics and biometry, cooperative extension)		engineering)	701 Industrial and labor relations

**Optional Information** 

# Academic and Career Advising

he wealth of academic opportunities at Cornell enables students to grow intellectually and to prepare for the future. While many undergraduates earn baccalaureate degrees following traditional curricula, others choose to follow individual courses of study. Some students embark on careers after graduation; others enter graduate schools. Advisers help prepare students for whatever path they choose.

Cornell's seven undergraduate colleges provide academic counseling to students, using both faculty and peer advisers who help students select courses, choose majors, and plan for careers. Advice may be given formally (by an assigned adviser in his or her office) or informally (at a campus coffee shop or during a stroll across campus). Students who want help diagnosing their academic problems, selecting curricula, or determining vocational goals may be referred to the University Guidance and Testing Center for a comprehensive program of testing and counseling. Of course, students have access to the entire faculty and support staff of the University, on whom they can rely for information and guidance in establishing and realizing their goals.

# Academic Opportunities

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 college to another; for detailed information students should consult a member of the college's admission staff.

Results of examinations sponsored by the College Board (the Advanced Placement Program and the College-Level Examination Program) 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. Students may also qualify for transfer credit based on previous college work.

Information on Cornell University's advanced standing policy for foreign students may be obtained by writing to the associate director of undergraduate international admissions, 410 Thurston Avenue.

Honors programs. Honors programs are available for talented undergraduate scholars who want to do research and advanced study. Requirements for graduation with honors vary among programs, which are administered at the department level. Most honors students do undergraduate research, write a thesis (usually during the senior year), and participate in seminars.

Learning Skills Center. The Learning Skills Center (LSC) provides academic advising, preparatory instruction in core courses (biology, physics, English, chemistry, and mathematics), and tutorial and study sessions. A summer program before the freshman year gives new students an opportunity to pursue college courses before fall enrollment. The LSC has study accommodations and provides access to typewriters, calculators, a reserve library, old examinations, and tapes.

Reading and Study Skills Program. The Reading and Study Skills Program offers students the opportunity to acquire and improve the reading and study skills essential for academic success. Each semester a two-credit course is offered in reading improvement and study skills. Three-week workshops are also offered on such topics as study skills and time management.

Writing Workshop. The Writing Workshop, in Rockefeller Hall, offers a wide range of services for students seeking help with writing. Members of the staff evaluate writing samples for students as part of the Freshman Seminar Program.

**Freshman Seminar Program.** The primary purpose of the Freshman Seminar Program is to teach students to write clear and coherent English prose characterized

The faculty was the glory of old Cornell. It was the strength of the men whom, with marvelous insight, President White collected about him in 1868, that made the Cornell we know. ... Everything else was raw, crude, discouraging, but with teachers was inspiration.

by intellectual force and stylistic grace. More than twenty University departments offer a total of 150 class sections in the program, with no more than eighteen students in each section. Thus students develop their writing ability within the context of a field of study that is of interest to them. There are eight to fourteen written assignments in all sections, and students are given an opportunity to revise their work. Ample classroom time is provided for work directly related to writing, and individual conferences are held.

Most of the academic divisions of the University require students to take one or two Freshman Seminars.

# Business and Preprofessional Study

#### **Undergraduate Business Study**

Undergraduate preparation for business is available in most of the colleges at the University. Students usually 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 carefully consider the unique offerings of each program when making a choice.

Applied economics and business management. Business management and marketing, agricultural economics, farm business management and finance, food industry management, and resource economics are examples of areas available in the College of Agriculture and Life Sciences. While students take courses in theoretical economics, the program emphasizes the application of economic principles and management skills. Graduates enter a wide variety of business fields or pursue master's degree programs.

**Economics.** The economics program, in the College of Arts and Sciences, 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.

David Starr Jordan, class of 1872



**Engineering.** Engineering schools provide much of the management personnel of modern industry. Engineers frequently climb the ladders of technological management, which lead to general management responsibilities; more than half the management-level personnel of major corporations have engineering degrees. Many students who enter engineering anticipate graduate business education. 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, cost-effective systems of people, materials, and equipment for manufacturing industries, public and private service organizations, and consulting firms.

Hotel administration. The undergraduate program in hotel administration provides managers for the hospitality industry. Capability for management of motels, hotels, condominiums, restaurants, clubs, and hospitals and land and facility development is developed through instruction in personnel and general administration, financial management, food and beverage service, and communications.

Consumer economics and housing. The College of Human Ecology's program in consumer economics and housing emphasizes the economic behavior and welfare of consumers in the private, public, and mixed sectors of the economy. There is an option for a concentration on housing. Study is aimed at understanding 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 the relationship, is studied in the School of Industrial and Labor Relations. Graduates can pursue immediate employment in industry, government, and labor organizations or choose graduate study in industrial and labor relations or such related fields as law and business and public administration.

Related areas. Courses in areas directly related to these business 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 dual-

registration 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 are eligible to explore this option. There is also a program with the College of Engineering that allows qualified students to earn a Bachelor of Science, Master of Business Administration, 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 programs; nor do they require any specific undergraduate courses. Law touches nearly every phase of human activity, and so 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 totally inappropriate. Prelaw students should, however, be guided by certain principles when selecting college courses.

First, interest encourages scholarship, and students will derive the greatest benefit from those studies that stimulate their interests.

Second, of great 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.

Third, 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 more well-rounded persons.

Finally, 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 a successful career.

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 certain undergraduate courses be completed. These courses usually include chemistry and organic chemistry, biology, physics, and a year of English composition (or a Freshman Seminar). In addition, many medical schools require or recommend at least one course in advanced biological science, such as genetics, embryology, histology, or physiology. These courses can be included in a variety

There is no preferred major program for those considering medical or dental school; students are 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.

Qualified students in the Colleges of Agriculture and Life Sciences, Arts and Sci-



ences, 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 this program is available from the Health Careers Program at the Career Center, 14 East Avenue.

#### **Preveterinary Study**

Students interested in a career of veterinary medicine should major in an area of study that not only suits their interests but includes the entrance requirements listed below for veterinary college. Most preveterinary students at Cornell are enrolled in the College of Agriculture and Life Sciences; there are several applied science majors, including animal sciences, that can lead to related careers if the student is not accepted into veterinary college. Some enter other divisions of the University, especially the College of Arts and Sciences, because of secondary interests or the desire for a broad liberal arts curriculum.

The college-level prerequisite courses for admission to the New York State College of Veterinary Medicine at Cornell are English, biology or zoology, physics, inorganic 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 the New York State College of Veterinary Medicine at Cornell, may vary

slightly at other veterinary colleges.

For information on additional preparation, including work experience and necessary examinations, students should consult the Office of Admissions, New York State College of Veterinary Medicine, C117 Schurman Hall.

#### Officer Education

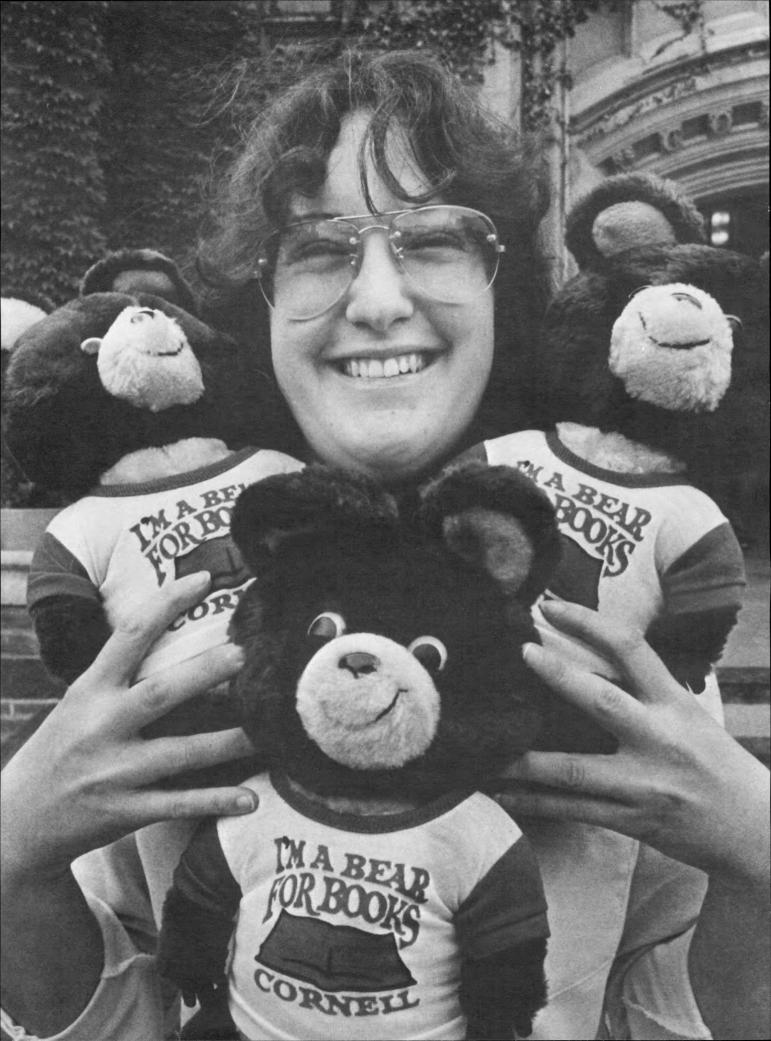
Instruction in officer education is provided by the Department of Military Science (army ROTC programs), the Department of Naval Science (naval ROTC programs), and the Department of Aerospace Studies (air force ROTC programs). Further information is given in the Announcement of Officer Education, obtained by writing to Cornell University Announcements, Research Park. Details about the specific programs, including scholarships and active-duty requirements, may be obtained by writing to the commanding officer of the department concerned, in Barton Hall.

#### Career Services

There are career planning and placement services throughout the University. The organizational network of offices that provide these services have facilities in the individual colleges that are independent operations functioning in cooperation with the University Career Center. Each office addresses the needs of students enrolled in the college it represents. The services available include on-campus recruiting. job-hunting seminars, and individual counseling.

The services of the Career Center cover nearly every dimension of the careerplanning process. Professional counseling, information, and advice are available on all aspects of career planning, including specific information on career exploration, fellowships, graduate and professional study, health careers, internships, oncampus interviewing, job hunting, minority opportunities, and travel and study abroad. The Sage Hall office, at 14 East Avenue. houses the center's library and deals with graduate and professional school advising, special programs for minorities, and job hunting. The center's office in 203 Barnes Hall deals with academic and career counseling, health careers, and credentials.

To inform students of opportunities available, a list of programs and events presented by the Career Center is published in each Monday's edition of the Cornell Daily Sun.



ornell staff and students arrange orientation activities and other programs to help new students develop "strategies for coping." Orientation, scheduled for the days just before the start of fall semester, introduces new students and their parents to Cornell and helps them feel part of the University. There are social and recreational activities that provide opportunities to meet fellow students and other programs that cover the academic side of college life, such as library tours and meetings with faculty advisers. Orientation counselors, upperclass student volunteers, are especially helpful throughout the first few months of adjustment. There are others to consult as well. In addition to faculty and peer academic advisers, each residence hall is staffed by a professional director and several undergraduate resident

Parents' Weekend is scheduled during the fall semester. This weekend is full of educational, cultural, social, and athletic events for families to attend together.

## The Freshman Year

Perhaps the most exciting change for Cornell freshmen is in the learning environment. Many introductory courses have large enrollments. These lecture-style classes are accompanied by a small laboratory or discussion meeting each week and are taught by some of Cornell's most eminent scholars. Although it may seem difficult to ask questions in this setting, teachers encourage questions after class, during labs, and during discussion sections. Beyond the introductory level, as students begin to specialize and explore, most courses are much smaller. Freshmen also take a Freshman Seminar, with fewer than twenty other new students each semester. These seminars provide close interaction between the students and the faculty member, as both the course topic and writing skills are discussed. There are 150 Freshman Seminars available, with topics ranging from science writing to Viking

Another characteristic of institutions like Cornell is what is often referred to as a competitive academic atmosphere. Most Cornell students are highly motivated and set high goals for their academic lives as well as for their other pursuits. Cornell's curriculum is vigorous and stimulating. The faculty members have high standards,

yet academic competition results primarily from the students' personal drive. Students are challenged by this spirit, as well as by the quality of instruction.

Most students who enter Cornell remain here until they earn their degree. In the fall of 1982, 84.3 percent of the students who entered the private undergraduate units (architecture, art, and planning; arts and sciences; engineering; and hotel administration) in the fall of 1976 had either graduated or were still enrolled. In the state-supported units (agriculture and life sciences, human ecology, and industrial and labor relations) 91.4 percent had graduated or were still working toward a Cornell degree.

I suppose the most striking thing about university life is how different it is from high school. It's not only that the campus is much larger, or that there are many more students; they are a startlingly cosmopolitan group, there is a bewildering variety of courses, programs, activities, and societies from which to choose, and there is a heady degree of freedom, made even more exhilarating by the community itself.

Each of these features presents a challenging opportunity, but collectively they can appear overwhelming. What is needed is a strategy for coping with them, so that they contribute to the richness of college life rather than being an obstacle to it.

Frank H. T. Rhodes, president of Cornell University, to his daughter as she began her freshman year The freshman year is a microcosm of the college experience. It is full of newness and varies from student to student, yet it is indeed a stepping-stone. New students who grasp the opportunities and challenges of college years will be well prepared to meet future challenges.

## Transfer Students

Transfer students may experience some of the same feelings as freshmen and may need to adjust to the differences between Cornell and previous colleges. They participate in the University's orientation program; there are also special orientation activities that address the unique needs of transfer students.

Transfer students live in both on-campus and off-campus housing facilities. The Transfer Center in Clara Dickson Hall and the Transfer House near North Campus organize activities and programs for all transfer students. It takes some extra effort initially to make friends, as it does for all new students. Transfers generally adjust quickly to academic and social life at Cornell. They become active participants in University life, taking advantage of Cornell's various resources. Whether a student's stay at Cornell spans two, three, or four years, it can be an exciting and fulfilling experience.

# Academic and Intellectual Life

Cornell students enjoy studying and doing research in the Cornell University libraries, one of the major academic library systems in the country. The fifteen campus libraries contain well over four million volumes and currently subscribe to some 52,000 periodicals. Students are entitled to use all the libraries on campus, and have access to the book stacks.

At the south end of the Arts Quad is Uris Library, the building with the tower that has become the symbol of Cornell. Uris particularly serves undergraduate students taking liberal arts courses. Across the walk from Uris is John M. Olin Library, devoted more specifically to graduate and faculty research. Olin houses a card catalog that includes the books in all the libraries on campus.

The largest of the specialized college libraries is Albert R. Mann Library, containing half a million volumes. Located on the



Ag Quad, it serves the College of Agriculture and Life Sciences and the College of Human Ecology. There are also libraries on campus for business and public administration; engineering; architecture, art, and planning; hotel administration; industrial and labor relations; law; and veterinary medicine. In addition, many departments (Africana studies, theatre arts, nutrition, entomology, mathematics, music, and physical sciences) maintain their own libraries.

Computers are rapidly becoming integrated into academic life as an increasingly important part of instruction and research. Cornell now has four mainframe computers, three IBMs and a DEC 2060. They connect with eight public terminal sites in different areas of the campus and provide two hundred interactive terminals for student computing. There are also microcomputers at several of these sites, in addition to a microcomputer facility with thirty-three TERAKs, used primarily in introductory computing courses. The curriculum also reflects the campus emphasis on computer literacy. For example, the use of an IBM displaywriter was integrated into ten Freshman Seminars to help students improve their writing skills. Free accounts are available from Cornell Computer Services in Warren Hall to introduce incoming students to the wide array of computing opportunities. In the College of Human Ecology all incoming students are assigned free computer accounts at registration and

are offered instruction on how to use the

The faculty of Cornell numbers nearly sixteen hundred and includes many who are recognized internationally as leaders in their fields. Well-known figures, including poet Archie Ammons, economist Alfred Kahn, chemistry Nobel laureate Roald Hoffmann, physics Nobel laureate Kenneth Wilson, writer Alison Lurie, composer Karel Husa, astronomer Carl Sagan, ornithologist Thomas Cade, and developmental psychologist Urie Bronfenbrenner teach fundamentals to their students and probe the esoteric with them. Since the University has always assigned a high priority to the quality of its undergraduate programs, most of the faculty members are actively involved in undergraduate education as well as graduate education and research. It is not uncommon to find department chairpersons teaching introductory classes and prominent scholars offering courses for general enrollment. Attracted by the vitality of the Cornell faculty and programs, visiting scholars provide other dimensions to the intellectual life of the community.

Contact with Cornell faculty members is an important part of the Cornell experience. Faculty members are not only distinguished teachers and researchers; they are also accessible advisers to undergraduates. A student may get to know an individual professor because of a shared academic or nonacademic interest. Faculty members hold office hours, and many departments have regular brown bag lunch seminars for

faculty members and students. Since Cornell is a major research institution, there are ongoing research projects in many fields. Interested and motivated students get involved in research activities for credit, as part of work-study employment. or as a volunteer experience.

Learning, like contact with faculty members, is not confined to the classroom, laboratory, or seminar room. Cornell students in many fields of study participate in fieldwork programs, internships, engineering cooperative programs, or independent or group research projects. Credit is often given for these experiences. Students live and work in Albany, Washington, D.C., New York City, and other places where they can best learn about the work of government, community organizations, businesses, and industries. In addition, many students each year pursue study at colleges and universities in other countries. There are some formal exchange programs with colleges overseas, but students often make their own arrangements for one or two semesters of study in absentia.

Opportunities for exposure to a variety of art forms, cultures, and topics are as much a part of student life at Cornell as are course work and research papers. For example, dozens of extracurricular lectures are given each week, ranging from scholarly presentations on a specific subject to talks with campuswide appeal by well-known speakers.

Cornell students have many opportunities to attend or participate in theatrical and dance productions. Theatre Cornell presents a full season of classical, modern, and experimental dramas. There is also a studio theater run entirely by students, the Risley Residential College's theater, and the Cornell Savoyards, who produce Gilbert and Sullivan operettas. Informal and formal dance programs are presented each year by student dancers and choreographers and by touring dance companies.

Students who want to participate in music making can find many opportunities 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, the Indonesian Gamelan, and several other musical organizations.

The University Faculty Committee on Music sponsors programs by visiting soloists and major orchestras in the Bailey Hall Series, string quartets and other groups in the Statler Series, 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 members and students. The Cornell Concert Commission offers a series of student-produced rock, folk, soul, and jazz concerts. Local bluegrass and folk performers are featured in informal concerts such as weekly events in the Commons, a campus coffeehouse.

Exhibitions of various forms of art are part of the campus resources. The displays include works of students, visiting collections, and the permanent University collec-

tion, housed at the Herbert F Johnson Museum of Art. Other campus locations for art displays include the art room in Willard Straight, the Olive Tjaden Gallery in Olive Tjaden, the John Hartell Gallery in Sibley, and galleries in Goldwin Smith and Martha Van Rensselaer.

Throughout the year and on almost every night of the week educational and entertaining films can be seen on campus at reduced rates. There are also a halfdozen commercial theaters in Ithaca.

# Campus Life and Activities

The nonacademic side of each student's life can be as rich in diversity and depth as the academic side. Cornell students have opportunities to relax and socialize together, to discuss worldwide or campus concerns, to develop their own living communities, and to pursue other interests.

The enrichment of the human contacts of student life is the objective of the University departments that coordinate campus activities and services for Cornell students. There are over four hundred student organizations. Some fit under conventional headings, such as music, recreation, religion, and social action groups. Others are harder to classify—the International Brotherhood of Magicians, Wargamers, and the Classics Discussion Group, to name a few. Among the clubs are those for persons with similar academic interests or hobbies, local chapters of professional associations, associations of international students, and a number of national honoraries that recognize scholarship and service. If an interest group does not now exist, persons with shared interests can readily establish one.

For many students fraternity or sorority life is an integral part of their Cornell experience. There are fifty fraternities with 38 percent of the male undergraduate students as members and thirteen sororities with 23 percent of the female undergraduate students as members. This is one of the largest Greek systems in the country; diversity is the key to its continuing growth. While satisfying room and board needs for students, fraternities and sororities provide opportunities for friendship, leadership, and personal growth.

Cornell's system of campus government consists of four deliberative bodies representing the University population as a whole and its three major components: students, faculty members, and employees. This system recognizes the diversity and the unity that are basic to the life of any academic community. The Student Assembly consists of twenty-three students elected by the student population, and it has legislative authority over the policies of Cornell Dining, the Department of Residence Life, the Department of Unions and Activities, and the Office of the Dean of Students. The University Assembly focuses on matters concerning the entire campus community; its delegates are drawn from the Student Assembly, the Employee Assembly, and the Faculty Council of Representatives.

Cornell students edit and publish a number of publications, including an independent daily newspaper, the *Cornell Daily Sun*. They are involved in printing a yearbook, literary magazines, humor magazines, and magazines relating to special fields, such as the *Cornell Engineer*, *Equity*, and the *Cornell Countryman*.

The Department of Unions and Activities coordinates resources for educational and recreational activities outside the classroom. Three University union buildings serve as campus community centers: Willard Straight Hall, Robert Purcell Union, and Noyes Center. These facilities include a theater, a browsing library, lounges, darkrooms, rooms for social gatherings and meetings, information centers, convenience stores, game rooms, music listening and practice rooms, and dining halls. Several student organizations run social, cultural, recreational, and educational programs in union facilities and other campus buildings.

The Third World Student Programming Board presents events to highlight minority and ethnic cultures. In addition there are many organizations that may be of interest to minority students, such as the Asian-American Coalition, Black Students United, La Asociación Latina, and the Mexican-American Student Association.

The Experimental College offers students and other members of the campus community a wide variety of noncredit courses in dance, poetry, photography, mime, yoga, and other interesting subjects.

It is almost impossible to generalize about the social lives of Cornell students. The ways Cornellians spend their leisure time is as diverse as their academic interests or personal backgrounds. Some students are involved in campus politics. while others are concerned with the world hunger problem. Some may prefer to attend a performance of a jazz band at a coffeehouse, while others never miss a classical music concert, an art exhibit opening, or an athletic event. Although Cornell students place a high priority on their academic commitments, they make time for social experience with colleagues and friends

Ithaca is a small yet cosmopolitan city with many unique opportunities for its permanent residents and for Cornell and Ithaca College students. The natural environment, with its waterfalls, gorges, lake, and rolling hillsides, is a grand setting for recreation and relaxation. Cultural activities in town complement the busy



schedule on campus. Ithaca's residents are probably its greatest resource: the people combine their talents and interests to mold an exciting community.

## **Athletics**

At Cornell athletic programs have been designed to meet the needs of every student who wants to participate. The Department of Physical Education and Athletics has three components: physical education for men and women, intramurals, and intercollegiate athletics. With a few exceptions, all freshmen must complete two terms of physical education and pass a basic swimming test. There are about seventy physical education courses from which to choose, including basketball, bowling, downhill skiing, jogging, squash, and weight lifting. Intramurals give students the chance to compete in team sports. Last year almost 31,000 contestants made up over two thousand teams in 190 leagues that included dormitory, graduate, independent, and coeducational teams. The variety of sports in this program is unusual: box lacrosse, broomstick polo, horseshoes, inner-tube water polo, and sailing, as well as the more traditional sports, such as softball, touch football, and wrestling.

At the most advanced level of competition is intercollegiate athletics. Cornell supports one of the largest programs of varsity sports in the country and is a member of the Ivy League, the ECAC, and the NCAA. There is intercollegiate competition for men in baseball, basketball, crew, cross-country, fencing, football, golf,



hockey, lacrosse, lightweight football, polo, riflery, sailing, skiing, soccer, squash, swimming, tennis, track, and wrestling. Women's intercollegiate teams include basketball, bowling, crew, cross-country, fencing, field hockey, gymnastics, ice hockey, lacrosse, polo, sailing, skiing, soccer, swimming, tennis, track, and volleyball.

Athletic and recreational facilities include an indoor ice rink, two competitionsized indoor pools, a golf course, playing fields, squash courts, indoor and outdoor tennis courts, crew tanks, gymnasiums, and a riding arena.

Wednesday, November 10, 1982



Quotation of the Day

"You don't win popularity contests being president - you shouldn't. You make hard decisions and do things that will not be popular."

-President Frank H.T. Rhodes

#### NOTICES ...

EARS - Peer counseling service open 5 to 11 p.m. Sundays, 3 to 11 p.m. Monday through Thursday, and 7 to 10 p.m. Fridays and Saturdays, Straight 211. Walk in or call 256-EARS or 256-RAGE.

Blue Light Escort - Escorts available, every night 10:30 p.m. to

12:30 a.m. Phone 256-7373.

Western Civilization - Prof. L. Pearce Williams will not be teaching History 152 next semester as announced. The course will be taught by Prof. William B. Provine.

Human Ecology Undergraduates — Course enrollment period ends Friday. Check the Counseling office, Martha Van Rensselaer N-101 for material packets.

Arts Students - Pick up course scheduling materials for preregistration, Goldwin Smith 142.

Blood Pressure Screening -2:30-4:30 p.m., Mondays and

Wednesdays, Gannett M223.

Recycling Contest - Dormitories, fraternities, sororities, and small living units can compete in Ecology House's contest to collect the most clean glass, aluminum, newspaper, and white or colored paper. Contact

Aleph Samach-Raven and Serpent — Honor Society for Juniors. Applications available at Straight Desk; due there 5 p.m. Nov. 19.

Winner's Reception - Cornell Games Championships. Come congradulate the winners and enjoy free refreshments, today, 4 to 4:45 p.m., Willard Straight Memorial Room.

COSEP Students - Applications for the COSEP-LSC Pre-Freshman Summer Program are available in the COSEP Office through Dec. 3, in

Barnes 100.

Poetry Prize — A \$500 prize will be awarded to the winner of the Robert Chasen Memorial Poetry Prize. Deadline: April 15. For more information contact Prof. P. Sawyer, Goldwin Smith 341.

Undergraduate Student Finance Commission - Accepting applications through Nov. 16. Applications available at Straight desk

Blue Light Escort Service - Volunteers greatly needed. Applications are available from Public Safety in Barton Hall, or call 256-7406.

One-to-One Program - The Ithaca Youth Bureau is looking for volunteers to work with boys fron three to 16 years old. Call 273-8364 for more info.

Centerpeace Hotline - Information and referrals for peace work, environmental action and social justice groups at Cornell and in Ithaca. Weekdays 11 a.m. to 2 p.m. Anabel Taylor 319. Walk in or call 256-5187

Praxis — Praxis magazine is currently accepting prose, non-fiction, art, and photography for the next issue Submissions may be dropped

off in the Straight Browsing Library or English Department mailroom.

Academic Survival Workshop — Study Skills Nov. 8-17, Mons. and
Weds. 4-5 p.m.; Reading Skills Nov. 9-18, Tues. and Thurs. 4:30-5:30
p.m. Call 256-8269 or drop by 375 Olin.

Faculty Hobby Show - The show has been cancelled and rescheduled

for March.

#### SCHOLARSHIPS, GRANTS . . .

Postdoctoral Fellowships for Minorities — Offered by the National Research Council. Deadline January 14, 1983. Info and application available at the Fellowship Office, National Research Council, 2101 Constitution Avenue, Washington, D.C., 20418.

Science Graduate Fellowships — Application deadline for National Science Foundation fellowships is Nov. 24. Write the Fellowship Office, National Research Council, 2101 Constitution Avenue, Washington, D.C. 20418. Minority fellowships are available.

D.C. 20418. Minority fellowships are available.

Business Paper Contest - Open to all U.S. and foreign, graduate and undergraduate students, preliminary drafts due Dec. 1, winner receives \$500. Contact Robert Houston or Marian Laud at the Institute of International Education, 312-644-1400, for more information.

Railroad Engineering — Open to all undergraduate students: deadline Nov. 15. Submit a paper between 3,000 and 5,000 words on railroad engineering. For further information Charles Chambers, 13939 S.W. Edy Road, Sherwood, Oregon 97140. (503) 625-5587.

#### LECTURES . . .

Debye Lecture - "Host-Guest Complexation Chemistry," Prof.

Donald J. Cram, chemistry, UCLA, 4:40 p.m., Baker 200.

Plant Research — "Identification of Nodule-specific Plant Proteins (Nodulins) of Soybean," Dr. Roman Legocki, Boyce Thompson Institute, 3:15 p.m., Boyce Thompson Institute Auditorium.

Entreprenuer's Club — "The Formation of the Federal Express Com-

pany," Charles Lea, Dillon Read and Co., 4 p.m., Mallot iol.

Africana Studies – "The Reagan Administration's Caribbean Basin Initiative Policy," Michael Manley, former Prime Minister of Jamaica, 3 to 4 p.m., Africana Studies and Research Center Main Lounge.

Trial Law - "Criminal Law and Trial Advocacy," Prof. Faust Rossi,

law, 7 p.m., Ives 117.

#### MIDDINGS

Faculty Council of Representatives - The meeting scheduled for Wednesday has been canceled.

Ag Ambassadors - Cornellian picture, 7:15 p.m. today, Goldwin

Smith Hollis E. Cornell Auditorium.

Go Club - 7:30-ll p.m. every Wednesday, Anabel Taylor Commons Coffee House.

Cuban Club - today, 4:30 p.m., Goldwin Smith 162.

Progressive Zionist Alliance — General Meeting, today, 8 p.m., Anabel Taylor Hillel Office.

Leonardo da Vinci Society - Meeting for all interested students, to-

day, 4:30 p.m., Uris 310.

University-Unions Programing Board - General board meeting, today, 6:30 p.m., Goldwin Smith 225.

#### EXHIBITS ...

Labor Cartoons — Cartoons by John Baer, a United States Congressman and cartoonist for labor magazines and newspapers, the first and second floors, northeast corner, through the semester, Ives Hall.

# Residence Life and Dining

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 or rooms nearby in the Ithaca community or live in fraternities or sororities. The University provides numerous residence halls, accommodating about six thousand single undergraduate and graduate students. These residence halls offer substantial variety in size, style, and type of living arrangement. There are single rooms, double rooms, triple rooms, suites, and a few apartments. Some halls are reserved for women or men, and others are coeducational.

Students are assured of on-campus housing for the freshman year. After the first year a lottery system is used to match interested students with rooms in residence halls. There is some on-campus housing available for new transfer students each year.

In addition to the large, traditional residence halls, there are small units that provide an opportunity for cooperative living arrangements for upperclass students. Residential program houses are reserved for students who share a particular interest, such as ecology or the performing arts.

Unfurnished apartments for 420 students and their families are available in three apartment complexes. Requests for further information should be directed to the Family Housing Office.

The Off-Campus Housing Office has information about rooms and apartments available in the Ithaca area. The staff serves both undergraduate and graduate students and provides programs and activities for students living off campus.

Cornell maintains dining services in ten locations: Willard Straight Hall, Robert Purcell Union, Noyes Center, Balch Hall, Sage Hall, Hughes Hall, Noyes Lodge, Risley Hall, Martha's, and the Red Bear Cafe. The Statler Student Cafeteria, affiliated with the hotel school, is another dining location on the Cornell campus. 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 dining requirement; students may eat when and where they choose.





Cornell's Co-op Dining program has been acclaimed as one of the most convenient and flexible dining programs in the country. Students choose from a wide range of prepaid options. Members of the Co-op Dining plan may eat at any of six dining areas. Those who miss dinner may eat at a designated unit until 10:00 p.m.

Cornell Dining also operates a grocery store on campus, the Pick-Up Store in the lower level of Noyes Lodge.

#### Student Services

The Office of the Dean of Students is the University office concerned with all aspects of student life. The staff of advisers help students solve whatever problems arise and make referrals to appropriate professionals on campus. Staff members advise fraternities and sororities and help with peer-counseling programs. The office also sponsors sex and drug education programs, special programs for married students, personal growth workshops, and orientation for new students.

Cornell United Religious Work (CURW) coordinates the work of the various ministries at Cornell. Established in 1929, it is housed in Anabel Taylor Hall, a five-level building that includes chapels, offices for staff in campus ministry, the Commons Coffeehouse, the Alternatives Library, the offices of CIVITAS (Cornell-Ithaca Volunteers in Training and Service), classrooms and social lounges, and the offices of the Center for Religion, Ethics, and Social Policy. CURW also administers the interfaith services at Sage Chapel held every Sunday during the academic year.

The programs of CURW include a wide range of worship services, pastoral counseling, retreats, lectures, and community involvement projects. Religious scholars are regularly invited to the campus for lectures and sermons. The current member groups of CURW are: AME Zion, Baha'i, Christian Science, Eastern Orthodox, Episcopal, Evangelical Alliance, Friends (Quakers), Hillel (Jewish), Latter-Day Saints, Lutheran, Muslim, Protestant Cooperative Ministry (American Baptist, Methodist,





services, provided through a central staff and the individual colleges. The COSEP staff also concerns itself with student needs such as work-study jobs and leadership training and provides assistance to student groups in financial budgeting and program planning. Extracurricular activities of particular interest to minority students are part of the diversity of campus life at Cornell.

The International Student Office gives students from other countries information and assistance with problems involving arrival, housing, immigration, financial matters, and personal or social situations. In operation since 1936, the office serves the more than fourteen hundred foreign students currently enrolled.

The Department of University Health Services (UHS) offers the following to all full-time students at Cornell: (1) unlimited visits to Gannett Health Center; (2) overnight care at the center; (3) after-hours and emergency care; (4) ordinary laboratory tests, X-ray examinations, and physiotherapy services performed on site, as approved by UHS physicians; (5) counseling services at the center and in the Psychological Service; and (6) sex counseling. Arrangements can be made for health care for spouses of students. The medical staff consists of attending physicians from the UHS staff and consulting physicians and surgeons in the various medical fields from Ithaca and the vicinity.

Cornell University is committed to assisting those handicapped students who have special needs. A brochure describing services for the handicapped student may be obtained by writing to the Office of Equal Opportunity, 217 Day Hall. Questions or requests for special assistance may also be directed to that office.

Table 1. Directory of Student Services

050 0000
256-2336
256-5221
256-6384
256-3608
256-5392
tments 256-5333
256-5298
nter 256-5155
256-6200
256-5243
256-5373
256-4221
[all 256-5368
256-4131
Hall 256-4214
t Hall 256-4180
256-4600
I

Note: All telephone numbers begin with the 607 area code.

United Church of Christ, and United Presbyterian), Roman Catholic, Southern Baptist, and Unitarian-Universalist. The programs of CURW are open to all persons, with or without religious affiliation.

The Committee on Special Educational Projects (COSEP) offers several programs to support minority students at Cornell. Students from ethnic minority groups make up almost 15 percent of the undergraduate population. COSEP coordinates academic, tutorial, and counseling support



# Undergraduate Admissions

hoosing a college or a university is a challenging, important, and exciting process. So, too, is choosing the students for the next year's enrolling class.

Admission decisions involve the review of both objective and subjective materials. Among the most important criteria for admission to Cornell University are intellectual potential and commitment—a complex combination of ability, achievement, motivation, diligence, and use of educational and social opportunities. Nonacademic qualifications are important as well. The University seeks individuals with outstanding personal qualities. Initiative and leadership, reflected in a record of significant involvement in extracurricular activities, are important.

Both faculty members and students benefit academically and personally from a diverse student body. The colleges at Cornell admit men and women of many social, economic, and cultural backgrounds, racial and national identities, and special talents. Selection committees evaluate students' achievements and potential, seeking to admit those who will best benefit from, and contribute to, the environment of Cornell. Students with unusual talents and achievements in music, acting, creative writing, science, athletics, politics, and other areas may want to provide additional information to the committees.

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 maintaining affirmative action programs which will assure the continuation of such equality of opportunity.

Students may submit only one application to Cornell for a given semester. Freshman applicants do have the option of indicating a college of second choice and may, under certain circumstances, be considered for admission to the second-choice college if the first-choice college does not make a positive admission decision. Each applicant competes only with those seeking admission to the same Cornell unit. Each college has its own selection committee, offering admission to those who best demonstrate the potential to benefit from the Cornell experience.

## 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 educational environment. Intellectual preparedness for study at Cornell is judged from the applicant's academic record, the recommendations of school authorities, and standardized college admission tests.

Extracurricular activities. While the basic requirement for admission is demonstrated intellectual capability, admission committees also note and evaluate evidence of an applicant's involvement in nonacademic areas. A student's participation in extracurricular school and community activities, the use made of vacation periods, and work experience or other activities related to the applicant's professional objective are all significant features.

Character, personality, and motivation. The intangible but important factors that form good character and an effective personality receive full consideration in the selection process. We seek to enroll individuals with outstanding personal qualities, including honesty, integrity, fairness, compassion, and altruism. The selection committee assesses these factors from the report sent by the applicant's secondary school and from interview reports, when available.

Evidence of strong motivation for attaining higher education and for pursuing a specific field of education is desirable. Those schools and colleges that focus on professional programs select students who, having met all other qualifications, show the most compelling evidence of their commitment to, and awareness of, the field. Because the number of qualified ap-

If there is any intangible possession that distinguishes this university, it is the tradition of freedom united with responsibility—freedom to do what one chooses, responsibility for what it is that one chooses to do.

Carl Becker, the John Wendell Anderson Professor of History plicants exceeds the number of spaces available, all the undergraduate units must limit their enrollment.

Geographical distribution. Cornell University prides itself on drawing 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 toward this end.

The undergraduate divisions financially assisted 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. 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 regarding residence. Among applicants of approximately equal qualifications, some preference may be given to those whose homes are in areas underrepresented in the student body.

Children of alumni. The University encourages applications from the children of alumni. In choosing among applicants of approximately equal qualifications, including scholarship, extracurricular activities, character, personality, and motivation, the son or daughter of an alumnus or alumna may receive preference. The Cornell relationship receives serious consideration by selection committees, although the statutory units, because of their New York State affiliation, cannot weigh this factor as heavily as the endowed divisions can.

# Required Interviews

College of Architecture, Art, and Planning. Applicants to the Department of Architecture and the Department of Fine Arts are encouraged to visit the campus in the fall of the year before anticipated enrollment for the required portfolio interview. Because these two departments have separate selection processes, each applicant must specify the department to which he or she is applying and arrange an interview with that department. It is to the applicant's advantage to schedule the interview at Cornell, but if an applicant is unable to travel to Ithaca, other arrangements may be possible.

#### Profile of the Class of 1987

#### Applicants to Colleges and Schools

	Applications	Acceptances	Enrolled Freshmen
Agriculture and life sciences	2,906	994	630
Architecture, art, and planning	560	140	90
Arts and sciences	7,805	2,563	990
Engineering	4,769	1,344	600
Hotel administration	745	193	149
Human ecology	944	338	229
Industrial and labor relations	476	181	125
University total	18,205	5,753	2,813

#### Secondary Schools Last Attended by Applicants

	Percentage	
Public	75.1	
Private	19.4	
Parochial	5.5	

#### Male and Female Distribution of Entering Students

Male, 50 percent; female, 50 percent

#### Geographical Distribution of Entering Students

	Percentage
New England	13.7
New York	49.7
Middle Atlantic	18.3
Southeast	3.9
Midwest	7.0
Southwest	1.7
West	4.8
Foreign countries	1.9

Number of Matriculants with Need-based Financial Aid (Based on Class of 1986): 1,575

#### Sources of Financial Aid (Based on Class of 1986)

	Estimated Total	Estimated Average Award
Grants		
University	\$2,574,631	\$2,736
Federal	1,069,868	893
State	1,030,011	1,148
Other	450,975	3,341
Self-help		
Loans	2,666,412	2,120
Jobs	1,063,471	1,091
Total financial aid	\$8,855,368	
Average award: \$5,622		

Number of Minority Students among Matriculants: 475 (17.6 percent)

#### Children of Cornell Alumni

Of alumni children who applied, 49.5 percent were accepted, and 382 enrolled.

Prospective architecture students who have submitted part I of the Cornell application should arrange for an interview by contacting the admission coordinator, 135 East Sibley Hall (607/256-4376). A portfolio of the applicant's artwork (independent work or class assignments) must be presented at the interview. (An applicant who has not had course work in architectural design is not required to show examples of such work.) A file portfolio must also be submitted to the above address by the appropriate deadline for review by the department's admission committee. Information about deadlines and specific portfolio requirements should be obtained from the admission coordinator as early as possible.

Fine arts applicants should arrange for an interview by contacting the administrative assistant, Department of Fine Arts, 100 Olive Tjaden Hall (607/256-3558). Originals of the applicant's artwork (independent work or class assignments) must be presented at the interview. A file portfolio must also be brought to the interview or mailed by the appropriate deadline to the above address for review by the department's admission committee. Information about deadlines and specific portfolio requirements should be obtained from the administrative assistant as early as possible.

School of Hotel Administration. The prospective student is responsible for arranging the required interview. On-campus 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 contacting the admission secretary, School of Hotel Administration, Statler Hall (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 informational visits may be made by contacting the Office of Admissions, School of Industrial and Labor Relations, 101 Ives Hall (607/256-2222).

**Applicants living abroad.** To arrange an interview abroad or to make other arrangements for fulfilling this requirement, applicants living outside the country should contact the appropriate college's director of admissions as soon as possible.

# **Optional Conferences and Interviews**

College of Agriculture and Life Sciences. The college offers admission conferences, in small groups and individually, by prior appointment. Appointments for individual and group conferences for 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 May 1 through mid-December. Transfer applicants are usually granted individual appointments to discuss their preparation for transfer, although group transfer conferences are sometimes scheduled.

Group conferences for high school students are scheduled on Monday and Friday mornings at 11:15. Students and their families are invited to attend. A videotape presentation about the college and its programs is followed by a discussion of admission procedures, financial aid, and student life. Questions are encouraged. After the group conference visitors may tour the campus with a student ambassador. A Saturday group conference is also offered once a month during the fall. Several group conferences are held during the spring as well.

Arrangements may be made by contacting the Office of Admissions, College of Agriculture and Life Sciences, 195 Roberts Hall (607/256-2036).

College of Arts and Sciences. The college welcomes requests from prospective students for personal interviews or group conferences. Although not required for admission, an interview does provide the admission representative with an opportunity to talk with the prospective student, to answer questions, and to 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 January 1. Interviews for transfer applicants are offered through mid-March. Appointments should be scheduled well in advance by writing or calling the Arts and Sciences Office of Admissions, Binenkorb Center, Goldwin Smith Hall (607/256-4833).

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. Members of the faculty generally participate in these conferences, which are intended to be informative rather than evaluative. Conferences are held on Mondays at 10:00



a.m., Fridays at 3:00 p.m., and Saturdays at 10:00 a.m. from September 19 through January 1 and are followed by a tour of the college. Appointments are recommended and may be arranged by contacting the college's admission office.

College of Engineering. The college encourages 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. 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, 167 Olin Hall (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, if the applicant has scheduled the meeting in advance.



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 Mondays at 10:30 a.m. and 3:00 p.m. and Fridays at 10:30 a.m. and 2:00 p.m. throughout the year. Individual conferences may be scheduled for Tuesdays, Wednesdays, and Thursdays from 10:00 a.m. to noon and 2:00 to 4:00 p.m. A group conference is also available at 10:00 a.m. on two Saturdays each month in the fall. 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 prospective applicants. Appointments can be arranged by contacting the Office of Admissions, College of Human Ecology, 172 Martha Van Rensselaer Hall (607/256-5471).

**Alumni Secondary Schools Committee** program. Cornell is eager to help prospective students and their families learn about the University from various perspectives. To supplement campus visits and the information provided in publications like this, the University's Office of Admissions organizes and coordinates the efforts of an extensive network of volunteers in the Alumni Secondary Schools Committee (ASSC) program. Some of these committees host gatherings in their local areas for interested students, applicants, and accepted students. Committee members contact applicants and represent the University at college information programs.



The Office of Admissions refers the names and addresses of as many applicants as possible to area alumni representatives, who can then make arrangements for information interviews. While ASSC interviews are not required, these contacts give applicants another opportunity to broaden their knowledge of Cornell. In addition, interview reports may provide selection committees with a better understanding of applicants. The ASSC interview does not substitute for the required inter-

view in the College of Architecture, Art, and Planning and the Schools of Hotel Administration and Industrial and Labor Relations.

#### Admission of Freshmen

A freshman applicant is any applicant who (1) will complete high school during the current academic year (even one who will graduate at midyear and pursue a college program for the rest of the academic year), or (2) is seeking early admission after the junior year in high school, or (3) has already graduated from high school but has earned fewer than twelve academic credits at a college or university.

Admission requirements. Each college has its own requirements for freshman admission, summarized in table 4. Applicants are responsible for completing the requirements of the college to which they are applying. Those indicating a second-choice college must also meet that college's requirements to be eligible for consideration if the applicant's first-choice college does not make a positive admission decision.

**Standardized tests.** Applicants must request the College Board and the American College Testing Program to send the official score reports to Cornell University. It is the student's responsibility to see that these reports are received. Scores reported on school transcripts or received in other ways are not acceptable.

Freshman applicants for fall term admission 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. Because of limited test

#### 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 undergraduate representatives of all the colleges on campus. If you know the unit or field in which you are interested, please include it in your letter; the Office of Admissions will forward the letter to the appropriate Ambassador for a reply. Write to Cornell Ambassadors, Box DSH, Office of Admissions, 410 Thurston Avenue, Ithaca, New York 14850.

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 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.

All divisions 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 table 4 for details). 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 Testing Program, P.O. Box 168, Iowa City, Iowa 52240, or 216 Goddard Boulevard, King of Prussia, Pennsylvania 19406.

Table 2. American College Testing Program Test Dates

Test Date	Registration Deadline
October 29, 1983	September 30, 1983
December 10, 1983	November 11, 1983
February 11, 1984	January 13, 1984
March 31, 1984	March 2, 1984
June 9, 1984	May 11, 1984

Note: Owing to legislation in effect in New York, the February test will not be held in that state. Similar legislation in California could lead to a slightly curtailed schedule in that state.



**Selection and notification.** Each college has a committee that selects, from among all who have applied to that division, the applicants it considers most desirable for admission.

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 notification. They report decisions to applicants over a period of time, beginning as early as mid-February and ending in mid-April. The selection committee in each of these colleges must review a large

number of applications, and the date on which an applicant hears from Cornell is not necessarily an indication of the quality of that applicant.

Decisions are reported to applicants to the College of Arts and Sciences and the School of Industrial and Labor Relations on the common notification date in mid-April.

All applicants who request review by a division of second choice will be notified of the decisions on the common notification date in mid-April.

Most financial aid announcements are also mailed to admitted applicants on the mid-April common notification date.

Table 3. College Board Test Dates

		H.C. F. A.	Total on at 1	0-1	
Test Date	U.S. Registration Deadline	U.S. Late Registration Deadline	International Registration Deadline*	Scholastic Aptitude Test	Achievement Tests
October 15, 1983	September 23, 1983			Yes†	No
November 5, 1983	September 30, 1983	October 12, 1983	September 26, 1983	Yes	Yes
December 3, 1983	October 28, 1983	November 9, 1983	October 24, 1983	Yes	Yes
January 28, 1984	December 23, 1983	January 4, 1984	December 19, 1983	Yes	Yes
April 7, 1984	March 2, 1984	March 14, 1984	February 27, 1984	Yes	No
May 5, 1984	March 30, 1984	April 11, 1984	March 26, 1984	Yes	Yes
June 2, 1984	April 27, 1984	May 9, 1984	April 23, 1984	Yes	Yes

Note: Sunday administrations of the Scholastic Aptitude Test will be offered on October 16, 1983; November 6, 1983; January 29, 1984; April 8, 1984; May 6, 1984; and June 3, 1984. Achievement tests will be offered on the following Sundays: November 6, 1983; January 29, 1984; May 6, 1984; and June 3, 1984.

Handicapped students may arrange to take the Scholastic Aptitude Test at the convenience of the student and the administrator of the test at any time during the academic year. They should contact their high school counselor for specific information.

New York State applicants should contact their guidance counselors for test dates, as New York State test dates may differ and some achievement tests may not be offered

<sup>\*</sup>Postmark date.

<sup>†</sup>Offered only in California, Florida, Georgia, Illinois, North Carolina, South Carolina, and Texas.

An applicant who has been accepted for admission does not need to notify Cornell of his or her decision about enrolling until the May 1 candidates' reply date, or within fifteen days of the date on the notification of acceptance for admission, whichever is later.

Early decision. The Colleges of Agriculture and Life Sciences; Architecture, Art, and Planning; Arts and Sciences; Engineering; and Human Ecology and the School of Hotel Administration participate in an early decision plan, designed for well-qualified high school seniors whose first choice is Cornell. Only a small percentage of the freshman class is admitted during the early decision selection process. In applying under this 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 held 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 held for later review are advised to 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 require-

Table 4. 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 (applicants twenty-four or older 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)
Architecture, art, and planning	Architecture: 16 units, including 4 units of mathematics (including plane geometry, intermediate algebra, and trigonometry) and 4 units of English  Art: 16 units, including 4 units of English, 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, 3 units of science, and 3 units of one foreign language (deficiencies in these requirements should be explained in a letter accompanying the application for admission)	SAT or ACT; three College Board achievement tests in different subjects, one of which must be English composition (with or without essay); early decision applicants see p. 54.
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)	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 twenty-four or older 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	ACT or both SAT and College Board achievement tests in English and mathematics (level I or II) (applicants who have already graduated from high school should contact the college's office of admissions)

ments in three years; others leave school lacking a few credits. Admission committees give serious consideration to those applicants who have exhausted the offerings of their secondary schools and demonstrate 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.

Students considering early admission should write to the school or college of their choice at Cornell before applying or make an appointment for an on-campus interview to discuss their plans and reasons for wanting to enter early.

Spring term admission. The College of Arts and Sciences is the only undergraduate unit that regularly admits 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 to gain a different kind of experience, such as work or travel.

The College of Agriculture and Life Sciences, the School of Hotel Administration, the College of Human Ecology, and the School of Industrial and Labor Relations only rarely admit freshmen in the spring term. For further information contact the appropriate director of admissions.

The College of Architecture, Art, and Planning and the College of Engineering admit freshmen in the fall term only.

Students living overseas are discouraged from applying for spring term admission. The longer time needed for mailing and

Additional Requirements	Other Recommended Preparation	Admission Options	Undergraduate Degrees Granted
	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: a portfolio interview, preferably on campus (if a campus interview is not possible, other arrangements may be possible); a file portfolio that meets department specifications	Architecture: 1 unit of high school physics and study of a foreign language (3 years of one language or 2 years each of two languages)	Architecture and art: early decision, early admission, and deferred enrollment	
	College Board achievement test in any foreign language to be continued for credit in college	Early decision, early admission, deferred enrollment, and spring term admission	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 en- rollment	B.S.



the waiting periods for obtaining visas make it unlikely that students living overseas can be considered in time to arrive for the spring semester.

Deferred enrollment. Some students accepted for freshman admission may want to defer their enrollment to the following year or later. This is usually permitted if the student is committed to entering Cornell at a later time and will not be applying elsewhere. An accepted student who wants to defer entrance should (1) accept Cornell's offer of admission by the stated date, (2) complete and return the registration coupons sent with the acceptance, and (3) state in an accompanying letter the reasons for the requested deferral of enrollment and the date entrance is desired.

If the request for deferred entrance is approved, the student is guaranteed a place in the specified future freshman class.

Freshman Summer-Start Program. This special program eases the transition from high school to college by giving entering freshmen an opportunity to adjust to university life, meet members of the faculty, and make friends on campus in the relaxed atmosphere of Cornell's Summer Session. All freshmen who have been accepted by the University are eligible to participate.

Students in the program take two undergraduate courses. One is of the student's own choosing. The other is a

Freshman Seminar, designed to improve and develop writing skills. The seminar is taught by L. Pearce Williams, professor of history and director of the program.

For more-detailed information write to Cornell University Summer Session, B12 Ives Hall.

# 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 twelve credits or more of college or university 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.

All the colleges consider applications for fall term transfer, and all but the College of Engineering consider applications for spring term transfer.

Most of the colleges require a minimum of four semesters in residence to receive a Cornell degree. An exception is the School of Hotel Administration, which requires a minimum of five semesters.

In most cases students who already have a bachelor's degree should apply to a graduate program. The College of Human Ecology and in some cases the College of Architecture, Art, and Planning do accept

students as candidates for a second undergraduate degree.

Admission requirements. Each college has its own requirements for transfer admission, summarized in table 5. Applicants are responsible for completing the requirements of the college to which they are applying.

Transfer applicants must furnish transcripts of all work completed at the college level. A transcript from an applicant's high school may also be required. The transcript of a student applying for fall term admission should include work taken the previous fall term and a midyear grade report for courses being taken during the spring term. The transcript of a student applying for spring term admission should include work taken through the previous summer and a midyear grade report for 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.

Standardized tests. Transfer applicants are required to submit results of the standardized tests indicated in table 5.

Students in two-year and community college programs. Although students in two-year and community college programs may apply to any division of the University, the Colleges of Agriculture and Life Sciences, Engineering, and Human Ecology, the School of Industrial and Labor Relations, and the Program in Urban and Regional Studies in the College of Architecture, Art, and Planning 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, B12 Ives Hall.) Each year most of Cornell's undergraduate 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 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.

People already employed often enroll 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 deficiencies 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 premedical, prelaw, and preveterinary study.

Each of Cornell's 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. Applications are due March 15.



Table 5. Requirements for Transfer Admission

	Secondary School Transcript	Standardized Tests	Other Requirements	Undergraduate Degrees Granted
Agriculture and life sciences	Required	Not required	Contact the director of admissions of the college for information on your program area	B.S.
Architecture, art, and planning	Architecture: required of those who have completed less than two full years of college at time of application; requested of other applicants  Art: required  Planning: required	Architecture: SAT or ACT only if taken while in high school Art: SAT or ACT rerequested Planning: SAT or ACT required	Architecture and art: a portfolio interview, preferably on campus (if a campus interview is not possible, other arrangements may be possible); a file portfolio that meets department specifications  Planning: a special essay	B.Arch., B.F.A., and B.S.
Arts and sciences	Required	SAT or ACT required	Those entering as juniors must be academically prepared to be admitted into the major they intend to complete	A.B.
Engineering	Requested	SAT or ACT requested		B.S.
Hotel administration	Required	SAT or ACT required	A personal interview	B.S.
Human ecology	Required	SAT or ACT required (applicants who have taken neither examination may request a waiver by writing to the director of admissions of the college)	Contact the director of admissions of the college for information on your program area	B.S.
Industrial and labor relations	Required	SAT or ACT only if taken while in high school	An interview, on or off campus; a five-hundred-word essay des- cribing the applicant's interest in the field	B.S.

# Admission of Students with **International Education**

Foreign applicants. Cornell University defines a foreign applicant as an applicant 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.

Foreign transfer applicants are expected to have completed at least one year of college work by the time of proposed entrance. Only foreign students enrolled in degree programs in the United States and Canada may apply for spring term transfer.

An information sheet, form 1A, must accompany part 1 of the application for admission. The information sheet will be reviewed to determine whether the student's academic credentials meet the minimum standards of the University. If not, the \$35 application fee will be refunded.

Questions about the admission of foreign students and requests for applications should be addressed to the associate director of undergraduate international admissions, 410 Thurston Avenue.

English proficiency requirement. 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 evaluate English proficiency must fill out and submit the report of proficiency in English, included with part 2 of the application.

A score of 550 on the Test of English as a Foreign Language (TOEFL) is also 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 an intensive English summer program at Cornell before they register. All students with TOEFL scores of less than 600 will be required to take Cornell's English placement examination (administered during orientation) and to continue English instruction during the academic year if necessary.

Nonnative speakers of English 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. Even students who technically meet the criteria for exemption from the TOEFL are therefore



Table 6. Test of English as a Foreign Language

Test Date	U.S. and Canada Registration Deadline	International Registration Deadline	
August 6, 1983	July 5, 1983	June 20, 1983	
October 8, 1983	September 6, 1983	August 22, 1983	
November 19, 1983	October 17, 1983	October 3, 1983	
January 14, 1984	December 12, 1983	November 28, 1983	
March 10, 1984	February 6, 1984	January 23, 1984	
May 12, 1984	April 9, 1984	March 26, 1984	

strongly urged to take the TOEFL examination and submit the scores as part of their application for admission. A TOEFL score enables the admission selection committee to assess more accurately 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 associate director of undergraduate international admissions. Only applicants who meet one of the following criteria will be exempted:

- The native language of the applicant is English.
- b. By January 1, 1984, 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, 1984, 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 SAT or the College Board achievement test in English.

Financial matters. Financial aid resources for foreign students at Cornell are limited. Most accepted students must meet the full cost of their education at Cornell from personal or other funds. Those who do receive financial aid are likely to have exceptional academic records and show extraordinary potential to contribute to the Cornell community.

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, form 1-20 (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) do not need form 1-20 but are required to submit financial certification before registration will be permitted.

Nonforeign 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 include a summary of educational background and a report of proficiency in English (for nonnative speakers of English only).

Students whose native language is not English are strongly urged to submit TOEFL scores as part of their application. Questions about the evaluation of foreign educational credentials, advanced placement policies, and exemption from the TOEFL may be addressed to the associate director of undergraduate international admissions.

# Minority and Special Opportunity Programs

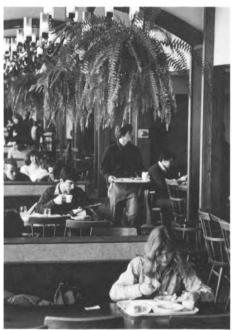
Cornell University administers a variety of programs designed to provide academic and personal support to minority and lowincome students who meet program guidelines

COSEP. In 1963 the Committee on Special Educational Projects (COSEP) was founded, in accordance with Cornell's mission as a land-grant institution and its founding philosophy, to be "an institution where any person can find instruction in any study." Through COSEP Cornell recruits and admits minority students with outstanding credentials, as well as those with strong promise for academic success but whose secondary school profiles are less competitive because of disadvantaged educational and economic backgrounds. COSEP provides a comprehensive support program for minority students who have been admitted to Cornell.

The main goals of the program are to:

- a. assist, during the selection process, in identifying qualified minority students with disadvantaged educational and economic backgrounds, as well as those from groups that have traditionally been underrepresented in higher education
- provide minority students with academic, tutorial, and counseling services to ensure progress toward the completion of their degrees





c. provide minority students with financial support, administered through the Office of Financial Aid, that is sufficient to meet their demonstrated need

Participation in the COSEP Program is voluntary and may be requested by minority students who are United States citizens or permanent residents. COSEP is not intended to provide remedial support; the academic and personal freedom of the students participating in the program is not restricted. All minority students are

encouraged to take full advantage of all opportunities offered at Cornell.

Higher Education Opportunity Program (HEOP) and Educational Opportunity Program (EOP). New York State residents who meet both the economic and academic guidelines (see tables 7 and 8) are eligible to be admitted to Cornell through the HEOP (endowed colleges) and EOP (state colleges) programs. These programs provide assistance to a limited number of students who, because of their economic and educational backgrounds, might not have considered attending Cornell. HEOP and EOP students are provided with a variety of services, including financial assistance, counseling, tutoring (required by the state), and a prefreshman summer program (required by the state). These services are provided by the State Programs Office, the Learning Skills Center, and various college offices. Those who believe they qualify and want to be considered must request such consideration on part 1 of the application for admission. Students may be considered for both COSEP and HEOP or EOP.

**Summer programs.** These programs are for students whose previous preparation and academic goals indicate a 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 COSEP, HEOP, and EOP participants attend the special orientation (starting about a week before fall orientation) to receive a briefing and introduction to the campus. Also, diagnostic testing will be administered for purposes of course-load counseling for the fall.

Table 7. Economic Guidelines for HEOP and EOP Eligibility

Dependents in Household*	Gross Family Income in 1983†
One	\$ 7,000
Two	9,200
Three	11,500
Four	14,200
Five	16,700
Six	19,400
Seven	22,000
Eight	24,200
Nine or more	26,700 plus \$2,000 for each family member in excess of nine

Note: These guidelines are subject to change after July 1, 1983.

**HEOP** 

†Does not include the student's income unless he or she is the head of the household or the second worker supporting the household.



Table 8. Academic Guidelines for HEOP and EOP Eligibility

Architecture, art, and planning	Below 550 verbal and mathematics SAT or below top third in class rank	
Arts and sciences	Below 540 verbal SAT or below top third in class rank	
Engineering	Based on a combination of factors	
Hotel administration	Below 1,000 composite SAT	
EOP		
Agriculture and life sciences	life sciences 1,000 or below composite SAT with neither verbal nor mathematics above 55	
Human ecology	Below 500 verbal or mathematics SAT	
Industrial and labor relations	1,100 or below composite SAT or 500 or below verbal or mathematics SAT or below top fifth in class rank	

# Application Procedures and Deadlines

The application process is designed to solicit information from various sources and to provide applicants with an opportunity to describe themselves and their interests, achievements, and educational, vocational, and professional goals.

The process is completed in two stages. When the first of an applicant's documents reaches the University's Office of Admissions, a folder is created for that applicant.

Part 1 of the application for admission is included in this Announcement or, if it has been removed, may be requested from the Office of Admissions, Cornell University, 410 Thurston Avenue. This form is to be completed and returned to the Office of Admissions with the \$35 application fee. Part 2 of the application and other forms (including those to be completed and returned by the secondary school or postsecondary 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 postsecondary work, or both, and official results of required standardized tests are received by the Office of Admissions.

Once all the necessary documentation has arrived, the folder is sent to the college in which the applicant has indicated interest. A selection committee in that college then considers the applicant carefully and thoughtfully. All information supplied on the application forms is of critical importance.

Students from very low income backgrounds may request a waiver of the application fee. Students may receive waivers in any of four ways: (1) by submitting the fee waiver request form of the Admissions Testing Program (ATP) of the College Board, which most high school guidance counselors have; (2) by submitting a request from a reputable agency such as the College Bound Program; (3) by submitting 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.

<sup>\*</sup>Including the head of the household.

#### **Admission Timetable**

November 1. Applications due for freshman early decision applicants. Applications due for freshman and transfer applicants for the spring semester. Early decision applicants should have submitted the financial aid form (FAF) to the College Scholarship Service.

December 1. Deadline for freshman foreign applicants residing outside the United States and Canada to submit the information sheet (form 1A) and part 1. All applicants are strongly encouraged to mail applications by early December to avoid postal delays.

Mid-December. Decisions announced for early decision and spring term freshman and transfer applicants.

January 1. Applications due for freshman applicants for the fall semester. Freshman financial aid applicants are encouraged to submit the FAF to the College Scholarship Service by this time.

February 15. Deadline for freshman financial aid applicants to send the FAF to the College Scholarship Service. Deadline for foreign transfer applicants residing outside the United States and Canada to submit the information sheet (form 1A) and part 1.

February 15-April 15. Decisions announced for freshman applicants applying to the College of Agriculture and Life Sciences; the College of Architecture, Art, and Planning; the College of Engineering; the School of Hotel Administration; and the College of Human Ecology.

March 1. Deadline for transfer financial aid applicants to submit the FAF to the College Scholarship Service.

March 15. Applications due for transfer applicants for the fall semester.

Mid-April. Decisions announced for freshman applicants to the College of Arts and Sciences and the School of Industrial and Labor Relations and to freshman applicants who have indicated a college of second choice on their application.

April 15—June 15. Admission decisions and financial aid awards announced for transfer applicants for the fall semester.

May 1. Deadline for freshman applicants for the fall semester to reply to acceptances for admission.

Early June. Transfer applicants for the fall semester must reply by June 1 or two weeks after notification, whichever is later.





rospective freshmen or transfer students should not hesitate to apply for admission because of financial circumstances. It is the University's goal to offer, to all freshman and transfer applicants accepted for admission, financial assistance to the extent of need (if they are United States citizens, Canadian citizens, or persons holding permanent resident or refugee visas in the United States). Financial assistance is awarded on the basis of demonstrated need, following closely, but not strictly adhering to, the standards of the College Scholarship Service.

#### Financial Aid

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.

The financial aid package. Cornell University offers a combination of gift (scholarship and grant) and self-help (loan and job) assistance. The financial aid package usually consists of a loan and job and, if need remains, a scholarship or grant. The amount of self-help is determined by the ratings that the undergraduate college's selection committee gives to the student, based on such qualities as academic ability, leadership, community service, and extracurricular contributions. Less-thanexpected academic performance will not affect a student's aid package for at least two years. However, aid packages may change after the first year if changes occur in family financial circumstances, costs, and the availability of federal funds.

Currently 70 percent of all Cornell undergraduates receive some form of financial aid from University, state, federal, or other sources. Over 50 percent receive Cornell-allocated scholarships, jobs, or loans. Students of all levels of financial capability attend Cornell University.

Financial aid resources for foreign students (excluding Canadians) 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.

Analysis of 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 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. To verify financial data reported on the FAF, parents must submit to Cornell copies of their most recent federal income tax return.

The University expects all students to help meet the cost of their education. A student's contribution includes earnings from summer and vacation employment, veterans' benefits, and a portion of personal savings and assets.

In a few instances a student may receive financial aid based solely on his or her own financial resources. To apply for aid on this basis, one must meet the federal criteria for independence. One must also meet the institutional requirement of having spent at least twelve consecutive months supporting oneself while not engaged in full-time study and not residing in the parental household.

The Cornell Tradition. Cornell has a unique financial assistance program. Made possible through the generosity of a group of alumni and friends of the University, the Cornell Tradition rewards men and women who demonstrate a commitment to work-

Cornell is dedicated to serving its community, to education for life, and to encouraging human development in its richest diversity. But the dimension and the scale have now changed. Cornell's community is now the world. ing and funding a portion of their own education.

There are four major components of the Cornell Tradition: the Freshman-Transfer Fellowship, awarded for a student's first year at Cornell; the Academic-Year Work Fellowship, awarded to continuing students; the Summer Fellowship, which helps replace summer savings when a student cannot meet the summer savings expectation because of living expenses; and the summer-job network, through which wages are subsidized to encourage employers in both private industry and the public sector to create summer jobs for Cornell students. While placement in summer jobs developed through the summer-job network is available to all undergraduates, regardless of financial need, the fellowships are awarded only to financial aid recipients.

Freshman-Transfer Fellows are nominated during the admission process. Continuing students apply for consideration for the Academic-Year Work Fellowships annually during the spring term. Selection is based on achievement, initiative, leadership, scholarship, and the willingness to work. Those selected receive up to \$2,000 to reduce the recommended loan portion of their financial aid package for the following year. More information about the Cornell Tradition can be obtained from the Student Employment Office, 203 Day Hall.

#### **Scholarships** and **Grants**

**Cornell-administered awards.** Many students are eligible to receive a scholarship or a grant from the University as well as from various federal and state programs.

The University budgets over \$7 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 are awarded to those who still have a demonstrated financial need after allowances for outside awards and Cornell loan and job offers.

Higher Education Opportunity Program (HEOP) and Educational Opportunity Program (EOP) grants are New York State grants that are awarded to New York State residents who meet both the economic and academic guidelines (see tables 7 and 8). HEOP grants are for those enrolled in the private units of the University; EOP for those in the statesupported units.

Supplemental Educational Opportunity Grants (SEOGs) are federal grants that Cornell awards to students demonstrating exceptional financial need who would be unable to attend without the grant. The grants range from \$200 to \$2,000 a year. To continue receiving the grant, students must remain in good academic standing and must be making satisfactory progress toward a degree.

**Direct state and federal assistance.** In addition to Cornell-administered awards, students may be eligible to receive funds from federal and state sources.

Pell Grants range from \$135 to \$1,800, based on financial need, and 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 FAF.

Regents College Scholarship and Tuition Assistance Program (TAP) awards for New York State residents range from \$250 to \$2,450 a year. Scholarships for children of deceased or disabled veterans are also available in amounts up to \$450 a year. 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 scholarships are offered by some states to students attending institutions out of that state. These include (but are not necessarily limited to) Connecticut, Massachusetts, Rhode Island, and Vermont. Prospective students should consult their secondary school guidance counselor, their state scholarship office, or Cornell's Office of Financial Aid for further information about their state's programs.

Other sources of funding include 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**

Cornell offers part-time employment opportunities for students through the Student Employment Office. All students, regardless of financial need, may find jobs both on and off campus.

Those students demonstrating financial need may be eligible to participate in the College Work-Study Program (CWS), a federally funded program that subsidizes a portion of the student's wages. CWS jobs are located in campus departments as well as in nonprofit agencies off campus. Many students who do not receive CWS as part of their financial aid package are able to locate employment in one of the campus departments. Others find jobs within the Ithaca business community.

Federal regulations and Cornell policy on financial aid require that all financial aid recipients planning to work on campus receive clearance from the Student Employment Office before accepting any job. All students are encouraged to visit the Student Employment Office for current employment regulations as well as for information and assistance in locating employment.

#### 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 Loan (NDSL).

This University loan is 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 5 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; military, Peace Corps, VISTA, and public service; full-time volunteer work; professional internship; teaching in an economically and culturally deprived area; and disability. Up to 100 percent of the loan may be canceled if the student becomes a special education teacher or a teacher in an economically and culturally deprived area.

#### Guaranteed Student Loan (GSL).

Twenty-seven states currently have loan programs for students attending institutions in or out of the home state. Undergraduates may borrow up to \$2,500 a year, to a maximum of \$12,500. The interest rate is 9 percent, and the grace period is six months for those who obtained their loans for a period of instruction beginning on or after January 1, 1981. The federal government will pay the interest until six months after graduation or the termination of at least half-time study. At that time repayment of both the principal and the interest will begin. The borrower has up to ten years after leaving school in which to repay the loan. Deferment of repayment may be permitted for graduate work and military, Peace Corps, and VISTA service.

A dependent student whose family's total adjusted gross income is \$30,000 or less will be able to borrow up to the maximum loan limit. If the family's adjusted gross income is greater than \$30,000, a student applying for a GSL is subject to a needs test to determine loan

eligibility. Applications may be obtained from participating lending institutions.

Parent Loan for Undergraduate Students (PLUS). Either natural or adoptive parents of dependent undergraduate students may borrow up to \$3,000 per child for each academic year to help meet the cost of postsecondary education. The amount borrowed in any year cannot be greater than the cost of going to school during that year minus all other financial aid received for that year. The total amount borrowed for any one student may not exceed \$15,000.

The annual interest rate is currently 12 percent. Repayment of the loan must begin within sixty days of the date funds are disbursed. Borrowers have ten years to repay. There is an insurance premium of 1 percent, payable at the time of disbursement. Applications may be obtained from participating lending institutions.

Auxiliary Loan to Assist Students (ALAS). Independent undergraduate and graduate or professional students may borrow money under the ALAS program. Undergraduates may borrow up to a total of \$2,500 a year from the combined loan sources of ALAS and GSL, to a maximum of \$12,500. Graduate and professional students may borrow up to \$3,000, to a maximum of \$15,000, in addition to their

GSL. The total amount borrowed in any year cannot be greater than the cost of going to school in that year minus other financial aid received for the period for the loan.

The annual interest rate is currently 12 percent. Students are billed quarterly for interest payments while they are in school. Repayment of the loan principal is deferred only while the student remains in full-time attendance at the school.

# **Application Procedures** and Deadlines

Applicants who indicate on part 1 of the application that they want to be considered for financial aid must submit the financial aid application (form 2E), included with part 2 of the application for admission, and 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, as soon as possible after January 1, but no later than February 15. Early decision applicants should submit the early version FAF to the College Scholarship Service by November 1. Those applying for admission in the spring semester should return the

FAF to the College Scholarship Service by November 1. Later submission will jeopardize the possibility of being awarded assistance.

**Foreign students.** Foreign students who want to apply for financial aid should complete the financial aid application for foreign applicants, 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. Since requirements for good standing vary among the units at the University, students should consult the registrars of their colleges for information about remaining in good standing.

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.

#### **Further Information**

More-detailed information, required by state and federal regulations, is available from the Office of Financial Aid, 203 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.

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.



# Fees and Expenses

Fees and expenses include a combination of tuition and expenses for room and board, books and supplies, and personal items.

**Tuition.** All charges listed in table 9 apply to the 1983–84 school year. Tuition and fees for the 1984–85 year will be set by the Board of Trustees in the spring of 1984. The amount, time, and manner of payment of tuition, fees, or other charges may be changed at any time without notice.

#### Table 9. Estimated Tuition, 1983-84

Agriculture and life sciences	
Resident*	\$3,740
Nonresident	6,050
Architecture, art, and planning	8,900
Arts and sciences	8,900
Engineering	8,900
Hotel administration	8,900
Human ecology	
Resident*	3,740
Nonresident	6,050
Industrial and labor relations	
Resident*	3,740
Nonresident	6,050

\*A resident is a person whose permanent domicile is in the state of New York at the time of registration for the term. The domicile of a student under twenty-one years of age is presumed to be that of his or her custodial parent(s), unless the student provides acceptable proof of emancipation.

Acceptance deposit. An acceptance deposit of \$200 is required. If a student does not enter in the semester for which the deposit is paid, and does not formally withdraw before July 1 for the fall semester or December 1 for the spring semester, or does not complete at least one semester at the University, the deposit is forfeited. Students who complete their degrees will automatically receive a refund of this deposit provided their accounts are paid in full.

Excess-hours tuition. Students in the state-supported colleges who want to take more credits in the endowed colleges than are allowed under the degree guidelines of those state-supported colleges 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. Recipients of financial aid can request additional loan or job assistance to cover this additional tuition.

**Special fees.** The following fees are imposed under certain conditions: make-up examination, \$10; late filing of study card, \$10; late change of program, \$10. A fee is charged for late registration according to the following schedule: three weeks late, \$30; four weeks, \$40; five weeks, \$50; six weeks, \$60; more than six weeks, \$60 plus \$25 for each additional week.

**Living expenses.** Table 10 shows the estimated living expenses for single undergraduate students without dependents.

Table 10. Estimated Living Expenses, 1983-84

Room and board	\$3,250*
Books and supplies	320†
Personal expenses	730

Note: This table does not include travel costs.

\*This is an estimate for a medium-priced double room and the meal plan that provides for twenty meals a week. It does not include the \$40 application fee for the University residence, the \$100 security deposit, or the \$70 membership fee for Co-op Dining.

†The cost of books and supplies for undergraduates in the College of Architecture, Art, and Planning and in the Department of Design and Environmental Analysis is estimated to be \$150 higher.

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, 200 Barnes Hall. Before a certificate of eligibility for an F-1 student status visa will be issued, foreign students who are accepted will be required to submit certification that funds are available to cover all expenses for the entire undergraduate program at Cornell. Students holding other types of nonimmigrant visas, such as A-2, G-4, and so on, are also required to submit a declaration and certification of finances before registration.

**Payment of University bills.** The Office of the Bursar mails tuition bills in July and December. Room charges are billed each semester about a month before the start of the semester. Dining charges are billed on the statement following registration. Statements are mailed monthly.

Tuition must be paid *before* a student may register. All other payments are due by the date stated on the bill. Any amount remaining unpaid after the due date on the statement on which the charges first appeared is assessed a finance charge of 1 1/4 percent a month (15 percent a year).

An individual with outstanding indebtedness to the University is not permitted to register or reregister in the University, receive a transcript, have academic credits certified, be granted a leave of absence, or receive a degree.

Cornell offers a monthly installment plan for payment of educational expenses. The cost of this plan is \$25 a year. Each spring information about this service is mailed to parents of incoming freshmen and transfer students.





Refunds. Part of the amount personally paid for tuition is refunded if a student obtains an official certificate for a 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 official University registration date (not necessarily the date the student registers) 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 five days of the registration day.

The University makes available tuition insurance, which provides refunds in the event of a 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. The \$70 Co-op Dining membership fee is not refundable.

Students receiving financial aid from the University who withdraw during a term 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.

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# Getting to Know Cornell

Prospective students and their families are encouraged to visit the campus and have discussions with members of the faculty or admission staffs and to become familiar with the University in a personal way. The University's Office of Admissions and the admission offices of the undergraduate colleges offer opportunities for group conferences and individual interviews (please refer to pages 49-52 for information about college interviews and group conferences). 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. With sufficient notice when school is in session, the colleges will arrange for prospective students to spend the night on campus with a stu-

Upon arrival visitors may obtain information about the University, directions to specific places on campus, and informational materials at the Information and Referral Center, just inside the main entrance of Day Hall, at the corner of Tower Road and East Avenue. The center is open Monday through Saturday, 9:00 a.m. to 5:00 p.m. (telephone: 607/256-6200).

Handicapped persons who want to visit the campus can make arrangements for interviews, attendance at group meetings, tours, and meeting other special needs by communicating well in advance with the Office of Admissions, Cornell University, 410 Thurston Avenue, Ithaca, New York 14850 (telephone: 607/256-5241).

#### University Tours and Group Conferences

Guided walking tours given by student guides, provide visitors with a general survey of Cornell's history, academic offerings, and facilities while showing them the beauty of the campus. The tours, which give a general introduction to the campus, leave at the times listed below:

#### April 1-October 31

Weekdays: 11:15 a.m.

1:30 p.m.

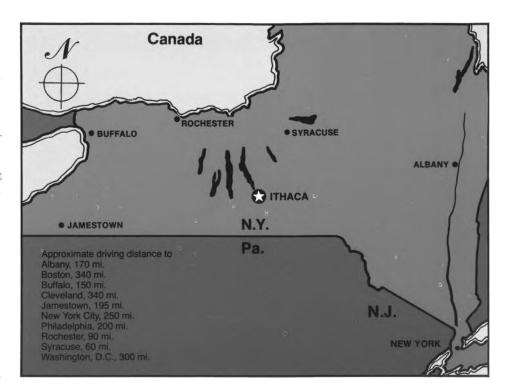
Saturday: 11:15 a.m. Sunday: 1:00 p.m.

November 1-March 31

Weekdays: 1:30 p.m. Saturday: 11:15 a.m.

Sunday: 1:00 p.m.

During holidays and intersession periods visitors should call ahead to make sure the tour they want to take will be offered.



University group conferences are for those who have limited knowledge about the University or are unsure how their interest might best be accommodated by a Cornell undergraduate program. These sessions can help the prospective student identify the college that best matches his or her academic needs. Open to students, parents, and other interested persons, the conferences provide 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 Mondays and Fridays at 9:30 and 11:00 a.m.: Tuesdays, Wednesdays, and Thursdays at 9:30 a.m.; and Saturdays at 9:00 a.m. Those who want to participate are encouraged to make appointments by writing or calling the Office of Admissions, 410 Thurston Avenue (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 can be made for those who want to visit other facilities.

#### Coming to Ithaca

**By plane.** Tompkins County Airport, in Ithaca, is serviced by USAir and several commuter airlines. Direct or connecting flights are available from major cities.

A limousine or taxi may be taken from the airport, or a car may be rented.

**By bus.** Ithaca is served by Greyhound Bus Lines. Visitors can reach the campus from the bus depot by taxi or Ithaca Transit bus. Bus fare is thirty-five cents.

**By car.** From the New England area, take the New York State Thruway west to exit 34A, Route 481 south to Interstate 81, Interstate 81 south to Homer, and Routes 281 and 13 south to Ithaca.

From New York City and the metropolitan area, take the New York State Thruway north to exit 16, Route 17 west to Binghamton, Interstate 81 north to Whitney Point, and Route 79 west to Ithaca; or take Route 17 through Binghamton to exit 64 and Routes 96 and 96B north to Ithaca.

From the south, take Interstate 81 north through Binghamton to Whitney Point and Route 79 west to Ithaca.

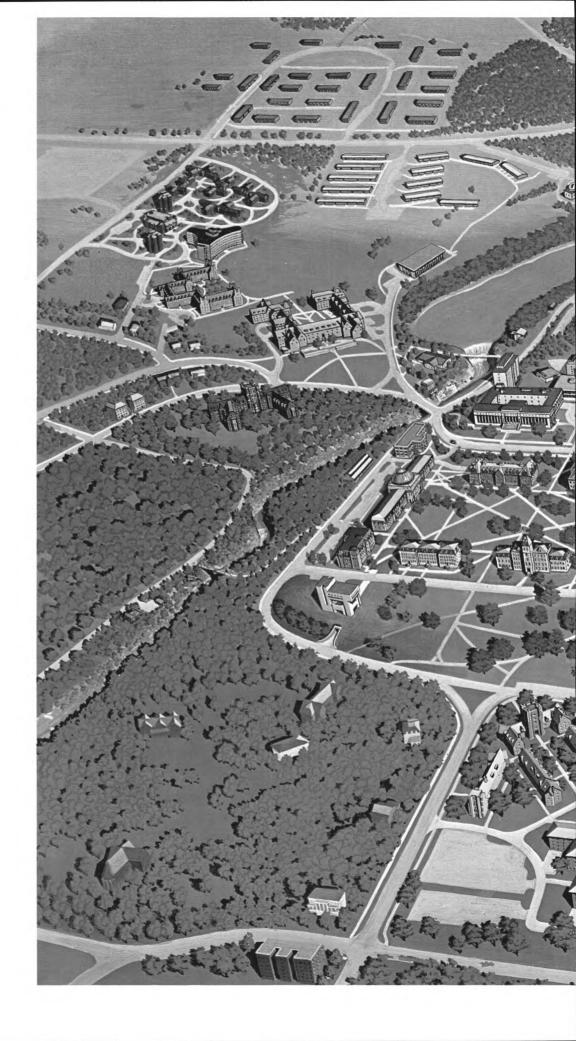
From the west, take the New York State Thruway east to exit 42 (Geneva) and Route 96 south to Ithaca, or take the Thruway east to exit 41 (Waterloo) and Route 89 south to Ithaca.

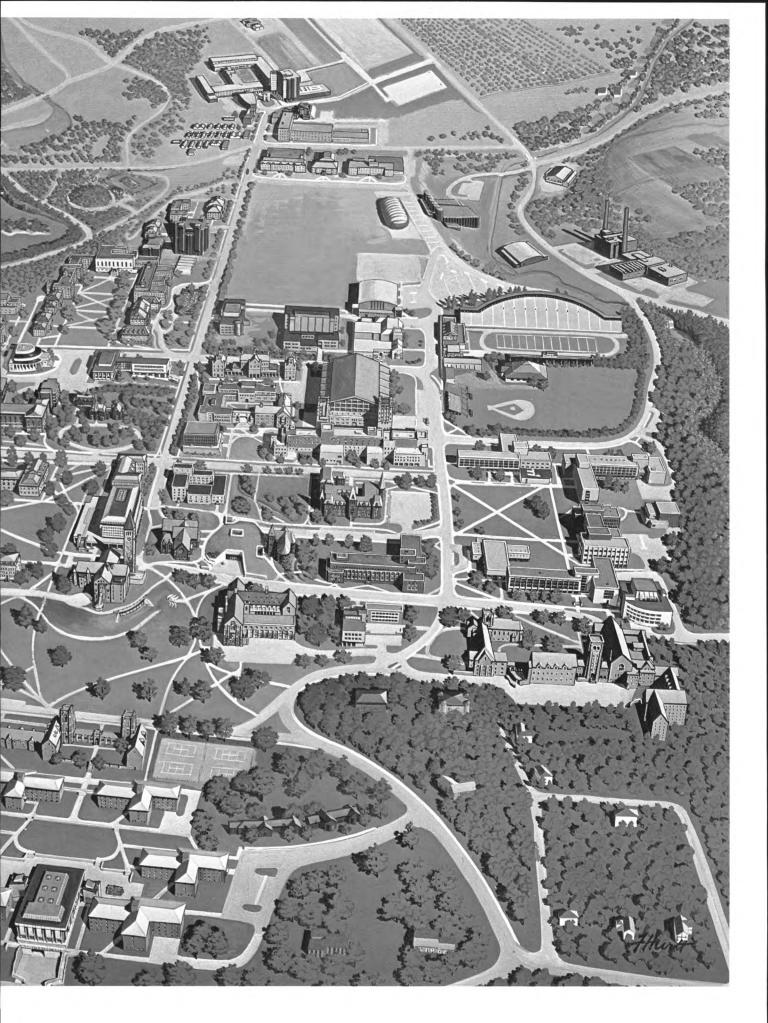
#### Sightseeing in Ithaca

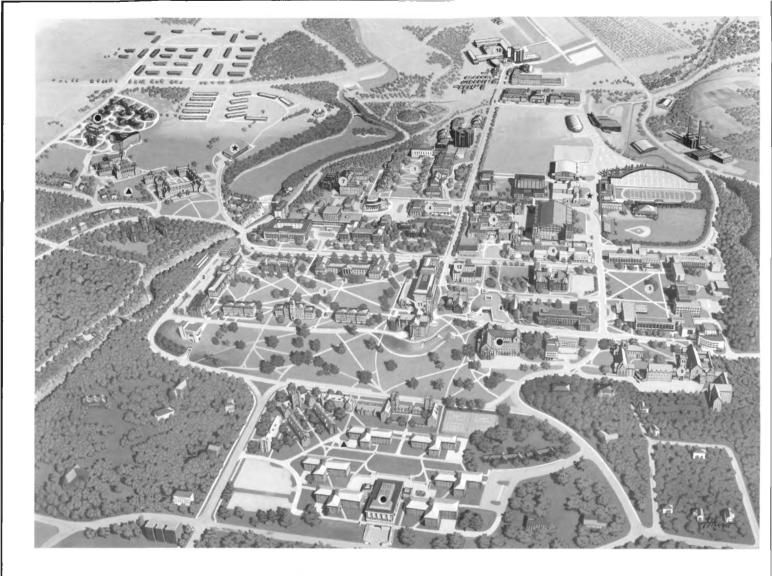
Ithaca is situated on Cayuga Lake, and there are several lovely state parks nearby with scenic gorges and waterfalls. Further information and directions are available at the Information and Referral Center in Day Hall.

# Cornell in Perspective

Turn the page for the legend.







- 1 New York State College of Agriculture and Life Sciences
- (2) College of Architecture, Art, and Planning
- 3 College of Arts and Sciences
- 4 Graduate School of Business and Public Administration
- (5) College of Engineering
- 6 School of Hotel Administration
- 7 New York State College of Human Ecology
- (8) New York State School of Industrial and Labor Relations
- (9) Law School
- (10) New York State College of Veterinary Medicine

- (11) Olin and Uris libraries
- (12) Information and Referral Center
- ▲ Residential areas
- \* Athletic facilities
- Student unions

#### Offices to Contact for Information

University admissions 410 Thurston Avenue 607/256-5241

Agriculture and life sciences admissions 195 Roberts Hall 607/256-2036

Architecture, art, and planning admissions 135 E. Sibley Hall 607/256-4376

**Arts and sciences admissions** Binenkorb Center, Goldwin Smith Hall 607/256-4833

Engineering admissions 167 Olin Hall 607/256-5008

Hotel administration admissions 339 Statler Hall 607/256-6376

Human ecology admissions 172 Martha Van Rensselaer Hall 607/256-5471

Industrial and labor relations admissions 101 Ives Hall 607/256-2221

Admission records 410 Thurston Avenue 607/256-5046

Financial aid 203 Day Hall 607/256-5145

Minority recruitment 410 Thurston Avenue 607/256-7233

Athletic admissions liaison 410 Thurston Avenue 607/256-3479

Information and Referral Center (tours) Lobby, Day Hall 607/256-6200

#### **Regional Offices**

Metropolitan New York Regional Office 521 Fifth Avenue, Suite 1801 New York, New York 10017 212/986-7202

Middle Atlantic Regional Office 1 Highland Avenue, Suite 5 Bala Cynwyd, Pennsylvania 19004 215/667-6490

Midwest Regional Office 120 South LaSalle Street Chicago, Illinois 60603 312/726-4692

North Central Regional Office Statler Office Tower, Suite 838 1127 Euclid Avenue Cleveland, Ohio 44115 216/241-0642

Northeast Regional Office 148 Linden Street, Suite 203 Wellesley, Massachusetts 02181 617/237-5300

Southeast Regional Office Bank of Coral Springs Building, Suite 604 3300 University Drive Coral Springs, Florida 33065 305/752-6750

Southwest/Mountain Regional Office 17 Briar Hollow Lane Houston, Texas 77027 713/629-5113

Western Regional Office 215 South Highway 101 Suite 201, P.O. Box T Solana Beach, California 92075 619/481-8777 Cornell University Announcements USPS 132-860 Office of Admissions Cornell University 410 Thurston Avenue Ithaca, New York 14850 Second-class postage paid at Ithaca, New York