

Cornell University Announcements

Graduate School of Business and Public Administration

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Cornell University

1980–81 Graduate School of Business and Public Administration

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Contents

Graduate Management Education at Cornell	5
Doctoral Program and Research Activities	19
Faculty	25
Curriculum	33
Student Life	49
Admission	55
Financial Aid	65
Administration and Advisory Council	71
Cornell Academic Calendar	74

The courses and curricula described in this Announcement, and the teaching personnel listed herein, are subject to change at any time by official action of Cornell University.





Graduate Management Education at Cornell

In 1865, when Cornell University was founded, the need for education in the area of management had already been recognized. Andrew D. White, the University's first president, recommended early in his administration that a department of commerce and trade be established.

It was not until 1946, however, that the Board of Trustees authorized the establishment of a school to teach and conduct research in business and public administration. At a time when existing schools specialized in either business or public administration, this decision of the trustees was an innovation. They reasoned that combining the two subject areas was logical because the basic principles and practices of sound administration cut across institutional differences, and because the need for cooperation between the private and public sectors of the economy was likely to become increasingly important in the postwar world.

Developments in recent years have justified their decision. Today, schools of business administration are beginning to emphasize the importance of close business-government relationships, and schools of public administration are stressing the need for public administrators to understand and use concepts and approaches traditionally taught in business curricula.

Through the generous financial support of the Alfred P. Sloan Foundation, the school established a program of hospital administration in 1954. This

program, the Sloan Program of Hospital and Health Services Administration, has become one of the nation's leading centers for teaching and research in medical care administration.

In 1964 the school moved into the newly built Malott Hall, named after Cornell's president emeritus Deane W. Malott. The building was designed to meet the requirements of graduate education in management and houses a center for student activities and offices for faculty and administrators. In addition to class and seminar rooms, it contains the Eastwick Library (housing over 123,000 volumes), Bache Amphitheater, and the Spencer and Collyer meeting rooms. In January of 1977, a wing was added to Malott Hall, providing additional office and library space, student conference rooms, and two 120-seat lecture halls.

A recent updating of computer facilities has given all B&PA students access to Cornell's DEC System 2060 computer, which offers a variety of interactive programming languages and data analysis programs. Terminal and printer facilities are located in Malott Hall; students may borrow portable computer terminals for use at home. Students with special needs may also use Cornell's IBM 370/168 computer.

Master's Degree Programs

The Graduate School of Business and Public Administration offers three professional degrees: Master of Business Administration, Master of Public Administration, and Master of Professional Studies — Hospital and Health Services Administration. These require the completion of sixty credits of course work and four semesters in residence. The only exceptions to this policy are given under the specific provisions for advanced standing explained in that section.

To maintain satisfactory status, a student must earn a grade point average of at least 2.7 each semester.

Much of the first year is taken up with core courses that introduce students to the broad range of disciplines relevant to administration and provide them with the necessary background for more specialized studies. All students must complete specific core courses: NCC 500 Managerial Accounting, NCC 501 Quantitative Methods for Management, NCC 502 Economic Principles for Management, NCC 503 Introduction to Computer Programming, and NCC 504 Introduction to Management Information Systems. In addition to these common core courses, each degree program has its own sequence of core courses that must be followed.

By contrast, the second year is devoted almost entirely to elective courses chosen by the student, in consultation with an adviser, to meet particular career interests and objectives.

Students anticipating a change in their degree objectives after entering the school should use electives during their first year to increase their degree of flexibility.

Educational Approach

Flexibility

The master's degree programs of the school are flexible. Students may exempt core courses in which they have an adequate background. They can, in addition, select from a wide range of elective courses, both in the school and in other units of the University.

Students choose elective courses with the guidance of faculty advisers and with some purposeful pattern. No major is formally required, and students can select an area for concentration from a wide range of fields.

The school periodically reviews its curriculum to maintain its effectiveness and its responsiveness to the needs of a changing world.

Methods of Instruction

The teaching methods at the school vary with the subject matter and the professors. Case studies and problems are introduced to acquaint the student with the complexities of real management situations requiring analysis, decision, and the development of a course of action. The lecture-discussion approach is used where it can contribute to the effective integration of reading assignments and class materials. Many advanced courses are offered as seminars, in which individual study and research are required and ideas can be discussed in depth.

Exemption from Core Courses

A student may be exempted from taking any or all of the school's common and program core courses by satisfactorily passing the special exemption examinations administered for these courses during registration, at the beginning of the first and second semesters. This is the only method by which required core courses are waived, even for those candidates who receive advanced standing credit for graduate work elsewhere.

All students admitted to the school are encouraged to take the exemption examinations for any of those common or program core courses in which they feel they have sufficient competence. If the student passes the examination, the requirement for the course is waived; if the student passes the examination at a "superior" level, credit toward the degree is granted for the course.

There is no penalty for failing an exemption examination for a core course. If students pass an exemption examination, they may still elect to take the course for credit. If they do so, the course must be taken on a compulsory satisfactory-unsatisfactory basis.

The exemption from core courses, even with credit, does not reduce the four-semester residency requirement. Residency is defined by B&PA as enrollment, each semester, for a minimum of twelve credits.

Advanced Standing

It is possible for a student to receive advanced standing credit toward a degree in the school. No student will receive more than sixteen credits of advanced standing or one semester of residency except for provisions in the special combined degree programs and the international exchange program.

The types of advanced standing and possible methods of achieving advanced standing are as follows:



Malott Hall is the center of B&PA activities.

1. *For graduate work taken elsewhere.* In certain cases it is possible for a candidate accepted for admission to receive advanced standing for graduate work satisfactorily completed elsewhere before enrollment in the school. Work taken elsewhere for which advanced standing may be awarded must be at the graduate level, that is, taken after the baccalaureate degree (or its equivalent in foreign countries), and must be directly comparable to studies in the common or program core courses required by the school. Applicants for admission who want to be considered for advanced standing should apply for such credit to the assistant dean for admissions and student affairs at the time they submit their applications for admission.
2. *For exemption examinations in core courses passed at a "superior" level.* All of the school's common and program core courses may be waived for students passing the exemption examinations for these courses, as outlined in the section on exemption from core courses. A student who passes such an exemption

examination at a level determined to be "superior" may be granted credit toward the degree in the amount equal to the credits of the course exempted.

3. *For courses in the Graduate School of Business and Public Administration taken and passed before admission, independent of registration in combined degree programs.* Advanced standing may be given for such courses to students who have taken courses in the school while on special nondegree status or on extramural status, or to Cornell undergraduate or graduate students enrolled in degree programs in other branches of the University. However, a Cornell student enrolled in another unit of the University may not take more than one of the school's core courses unless a formal application for admission has been filed with the assistant dean for admissions and student affairs.

All questions regarding advanced standing must be resolved before registration for the first semester.

Program in Business Administration

Objectives

The school's program in business administration is designed to provide an educational foundation for business or public managerial careers.

In the M.B.A. core program, organizational behavior and administrative relationships are examined with the aid of perspectives from the behavioral sciences. The uses of computers and quantitative approaches to managerial problems are explored. A foundation in economic analysis is presented to equip students with analytical tools of proven value in decision making and to provide them with an understanding of the environment in which business operates. The functions of accounting, marketing, operations management, and finance are introduced, with a view of how these functions fit into the company-wide decision and planning process. In the second year of the program the political and economic foundations of the United States business community and the impact of important public policies are

investigated. The business policy course links the several functional areas and basic disciplines studied in the first year and analyzes cases dealing with broad issues.

There is substantial flexibility in the M.B.A. program. Students are allowed a minimum of six elective credits during the first year and twenty-six elective credits in the second. Those passing exemption examinations can substitute electives of their choice for the core courses exempted. Further, students can design program concentrations to meet their specific needs. All students may take courses offered by other units at Cornell as well as electives available within the school. A student earning a master's degree in B&PA must take at least fifteen credits of elective courses in this school.

A booklet describing the M.B.A. program in more detail will be published in September 1980 and may be obtained from the Assistant Dean for Admissions and Student Affairs, Graduate School of Business and Public Administration, Cornell University, Malott Hall, Ithaca, New York 14853.

Recommended Schedule of Courses for the M.B.A. Degree

Year One: Fall

NCC 500	Managerial Accounting
NCC 501	Quantitative Methods for Management
NCC 502	Economic Principles for Management
NCC 503	Introduction to Computer Programming
NCC 504	Introduction to Management Information Systems
NCE 540	Organizational Theory and Behavior
OR	
NCE 541	Personnel Administration and Human Relations

Year Two: Fall

NBP 503	Business Policy
OR	
NBA 563	Strategic Management
OR	
NPP 502	Policy Considerations: The Business-Government Interface*
— —	Elective
— —	Elective
— —	Elective
— —	Elective

Year One: Spring

NBP 500	Marketing Management
NBP 501	Production and Operations Management
NBP 502	Managerial Finance
— —	Elective
— —	Elective

Year Two: Spring

NBP 504	Introduction to the Business-Government Interface†
— —	Elective
— —	Elective
— —	Elective
— —	Elective
— —	Elective

Note: All courses listed are required for the M.B.A. degree. Electives may be taken from B&PA and other Cornell graduate programs.

**This course has been approved as an alternative in 1980-81 and may be substituted for NBP 504 Introduction to the Business-Government Interface.*

†This is a one-credit course.

Note: For those M.B.A. candidates who exempt core courses at the beginning of the year, NBP 501 Production and Operations Management and NBP 502 Managerial Finance are offered during the fall semester. M.B.A. candidates who do not exempt a course will still have six elective credits during the first year.

Program in Public Administration

Objectives

The school's program in public administration has two primary objectives: (1) to prepare capable and motivated men and women to contribute effectively to the resolution of public issues, and (2) to provide these men and women with the foundation for their long-term professional development and accomplishment — as analysts, administrators, consultants, or a combination of all three. Breadth in course offerings and flexibility in opportunities for individual study enable the program to meet the needs of students with diverse backgrounds and career objectives. As summarized below, core courses providing managerial, analytical, and policy foundations complement advanced courses through which the students build their particular elective concentrations.

Curriculum

The public administration curriculum has three components: (1) required courses that develop abilities essential to any professional career in management; (2) recommended courses that develop knowledge and understanding of the analytical, political, and administrative aspects of government operations; and (3) elective courses that develop competence and thus specific job qualifications in areas of career interest. The first two groups are taught entirely within the school; the third represents a blend of courses available not only within the fields of business and public administration but also within fields such as city and regional planning, community services, consumer economics, environmental engineering, housing, law, and natural resources. Cornell is unique in the scope and depth of courses that relate to the public sector available in over sixty departments and programs on campus.

Departments and programs in which students regularly elect courses include Natural Resources, Agricultural Economics (College of Agriculture and Life Sciences); City and Regional Planning (College of Architecture, Art, and Planning); Economics, Government (College of Arts and Sciences); Civil and Environmental Engineering, Computer Science, Operations Research and Industrial

Recommended Schedule of Courses for the M.P.A. Degree

Year One: Fall

NPP 500	Economic Foundations of Public Policy*
NCC 500	Managerial Accounting*
NCC 501	Quantitative Methods for Management*
NCC 502	Economic Principles for Management*
NCE 540	Organizational Theory and Behavior*
OR	
NCE 541	Personnel Administration and Human Relations*

Year One: Spring

NPP 501	Public Financial Management*
NCC 503	Introduction to Computer Programming*
NCC 504	Introduction to Management Information Systems*
— —	Elective
— —	Elective
— —	Elective

Year One: Summer

Public Internship Program of professional employment

Year Two: Fall

NPP 502	Policy Considerations: The Business-Government Interface*
— —	Elective
— —	Elective
— —	Elective
— —	Elective

Year Two: Spring

NPP 503	The Conduct of Public Affairs*
— —	Elective
— —	Elective
— —	Elective
— —	Elective

Note: Electives may be taken from B&PA and other Cornell graduate programs.

**Required for M.P.A. degree.*

Engineering (College of Engineering); Human Service Studies, Consumer Economics and Housing (College of Human Ecology); New York State School of Industrial and Labor Relations; Center for International Studies, and Program on Science, Technology, and Society (independent interdisciplinary programs).

It is the responsibility of the individual student, assisted by a faculty adviser whose teaching and research activities complement the student's career interests, to design an elective program. Popular concentrations are (1) *specific areas of public policy*, such as energy, human resource management, government regulation, environmental protection, or international development; (2) *policy analysis*, with an emphasis on economics, quantitative methods, and systems analysis; (3) *financial analysis and management*, including public sector economics, tax policy, debt financing, and budget theory and practices.

The public program provides two degree options: the Master of Public Administration (M.P.A.) and

the Master of Business Administration (M.B.A.) with an emphasis on public administration.

A booklet entitled *Public Management at Cornell* may be obtained from the Assistant Dean for Admissions and Student Affairs, Graduate School of Business and Public Administration, Cornell University, Malott Hall, Ithaca, New York 14853.

Sloan Program in Hospital and Health Services Administration

Objectives

The Sloan program is designed to prepare students for careers leading to executive positions in the health care field. Most graduates pursue careers in hospital administration in the public and private sectors, in health planning and consulting, or in federal and state governments.

Training in basic management areas such as financial analysis, organizational behavior, management information systems, quantitative methods, and economics lays the groundwork for a

Recommended Schedule of Courses for the M.B.A. Degree with Emphasis on Public Administration

Year One: Fall

NPP 500	Economic Foundations of Public Policy*
NCC 500	Managerial Accounting†
NCC 501	Quantitative Methods for Management†
NCC 502	Economic Principles for Management†
NCE 540	Organizational Theory and Behavior†
OR	
NCE 541	Personnel Administration and Human Relations†

Year One: Spring

NPP 501	Public Financial Management
NBP 500	Marketing Management†
NBP 502	Managerial Finance†
NCC 503	Introduction to Computer Programming†
NCC 504	Introduction to Management Information Systems†
— —	Elective

Year One: Summer

Public Internship Program of professional employment

Year Two: Fall

NPP 502	Policy Considerations: The Business-Government Interface†**
NBP 501	Production and Operations Management†
— —	Elective
— —	Elective
— —	Elective

Year Two: Spring

NPP 503	The Conduct of Public Affairs
— —	Elective
— —	Elective
— —	Elective

Note: Electives may be taken from B&PA and other Cornell graduate programs.

*May be substituted for NBP 504 Introduction to the Business-Government Interface.

†Required for M.B.A. degree.

**Either NBP 503 Business Policy or NBA 563 Strategic Management also fulfills the M.B.A. degree requirement.

successful career in hospital administration. In addition, courses on political, social, and economic forces and on the development and implementation of policy meet the distinctive needs of contemporary health administrators.

The Sloan program provides a balance between management techniques and policy and planning skills. Developmental, sociopolitical, and ethical factors essential to responsible decision making in the health services field are stressed. The aim is to foster understanding of comprehensive, integrated delivery and planning systems. With this understanding, students can make individual career plans that are flexible and innovative.

Curriculum

The health administration program shares a set of required courses with the business and public programs. Concentrated primarily in the first semester, this common core focuses on managerial skills such as personnel management, accounting and economic analysis, and quantitative methods. Beyond the management core the curriculum includes one introductory health course and several subject area requirements that can be satisfied by a choice among courses. There is

ample time for elective courses, concentrated primarily in the second year.

Health administration students form their courses of study, in consultation with their Sloan faculty advisers, by selecting a degree program and choosing elective courses to fit their career objectives. Careful planning is necessary because of the large number of electives available within the school and elsewhere in the University. Health administration students typically supplement their program with electives in business or public administration and courses in departments such as government, city and regional planning, computer science, human development and family studies, and sociology.

Health administration students may choose any one of the three degrees offered by the school — M.B.A., M.P.A., and M.P.S. (H.H.S.A.). The choice of degree determines the requirements for graduation. Suggested courses of study for each degree choice are described below.

The program leading to the M.P.S. (H.H.S.A.) degree is accredited by the Accrediting Commission on Education for Health Services Administration. Students who satisfy the M.P.S.

Recommended Schedule of Courses for the M.P.S. (H.H.S.A.) Degree (Master of Hospital and Health Services Administration)

Year One: Fall

- NHP 500 Introduction to Hospital and Medical Care Organization
- NCC 500 Managerial Accounting
- NCC 501 Quantitative Methods for Management
- NCC 502 Economic Principles for Management
- NCE 540 Organizational Theory and Behavior
- OR
- NCE 541 Personnel Administration and Human Relations

Year One: Summer

Summer Practicum

Year Two: Fall

- NHA 507 Health and Welfare Policy*
- — Elective
- — Elective
- — Elective
- — Elective

Year One: Spring

- NHA 518 Financial Management of Hospitals
- OR
- NBP 502 Managerial Finance
- NCC 503 Introduction to Computer Programming
- NCC 504 Introduction to Management Information Systems
- — Elective
- — Elective
- — Elective

Year Two: Spring

- — Elective
- — Elective
- — Elective
- — Elective
- — Elective

Note: Unless otherwise indicated, all courses listed are required for the M.P.S. (H.H.S.A.) degree. Electives may be taken from B&PA and other Cornell graduate programs. However, at least five must be two-, three-, or four-credit courses with an NHA prefix. Projects and field trips do not fulfill this requirement.

**NHA 503 Primary Health Care Services: Policy and Planning or NHA 513 Long-Term Care Services: Policy and Planning may be substituted for NHA 507 Health and Welfare Policy.*

(H.H.S.A.) degree requirements automatically qualify for the Sloan certificate, which certifies that a student's program of study is satisfactory to the Accrediting Commission. Requirements for the M.P.S. (H.H.S.A.) degree are shown in the first recommended course schedule below.

By following an M.B.A.–Sloan course of study, shown in the second schedule, the student can earn an M.B.A. degree and qualify for the Sloan certificate. This schedule combines the business program's M.B.A. degree requirements and the Sloan curriculum. Free choice of electives is reduced with this schedule.

A third combination is the M.P.A.–Sloan degree program, which is a superimposition of the M.P.A. graduation requirements on the M.P.S. (H.H.S.A.) schedule displayed below. A separate schedule for this option is not included here, as this program

requires very little modification to the M.P.S. (H.H.S.A.) course of study.

A booklet entitled *Health Services Administration: The Sloan Program's Approach* may be obtained from the Assistant Dean for Admissions and Student Affairs, Graduate School of Business and Public Administration, Cornell University, Malott Hall, Ithaca, New York 14853.

Combined Degree Programs

Graduate study at Cornell offers students maximum flexibility in planning programs to fit individual needs and interests. The tradition of cooperation among the various units of Cornell enables this school to join with them in offering combined degree programs. Such programs exist at both the graduate and undergraduate levels.

Recommended Schedule of Courses for the M.B.A. Degree with Emphasis on Health Administration

Year One: Fall

NHP 500 Introduction to Hospital
and Medical Care Organization*
NCC 500 Managerial Accounting
NCC 501 Quantitative Methods for
Management
NCC 502 Economic Principles for
Management
NCE 540 Organizational Theory and
Behavior

OR

NCE 541 Personnel Administration and
Human Relations

Year One: Summer

Summer Practicum*

Year Two: Fall

NBP 503 Business Policy
OR
NBA 563 Strategic Management
OR
NPP 502 Policy Considerations: The
Business-Government Interface
NHA 507 Health and Welfare Policy*†
— — Elective
— — Elective
— — Elective

Year One: Spring

NBP 500 Marketing Management
NBP 502 Managerial Finance
NCC 503 Introduction to Computer
Programming
NCC 504 Introduction to Management
Information Systems
NHA 509 Health Operations Management
and Planning

OR

NBP 501 Production and Operations
Management
— — Elective

Year Two: Spring

— — Elective
— — Elective
— — Elective
— — Elective
— — Elective

Note: The Accrediting Commission on Education for Health Services Administration has accredited this program, together with five or more two-, three-, or four-credit electives with NHA prefixes. Projects and field trips do not fulfill this requirement.

*This is not required for the M.B.A. degree but is required for the Sloan certificate.

†NHA 503 Primary Health Care Services: Policy and Planning or NHA 513 Long-Term Care Services: Policy and Planning may be substituted for NHA 507 Health and Welfare Policy.

Graduate Joint Degree Programs

Joint Law Program

The school offers a combined program with the Cornell Law School in legal and administrative studies, in which the student may obtain the master's degree in either business, public, or hospital and health services administration, together with the Doctor of Law degree in four years instead of the five that would be required if each were taken separately. This combination is of interest to students preparing for careers in such areas as tax accounting and law, corporation law, or legal practice in government.

Students may begin the program in either school, with the first year's work taken entirely within one school and the second year's entirely within the other. In the third year, the work is divided between the two schools, and the fourth year it is taken entirely within the Law School. The student completes the requirements for the master's degree at the end of the third year and the requirements for the law degree at the end of the fourth.

To be admitted to the full combined program, a student must meet the admission requirements of both schools. Application for admission should be made to both schools, and acceptance must be granted by their respective admission committees before entrance into the first year of the program. Students who decide to apply for the program after starting their studies in the Graduate School of Business and Public Administration should discuss their plans with both schools as soon as possible, but no assurance can be given that such a student will be permitted to undertake the combined program.

Individual Joint Degree Programs

Individual programs combining study at B&PA with study for graduate degrees in other fields can be arranged in consultation with advisers from the school. A B&PA student is free to take graduate-level courses in any unit of the University. Furthermore, since most of the courses taken during the student's second year at B&PA are electives, there is ample opportunity for study in other areas. In order to pursue a master's degree program in this school in combination with study in another field, it is necessary to apply to both this school and the unit that administers the other graduate degree. The student must be accepted into each program independently and spend time registered in each division. However, with permission, courses taken in one school while registered in the other may be counted toward both degrees. In this way, the amount of time required to complete two advanced degree programs can be reduced.

Joint Master of Engineering Program

The school offers a combined program for undergraduates in the Cornell College of Engineering. This program provides an opportunity for the Cornell senior to obtain the Master of Engineering degree one year after graduation from the baccalaureate program and to complete the M.B.A. program in one additional year. To be admitted to the full combined degree program, a student must meet the admission requirements of both schools. Application for admission should be made to both schools during the student's junior year, and acceptance must be granted by their respective admission committees before entrance into the program.

Undergraduate Joint Degree Program

Undergraduate Double Registration

Highly qualified Cornell undergraduates have the opportunity to combine their undergraduate program with graduate study at B&PA. Students in such a combined degree program generally receive a bachelor's degree after four years of study and a master's degree from B&PA after the fifth year of study, rather than the normal sixth year. Admission to these combined degree programs is limited to particularly promising candidates, and careful planning is required for successful integration of the work of the two degree programs. Cornellians interested in applying for admission to this program are advised to meet with a staff member of the Office of Admissions and Student Affairs. Formal application should be made during the winter of the junior year.

Education for Public Management Program

B&PA conducts a nine-month non-degree program, Education for Public Management, for a limited number of midcareer executives from field offices and headquarters of agencies of the federal government. This program was formerly sponsored by the U.S. Office of Personnel Management; it is now sponsored by Cornell and the seven other universities where it also operates.

The purpose of the program is to provide a link between the individual's employment experience and long-term career interests. Its emphasis is on intellectual breadth rather than job-related specialization. In selecting courses appropriate to their respective needs and aspirations, participants avail themselves of academic opportunities in



J. William Middendorf, former secretary of the navy and chief executive officer of Financial General Bankshares, in an informal class presentation as part of his day's visit to B&PA.

B&PA and other divisions and develop close associations with faculty members and students. They participate in a special seminar designed to integrate their individual study programs into a sophisticated exploration of selected issues of public policy.

Further information about this program may be obtained from Professor Edward S. Flash, Jr., Graduate School of Business and Public Administration, Cornell University, 521 Malott Hall, Ithaca, New York 14853.

International Programs

Over the last several years the faculty of the school has become increasingly committed to participation in projects overseas. These projects assist in the development of foreign institutions and generate expanded opportunities for international studies in the school.

A student exchange program with the University of Louvain, Belgium, was inaugurated in 1969. Each year nine Cornell students may study for either a Licence or Maitrice at the Institut d'Administration et de Gestion at the University of Louvain (French speaking) or study for an M.B.A. degree

in the Department of Applied Economics in the *Katholieke Universiteit te Leuven*, a program offered in English. Similarly, graduate students from both Belgian universities come to this school for master's degree work. Participating Belgian degree candidates are called Deneffe scholars in memory of the late Paul Deneffe of Louvain, who taught at Cornell in 1968. Louvain University pays the tuition and fees and offers a stipend for two Cornell students and one student from Leuven. The other participating Cornell students receive tuition and fee fellowships. Cornell, in turn, pays tuition and fees for two Belgian students.

The exchange program is open to all business and public administration students, but most applicants are pursuing interests in either international business or international development. This one-year program can be taken either at the completion of the master's degree or, more typically, after the completion of the first year of studies in Ithaca. In the latter case, students return to the school for one additional term of study after completion of the year abroad. Before beginning work at either Louvain or Leuven, students are urged to take an intensive French course in Europe during the summer. Candidate selection for this program is based on motivation for studying and living abroad, academic average, and language ability.

Program on Science, Technology, and Society

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

In cooperation with other University departments and centers, STS participates in the development of interdisciplinary courses at both the graduate and undergraduate levels. Courses developed for the program are designed to both synthesize and contrast the perspectives of several academic disciplines in the analysis of relationships among science and technology and the needs, values, and institutions of modern societies. The program sponsors the undergraduate biology and society major in the College of Arts and Sciences and offers a science policy "stream" within the graduate minor field of public policy. Limited support is available to graduate students whose studies fall within the program's scope. Such support can be in the form of full or partial fellowships, research or teaching assistantships, or grants to cover research expenses.

Further information may be obtained from the Program on Science, Technology, and Society, Cornell University, 628 Clark Hall, Ithaca, New York 14853.

Placement Services

The school's Placement Office provides students and alumni with a full range of services, including interview scheduling, career forums, career counseling, and job referrals. Students are given assistance with resume and cover-letter preparation and interviewing techniques. The Placement Office publishes widely distributed resume books for each program.

More than one hundred fifty organizations interview on the Cornell campus each year for M.B.A., M.P.A., and M.P.S. (H.H.S.A.) graduates. As the following list indicates, most of the recruiting organizations are business firms seeking M.B.A.s.

Interviews take place during both the first and second semesters, with most activity in the second. Students can interview with a number of organizations, and a priority system assures all students an opportunity to interview with the organizations that most interest them. Approximately 80 percent of the initial contacts that lead to job offers take place in on-campus interviews.

Health and public administration students are served by a job market that involves considerably more contacts made off the campus. Summer residency and internship programs, colloquiums, and field projects provide opportunities for contact with professional job markets, and the Placement Office maintains communications with many prospective employing organizations. School alumni also provide valuable placement contacts.

In addition to providing liaison with the organizations that recruit on campus, the Placement Office maintains information on many firms, hospitals, and public agencies in order to provide students with up-to-date information on job opportunities. Job files, bulletins, and alumni job listings are used extensively to keep students abreast of job opportunities.



Thomas M. Calo, assistant dean for placement.

Of the 1979 graduates 22 percent went into positions in finance; 16 percent, in general management; 14 percent, in banking; 14 percent, in accounting; 13 percent, in consulting; 12 percent, in marketing; and 9 percent, in other posts. The mean annual starting salaries for 1979 business, public, and health program graduates were \$22,183, \$20,250, and \$20,281, respectively. A placement statistics summary will be mailed upon request by the Assistant Dean for Placement, Cornell University, 310 Malott Hall, Ithaca, New York 14853.

Some Organizations Interviewing Graduates on Campus

Abraham & Straus
Air Products and Chemicals, Inc.
Amax, Inc.
American Express Co.
American Management Systems
Analytic Sciences Corp.
Arthur Andersen & Co.
Arthur Young & Company
Bamberger's
Bankers Trust Co.
Bausch & Lomb

Bell Systems
Bendix Corporation
Bloomingdale's
Booz, Allen & Hamilton
Bristol-Myers Co.
Burroughs Corp.
Campbell Soup Company
Certain-teed Corp.
Chase Manhattan Bank
Chemical Bank
Citibank
Citibank of Columbus, Ohio
Colgate-Palmolive Co.
Colt Industries Inc.
Connecticut Bank & Trust Co.
Connecticut General Life Insurance Co.
Continental Grain Co.
Continental Group, Inc.
Continental Oil Company
Coopers & Lybrand
Corning Glass Works
Data Resources, Inc.
Deloitte, Haskins & Sells
Digital Equipment Corp.
Eli Lilly & Company
Emerson Electric Co.
Ernst & Ernst
Exxon Corporation



Following his Executive Forum presentation, Sanford Weill (left), chairman and chief executive officer of Shearson, Loeb, Rhodes, meets guests of the school.

Firestone Tire & Rubber Company
FMC Corporation
Ford Motor Company
Frito-Lay Inc.
General Electric Co.
General Foods Corporation
General Motors Corporation
George J. Ball Co.
Gillette Co.
Goldman, Sachs & Co.
Gould Inc.
Hartford National Bank
Hewlett-Packard Co.
Illinois Bureau of the Budget
International Business Machines Corporation
Ithaca Intersystems, Inc.
Jewel Food Stores
John Hancock Mutual Life Insurance Company
Jos. E. Seagram & Sons, Inc.
Kurt Salmon Associates
L. D. Schreiber Cheese Co., Inc.
Marathon Oil Company
Marine Midland Bank
Marriott Corp.
Massachusetts General Hospital
McDonnell Douglas Automation Co.
Mellon Bank N. A.
Memorial Sloan-Kettering Cancer Center
Merck & Co., Inc.
Metropolitan Life Insurance Company
Mobil Oil Corporation
Morgan Guaranty Trust Co.
National Bank of North America
National Steel Corporation

New York City Office of Management and Budget
Ore Ida—Ida Foods, Inc.
Oscar Mayer and Company
Owens-Corning Fiberglas Corporation
Owens-Illinois, Inc.
Oxford Industries, Inc.
Peat, Marwick & Mitchell & Co.
Pfizer Inc.
Price Waterhouse & Co.
Procter & Gamble Company
Prudential Insurance Company of America
Ralston Purina Co.
Roadway Express Co.
Rochester Telephone Corporation
Rockwell International
R. R. Donnelley & Sons Company
Ryder Systems, Inc.
Salomon Brothers
S. C. Johnson & Son, Inc.
Scott Paper Company
Service Bureau Co.
Shawmut Bank of Boston, N. A.
Standard Oil Company (Indiana)
Temple, Barker & Sloane, Inc.
Theodore Barry & Associates
Touche Ross & Co.
Turner Construction Co.
United Nuclear Corp.
United Research Co.
University Hospital, University of Michigan
Washington, D.C., Office of Budget and Resource
Development
Xerox Corporation



Doctoral Program and Research Activities

Doctoral Program

Approach and Content

The requirements for the Ph.D. degree are established and administered by the Graduate School of Cornell University. Business and Public Administration is one among a number of fields of study offered by the Graduate School. For more information, a prospective student should obtain the *Announcement of the Graduate School* from Cornell University Announcements, Building 7, Research Park, Ithaca, New York 14850. In addition, a separate booklet containing information on the B&PA Ph.D. program is available from the Director of the Doctoral Program, Graduate School of Business and Public Administration, Cornell University, Malott Hall, Ithaca, New York 14853.

Studies for the Ph.D. degree in the Field of Business and Public Administration are designed to prepare candidates for careers in teaching and research. The objective is not simply to take a number of required courses but rather to develop the deep understanding of the field that is essential to the advancement of knowledge. Candidates for the Ph.D. degree in the Field of Business and Public Administration select a major subject in this field and two minor subjects from related fields. The student selects faculty members to represent these subjects and to direct his or her study.

Admission and Financial Assistance

Applications for admission to the doctoral program should be made on the forms of the Graduate School of Cornell and should be sent to the Graduate School, Cornell University, Sage Graduate Center, Ithaca, New York 14853. They should clearly indicate in the appropriate place a major interest in the Field of Business and Public Administration. All applicants, whether from the United States or abroad, are required to take either the Graduate Record Examination (Aptitude Test) or the Graduate Management Admission Test. In addition, those students whose native language is not English must take the Test of English as a Foreign Language. These tests are given several times a year in the United States and abroad. For information about the examinations, candidates should write to the Educational Testing Service, Princeton, New Jersey 08540.

Eligibility for admission is determined on the basis of an applicant's academic record, the suitability of prior work for the intended program, career objectives, test scores, and the opinions expressed in letters of recommendation. Many applicants to the doctoral program have M.B.A. or M.P.A. degrees, but a previous master's degree is not essential. Students with training in other disciplines such as physics, mathematics, engineering, economics, or psychology are encouraged to

apply. Such students probably will take a few of the basic master's degree courses, but they will find their previous analytic training highly valuable in pursuit of the Ph.D. degree in business or public administration.

The school has funds available for the support of Ph.D. candidates through fellowships and assistantships. These are awarded on a competitive basis to both new and continuing candidates, with renewals based on the student's academic performance. Support will continue for three or four years if the candidate continues to make satisfactory progress, as evaluated by his or her Special Committee. (Students with master's degrees are supported for three years; students with undergraduate degrees, for four years.) In addition to the fellowships and assistantships offered by the school, a few University fellowships and scholarships are available and are awarded in a general competition that closes on February 1. Applicants interested in fellowships should apply by that time. See pages 65–69 for additional details.

Requirements

Each doctoral student is assigned a temporary committee composed of faculty from his or her major areas of interest. It is the purpose of these committees to meet with candidates as soon as possible after their arrival on campus, to help them begin their programs. Students are asked to form their own Special Committee during their first semester at Cornell.

A comprehensive examination is given on the major and minor subject areas after the candidate has had adequate preparation, ordinarily after completion of four terms of residence for students with master's degrees and six terms for those with bachelor's degrees. The comprehensive examination is always given in two parts, written and oral. A thesis is required and is prepared under the direction of the chairperson of the Special Committee. After a manuscript has been approved in substance by the Special Committee, an oral thesis examination is given.

The thesis typically takes a student one full year of work. Hence a student with a master's degree should expect to complete the Ph.D. degree program in three years. A student without a master's degree should expect to take four years.

A Ph.D. candidate may be required to demonstrate proficiency in one or more foreign languages. The language or languages, if any, and the degree of proficiency are determined by the student and his or her Special Committee. These decisions are

based on the potential usefulness of the language to the student in research and future scholarly activities. Most students have no language requirement.

A minimum of six terms of full-time residence beyond the bachelor's degree is a requirement for the Ph.D. degree, but under certain circumstances residence credit may be received in whole or in part for graduate work done elsewhere for the M.B.A. or M.P.A. degree, or in other relevant graduate programs. Such transfer of credit may be allowed by the Graduate School on recommendation of a student's Special Committee after matriculation. A maximum of two terms' credit may be granted.

Major and Minor Subjects

The primary emphasis in the Field of Business and Public Administration is on applied areas of research. However, solving applied problems usually requires a strong background in a disciplinary field. Acquisition of this background will enable the doctoral graduates of this school to engage in scholarly research throughout their careers. Therefore, the majors and the minors in the field are segregated into two groups:

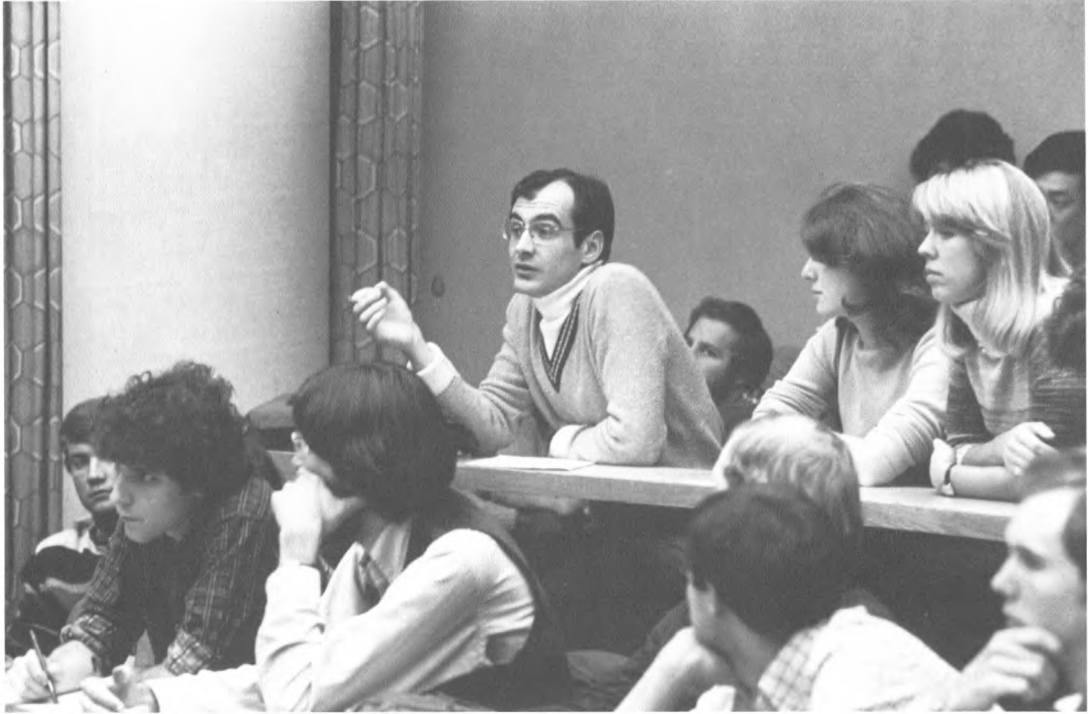
Group I — disciplinary areas relevant to managerial problems

Group II — areas of application

The major subject must be selected from the subject areas in Group I or Group II, listed below. The first minor must be selected from the group not used for the major, with exceptions as indicated.

Some candidates electing a major subject in Group II may wish to take a first minor in a basic discipline offered in another field of the Graduate School. This is permitted whenever the proposed discipline meets the test of being a basic discipline reasonably related to the student's major subject. Also, some candidates electing a major subject in Group I may wish to take their first minor in an applied subject offered in another field. This is also permitted when the candidate can demonstrate that the choice is relevant to career objectives. In order that administration of these exceptions be uniform, all substitutions in Groups I and II must be approved by the director of the doctoral program.

The first minor must be relatively extensive and demands a level of competence equivalent to that expected of majors. The second minor may be selected from the subjects listed below or from another field. If the first minor is taken in B&PA, a student may be encouraged to take the second minor outside the school, provided that this second minor is relevant to the program.



Candidates for advanced degrees with majors in other fields may elect minors in the Field of Business and Public Administration, provided that they have sufficient preparation to do the graduate work involved. Twelve to fifteen credits of course work are usually required of minor students in the field, depending on whether they are candidates for a master's degree or a Ph.D. degree, and on the extent of their prior preparation.

A short description of the major subjects in the Field of Business and Public Administration follows.

Group I

Managerial economics concentrates on economic analysis for public and private management decision making. A candidate may study the problems of a total economy, of industries, or of a firm. He or she may concentrate on areas such as international economics, economic development, public finance, business-government relations, money and banking, or investment analysis. Study of this area requires a thorough grasp of relevant economic theory and institutions and a basic understanding of both qualitative and quantitative analysis. Some of the course work in the area is normally taken in the Departments of Economics and Agricultural Economics.

Organizational theory and behavior focuses on social and behavioral science approaches to the study of human activity in organizational settings. The major concern is with regularities, differences, and relationships in behavior directed toward purposive ends. Systematic observation, theoretical analysis, and empirical investigation are stressed. A fundamental grounding in at least one of the basic behavioral disciplines is required, and some of the course work would be in the Departments of Psychology, Sociology, and Rural Sociology, and the School of Industrial and Labor Relations.

Quantitative analysis for administration stresses modern development in the uses of mathematical and statistical tools and computer technology for the solution of managerial problems. A high level of mathematical competence is an essential requirement. Some of the course work should be taken in the School of Operations Research and Industrial Engineering (College of Engineering) and the Departments of Economic and Social Statistics (School of Industrial and Labor Relations), Computer Science (College of Engineering), and Mathematics (College of Arts and Sciences).

Group II

Accounting involves the study of the theory and practice of developing financial data for the two

purposes of enabling management to control and plan the development of the enterprise and enabling others to appraise its condition.

Business and public policy involves the study of the three-way relationship among individuals, business firms, and government. A student may concentrate either on the United States or on a foreign area. A substantial knowledge of the political and economic background of public policy is essential.

Business policy involves the study of the business corporation and particularly of the strategy developed to successfully compete and to meet both internal and external challenges. A substantial knowledge of the functional areas of marketing, production, finance, personnel and labor relations, and accounting and control is essential.

Finance focuses on the financial structure and problems of corporations. It deals with problems of developing and maintaining sound financial condition through the proper use of stock and debt; the organization and behavior of financial markets; and the influence of public policies at home and abroad on financial markets and on corporate finance. A knowledge of accounting is essential.

International development is the study of the problems of forming effective public and business institutions in developing parts of the world, with special emphasis on problems of public and private administration — both indigenous and American — in such areas. A good background in one or more of the basic disciplines of economics, government, sociology, or anthropology is highly desirable.

Marketing is the study of how analytic tools derived from economics, psychology, sociology, and operations research can be applied in conducting the marketing function. Potential areas of study range from analysis and modeling of consumer behavior to research in the decision-making process in the management of marketing organizations.

Medical care organization and administration comprises the study of the complex problems of public policy and administration associated with the planning, financing, organization, and delivery of personal health services — both in hospitals and in a larger framework of public agencies and private firms. Multidisciplinary approaches to the investigation and resolution of applied problems are stressed.

Production and operations management emphasizes the study of quantitative methods of analysis, including the use of the computer in solving major economic decision problems involved in the operation of large organizations. Typical problems include scheduling production, managing complex distribution systems, choosing locations for productive facilities, and maintaining quality of physical goods and services.

Public administration involves an interdisciplinary approach to the study of government policies, policy formulation, power relationships, administrative behavior, and basic management functions such as personnel and finance. The student is expected to gain competence in bureaucratic and organizational theory and in the methods of the social sciences.

Research Activities

Through its research activities the school seeks a combination of related objectives: the advancement of basic knowledge, the use of that knowledge in teaching programs, and the further encouragement of both faculty and graduate students in the use of research in management settings.

The school engages in both theoretical and empirical studies of private and public organizations. Theoretical research is directed toward developing new theories or broadening the existing theories of managerial and economic behavior and decision making. In empirical research, management problems faced in several organizations are abstracted; appropriate analytical or behavioral models are then developed to describe or solve the problems; and, finally, models are tested and validated in relation to empirical data. This approach not only breaks new ground in management research but also provides a foundation for research theory.

Research studies at the school have included a large-scale analysis of how accounting information is processed; effects of inflation on the behavior of security prices; simulation of use of hospital beds; experimental and financial evaluation of alternative pricing systems on the use of electric energy; study of the price-quality relationship; an inquiry into the processes of subjective evaluation of multiattributed decision alternatives; and analysis of methods of dealing with multi-item, multilocation production-distribution systems.

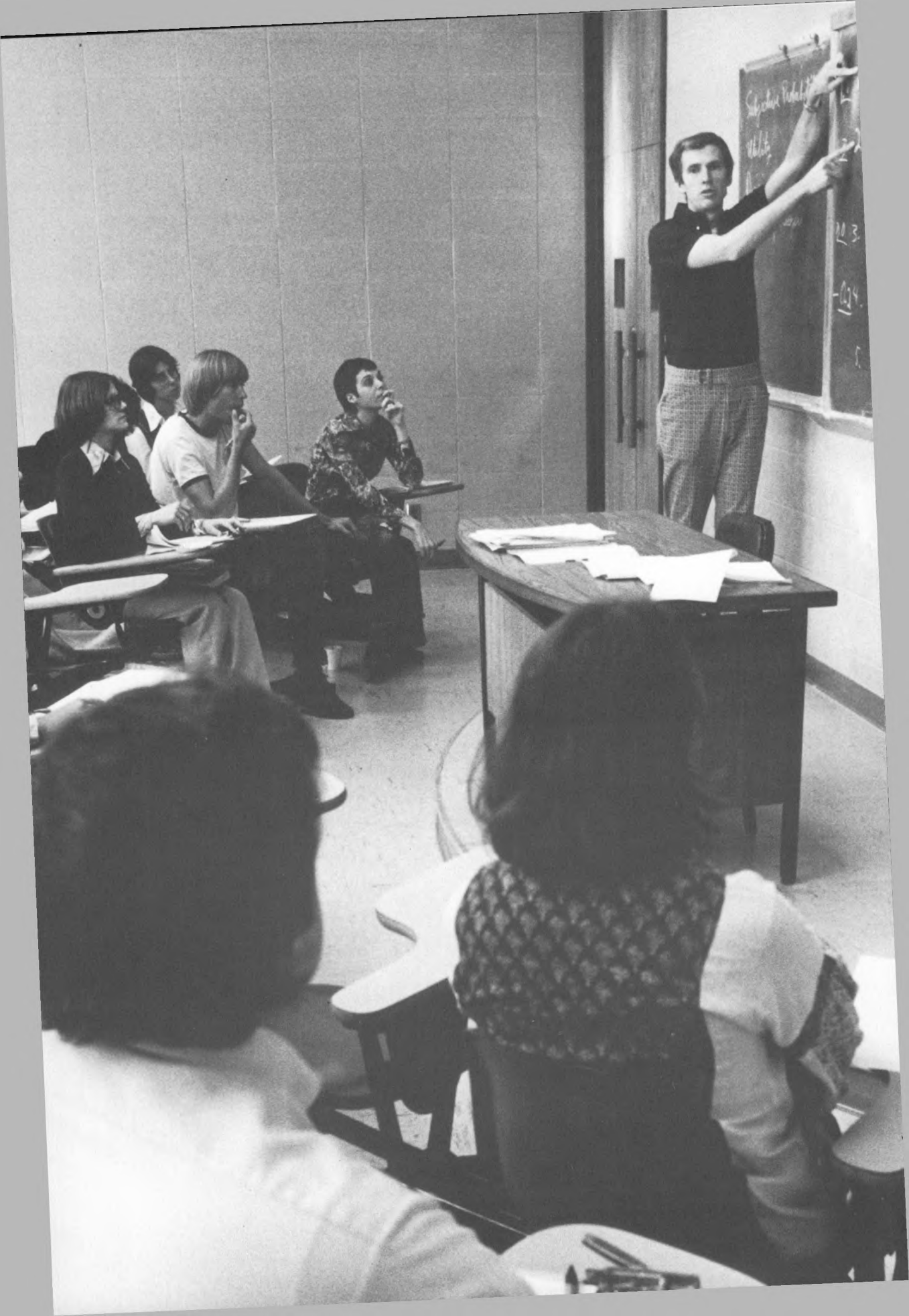


Lynn D. Salvage, former president of First Women's Bank and president of Katharine Gibbs School, presents a seminar on women in business as part of her three-day executive residency at B&PA.

Other current research efforts concern the development of capital budgeting in both business and government; the development of concepts and methods of managerial accounting; work on the factors influencing direct foreign investments; economic and behavioral analysis of the effects of advertising; alternative approaches to market segmentation; the application of multidimensional scaling to marketing problems; the study of efficient capital markets; economic analysis of coinsurance in health; the study of executive personality; the economics of the energy industry; studies of organizational structure; and work on

the integration and use of findings in the behavioral sciences in organizational activity.

The school maintains close associations with Cornell offices and departments concerned with social and organizational research, especially the Office of Computer Services. Ph.D. students are strongly encouraged to take advantage of courses offered through other departments and schools, particularly Psychology, Economics, Agricultural Economics, Government, City and Regional Planning, Operations Research and Industrial Engineering, and Industrial and Labor Relations.



Faculty

Full-Time Faculty

David M. Ahlers, M.A. (Washington), M.S., Ph.D. (Carnegie-Mellon),

Associate Professor of Management

In addition to his teaching and research, Professor Ahlers is actively involved in executive education, consulting, and new business ventures. He is a codirector of the American Bankers Association Business of Banking School; an associate director of the Columbia University Bank Management Program; and a recipient of the Touche Ross New Perspectives Award. He is also a consultant to Chase Manhattan Bank and to the chairman of Northeast Bank Corporation.

Roger M. Battistella, M.P.H., Ph.D. (Michigan), Professor of Medical Care Organization

Professor Battistella is principally interested in public policy issues involving health planning and the organization, financing, and delivery of personal health services in the United States and other highly developed countries. He has written in the areas of health affairs, regional and comprehensive health planning, and medical sociology. He serves as a seminar chairman in the school's Health Executives Development Program and is active as a consultant to HEW and state and local governmental bodies.

Fredrick T. Bent, Ph.D. (Chicago), Associate Professor of Public Administration

Professor Bent's chief interest is international comparative administration. He has taught at the American University of Beirut and at Middle East Technical University in Ankara, Turkey. He has served as acting editor of the *Administrative*

Science Quarterly, associate director of Cornell's Center for International Studies, and an adviser to the Ministry of Finance of the government of Bahrain.

Harold Bierman, Jr., M.B.A., Ph.D. (Michigan), Nicholas H. Noyes Professor of Business Administration

Professor Bierman's interests are in the areas of measuring and communicating financial information and financial policy decisions. He has consulted for public organizations and industrial firms and is the author of a number of books and articles in the fields of accounting, finance, taxation, and quantitative analysis. He is the finance section coordinator of the school's Executive Development Program.

Earl Brooks, M.S. (American University), Professor of Administration

Professor Brooks teaches organizational behavior, personnel management, and negotiations. As a management consultant in this country and overseas, he has published articles on delegation, negotiations, performance improvement, labor relations, communications, management by objectives, and management development. He serves as coordinator of the school's Executive Development Program. Professor Brooks is on leave second semester, 1981.

Joseph B. Bugliari, J.D. (Cornell), Professor of Agricultural and Business Law
Professor Bugliari was formerly an associate with the firm of Royall, Koegel, and Rogers in New York

and an assistant to an associate justice of the Appellate Division of the New York Supreme Court. He is interested in the law pertaining to farming operations, business associations, taxation, estate planning, and the hospital health care area.

Roland E. Dukes, M.B.A., Ph.D. (Stanford), Associate Professor of Accounting and Finance
Professor Dukes's teaching interests are in the areas of financial reporting, theory and operation of capital markets, and accounting for planning and control. His dissertation was an investigation of the relationship between security price behavior and the expensing of research and development costs. His current research interests include investigating the efficiency of capital markets with regard to the processing of various accounting data and examining the economic consequences of accounting policy decisions. Present research includes examining the consequences of the requirement to expense research and development costs and the consequences of requirements regarding foreign currency translation.

Thomas R. Dyckman, M.B.A., Ph.D. (Michigan), Ann Whitney Olin Professor of Accounting
Accounting, statistics, and quantitative approaches to decision making are Professor Dyckman's fields of interest. His publications have dealt with such topics as econometric models of the automobile industry, accounting theory, the investment decision, the effects of alternative accounting techniques on management decisions, the behavioral effects of accounting reports, the economic consequences of accounting policy decisions, statistical cost control techniques, bond refunding, capital markets, utility theory, and statistical techniques. He is currently engaged in research on issues associated with normative and descriptive decision making in accounting. He is the coordinator of the operational decision-making program in the school's Executive Development Program and director of the doctoral program.

Steven R. Eastaugh, M.S.P.H. (Harvard), Sc.D. (Johns Hopkins), Assistant Professor of Health Economics and Hospital Finance
Formerly the senior economist on a National Academy of Sciences hospital study, Professor Eastaugh is interested in hospital cost containment, physician reimbursement policies, health services regulation, cost-benefit analyses of utilization review programs, and cost-effective analyses of new medical procedures. His interests include the broader issues of public finance, operations research, and public expenditure analysis. Professor Eastaugh consults for Central New York Blue Cross and teaches cost-effective clinical decision making at the Cornell Medical School.

Edward S. Flash, Jr., M.P.A., Ph.D. (Cornell), Associate Professor of Public Administration
Professor Flash's teaching and research focus on the development and implementation of public policy at national, state, and local levels; urban government; and relationships among politics, administration, and analysis. He has written on the knowledge-power relationship between the president and the Council of Economic Advisers and is currently preparing a public administration text. He has conducted research on political and administrative aspects of British water reorganization and intergovernmental strategies such as revenue sharing. Professor Flash is an experienced public servant, having served and consulted with a number of federal and local government agencies.

David A. Gautschi, Ph.D. (California at Berkeley), Assistant Professor of Marketing
Professor Gautschi's main research interests include microeconomics and marketing and the application of quantitative methods to managerial marketing problems. His teaching interests are in the areas of marketing research, mathematical model building in marketing, and distribution; his current research interests are in retail location and in the assessment of individual utility functions.

Jerome E. Hass, M.B.A., Ph.D. (Carnegie-Mellon), Professor of Managerial Economics and Finance
Professor Hass's fields of interest are energy economics, finance, and the economics of regulation. His publications have dealt with such topics as transfer pricing, capital budgeting, the pricing of natural gas and electricity, financing the energy industry, natural resource allocation, and the theory of merger and acquisition decisions. He was chief of the Division of Economic Studies at the Federal Power Commission in 1976-77 and has been a consultant to a number of organizations, including the Executive Office of the President, the Department of Energy, the New York State Public Service Commission, the Environmental Protection Agency, the Brookings Institution, the American Enterprise Institute, the U.S. Congressional Office of Technology Assessment, and numerous corporations. He is currently a consultant to the Federal Energy Regulatory Commission and the Department of Energy.

Ronald W. Hilton, Ph.D. (Ohio State), Assistant Professor of Accounting
Professor Hilton's interests are in the areas of managerial accounting and quantitative methods. His current research includes topics in information economics, integration of normative and descriptive theories of decision making, and application of normative decision models to issues in managerial accounting.

Robert A. Jarrow, M.B.A. (Dartmouth), Ph.D. (Massachusetts Institute of Technology), Assistant Professor of Finance

Professor Jarrow's teaching and research interests involve the study of economic theory under uncertainty. He is interested specifically in capital market theory, macroeconomics, and microeconomics. He is currently doing theoretical research relating to the pricing of securities in the capital markets.

Edward G. Jordan, M.B.A. (Stanford), Professor of Management

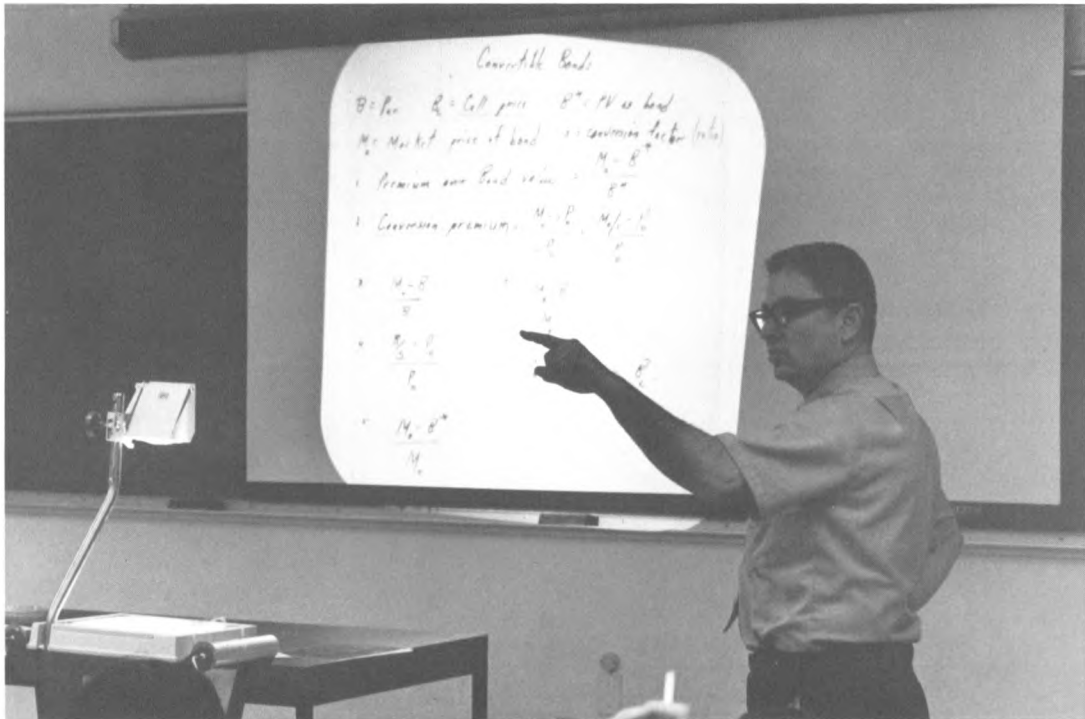
Mr. Jordan is presently chairman of the board and chief executive officer of Consolidated Rail Corporation, the largest rail system in the United States. He has headed that firm since its inception in 1975, when it was created as a unique means of sustaining private-sector rail service in the industrial northeast quadrant of the United States. He previously was president of the United States Railway Association, a congressionally sponsored public corporation that designed the rail reorganization plan to avoid the threatened liquidation of eight bankrupt railroads. His business background includes serving as president of the Pinehurst Corporation, a California insurance services company. His major interests lie in studying the development of strategic analysis and policy options for private sector management, particularly where the implementation of government policy intersects corporate actions.

Robert C. Lind, Ph.D. (Stanford), Professor of Economics and Public Administration

Professor Lind's major interests are the analysis of public investment decisions, the theory of decision making under uncertainty, the planning process for government decisions, and incentive systems. He is also interested in the relationship between government and business. His publications range from theoretical papers dealing with the social rate of discount, uncertainty in public sector decision making, and the theory of rents to policy-oriented papers on natural resources, criminal justice, and land use. His current research is on energy policy, and he is director of the Energy Policy Studies Unit at Cornell. Professor Lind has consulted widely for both public and private organizations. He will be on leave second semester, 1981.

Thomas M. Lodahl, Ph.D. (California at Berkeley), Professor of Administration

A social psychologist by training, Professor Lodahl now centers his interests on the structure and functioning of organizations. He teaches organizational theory, organizational development, and organizational design. His research projects include a study of the founding of new universities in England, organizational design for office automation, and the psychology of consumer affairs.



Alan K. McAdams, M.B.A., Ph.D. (Stanford), Associate Professor of Managerial Economics
Professor McAdams's interests and publications are in the fields of managerial economics and business-government relations. He has served as a senior staff economist with the president's Council of Economic Advisors and as a consultant and expert witness for the government in *United States v. I.B.M.* He has been a consultant to industry and the Ford Foundation and recently has established his own consulting firm.

John O. McClain, Ph.D. (Yale), Associate Professor of Quantitative Analysis
Professor McClain is studying the application of quantitative methods to managerial problems. His interests focus on applications of operations research techniques to the design and operation of health care delivery systems and operational problems in production and inventory control.

Dale Morse, M.B.A. (Oregon), Ph.D. (Stanford), Assistant Professor of Accounting
Professor Morse's primary interests are in the fields of financial accounting, finance, and information economics. He is currently working on the problem of private information in a market setting.

Maureen O'Hara, Ph.D. (Northwestern), Assistant Professor of Finance
Professor O'Hara's research and teaching interests are in the areas of financial institutions and monetary economics, particularly the effects of regulation on financial institutions. She is currently examining the behavior of mutual and stock savings and loans to determine the optimal industry organization structure. She has consulted for the Federal Savings and Loan Insurance Corporation on default prevention policies for savings and loans.

George S. Oldfield, M.A., Ph.D. (Pennsylvania), Associate Professor of Economics and Finance
Professor Oldfield's current research and teaching interests are in the fields of valuation theory and monetary economics. He has published articles on efficiency in foreign exchange markets, private pension finance, and the mathematical properties of common stock returns. Professor Oldfield has worked for the New York and Philadelphia Federal Reserve Banks and consults for several commercial banks.

Levent Ormancioglu, M.S., Ph.D. (Northwestern), Assistant Professor of Information Systems
Professor Ormancioglu's primary interest is in data-base application systems. He has taught courses and published articles on data-base theory, file design, user-oriented languages, and large-scale system development. He is currently working on nonprocedural application languages

and the communication problems between the application specialists and the computer systems.

Vithala R. Rao, Ph.D. (Pennsylvania), Emerson Electric Company Professor of Marketing
Professor Rao's research interests include application of multivariate models to various substantive problems of marketing, development of prescriptive models of marketing behavior, and long-range planning. His teaching interests encompass marketing, quantitative methods, and research design. He has done research in the areas of salience of price in the perception and evaluation of product quality, product design, and multiattribute decision making; and he has written several papers in the fields of statistics and measurement in marketing.

Douglas K. Reece, M.S., Ph.D. (California at Berkeley), Assistant Professor of Information Systems and Management Science
Professor Reece specializes in the application of information science and quantitative methods to problems of business and public administration. His specific interests include computer simulation, models of competitive bidding, natural resource development policy, and information system design. He is currently studying alternative systems for development of publicly owned natural resources.

Andrew T. Rudd, M.S., M.B.A., Ph.D. (California at Berkeley), Assistant Professor of Finance and Operations Research
Professor Rudd's research interests are in the application of operations research to financial and investment decisions in national and international markets. Within this area he has been working on efficient portfolio selection and revision models for institutional portfolios. In addition, he has been studying uses of option contracts in investment management and models of hedged portfolios. He has served as a consultant to major banks on institutional fund management. Professor Rudd will be on leave during the academic year 1980-81.

Darius Jal Sabavala, Ph.D. (Columbia), Assistant Professor of Marketing and Management Science
Professor Sabavala's research is in the areas of stochastic modeling of consumer behavior and the application of quantitative methods to problems of marketing strategy. His teaching interests include marketing management, industrial marketing, marketing decision models, and management science. His consulting projects have been concerned with building models for evaluating sales response to marketing strategies. Professor Sabavala will be on leave during the academic year 1980-81.

Seymour Smidt, Ph.D. (Chicago),
Nicholas H. Noyes Professor of Economics and Finance

Professor Smidt's main interests are in the areas of managerial economics and finance. He has written books on capital budgeting and statistical decision theory. He has also conducted research on the stock market, commodity futures markets, and on electric rate regulation. He has served as director of the school's research program on agricultural industries, as chief of party to the school's project at the Middle East Technical University in Ankara, and as associate director of the Securities and Exchange Commission's Institutional Investor Study. He is a coordinator of the school's Executive Development Program and for five years served as mayor of the Village of Lansing.

Robert H. Smiley, M.S., Ph.D. (Stanford),
Associate Professor of Economics and Public Policy

Professor Smiley's research and teaching interests are in the fields of microeconomics, energy economics, industrial organization, and public policy analysis. His current research projects include energy economics and the economics of regulation. Professor Smiley will be on leave second semester, 1981.

Robert J. Swieringa, Ph.D. (Illinois),
Associate Professor of Accounting
Professor Swieringa has taught in the areas of

corporate financial reporting, auditing, and the use of cost accounting information for decision making. His research interest is behavioral accounting. His publications have dealt with such topics as financial statement analysis, behavioral approaches to internal control evaluation, behavioral effects of participation budgeting, and the use of heuristics in processing accounting information. Professor Swieringa will be on leave second semester, 1981.

Richard H. Thaler, Ph.D. (Rochester),
Assistant Professor of Economics and Public Administration

Professor Thaler's research has been in applied microeconomics, including such subjects as the value of saving lives, the economics of crime, and the organization of labor markets. He has recently been working on the development of descriptive models of consumer behavior. His teaching interests include microeconomics, public finance, and behavioral decision theory. He spent 1977-78 as a visiting scholar at the National Bureau of Economic Research in Stanford, California.

David A. Thomas, M.B.A., Ph.D. (Michigan),
C.P.A.,
Professor of Accounting

Professor Thomas is interested in cost accounting, accounting for the construction industry, industry cost structures, and philanthropy. He is the author



of several books, monographs, and articles on these subjects. He has worked in public accounting and industry and serves as the administrator of the Charles E. Merrill Trust.

L. Joseph Thomas, Ph.D. (Yale), Professor of Production and Quantitative Analysis
Professor Thomas specializes in the field of operations research. His teaching interests are in the areas of production, inventory, distribution management, and quantitative analysis. His publications have dealt with inventory control, the relationship of production planning to pricing and advertising, and the effect of ruin considerations on capital structure. He has consulted and been involved in management education programs for several companies. His current research interests involve mathematical models for managing complex production-distribution systems.

Karl E. Weick, M.A., Ph.D. (Ohio State), Nicholas H. Noyes Professor of Organizational Behavior and Professor of Psychology
Professor Weick, who specializes in the field of organizational behavior, is a social psychologist. His research interests include process descriptions of organizations, strategies of hypothesis generation, perception of causality, and loosely coupled systems. He has written extensively on the topic of research methodology, with special emphasis on the use of the laboratory as a field site to test and develop organizational theory. He is editor of *Administrative Science Quarterly* and advisory editor of *Contemporary Psychology*. Professor Weick will be on leave during the academic year 1980–81.

Elliott N. Weiss, Ph.D. (Wharton), Assistant Professor of Operations Management
Professor Weiss's research interests are in the application of the methodology and techniques of operations research in the public and private sectors. His recent research has been on the development of a stochastic service network model for capacity planning for progressive patient care hospitals. He is currently developing a regional health care planning model and is interested in multiple-criteria decision making and scheduling models.

William H. Wendel, M.B.A. (Harvard), Visiting Professor and Executive-in-Residence (Enterprise Chair)
Professor Wendel, former president of the Carborundum Company and the Kennecott Copper Corporation, is currently vice chairman of the board of Kennecott and a director of Allegheny Ludlum Industries, Dunlop Tire and Rubber, Marine Midland Bank NA, New York Telephone, and Norfolk and Western Railway.

Associated and Visiting Faculty

William J. Abelow, J.D. (Columbia), Visiting Professor of Labor Relations in the Health Industry

Professor Abelow is the executive vice president and counsel of the League of Voluntary Hospitals and Homes of New York, an organization engaged in collective bargaining on behalf of a large number of hospitals and homes. He is a management labor attorney and serves as vice president of South Nassau Communities Hospital.

Douglas R. Brown, Ph.D. (Syracuse), Coordinator of Health Services Development and Continuing Education

Mr. Brown joined the school after serving in an administrative capacity in several hospitals. He serves as director of the Health Executives Development Program. His research is in the area of hospital administration and health planning. He also serves on a number of health care committees, including the governor's Health Advisory Council.

Theodore E. Chester, C.B.E., J.D. (University of Manchester), Visiting Professor of Comparative Development in Health Services

Professor Chester is particularly concerned with large-scale administration in private and public undertakings, especially regarding the hospital and education services in Britain. He is professor of social administration emeritus at the University of Manchester, England.

Robert W. Daly, M.D. (State University of New York at Syracuse), Visiting Professor of Administrative Medicine
Dr. Daly's interests are in the fields of the philosophy of persons, psychoanalysis, psychopathology, and the history and sociology of psychiatric institutions. He has served as a consultant to the Maxwell School at Syracuse University, the National Library of Medicine, and to numerous social agencies. He is a member of the Board of Consultants of *The Psychoanalytic Review* and was named a fellow of the National Endowment for the Humanities for 1974–75. He is professor of psychiatry at the Upstate Medical Center of the State University of New York at Syracuse (SUNY) and executive director of the Syracuse Consortium for the Cultural Foundations of Medicine — a joint project of LeMoyne College, SUNY Upstate Medical Center, and Syracuse University.

Arch T. Dotson, Ph.D. (Harvard), Professor of Government
Professor Dotson has long experience in problems of public administration and state and local

government. For two years he served as deputy controller of New York State. More recently, as a consultant to the Ford Foundation, the United Nations Development Program, and the Agency for International Development, he has played an active part in development planning in India, Iran, Japan, Malaysia, Jordan, and the Philippines.

Milton J. Esman, Ph.D. (Princeton), John S. Knight Professor of International Studies Professor Esman is interested in development administration, institution building, the relationships of science and technology to national development and to international affairs, and the management of ethnic and racial tensions in plural societies. Professor Esman is also a professor in the Department of Government and serves as director of Cornell's Center for International Studies.

Spencer Johnson, M.P.A. (Cornell), Visiting Professor of Health Policy and Planning Professor Johnson is executive vice president of the Hospital Association of New York State and executive director of the Hospital Education and Research Fund. He is a former staff member of the Senate Human Resources Committee and before that, was associate director for health and welfare of the Domestic Council of the White House.

Peter R. Jutro, Ph.D. (Cornell), Adjunct Associate Professor of Public Policy and Management Professor Jutro's research and teaching interests are in those areas of public policy that have major scientific and technical components, such as environmental, health, urban service delivery, and natural resource legislation and regulation, with an emphasis on the relationship between the public and private sectors. He has worked in the U.S. Congress and is a consultant to international organizations and federal and local governments and agencies. He is currently studying the development of risk analysis methods as potential analytical tools for persons responsible for decision making in scientifically uncertain areas. He is also developing analytical techniques and financial mechanisms for dealing with problems of urban infrastructure decay.

Eugene A. Kaplan, M.D. (State University of New York Upstate Medical Center at Syracuse), Visiting Professor of Administrative Medicine Dr. Kaplan is associate professor of psychiatry, director of the Behavioral Science Program, and codirector of the Undergraduate Education Program in Psychiatry at the State University of New York Upstate Medical Center at Syracuse, where he is responsible for the training of medical students and residents in psychiatry. He has served as a lecturer in psychiatry at the Washington School of Psychiatry and as a consultant for the

Peace Corps. He is currently a consultant to the Hutchings Psychiatric Center, as well as other psychiatric institutions in the Syracuse area. His interests, in addition to psychiatric education, include depression and suicide, problems in psychosexual identity and behavior, and the influence of existential concepts in psychiatric practice.

John E. Kern, M.P.A. (Cornell), Visiting Professor of Health Policy and Planning A professional staff member of the Senate Committee on Finance, Professor Kern is responsible for legislative and oversight activities with respect to Medicare, Medicaid, and national health insurance. Prior to joining the Finance Committee, he was an American Political Science Association congressional fellow and also served as deputy director of the Division of Provider Standards and Certification at the Bureau of Quality Assurance, U.S. Public Health Service.

Cosmo J. LaCosta, M.P.A. (New York University), Visiting Professor of Hospital Administration Mr. LaCosta is an associate director of the New York Hospital. He is active in local, state, and national professional associations in hospital administration and is a member of the Board of Directors of Fordham University. Mr. LaCosta serves as a major contact in the coordination of special programs conducted in New York City, which are designed to provide Sloan students with a practical exposure to hospital administration and an understanding of the problems of health services delivery in major urban areas.

Allyn B. Ley, M.D. (Columbia University College of Physicians and Surgeons), Visiting Professor of Administrative Medicine Dr. Ley is director of Cornell University Health Services and professor of medicine, Cornell University Medical College. He served as chief of staff on the *S.S. Hope*, 1969–70, and was director of ambulatory services, New York Hospital, 1963–69. Dr. Ley has done extensive research on cancer and hematological problems.

David D. Thompson, M.D. (Cornell Medical College),
Visiting Professor of Hospital Administration
Dr. Thompson is the director of the New York Hospital and a professor of medicine at the Cornell Medical College. Among the societies of which he is a member are the American Association of Medical Colleges, the American Public Health Association, the Hospital Administrators Club of New York, and the Society of Medical Administrators.

Frederick Yanni, M.P.A. (Cornell),
Visiting Professor of H.M.O. Development and Management
Professor Yanni is executive vice president of Health Services Medical Corporation, a Syracuse, New York-based health maintenance organization. He is also executive director of Health Services Association, a corporation that operates several ambulatory care centers.

A number of faculty members in other schools and colleges at Cornell have interests closely allied to those of the faculty of the Graduate School of Business and Public Administration. Such relationships exist with the School of Operations Research and Industrial Engineering; the Department of City and Regional Planning; the College of Architecture, Art, and Planning; and the School of Civil and Environmental Engineering.

Close relationships also exist with faculty members in the Departments of Economics, Government, Psychology, and Sociology of the College of Arts and Sciences; and the Department of Agricultural Economics in the College of Agriculture and Life Sciences. Through the courses that associated faculty teach and the committees on which these members serve, the programs of the Graduate School of Business and Public Administration gain an added diversity.

Emeritus Professors

Melvin G. De Chazeau, Ph.D.,
Professor of Business Economics and Policy
Emeritus

Frank F. Gilmore, S.M.,
Professor of Business Administration Emeritus

Albert M. Hillhouse, J.D., Ph.D.,
Professor of Public Finance Emeritus

John G. B. Hutchins, Ph.D.,
Professor of Business History and Transportation
Emeritus

Arthur E. Nilsson, Ph.D.,
Professor of Finance Emeritus

John M. Rathmell, Ph.D.,
Professor of Marketing Emeritus

Curriculum

This section lists and describes the courses offered by B&PA, including those courses offered jointly by B&PA with another school or college on the campus. Students are strongly urged to consult course schedules published by the Office of the Registrar for the most recent information pertaining to courses.

There are many courses in other units of the University — including the Departments of Economics, Government, Psychology, and Sociology in the College of Arts and Sciences, the School of Industrial and Labor Relations, the School of Operations Research and Industrial Engineering in the College of Engineering, and the Department of Agricultural Economics in the College of Agriculture and Life Sciences — that may be of interest. For information on the content of these courses, the student should consult *Cornell University: Description of Courses*.

Note: Brackets surrounding a course description indicate that that course will not be taught in the academic year 1980–81. Any courses mentioned but not described in this publication are described in *Cornell University: Description of Courses*.

Common Core Courses

NCC 500

Managerial Accounting. First semester. Three credits.

In the first part of this course the principles and procedures underlying financial statements are introduced. Financial transactions are studied, and alternative accounting treatments are analyzed. Tools for analysis of financial statements and the uses and limitations of ratios and other quantitative measures are introduced. The second part of the course concentrates on accounting information useful for managerial action. The objective is to develop an ability to recognize the uses and limitations of the accounting information available to management and to apply the information in decision situations.

NCC 501

Quantitative Methods for Management. First semester. Three credits.

This course deals with basic elements of decision making under conditions of uncertainty. Topics discussed include descriptive statistics, probability theory, classical statistics (including an introduction to regression analysis), and statistical (Bayesian) decision theory. Although the course is taught at an introductory level, the student is required to have a limited knowledge of calculus. Students desiring more rigorous coverage of this material may substitute NCE 560 and NCE 561 for NCC 501.

Note: For those students who have had little or no mathematics, B&PA conducts an intensive two-week preparatory course in algebra and calculus in late August and early September each year. For additional information on this program and on other means of meeting the calculus requirement, please refer to page 56 of this catalog.

NCC 502

Economic Principles for Management. First semester. Three credits.

The fundamental concepts and principles of microeconomic and macroeconomic theory are introduced and developed in the context of applications that are relevant for both business and public managers. The course covers the basic elements of consumer demand, production and supply, and of the operation of markets. It also covers the basic elements of national income accounting, the Federal Reserve System, and the determinants of national income, unemployment, and inflation.

NCC 503

Introduction to Computer Programming. First seven weeks of each semester. One and one-half credits.

Students are introduced to computers and computer programming using BASIC, a programming language.

NCC 504

Introduction to Management Information Systems.

Second seven weeks of each semester. One and one-half credits.

This course surveys the design and use of information systems for data management and financial reporting. The basic concepts of computer simulation and modeling are also introduced.

Program Core Courses

M.B.A. Candidates

NBP 500

Marketing Management. Second semester. Three credits.

This is an introductory course designed to acquaint the student with the perspectives and problems of marketing management in a multiproduct firm. Decision processes for product planning, pricing, promotion, distribution, and competitive strategy are discussed in the light of contributions from the social and management sciences. These problems are approached within the framework of the changing environment of the firm. *Prerequisites:* NCC 501 or NCC 502 or permission of the instructor. *Required for M.B.A.*

NBP 501

Production and Operations Management. First and second semesters. Three credits.

This course introduces major economic decision problems of production and operations management: aggregate production and work-force scheduling, multiplant allocation of product, large-scale project control (PERT), production and inventory control, demand forecasting, quality control, and short-run, job-shop scheduling. Problems are analyzed through the use of traditional intuitive rules, schematic methods, incremental analysis, differential and integral calculus, linear programming, computer simulation, heuristic programming, and critical path methods. Emphasis is placed on the effectiveness and the limitations of quantitative techniques in the decision-making process.

The interaction of production problems with those of other functional areas is also considered. *Prerequisites:* NCC 501, NCC 503, and NCC 504; or the equivalent. *Required for M.B.A.*

NBP 502

Managerial Finance. First and second semesters. Three credits.

The student is introduced to the principles and practices of business finance by developing theory and analyzing cases applying that theory. The first section of the course deals with the capital-budgeting decision, the analysis of financial information, and the problems of managing and financing short-term assets. The following section considers the cost of different long-term financing instruments and the effect of the mix of these securities employed on the entity's cost of capital. The interaction between the financing and investment decision is then explored. Other topics covered are dividend policy and the capital asset pricing model. *Prerequisites:* NCC 500 and NCC 501 or the equivalent. *Required for M.B.A.*

NBP 503

Business Policy. First semester. Three credits.

This course is designed to ease the transition from the university to the business world. It is intended primarily for students who want to make this transition either by starting their own firms or by assuming a line management role in a small, innovative company. However, the principles covered are applicable to all business policy decisions regardless of the size of the firm. The course is built upon a combination of Harvard cases; current problems presented by business executives; discussions with representatives from regulatory, legal, financial, and other relevant professions; and background lectures by the instructor. Emphasis is placed on the student's ability to take positive action and to use his or her M.B.A. training to the best comparative advantage. *Prerequisites:* NBP 500, NBP 501, and NBP 502. Only students registered in B&PA may take this course. *Required for M.B.A. Note:* In 1980–81 NBA 563 or NPP 502 may be substituted for NBP 503.

NBP 504

Introduction to the Business-Government Interface. First semester. One credit.

The purpose of this course is to explore the influence of the economic, social, and legal environments on business, public, and social service organizations. The characteristics of existing economic and political institutions are examined. Other points for investigation are how institutional interactions and social concerns shape or constrain choices, and how current changes in attitudes, values, and institutions may affect the future environment for administrative decision making. *Required for M.B.A. Note:* In 1980–81 NPP 502 may be substituted for NBP 504.

M.P.A. Candidates

NPP 500

Economic Foundations of Public Policy. First semester. Three credits.

This course is designed to be taken concurrently with NCC 502. It examines the aspects of economic theory that are particularly relevant to government activity.

Current public policy questions are emphasized as applications of the tools of economic analyses. Theoretical topics include welfare economics, externalities and property rights, models of government and bureaucracy, social choice, taxation, regulation, and macroeconomic policy. *Required for M.P.A.*

NPP 501

Public Financial Management. Second semester. Two credits.

This course extends and applies many of the concepts examined in NBP 502 Managerial Finance. In the first part of the course major emphasis is placed, through case studies, on cost-benefit analysis, the measurement of social benefits, and the choice of a discount rate in public decision-making analysis. The second part of the course deals with public (fund) accounting and reporting. The third part is directed toward various state and local financial problems such as debt ratings, debt management, budgeting, cash management, cost controls, and pension fund management. *Required for M.P.A.*

NPP 502

Policy Considerations: The Business-Government Interface. First semester. Three credits.

This course deals with the formulation and implementation of public policies on major issues from the perspective of officials responsible for deciding the issue in question, of the business executive whose activities are influenced by that issue, and of the general public. These often conflicting, and sometimes complementary, viewpoints are examined for their significance in achieving consensus on a given question. This course requires the students' active and imaginative participation. They may be asked to develop position papers for their constituencies and to argue their positions; to formulate strategies and tactics to ensure "proper" resolution of policy debates; or to develop comprehensive programs to ensure effective implementation of policies already established. Written and live cases, mock hearings, and debates as well as written presentations are employed. *Required for M.P.A.*

NPP 503

The Conduct of Public Affairs. Second semester. Three credits.

This course develops an understanding of the complex and value-loaded environment in which public officials apply their particular combinations of policy knowledge, analytical skills, and operating abilities. This understanding heightens the sensitivity of each student to the vitality and significance of public affairs. Although designed primarily for the future public official, it can also serve the needs of the future business executive anticipating extensive association with government officials. Course analysis focuses on three major relationships operating at all levels of government: (1) between legislators, political executives, bureaucrats, and judges; (2) between federal, state, local, and international bodies; and (3) between professional experts serving in advisory or administrative capacities and operating officials exercising program responsibilities. These relationships are examined in the decision-making context in which they operate, that is, policy formulation, planning and program development, resource allocation, program implementation, and program evaluation. The processes, cooperative-competitive interaction, and

outcomes of public decision making are analyzed and compared as reflections of particular program factors. Specific attention is given to the organization and reorganization of public bureaucracies. Each student selects a particular public program — such as some aspect of natural resource development, provision of welfare services, or regulation of private sector activity — as his or her vehicle for analyzing the relationships inherent in public decision making. Examination of selected readings is complemented by case discussion, preparation of three short papers or memoranda, and student presentations. *Required for M.P.A.*

M.P.S. (H.H.S.A.) Candidates

NHP 500

Introduction to Hospital and Medical Care Organization. First semester. Three credits.

Health services are described and analyzed in the context of recent political, social, and economic developments. For purposes of organization and understanding of the forces for change, health services are viewed as a social system — the Medical Care System. Alternative methods of organizing and financing health care services are examined in an effort to evaluate the capacity of the medical care system to respond to pressures generated by changing disease patterns, rising expectations for medical care, and economic imperatives of medical science and technology. The roles and responsibilities of various institutions and professional groups are examined, with particular emphasis on the hospital as the central institution in the provision of community medical care. The process of community planning for health and welfare services is studied, and the relationship of the hospital to that process is analyzed. *Required for all hospital and health services students regardless of degree choice.*

Elective Courses

Business Administration Program

Accounting

NBA 500

Intermediate Accounting. First and second semesters. Three credits each semester.

This course is intended to motivate and facilitate students' learning of the concepts and terminology that are essential to an understanding of financial accounting and financial statements. Relatively brief cases drawn from or based on actual corporate financial reports are used to enhance students' understanding of how accounting information is collected, adjusted, or modified and presented to investors and others; their understanding of and ability to critically evaluate published financial statements; and their obtaining of a practical working mastery of these concepts and terminology. *Prerequisite:* NCC 500 or equivalent.

NBA 501**Advanced Accounting.** Second semester. Three credits.

This course, a continuation of NBA 500, also deals with advanced topics of financial accounting. Among the specialized situations covered are consolidated statements, multinational operations, fund accounting, and bankruptcy. The student is encouraged to develop an ability to cope with a variety of situations requiring evaluation and reporting of financial results. *Prerequisite:* NBA 500 or permission of the instructor.

NBA 502**Cost Accounting.** First and second semesters.

Three credits each semester.

This course concentrates on the controller's function in the decision-making process. The course is specifically designed for those who will either be responsible for the cost records of an organization or who will use the data for decision making. Topics discussed include the budgeting process, accumulating costs for product costing, standard costs, the analysis of cost variances, cost estimation and prediction, cost-price-volume decisions, performance measurement, nonmanufacturing cost analysis, joint-cost problems, and transfer pricing. *Prerequisites:* NCC 500, NCC 501, and NCC 502 or their equivalent.

NBA 504**Introduction to Taxation Affecting Business and Personal Decision Making.** Second semester. Three credits.

This course deals with both state and federal taxation and their impact on business and personal decision making. After a brief discussion of tax policy and state and local taxes, an in-depth examination is conducted of federal income and estate and gift taxes affecting individuals and businesses. Both tax management and tax reporting are stressed. *Prerequisite:* one course in accounting.

NBA 505**Auditing.** Second semester. Three credits.

This course is designed for the student interested in a career in public accounting or wishing to fulfill the New York State requirements for the Certified Public Accountancy concentration. A detailed and comprehensive practice audit set, problems, and cases focus on the auditing profession, the audit process, and audit reports.

NBA 506**Financial Information Evaluation.** First and second semesters. Three credits.

This course focuses on issues of accounting information evaluation, with special emphasis on the use of financial statements by decision makers outside the firm. The implications of recent research in finance and accounting for external reporting issues will be explored. Emphasis will be placed on a rigorous development of the models that describe the user's decision context. Recent empirical research on the usefulness of financial statement data is also discussed. The research investigates the predictive ability of financial statement data in several decision contexts, such as solvency

determination, value of the firm, security returns, security risk, and dividend policy. *Prerequisites:* NBP 502 and concurrent enrollment in NBA 500 or permission of the instructor.

NBA 507**Federal Income Tax.** First semester. Three credits.

Federal taxation of both personal and corporate income is examined. The intent is to develop an understanding of the essential provisions affecting tax liability and thus taxpayer decision making and planning. Illustrative tax provisions are traced to the Internal Revenue Code and Tax Court decisions. Consideration is given to the structuring of business activity to minimize income tax liability. Current legislation is used to illustrate the legislative process. The Internal Revenue Code is viewed as a tool of economic and social policy as well as a source of revenue. *Prerequisite:* one course in accounting.

[NBA 508]**Advanced Cost Accounting.** Three credits. Not offered in 1980–81.

This course provides in-depth coverage of selected topics in managerial cost accounting and focuses on the economic evaluation of accounting information produced for decision making in the organization. The development of a general structure for evaluating internal accounting information precedes a consideration of specific topics, such as transfer pricing, cost variance analysis, cost allocation, profit planning, budgeting, and performance evaluation. Current trends in managerial cost accounting research are discussed with a view toward assessing their relevance for practicing accountants and other decision makers. *Prerequisite:* NBA 502.]

Business Law**NBA 510****Law of Business Associations.** First semester. Four credits.

This course is an introduction to the basic purposes and logic of the law as they apply to business enterprises and their operations. The fields of personal property, contracts, agency, partnerships, corporations, and real property are emphasized. A combination of text and case study is used. The course is required of all students in professional accounting and is strongly recommended for students whose area of specialization is finance.

NBA 511**Advanced Business Law.** Second semester. Four credits.

This course considers the law pertaining to bailments, sales, secured transactions, bankruptcy, negotiable instruments, insurance, and trusts and estates. Both text and case materials are employed. *Prerequisite:* NBA 510 or permission of the instructor.

NBA 513**An Introduction to Estate Planning.** Second semester. One credit.

This course consists of fourteen sessions on the various aspects of estate-planning techniques. The law and use of trusts, the law of wills, federal and New York estate and gift taxes, and probate procedures are covered. This course cannot be taken by students enrolled in, or who have taken, NBA 511.

Finance

NBA 514

Financial Policy Decisions. First semester. Three credits. This course deals with quantitative decision models for different types of financing methods, starting with leases and different types of bonds and proceeding to preferred stock and convertible securities. The topics covered include common stock, capital structure decisions and cost of capital, dividend policy, mergers, and acquisitions. The decision models are developed from the point of view of the issuing firm, with consideration given to the investor's viewpoint. Also included are leverage, bond refunding, and the term-structure of interest rates. A combination of lecture, discussion, and cases is used. *Prerequisite:* open to second-year students who have had basic accounting, statistics, and finance.

[NBA 516]

Investment Management. Three credits. Not offered in 1980–81.

This course emphasizes portfolio theory, performance measurement, fundamental and technical security analysis, risk analysis, and security price information. The focus of the course is on the application of financial theory, economics, management science, and information systems to the investment management process. A variety of quantitative techniques will be surveyed. The viewpoint assumed is that of an investment management organization. *Prerequisites:* NCC 500, NCC 501, NCC 503, NCC 504, NBP 502, and NBA 521.]

NBA 518

Financial Markets and Institutions. First semester. Three credits.

This course develops a unified framework for understanding financial intermediation. The course objectives are to analyze the sources, uses, and pricing of funds in the economy; to develop the theory of commercial banking; to investigate the similarities between commercial banks and other financial intermediaries; and to analyze how central bank operations affect commercial banks. The use of quantitative techniques for modeling economic theory is stressed.

NBA 519

Seminar in Bank Management. Second semester. Three credits.

This course is designed for the person who plans a career in banking or corporate financial management. Topics covered include loan pricing, bond portfolio management, international banking, people in banking, and career planning. The format of the course is an integrated combination of lectures, visits by bankers, case studies, seminar discussions, and a bank management simulation. *Prerequisites:* NBP 500, NBP 501, NBP 502, NBP 503, and NBA 518 or permission of the instructor.

NBA 521

Finance Theory. First and second semesters. Three credits.

The course provides the theoretical background for advanced work in finance. Topics include the theory of allocation of wealth and the role of financial markets under conditions of certainty. The students then consider financial decisions under conditions of uncertainty. The uncertainty models studied include utility and portfolio

theory, the capital asset pricing model, the option pricing model, and the state preference model. This course is recommended for finance majors. *Prerequisite:* NBP 502.

Note: Students interested in finance should also consider the following courses in the school:

NBA 504

Introduction to Taxation Affecting Business and Personal Decision Making

NBA 506

Financial Information Evaluation

NBA 510

Law of Business Associations

NBA 511

Advanced Business Law

NBA 513

An Introduction to Estate Planning

NCE 505

International Trade and Finance

NCE 524

Economic Evaluation of Capital Investment Projects

[NBA 523]

Topics in International Financial Management.

Three credits. Not offered in 1980–81.

This seminar considers several problems related to international financial management. The viewpoint is that of an executive in a multinational corporation. Topics for discussion include the foreign exchange market, the Eurocurrency market, exchange risk, exposure management, and international cash management. Other topics based on the interests of the participants are explored, time permitting. *Prerequisites:* NBA 516 (concurrent enrollment permitted) and NCE 505 or permission of the instructor.]

NBA 524

Options, Bonds, and Commodities. Second semester. Three credits.

The creation of the Chicago Board Options Exchange and recent academic developments have made the study of options a subject of increasing importance in the field of finance. The main emphasis in this course is on understanding the use and behavior of puts and calls. Consideration is given to the classification of convertible assets, hedging versus diversification, arbitrage conditions, and the derivation of an exact pricing formula. Attention is then turned to the effect of market imperfections, the results of empirical investigations, and the nature of institutional constraints. There is also a brief introduction to the investment aspects of bonds and commodity futures. *Prerequisites:* NBA 516 and NBA 521 or permission of the instructor.

NBA 525

Investment Banking. Second semester. Three credits.

This course develops the analytic basis for investment banking. Guest speakers and case studies give institutional applications for the material developed in the course. *Prerequisites:* NBA 514 and NBA 521 or permission of the instructor.

NBA 541**Marketing Research.** First semester. Four credits.

Marketing research is concerned with the identification of information needs for marketing decisions and the subsequent data collection, analysis, and reporting techniques appropriate for various areas of application. Techniques include sampling, questionnaire design, experimentation, scaling, conjoint measurement, and multivariate data analysis. As part of the course requirements, groups of students conduct empirical studies on typical marketing research problems. *Prerequisites:* NCC 501 and NBP 500 or permission of the instructor.

[NBA 542**Advertising Management.** Three credits. Not offered in 1980–81.

This course is designed to develop the student's ability to understand the communications process, to recognize advertising opportunities, to determine goals, to allocate advertising effort through the most efficient media, and to evaluate the effectiveness of this effort. Since this is a course in strategy, not tactics, discussions of copy, layout, art, and typography are omitted. Reading assignments stressing concepts and methodology are followed by cases that provide an opportunity for application of advertising principles. The course includes discussion of the consumer's behavior, the regulation of advertising, social and economic effects, advertising experimentation, and models. *Prerequisite:* NBP 500 or permission of the instructor.]

NBA 543**Marketing Strategy.** Second semester. Three credits.

This course provides a balance between theoretical and practical approaches to strategic planning for marketing decisions. Marketing policy areas and market conditions are analyzed in depth in the lectures. Case analyses and guest speakers from industry provide a view of the operational aspects of marketing strategy. Student teams work on strategy projects applied to actual firms. *Prerequisite:* second-year standing or permission of the instructor.

NBA 544**Seminar in Marketing Planning: Topics and Cases.** Second semester. Two credits.

This course is a second-level course in marketing planning and strategy development. Selected topics are discussed through analyses of published cases and of cases from industry. Students are required to make professional presentations (oral and written) of their case analyses. *Prerequisite:* NBP 500 or permission of the instructor.

[NBA 545**Management of Marketing Intermediaries.** Two credits. Not offered in 1980–81.

This course covers three broad topics: (1) study of conventional marketing systems and institutions; (2) design of normative marketing systems and channels; and (3) management of the marketing channel. Practical applications of models in the marketing literature, lectures, and readings are combined to help identify fundamental issues in distribution management. *Prerequisite:* NCC 502, NBP 500, or permission of the instructor.]

NBA 546**Marketing Decision Models.** Second semester. Three or four credits.

This course is directed to several topics in the application of management and behavioral science models to marketing problems. Principal emphases are placed on understanding the nature and complexity of marketing decisions, structuring marketing problems into analytical models, and evaluating the utility of existing models and their implementation. The course covers models in the four principal decision areas: product, pricing, promotion, and distribution. In addition, models of consumer choice will be discussed. *Prerequisite:* NBP 500 and NCC 501 or permission of the instructor.

NBA 547**Demand Analysis and Consumer Behavior.** First semester. Three credits.

Planning for change in business and other organizations requires an understanding of the determinants of demand for goods and services. This course provides a multidisciplinary approach for demand analysis by applying concepts and models from the behavioral sciences and economics. Examples include the demand for transportation, energy, and health care services, as well as industrial and consumer goods. Students are required to design a demand analysis study. *Prerequisite:* NBP 500 or permission of the instructor.

[NBA 548**Industrial Marketing.** Two or three credits. Not offered in 1980–81.

This course focuses on problems facing marketers of industrial goods and services. The topics include processes of industrial buying, forecasting of demand, prices and technology in markets for industrial products, management of the sales force, product design, pricing strategy, selection of distribution channels, and methods of communication. Lectures and case discussions are combined to identify the issues facing industrial marketers and to develop analytical approaches toward resolving them. *Prerequisite:* NBP 500 or permission of the instructor.]

NBA 550**Special Topics in Marketing Management.** Second semester. One, two, or three credits, depending on topic.

This course is devoted to an in-depth examination of one selected topic in marketing. The topic varies from year to year. Some possible topics are stochastic models of consumer choice, interrelationships among functional areas in a corporation, new-product demand forecasting, product policy, international marketing, and public policy and regulation. *Prerequisite:* permission of instructor.

[NBA 551**Topics in Consumer Behavior.** Three credits. Not offered in 1980–81.

This course discusses selected topics in the field of consumer behavior, as they apply to marketing management. Current research in the behavioral sciences is introduced as an aid to considering various issues in the field. Students work in teams on applied cases and present their analyses. In addition they work individually on semester projects or research papers. *Prerequisite:* NBP 500 or permission of the instructor.]

NBA 552

Seminar in Current Research in Marketing. First and second semesters. No credit.

This seminar reviews and appraises selected trends in current research in marketing. While topics may vary from year to year, they generally include stochastic models of choice behavior, advances in behavioral theories of marketing, public-policy-oriented marketing research, advances in methods of analysis of marketing data, and multidimensional scaling and measurement. The seminar is directed toward doctoral and advanced master's degree students. Various faculty members also participate in the discussions.

[NBA 553]

Product Management and Policy. Two credits. Not offered in 1980–81.

This is a second-level course that identifies and discusses the issues in the management of new-product programs and product policies in corporations. Topics such as importance of new products to a company's growth and viability, methods for identifying new-product opportunities, product positioning, product portfolio concepts, and legal and organizational problems involved in management of new products are covered.]

NBA 554

Advertising Practicum. Second semester. One credit.

This course is designed to present the practice of advertising for products and services from the viewpoint of an advertising agency. The sessions cover such topics as setting advertising objectives, creative strategy and development, copy strategy and testing, media planning, evaluation of advertising campaigns, and relationships among media, agency, and client organizations.

Production and Operations Management**NBA 560**

Production Management. First semester. Three credits.

Major economic decisions in management of productive systems are studied, such as process and equipment selection and replacement; materials handling; production scheduling, including MRP (material requirements planning); capacity planning; organization and scheduling of job shops; and quality control. Cases are used to illustrate the problem areas and the managerial issues surrounding them. Management science techniques such as mathematical programming, simulation, and queuing theory are used as needed, and the capabilities and limitations of these tools are discussed from the viewpoint of management.

Prerequisite: NBP 501 or permission of the instructor.

[NBA 561]

Case Studies in Production and Operations

Management. Three credits. Not offered in 1980–81.

Case studies illustrating decision problems in production and operations management are analyzed with the use of techniques studied in prerequisite courses. Areas covered include aggregate scheduling, job-shop scheduling, equipment replacement, inventory and production control, and plant size and location. Students have team responsibilities for case analysis and presentation. Emphasis is placed on awareness and resolution of difficulties encountered when one attempts to apply

theoretical models to actual decision situations.

Prerequisite: NBP 501 or NBA 560 or permission of the instructor.]

NBA 562

Business Logistics Management. Second semester. Three credits.

Business Logistics Management deals with moving materials to a productive facility, controlling the transformation of these materials into products, and distributing the products to customers. Topics include plant and warehouse location, selection of channels of distribution and modes of transportation, management of overall material flow, management of large-scale inventory systems, and organizational structure. Case studies constitute one-third to one-half of the class sessions; cases are selected to represent different industries, situations, and use (or nonuse) of quantitative methods. Emphasis is placed on oral and written communication in the class; each individual has several chances to present an analysis of managerial problems.

Prerequisite: NBP 501 or permission of the instructor.

Note: Students interested in this field may also elect NCE 562 Operations Research I and NCE 563 Operations Research II.

NBA 563

Strategic Management. First semester. Three credits.

This course is concerned with the functions and responsibilities of the general manager and of top management in setting long-term objectives and charting courses of action to reach the objectives. Strategic management is applicable to the total corporation as well as to its components. It integrates the expertise of specialists and differentiates between strategy and management control. It is as concerned with forces external to the corporation as it is with internal strengths and weaknesses. This course uses Harvard business policy cases, lectures, and visiting executives.

Public Administration Program**NPA 500**

Urban Government Operations. First semester. Three credits.

This elective course is designed for graduate students in public administration and related disciplines and for qualified upperclass undergraduates who are preparing for involvement in urban affairs at national, state, and local levels, with private as well as public organizations. Its focus is on the managerial responses that elected and appointed officials make to the opportunities and problems that face the urban community. Through examination of interacting substantive and political managerial issues, it attempts to develop the student's knowledge and convictions regarding government leadership, systems analysis, planning and evaluation, urban bureaucracy, and resource development and allocations, as well as metrogovernment reorganization.

NPA 504

Science, Technology, and Public Policy (also Government 426). Second semester. Four credits.

This course reviews the major trends, issues, and implications of public policies that support scientific research and technological innovation. The readings and

class sessions are intended to give a historical overview of government's role in science and technology and to examine the mechanisms of public support, the organization of policy making in science, the role of scientists and conventional politics in science policy, and the impact of public policy on university research and industrial research and development (R&D). Issues specific to several sectors of R&D policy — defense, energy, biomedical research, and foreign affairs — are covered.

NPA 507–508

Integrative Seminar: Education for Public Management Program I and II. First and second semesters. Three credits each semester.

This seminar is designed primarily for the participants in the Education for Public Management Program (EPM). It attempts to increase the participants' understanding of, and convictions regarding, the interaction of policy, politics, and administration. The subject matter of the seminar is adapted to the interests of the particular EPM group and to the nature of the individual study programs. The seminar participants may consider not only specific policy and administrative topics but also such fundamental government and social phenomena as individual freedom, impact of mass media, radicalism and dissent, executive-legislative relations, and intergovernmental cooperation. Readings from a wide range of sources complement oral and written presentations and discussions with practitioners and academicians from other parts of the University.

NPA 512

Seminar in Public Systems Analysis. Second semester. Three credits.

Organized around significant problems of society, the subject matter in this seminar is different from year to year and involves a mix of technological, social, economic, and political considerations. Projects involving team efforts are emphasized and generally directed toward issues of urgent current interest. The course is closely coupled with some public agency that is interested in the results of the activity. Each course is organized around recognition of needs, problem definition, information gathering, formulation of alternate solutions, hypothesis testing, design, and evaluation. Typical problems could be from such areas as environmental quality, health care, urban service provision, or transportation. Small groups work on the problem, using a broad range of problem-solving techniques. Problem solutions may include the design of

a new institution, the preparation of a draft of new legislation, or recommendations for alleviation of particularly problematic situations. The study can also include follow-up information systems for evaluation, correction, control, and implementation. Project activity culminates with the presentation of the students' results in a formal document and presentation to the interested public or private body.

NPA 515

The Politics of Technical Decisions I (also CRP 533 and Government 629). First semester. Four credits.

This interdisciplinary seminar focuses on the increasingly significant role played by technical experts in formulating and implementing public policy decisions. The class examines the sources and characteristics of "the myth of technique," the changes in political structures and public attitudes that have accompanied the growth of expertise, and the diverse consequences of these developments on the quality of life and the democratic process in industrial societies. In the final section of the course, several alternatives to current decision-making procedures are explored.

NPA 516

The Politics of Technical Decisions II. Second semester. Four credits.

This research seminar in public policy builds directly on the material covered in NPA 515. Attention is focused on questions of public participation in policies for science and technology. Students are required to develop individual or group research projects focusing on specific cases. *Prerequisite:* NPA 515 or permission of the instructor.

NPA 520

Legal Process (also Civil and Environmental Engineering B614). Second semester. Four credits.

This course is an introduction to the structure and operation of the United States legal system, using the development of legal analysis and basic legal research skills.

[NPA 521

Energy and Public Policy. Three credits. Not offered in 1980–81.

This course deals with public policy, economic policy, and finance in energy-producing and energy-using industries. The use of analytical techniques, political constraints, and organizational realities is investigated, as they affect energy pricing, production, investment, and distribution decisions.]

[NPA 522

Issues in Energy Policy. Two credit hours. Not offered in 1980–81.

Major topics in energy policy are examined and discussed, such as the development of synthetic fuels, solar power, and coal. This course may not be taken for credit if the student has taken NPA 521 Energy and Public Policy.]

Hospital and Health Services Administration Program

Note: NHP 500 is a prerequisite to all one-credit NHA courses.

NHA 500

Social Psychology of Health Organizations. Second semester. Three credits.

This course provides an introduction to the major issues and problem areas in health care that have important sociological and psychological dimensions. Areas covered are social, cultural, and psychological factors in illness; the use of health services; the education of physicians; professionalization in medicine and issues of control; the patient-provider relationship; strategies for improving the patient-provider relationship; chronic and terminally ill patients; mental illness; quality of care in health organizations; the bureaucratic organization of hospitals; health and social priorities; and strategies for health care reform.

NHA 501

Hospital Corporate Planning. First semester. Three credits.

The course is designed for students interested in the hospital planning process who may be pursuing careers in hospital management or health planning. It attempts to apply and develop the students' knowledge, skills, and analytical abilities regarding the planning and delivery of health services at the institutional level. The main focus of the course is on the corporate planning process in hospitals and the interface with community, regional, and state health planning. The corporate planning process is viewed as an essential part of the management responsibility, a continuing action-oriented endeavor that enables the organization to cope with change and meet community health care needs. The course begins with an overview of area health planning and the implications for hospital planning. Organizational and technical requirements of the corporate planning process are emphasized, as well as the human-political dimensions of program planning and implementation. Preparation of a hospital planning proposal by the student helps to focus and synthesize the course sessions and materials.

NHA 502

Psychiatric Institutions: Administration and Practice. Second semester. Three credits.

The purpose of this course is to review with the student the current perceptions of, and prescriptions for, psychiatric problems. This is accomplished by an explication of the histories and philosophies of the care and cure of patients, an exposition of clinical syndromes, and an examination of the contemporary forms of treatment and practice in their institutional settings — the mental hospital (public and private), psychiatric units in general hospitals, outpatient clinics, private practice, community mental health centers, and programs of prevention. The contributions of diverse sciences, technologies, and arts to the organization of theory and practice are emphasized throughout the course.

NHA 503

Primary Health Care Services: Policy and Planning.

Second semester. Three credits.

The aim of the course is to provide future administrators, planners, and researchers with an introduction to social theory and research useful for the planning and delivery of noninstitutional health services. Primary care is viewed as having little in common with hospital-oriented medicine, and the implications for manpower training and the organization of services and referral systems are discussed. Major foci involve (a) the goals and principles of regional health planning; (b) the role of cultural, social, and psychological factors in the initiation and use of first-contact health services; (c) unresolved issues in the organization of primary care services; (d) the potential of health education for changing harmful life styles and for promoting greater self-responsibility for health maintenance; and (e) community organization and decision making. Among the specific topics covered are the limitations of formal theories and methods for coping with current realities in policy making and planning; disease and its interpretation; sick role theory; health education; community power structure theory; consumer participation; and models of social change. Developments and issues in England, Sweden, and the Union of Soviet Socialist Republics are described, to provide a perspective of alternatives and trends relevant to the future of first-contact medicine and areawide health planning in the United States.

NHA 504

Legal Aspects of Hospital Administration. First semester. Three credits.

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

NHA 505

Health Services Research and Evaluation. Second semester. Three credits.

The course is a critical survey of the research tools applicable to program evaluation in health and public settings. Topics include a review of basic issues in evaluation research; research design; problems of measurement; sampling; analysis of data; and the implications of evaluation research for health and social program planning.

NHA 506

Health Economics. First semester. Three credits.

This course addresses a broad range of health care issues from an economic perspective. The issues are grouped into three major sections: the demand for health care, the supply of health care, and government health care programs. In the first section, the influences of income, price, insurance coverage, need, and other variables on medical care consumption are considered. In the second section, the relationships among supply and price of

medical care, input productivities, factor markets, and incentives are analyzed. The final section brings together the demand and supply relationships and the theory of government activity, in order to address the question of the role for the government in the health care arena.

NHA 507

Health and Welfare Policy. First semester. Four credits.

The major objectives of this course are the identification and analysis of salient ideological currents influencing the development of social policy in the United States and the construction of a framework for understanding and coping with complex policy issues. Health and welfare issues are seen as reflecting alternate solutions to the broader institutional problems of allocation (economics), control (politics), and normative behavior (morality). Because it serves to establish goal parameters and means of goal attainment, ideology is viewed as the mainspring force of institutionalized systems for the provision of health and welfare services. The basic tenet of the course is that health and welfare policy is deeply rooted in the value system of society. The development of interdisciplinary approaches to explain underlying assumptions and an analysis of the consequences of policy alternatives are key aims of the course.

NHA 508

Health Maintenance Organization Development and Management. Second semester. One credit.

The major goal of this course is to provide students with a conceptual framework for understanding the role of prepaid group practice in today's health economy and to provide practical field experience in the planning, development, and operation of health maintenance organizations.

NHA 509

Health Operations Management and Planning.

Second semester. Three credits.

The course examines operational problems in the areas of hospital administration and health planning. This includes project planning, patient-load forecasting and scheduling, facility staffing, quality control, inventory control, and regional allocation of health care resources. There is an emphasis on quantitative methods of addressing these problems. The goal is to supply the student with the rudiments of a few skills that are widely used and to instill an understanding of the language, applications, and limitations of quantitative models. For the more quantitatively oriented student, a deeper study of mathematics is encouraged through extra assignments and readings. *Prerequisites:* NCC 501 or the equivalent.

NHA 510

Seminar in Hospital Governance and Decision Making. Second semester. Three credits.

Designed as an integrating "capstone" seminar for second-year students interested in hospital and health services administration, the course focuses on management decision making and attempts to develop the students' problem-solving and written skills through the analysis of cases. A number of major themes are explored, such as hospital objectives, governance and corporate structure, medical staff relationships, organizational change, motivation and behavior, coordination and control processes, group dynamics, and executive leadership.

NHA 511

Field Studies in Health Administration and Planning.

First and second semesters. Variable credit.

Students interested in developing administrative and program planning research skills are given an opportunity to evaluate an ongoing phase of health care agency activity in the light of sound administrative practice and principles of good medical care. In planning and carrying out the research, students work closely with a skilled practicing administrator and with B&PA faculty.

[NHA 513]

Long-Term Care Services: Policy and Planning. Three credits. Not offered in 1980–81.

The course describes and analyzes the relationship between personal health services (somatic and mental) and personal social services (social work, home help, and residential and custodial services) in the light of new policy directions in long-term care for the clinically ill and the aged. These policy directions include the dehospitalization of treatment of the long-term ill in nursing homes and mental hospitals; the redistribution of resources from high-technology, hospital-based services to low-technology, community-based services; and the revival of primary care. Among the underlying factors considered are the aging of the population, changing disease patterns, and the cost effectiveness of modern medical technology. Major emphasis is also given to the political and administrative constraints that condition the opportunities for effective program coordination and planning between health and social services. The experiences of other highly developed countries (Sweden, Finland, Great Britain, and the Union of Soviet Socialist Republics) are considered, to help illuminate policy and planning options in the United States with respect to long-term care and community-based health and social support services.]

NHA 514

Washington Health Policy Field Seminar. Intersession between first and second semesters. One credit.

This seminar involves fieldwork undertaken in Washington, D.C. Before going to Washington, students must complete a selection of readings, including background information on the structure and functioning of organizations involved in formulating health policy, as well as information on pending health legislation and actions. The time spent in Washington is allocated to a series of meetings and seminars with members of Congress and staff serving on important health committees; spokespersons for key professional lobby groups such as the American Hospital Association and American Medical Association; consumer interest groups; high-ranking health officials representing the administration; and program administrators in HEW. Upon returning to campus, students are required to complete a paper integrating the background material and the field exposure within the framework of a policy analysis. *Prerequisite:* NHP 500 or permission of the instructor.

NHA 515

Orientation to Tertiary Hospital Services. Intersession between first and second semesters. One credit.

This seminar is taught and coordinated by the director and assistant director of the New York Hospital—Cornell Medical Center in New York City. The seminar

provides students with an exposure to hospital and health management practice, both at the institutional level and at the community level. An opportunity is also provided to acquire some insight into the problems of health services planning and delivery in major metropolitan areas, based on visits with New York City health officials and visits to, among others, neighborhood health centers, methadone treatment clinics, and municipal hospitals. Before the end of the first semester, a list of readings is distributed to prepare students for the seminar and field visits. Upon returning to the campus, students are required to complete a paper integrating classroom instruction in management and planning theory with the field experiences. *Prerequisite:* NHP 500 or permission of the instructor.

NHA 516
Selected Topics in the Administration of Teaching Hospitals. Intercession between first and second semesters. One credit.

As a follow-up to NHA 515, the New York Hospital provides a second week of in-depth study of specific issues in managing a large teaching hospital: ambulatory care, facility planning and project management, finance, inpatient services, patient representation, and risk management. The week's focus on specific issues requires selection in advance of the students and their general areas of interest. Approximately five students attend, and they are assigned an adviser, determined by the issue they choose and the approval of the course instructor. A short bibliography and reading material appropriate to the selected issue are starting points for the week's work. The student meets daily with the course instructor for tutorials. Students are evaluated on their thoroughness in researching the issue and quality of participation in the daily conferences. A capsule summary is presented at the end of the course to the hospital director.

NHA 517
Introduction to Clinical Medicine: The Physician, the Hospital, and the Delivery of Medical Care. Second semester. Two credits.

The principal aim of this course is to give insights into the rationales and attitudes of physicians in regard to medical practices. Initially, principles of epidemiology are presented, both as a background for understanding trends and goals in health care and as a means of introducing clinical orientation and methods. Attention is then focused on the training and acculturation of physicians. The roles and interrelationships of generalists, specialists, and allied health personnel are discussed. The scientific and technological bases for medical care are evaluated. Finally, the relationships between physicians and administrators are examined.

NHA 518
Financial Management of Hospitals. Second semester. Three credits.

The purpose of this course is to give the student a solid understanding of the financial aspects of managing a health care facility. The course begins with a look at the particular types of financial information used in a hospital. Next, the various methods of cost analysis are covered, followed by an analysis of reimbursement from third-party payers and rate-setting techniques. The last part of the course addresses the topics of working-capital management, budgeting, and capital financing in hospitals.

NHA 519
International Comparisons of Health Services. Second semester. One credit.

This course covers the trends in health services management in Western Europe, in order to improve students' understanding of contemporary United States health care delivery issues, together with alternative solutions to problems involving the organization and management of hospital and related health services.

NHA 520
Labor Relations in the Health Industry. Second semester. One credit.

This course provides an overview of the major topics and current issues of unionization in the health industry. It emphasizes a practical, direct approach to dealing with union organizing and elections, collective bargaining, strikes, and labor contract administration in the health industry. The history of unionization in the field and an analysis of applicable laws are covered. Particular emphasis is placed on the role of government and other regulatory agencies in the negotiation process. Students work with current actual cases and materials. Appropriate films and guest speakers are also used. A short research paper on one of the topics covered in the course is required.

NHA 521
State Government Health Policy Seminar. Spring recess. One credit.

This in-field seminar provides students with the opportunity to gain firsthand knowledge of the formation of health policy at the state level. A series of meetings are arranged with members of the legislature, officials of state agencies such as the departments of health and mental hygiene, and representatives of key lobby groups. Issues for discussion include health planning and control of capital expenditures, hospital reimbursement systems, and regulatory reform. Background information on the legislative process and pending health care legislation is provided before the seminar, and an assignment is made.

Common Elective Courses

Accounting

[NCE 500]
Fund Accounting. One credit. Not offered in 1980–81. Basic accounting concepts are applied to the problems and institutions of the public not-for-profit sector. This course is primarily for public and hospital administration students. *Prerequisite:* NCC 500. It is also recommended that the student have had one other accounting course.]

International Business, Development, and Economics

NCE 505
International Trade and Finance. First semester. Three credits.

This course is divided into two major sections dealing with issues at the national or global level. The first section examines the rationale for international trade and the arguments for various protectionist policies and their

effects. The second section examines the operation of the foreign exchange market, the balance of payments, and the mechanisms by which the balance of payments is equilibrated under regimes of fixed and flexible exchange rates. *Prerequisite:* NCC 502 and NCE 523 or permission of the instructor.

[NCE 507]

American Business Operations Abroad. Three credits. Not offered in 1980–81.

This course is an introduction to the multinational business firm. It surveys the various administrative, political, and economic consequences of American firms operating in Europe and in the Third World. Among the specific topics discussed are administrative and bureaucratic characteristics of American overseas business; personnel policy and labor relations; the impact of United States domestic legislation on direct foreign investment, including tax and antitrust policies; and the interaction of American business with host governments. In addition to general texts and more popular references, students read parts of selected congressional hearings. *Prerequisite:* graduate standing.]

NCE 514

Administration of Agricultural and Rural Development (also Government 692 and International Agriculture 603). Second semester. Three credits.

An intercollege course designed to provide graduate students with a multidisciplinary perspective on the administration of agricultural and rural development activities in developing countries. The course is oriented to students trained in agricultural and social sciences who are likely to occupy administrative roles during their professional careers.

Note: Students should also consider course offerings in the international area available in other units of the University, some of which are listed below.

Department of Economics:

525

Economic History of Latin America

561

International Trade Theory and Policy

562

International Monetary Theory and Policy

565

Economic Problems of Latin America

567

Comparative Economic Systems: Soviet Union and Europe

571

Public Policy and Economic Development

572

Applied Economic Development

674

Economic Systems

Department of Government:

181

Introduction to International Relations

386

Economic Issues in International Relations

Managerial Economics and Economic Policy

NCE 520

Security Analysis. Second semester. Three credits.

This course is divided into two parts. The first part lasts approximately nine weeks and is a lecture format dealing with the essentials of security analysis, portfolio theory and management, options, and institutional investment management and performance evaluations. The remaining five weeks are devoted to student presentations of security analysis for industry and individual firms. One exam at the end of the first part of the course and a written report on the company chosen for analysis are required. *Prerequisite:* NBP 502.

NCE 523

Macroeconomics. First semester. Three credits.

This course is designed to give the student a firm foundation in macroeconomic theory. The two basic approaches to macroeconomics — IS-LM analysis and growth theory — are developed in depth. Subtopics covered include income accounting, inflation, unemployment, government debt, the Federal Reserve System, and international trade. Emphasis is placed on using the theory to explain current economic developments. *Prerequisite:* NCC 502 or equivalent.

NCE 524

Economic Evaluation of Capital Investment Projects. Second semester. Three credits.

This course is intended to provide students with a reasonable background for estimating the economic value of proposed capital investment projects. Project evaluation from the point of view of a business firm is emphasized, although most of the techniques considered are applicable to nonprofit organizations (such as hospitals and universities) and to governments. The problems associated with making capital budgeting decisions under conditions of uncertainty will receive particular attention. For a term paper, students are encouraged to analyze a real capital investment project, but other topics are possible. *Prerequisites:* NCC 501 and NBP 502.

NCE 526

Problems and Practices: The Business-Government Interface. Second semester. Three credits.

This course deals with the interaction between business and government in a mixed economy. The particular interests of business people, of government officials and administrators, and of consumers sometimes conflict and sometimes coincide, as the varying pressures of such an economy play on them. To appreciate the different incentives influencing each party at their interface, students are asked to take the role of each party in evaluating cases, problems, readings, concepts, and theories for dealing most effectively with business-government interaction.

[NCE 527

American Industry: Economic Analysis and Public Policy. Three credits. Not offered in 1980–81.

The first part of this course presents a framework of analysis in which problems of market power and economic welfare can be examined. In the second half of the course this framework is applied to conditions found in American industry, in order to evaluate industrial performance from the point of view of society and to consider actual and proposed measures of public policy. Presentations and discussions by members of the class are stressed in the second half of the course.]

NCE 528

Topics in Managerial Economics. Second semester. Three credits.

This course is designed to assist the student in developing analytic capabilities. The student is required to use training in economics, finance, and quantitative methods in real-world situations requiring managerial decisions. The class focuses on several problems, cases, and research projects from the public and private sectors. Individual and group papers — especially short decision memoranda on particular topics — are assigned, some for submission in draft form to be revised after being critiqued. Oral presentation of analyses and recommendations is also assigned. Active participation in class discussions and analyses is a requirement of the course.

Note: Students interested in managerial economics should also consider the following courses offered by the school:

NBA 518

Financial Markets and Institutions

NCE 505

International Trade and Finance

Note: Students should also consider courses in economics offered by other units of the University, such as those listed below.

Department of Economics:

519–520

Quantitative Methods

551

Industrial Organization

552

Public Regulation of Business

561

International Trade Theory and Policy

562

International Monetary Theory and Policy

572

Applied Economic Development

635

Public Finance: Resource Allocation and Fiscal Policy

642

Seminar in Labor Economics

651–652

Industrial Organization and Regulation

Department of Agricultural Economics:

450

Evaluating Resource Investment and Environmental Quality

650

Economic Analysis of Public Policy

710

Econometrics I

711

Econometrics II

Organizational Behavior and Personnel

NCE 540

Organizational Theory and Behavior. First semester. Three credits.

Theories and empirical research on human behavior in organizations are studied, and their management applications are explored. Problems of internal structure are examined, such as specialization and division of labor, hierarchy and authority, informal organization, and structural variations in organization. Dynamics of organizational behavior are also treated under such topics as leadership and supervision, motivation and the social structure of work groups, and communication and control processes. The course is presented through readings and through discussion of theory and empirical research. Cases are used extensively, and fieldwork is assigned to give students familiarity with elementary social science tools, such as interviewing and questionnaire construction.

NCE 541

Personnel Administration and Human Relations. First semester. Three credits.

The objective of this course is to develop an understanding of the policies, methods, and techniques used in personnel management and human relations as management functions. Specific attention is given to problems of recruitment, selection, training, compensation, motivation, communications, service and benefit programs, performance evaluation, management by objectives, negotiations, safety, discipline, and community relations. The capacity to analyze problems, select the most effective means of dealing with them, and plan appropriate courses of action is developed through case examples. Attention also is given to analysis of trends in personnel management. This course is open only to graduate students.

NCE 542

Processes and Techniques in Organizational Development. Second semester. Three credits.

The field of organizational development integrates many of the older theories of change in organizations with modern experiential techniques deriving from the T-group and its descendants. This course attempts to help students develop five competence areas related to working in organizational development: personal insight,

interpersonal skills, analytic techniques, analytic skills, and tool kits. Activities include ordinary classroom work, experience-based exercises with videotape feedback, and practical work in a local organization. *Prerequisite:* a basic course in organizational theory.

[NCE 543]

Organizational Behavior and Administration. Three credits. Not offered in 1980–81.

Cases, concepts, and research findings in organizational behavior and administration are covered in this course. Human problems in administration, methods of diagnosing situations, group behavior, intergroup reactions, and organizational change are analyzed. This course is open only to graduate students.]

[NCE 545]

Seminar in Organizational Theory. Four credits. Not offered in 1980–81.

This seminar involves the intensive exploration of a selected aspect of behavior in complex organizations. In past years topics have included the presentation of one's self, theories of careers, and comparative organizational analysis. *Prerequisite:* permission of the instructor.]

[NCE 547]

Negotiations. One credit. Not offered in 1980–81.

Among the topics considered in this course are principles of negotiations used in sales, purchasing, acquisitions, mergers, joint ventures, labor-management, and environmental issues; trends in negotiations; use of teams; preparation; planning; power; strategy; tactics; timing; and pitfalls. Each participant engages in negotiations and prepares a paper on a specific phase of negotiations.]

[NCE 548]

Behavioral Science and Managing. One credit. Not offered in 1980–81.

The purpose of this course is to demonstrate behaviorally based tools managers can use to make sense of what happens around them. Concepts chosen for presentation have a mixture of durability, usefulness, face validity, empirical validity, interest, and generality.]

NCE 549

Sociotechnical Issues in Office Automation. Second semester. Three credits.

This course explores current trends in office automation and word processing. It is intended for students with a strong background in computers-MIS systems. Theories of organizational change and development are reviewed, and the current state of the art in word processing, electronic mail, text processing, software (including electronic filing and retrieval), and administrative automation are assessed. Students are then involved in a variety of projects, including system design, feasibility assessments, organizational analysis software, and technology assessment.

NCE 551

Behavioral Decision Theory. Second semester. Three credits.

This course is an examination of the ways in which individuals make decisions, especially under conditions

of uncertainty. Actual decision processes are compared with the normative economic and statistical decision theories. Specific heuristic aids are examined to discover the systematic biases they will produce. Applications to marketing, accounting, economics, and public policy are developed.

Note: Students interested in this field may also elect NHA 502 Psychiatric Institutions: Administration and Practice.

Quantitative Analysis

NCE 560

Applied Probability (also Operations Research and Industrial Engineering 660). First semester. Four credits.

This course deals with definitions of probability and basic rules of probability theory, random variables, probability distributions, and expected values. Included are important special distributions and relations among them, and elementary limit theorems. Stochastic processes and Markov chains are introduced, and their applications in the construction of mathematical models for administrative decisions are considered. *Prerequisite:* calculus. (**Note:** This course may be substituted for NCC 501 in the core requirements.)

NCE 561

Applied Statistics (also Operations Research and Industrial Engineering 670). Second semester. Four credits.

This course includes a review of distribution theory of special interest in statistics — normal, chi-square, binomial, Poisson, t, and F — as well as an introduction to statistical decision theory, sufficient statistics, the theory of minimum variance, unbiased point estimation, and maximum likelihood and Bayes estimation. Basic principles of hypothesis testing, including the Newman-Pearson lemma and likelihood ratio principle, and confidence interval construction also are studied.

NCE 562

Operations Research I (also Operations Research and Industrial Engineering 622). First semester. Three credits.

This course deals with model design, methodology of operations research, linear programming, the transportation problem, the assignment problem, the dual theorem, parametric linear programming, integer programming, nonlinear programming, and dynamic programming. Emphasis is placed on comprehensive problems and case studies.

NCE 563

Operations Research II (also Operations Research and Industrial Engineering 623). Second semester. Three credits.

This course deals with decision making under risk and uncertainty; reliability theory; replacement theory; queuing (including standard birth and death processes and nonstandard models); applications of queuing theory; models for production and inventory control; and simulation models. Operations Research I and II are not expected to provide an exhaustive treatment; rather they examine the broad range of operations research problems and the standard techniques used to approach them. *Prerequisite:* NCE 560 or permission of the instructor.

[NCE 564

Applied Multivariate Analysis. Three or four credits. Not offered in 1980–81.

This seminar introduces the student to techniques for measuring and analyzing perceptions, attitudes, and preferences leading to behavior. In addition to covering current linear multivariate models and nonmetric methods for scaling and data analysis, directions for new research in the field are explored. Potential applications in social and life sciences are discussed. The participants are required to design and implement a viable research project. In addition, every student is required to prepare a proposal for a research design and analysis of any substantive problem of particular interest. *Prerequisite:* NCC 501 or permission of the instructor.]

[NCE 565

Applied Econometrics. Three credits. Not offered in 1980–81.

This course deals with the application of regression analysis to historical data for solving managerial problems, for example, forecasting demands or forecasting costs. Topics include the linear model, some extensions, and the effects of including lagged variables and autocorrelation. Simultaneous equation methods and time series analysis are discussed in the latter part of the course. Mathematical derivations are not required. Students work on term projects dealing with the business or the not-for-profit sector. *Prerequisite:* NCC 501.]

Information Processing**[NCE 566**

Management Science. Three credits. Not offered in 1980–81.

This course develops several mathematical and computer techniques commonly used in analyzing management problems. Several techniques are covered, including linear programming and extensions, nonlinear programming, integer programming, and stochastic models of operating systems. The application of these and other management science techniques is discussed at length. Students are expected to develop a term paper on a survey of either a technical area or a type of application. *Prerequisites:* NCC 501 and NCC 503.]

[NCE 569

Introduction to COBOL Programming. One and one-half credits. Not offered in 1980–81.

This course provides an introduction to the ANS standard COBOL language. COBOL is the primary programming language used in today's business computer systems. Programming assignments stress the file-processing features of the language.]

NCE 570

Data Base Systems. First semester. Three credits.

The course provides an introduction to the design and use of computerized data bases. Topics covered include data structures, distributed data bases, searching techniques, security controls, audit trails, system design considerations, and the duties of a data base administrator. A survey of commercially available data base management systems is also provided. Projects involving hands-on use of a data base system are assigned. *Prerequisite:* NCC 503.

NCE 571

Computer Systems Analysis. Second semester. Three credits.

This course presents the fundamentals of information system analysis and design. The economic and technical characteristics of general purpose computer systems and minicomputers are surveyed. Each student completes a systems design project. *Prerequisites:* NCC 503 and NCC 504.

General**NCE 580**

Seminar in University Administration. Second semester. Two credits.

This course is intended for those who have an interest in the broad aspects of university administration. Topics include financial policies, affirmative action, budgetary processes, endowment strategies, admissions and financial aid, salary levels, and governance procedures.

NCE 581

Management Writing. First and second semesters. Three credits each semester.

The aim of this course is to teach students to write clear, well-organized prose. Students are given weekly assignments that include memos, business letters, and reports. The course emphasizes not only the proper formats for business communications but also thinking through, organizing, writing, and then rewriting material to suit the intended audience.

Research**NMI 500 or 501 or 502**

Directed Reading and Research. First and second semesters. One, two, or three credits, respectively.

Research of special interest to the student is carried on under the supervision of staff. Registration is limited to students who have the approval of their advisers and of the faculty members involved.

NMI 510

Personal Computing Lab. First semester. One credit.

This course is designed for the student who is interested in applying personal computers to complex real-world problems in financial or investment analysis. Many such problems cannot be realistically treated without building a computer model of them. Moreover, programs developed on large-scale university computers are rarely usable in the corporate world due to computer system changes, high cost, or restricted availability of computer resources. This course introduces students to the use of low-cost personal computers for financial analysis. Programming and application instruction is done on the Texas Instruments TI-58 C and TI-59, provided by B&PA with representative examples from more powerful minicomputer systems. Although programming will be stressed, the focus is on applications such as forecasting, forecast evaluation, corporate simulation, and project analysis. *Prerequisites:* NCC 500, NCC 501, NCC 502, NCC 503, and NCC 504.

NRE 503

Advanced Capital Market Theory. First semester. Three credits.

The objective of the course is to develop the mathematical basis of security value theory. Topics covered include Von Neumann–Morgenstern utility theory and risk aversion, arbitrage asset pricing theory, stochastic processes, and contingent claim pricing models. Each student conducts a research project. *Prerequisite:* permission of the instructor.

NRE 504

Doctoral Seminar in Accounting. First semester. Three credits.

This seminar is designed to provide a rigorous and integrative exposure to the literature in accounting and finance, as it relates to questions of accounting theory, research, and policy. Topics are chosen from the areas of competitive equilibrium, information choice, information economics, human information processing, and empirical accounting research.

NRE 505

Finance Workshop. First and second semesters. Three credits each semester.

This workshop is designed for faculty members and Ph.D. students with an interest in finance. Most workshop sessions are devoted to critical analyses of unpublished theoretical and empirical research papers.

NRE 506

Doctoral Seminar in Monetary Economics. Second semester. Three credits.

This seminar deals with the influence of money in a macroeconomic framework. Topics covered include neoclassical growth theory, equilibrium and disequilibrium models of monetary sector dynamics, rational expectations, and interest rate determination. Emphasis is placed on the movement of real and nominal

values on an aggregate level. Student presentations are an important part of the seminar.

[NRE 507

Advanced Corporate Finance Theory. Three credits. Not offered in 1980–81.

This course covers the most recent advances in corporate finance theory. Topics covered include adjusted present value, valuation of corporate securities, dividend policy, the debt-equity decision, and the criterion for wealth maximization. Each student conducts a research project. *Prerequisite:* permission of the instructor.]

NRE 508

Advanced Seminar in Banking and Financial Markets. Second semester. Three credits.

This seminar examines the role of commercial banking in the financial markets. It emphasizes current research on banking and financial institutions. Topics include the banking firm, financial innovation, credit rationing, and regulatory problems. *Prerequisite:* permission of the instructor.

[NRE 942

Social Psychology of Organizing. Three credits. Not offered in 1980–81.

This course examines systems theory from a psychological and evolutionary perspective. The intent is to acquaint students with psychological concepts and ways of thinking that permit analysis of complex social units. Concepts such as overload, stress, equity, causal mapping, ambivalence, loose coupling, cognitive dissonance, and cybernetics are examined for their relevance to the general theme that organizations are more usefully viewed as processes than as structures. Exercises provide students with experience in applying these concepts to their own organizational experiences. The course does not give explicit information about how to manage an organization; it does provide alternative ways to make sense of what happens in organizations.]

Student Life

The Graduate School of Business and Public Administration is centrally located on the Cornell campus in Ithaca, New York.

A small city of character and vitality, Ithaca has been greatly influenced by its close ties to Cornell. It offers a broad range of cultural events and widely varied shopping and dining facilities.

Ithaca is part of the Finger Lakes region of New York State, a beautiful area of rolling hills, deep valleys, scenic gorges, and clear lakes. Open countryside, state parks, and year-round recreational facilities are only minutes away. Excellent sailing, swimming, skiing, hiking, and other outdoor activities are readily available.

Ithaca, serviced by four airlines, is one hour by plane and five hours by car from New York City, and other major metropolitan areas are easily accessible.

Housing

On-Campus Housing

Single-Student Housing

Coeducational graduate dormitory housing is available at Sage Hall and Cascadilla Hall. Sage Hall, located in the center of the campus, houses 189 students and has dining facilities. Cascadilla Hall houses 143 graduate men and women. Located on the southwest edge of the campus, it is convenient to Collegetown shopping areas.

Thurston Court apartments (eighteen units), which range from one to three rooms, are located on Thurston Avenue in the North Campus area. The apartments are generally assigned to single graduate men or women.

For students seeking an international living experience, the International Living Center provides housing for graduate and undergraduate students. Approximately half of the residents are from foreign countries.

Detailed information concerning these residence units is provided in the booklet *Living on Campus: Housing for Single Students*, which is available from the Housing Assignment Office, Department of Residence Life, Cornell University, 223 Day Hall, Ithaca, New York 14853. When writing for this booklet, the student should include information regarding the program in which he or she is enrolled as well as a request for a housing application. Students who desire more detailed information about the programs and activities sponsored by the International Living Center may write to the Resident Director, International Living Center, Cornell University, North Campus Dormitory 8, Ithaca, New York 14853.

Family Housing

The University maintains three family housing complexes of unfurnished apartments: Cornell Quarters, Pleasant Grove Apartments, and Hasbrouck Apartments. Comfortable one- and two-bedroom units are provided for 419 families. All units are moderately priced, comfortable, and located near the campus. Local housing codes set a limit of two occupants in a one-bedroom apartment and four occupants in a two-bedroom apartment. Detailed information about these University apartments is presented in the booklet *Cornell University Family Housing*, which can be obtained from the Family Housing Office, Department of Residence Life, Building 40, Hasbrouck Apartments, Pleasant Grove Road, Ithaca, New York 14850.

Assignments in all Department of Residence Life housing facilities are made by the Housing Assignment Office in the order in which room applications are received. Thus, all students accepted for admission who would like to live in University-operated housing facilities are urged to submit the necessary forms as soon as possible.

Off-Campus Housing

Off-campus housing is plentiful, but varies greatly in quality, cost, and desirability. The student is urged to search for housing as soon as possible. A good first step is to obtain the brochure *Off-Campus Housing* from the Off-Campus Housing Office, Department of Residence Life, Cornell University, 223 Day Hall, Ithaca, New York 14853.

It is only through personal inspection that a student can compare and evaluate housing in terms of personal requirements. Students are therefore urged to visit Ithaca no later than the end of June for this purpose, if at all possible.

Listings of available housing are posted in the Off-Campus Housing Office. Because the notices are constantly changing, it is not possible to mail listings or to maintain a waiting list of people seeking accommodations.

Rental prices of off-campus rooms range, on the average, from \$75 to \$125 per month for single rooms and from \$175 a month for small efficiency quarters to more than \$300 a month for larger apartments accommodating families or groups of students.

Dining Facilities

Cornell Dining operates a wide variety of dining facilities on campus, conveniently located near University housing and Malott Hall. Cornell Dining also offers a variety of meal plans, designed to be economical without sacrificing quality or abundance of food. Meals are served regularly on campus at ten locations — Willard Straight Hall, North Campus Union, Noyes Center, Balch Halls, Sage Hall, Hughes Hall, Noyes Lodge Pancake House, Risley Hall, the Statler student cafeteria, and the Dairy Bar. These facilities are open to all students on a cash or credit basis, whether or not they live in University residence halls or subscribe to a specific dining plan. The Department of Dining Services also operates several small grocery stores on campus.

Health Services

The Department of University Health Services provides facilities for comprehensive medical care for students and their spouses. All regularly registered graduate students and their spouses are eligible. The cost for students is included in University charges; the cost for spouses is made on a fee-for-service or prepaid basis.

The following services are available to all full-time students and prepaid spouses who have paid Cornell University tuition or the prepaid fee and who are in Ithaca:

1. unlimited visits to Gannett Health Center;
2. overnight care at Gannett Health Center;
3. ordinary laboratory work, x-ray examinations, and physiotherapy as ordered by health services physicians;
4. counseling at the center, including its psychological counseling service.

The following health services are not available from the University:

1. hospitalization expense;
2. visits to physicians or health care facilities other than those of the University Health Services — consultations with specialists authorized by University Health Services' physicians are covered by the elective health insurance plan discussed below;
3. hospital charges and fees for surgical procedures;
4. prenatal or obstetrical care;



5. expenses of illness or injury occurring
 - a) outside of Ithaca while in transit to and from the University or on weekend trips and vacations, or b) during the summer unless enrolled as a summer student.

Gannett Health Center. Outpatient care and emergency after-hours care are provided at Gannett Health Center, 10 Central Avenue. The center's medical staff is composed of doctors from the University staff and the Ithaca area. Appointments may be made by calling or dropping by the center. The appointment phone numbers are 256-4082 and 256-7495.

Emergency Service. Students who need medical attention at any time should go to Gannett Health Center, 10 Central Avenue. When an accident or serious illness occurs, the doctor on emergency service can be reached at 256-5155. Normal center hours are 8 a.m. to 5 p.m. Monday through Friday and 9 a.m. to 12:30 p.m. on Saturday. An abbreviated schedule is followed during University holidays. These schedules will be posted on the clinic doors.

Elective Health Insurance. An elective health insurance plan for registered students and their spouses and dependents is available to cover hospitalization, consultations, sickness, accidents, and most services not provided by University Health Services. Information about this insurance is available at the Gannett Health Center, where a representative of the elective insurance company has an office. Students may also call 256-6363 or 257-2252.

Employment for Students and Spouses

Although students enrolled in the Graduate School of Business and Public Administration do find part-time employment as a means of earning needed funds, prospective students are cautioned against seeking outside employment during their first semester in the school. At the school the assistant dean for admissions and student affairs, the assistant dean for placement, and the associate dean for external affairs are all available to provide counseling and guidance to second-year students seeking employment at the University and in the Ithaca area.

As in many university communities with unusually high numbers of well-educated men and women, finding employment in the Ithaca area is difficult. Competition is very keen, and highly skilled people often accept work in semiskilled jobs outside their professions.

The key to finding employment in Ithaca is to apply in person during the summer. Since most students leave Ithaca at the beginning or end of the summer, the majority of job openings occur at these times. Applicants should register at Personnel Staffing Services, Fourth Floor, Day Hall, to be eligible for jobs offered by the University. The Professional Skills Roster, 512 East State Street, Ithaca, New York 14850, is a job directory supported by the University that lists job openings throughout the county. The Office of Admissions

and Student Affairs provides a list of local elementary and secondary school personnel offices. The assistant dean for admissions and student affairs and the placement staff will provide assistance whenever possible, and the B&PA Married Couples Club can sometimes supply job leads.

Student Associations

B&PA, Incorporated. B&PA, Incorporated, is an affiliate of the Student Association. It is a New York State corporation set up with limited endowment to provide short-term (two-month) loans of up to \$200 to students in need of funds. The corporation is a nonprofit organization. It charges nominal interest to cover administrative expenses. The disposition of its funds, which have been accumulated through gifts, subscriptions, and earnings, is governed by the student and faculty members of its board of directors.

B&PA Married Couples Club. Almost 20 percent of the students attending the school are married. Their spouses have formed the B&PA Married Couples Club, which sponsors a program of activities for couples throughout the year. There is also a campuswide Graduate Wives Club open to all Cornell faculty and graduate student wives.

B&PA Student Association. The student activities program is carried out under general sponsorship of the B&PA Student Association, with the guidance of its Executive Council. The president, vice president, secretary, and treasurer of the association are elected each December for one year by members of the association. Representatives from the first-year class are elected in October to serve through December of the following year. Members of the council are appointed chairpersons of various subsidiary committees and organizations. The various committees sponsor social events ranging from formal dances and cocktail parties to informal student-faculty gatherings and weekly beer parties. It also sponsors women's and men's intramural athletic teams. A fee of \$25 covers membership in the association for the two years of residence at the school.

B&PA Women's Association. The B&PA Women's Association sponsors professional and social activities for the women students at the school and for the entire B&PA community. The group locates qualified women for consideration as potential faculty members, brings women who are practicing managers to the campus for lectures and discussions, and cooperates with other women's organizations at Cornell in activities of mutual interest. The group also sponsors a Women's

Career Forum, which brings professional women to the school to give students their view of the job world and the place of future B&PA graduates in it.

Entrepreneurs Club. The Entrepreneurs Club focuses on the needs of those students who want to work in or form their own small businesses. Besides meetings and other activities, the club invites a series of guest lecturers, who cover such topics as incorporation, venture capital, financing, management, and taxes. Businesses recently discussed include consulting, construction, real estate, transportation, and retailing.

Graduate Minority Business Students Association. The Graduate Minority Business Students Association is an organization of black and other American ethnic minority students in the school. It is involved in a variety of activities, including the promotion of continuing communication between minority students and the rest of the student body, the faculty, and the administration of the school. It also works in liaison with the Student Association to provide orientation activities specifically designed for minority students during the first month of the first semester. It also carries on social and professional extracurricular activities throughout the year.

International Student Club. The International Student Club is open to all foreign and American students enrolled in the school. Its aim is to promote cultural exchange, cooperation, and understanding among all members of the B&PA community, including faculty and administration. It assists foreign students in orientation to the University, represents these students in academic and social matters, and organizes and coordinates many meetings and activities of international character within the school.

M.B.A. Marketing Association. The M.B.A. Marketing Association is organized to enhance the academic experience of students concentrating in marketing. The association sponsors forums, career planning sessions, informal meetings, and occasional problem-analysis conferences with practicing marketing executives.

Old Ezra Investment Club. The Old Ezra Investment Club is an affiliate of the Student Association. The membership comprises students from the school who are interested in gaining experience in making investments. In addition to meetings, the club organizes programs of events designed especially for small investors, including the Old Ezra Investment Game, an investment lecture series, and guest speakers from the investment community.

Public Management Students Association. The Public Management Students Association is organized to coordinate and direct the activities of public program students. The association sponsors

social events and professional activities, including forums on public sector issues and other topics that students decide are important to their professional development. It also assists incoming students by making public students available as guides and by helping to arrange the fall orientation program. The association is open to all students interested in public policy issues in the public and private sectors.

Sloan Association. The Sloan Association is the organization of the students and faculty of the Sloan Program in Hospital and Health Services Administration that promotes close association and cooperation between students and faculty in the Sloan program. It represents students in matters relating to the curriculum, requirements for field experience and career placement, and provides social and professional extracurricular activities for its members.

Student-Faculty Committee. The Student-Faculty Committee (SFC) is the representative government organization of the school, by which the student body expresses its views on matters affecting student-faculty-administration relationships. The SFC is composed of twelve elected student representatives, one student representative appointed by each of seven student organizations, the assistant dean for admissions and student affairs, and three faculty representatives appointed by the dean of the school.

Forums

Executive Forum. Although the school's students are in continual contact with middle management, many are not familiar with the thinking and style of top-level executives. The Executive Forum answers this need. Visiting executives, who usually are at the school for an entire day, may take part in classes, hold informal question-and-answer sessions with students and faculty, or direct a seminar. At the end of the day they address the school in Bache Amphitheater, where they explore some of the key managerial problems of the 1980s.

During the past academic year, the following executives joined the forum: David Rockefeller, chairman, Chase Manhattan Bank, N.A.; Sanford Weill, chairman and chief executive officer of Shearson, Loeb, Rhoades; and Charles Knight, chairman and chief executive officer, Emerson Electric.

Management Forum. This series of weekly forums takes place during the first semester and consists of visiting speakers with a broad range of management backgrounds. The focus of the forum

is on various career alternatives for students. It is a student-coordinated activity, and the topics covered each year reflect students' career interests. Forums are informal in nature and provide an opportunity for students to talk with the speakers.

Alumni Association

The school's alumni association has become increasingly active during the past few years. The alumni body is composed of slightly more than four thousand graduates; approximately five hundred attended alumni-sponsored dinners and luncheons throughout the country last year. Alumni are a vital part of the school and frequently maintain close ties; they serve as guest lecturers in advanced seminars, supply case materials to professors, assist current students in their job search, and interview prospective students for the office of admissions. The association has recently begun offering a broad service in alumni placement. Under the aegis of the Placement Office, it assists alumni in career planning and in undertaking a job search.

Further Information

The *Announcement of the Graduate School* and the *Announcement of General Information* are useful to prospective Cornell graduate students and should be consulted for additional information about health requirements and services, vocational testing and guidance, the use of motor vehicles, and University-wide social and cultural activities. Information about facilities, programs, and courses available in the other schools and departments of the University is included in *Cornell University: Description of Courses*. Copies of these publications may be obtained by writing to Cornell University Announcements, Building 7, Research Park, Ithaca, New York 14850, or by stopping by the Information and Referral Center in Day Hall.

More detailed student information required by state and federal regulations is available in a handbook for enrolled students, *Announcement of Academic Information*, and from the Office of the Dean of Students, 103 Barnes Hall, and the Information and Referral Center. In addition an orientation handbook prepared by B&PA students is sent to all students upon their admission to the school.



Admission

Eligibility for Admission

Variables considered in the admission decision process include the applicant's earlier academic record, scores on required admission tests, and leadership demonstrated in employment experience, military service, or extracurricular activities. The Admissions Committee uses no arbitrary cutoff score to determine admission but does consider impressive records of leadership as a balancing factor. Over half of the school's students have had significant work experience before matriculation.

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, handicap, sexual or affectional orientation, or happenstance of birth. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

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

Degree Requirements

Admission to candidacy for the M.B.A., M.P.A., or M.P.S. (H.H.S.A.) degree is open to qualified men and women holding baccalaureate degrees from accredited colleges, universities, or technical schools in this country or abroad.

Undergraduate Preparation

Because of the specialization that occurs in graduate-level professional education and in subsequent careers, candidates are urged to pursue as broad an education as possible at the undergraduate level. Undergraduate courses in business administration do not enhance a candidate's chances for admission, nor do they assure satisfactory graduate academic performance. The school's three master's degree programs are designed for candidates who have majored in nonbusiness fields as undergraduates.

No specific courses are required for admission, but students planning to enter the school are advised to include courses in economics, American government, the humanities, the behavioral and social sciences, and mathematics in their undergraduate programs.

Since a number of core courses and electives assume a working knowledge of algebra and basic calculus, the school strongly urges students to strengthen their background in mathematics. This is particularly important for those with backgrounds in the social sciences and liberal arts who have had little or no work in mathematics.

Applicants who are unsure whether their calculus background is sufficient should know that a working knowledge of the following topics is assumed when the first semester begins: (a) the concept of limit; (b) differentiation of simple polynomials, exponential functions, and logarithmic functions; (c) integration of the simple functions contained in (b); (d) partial differentiation of simple algebraic functions of two variables; (e) the use of differentiation to find maximums and minimums; and (f) the use of integration to find areas.

The necessary mathematics background can be obtained by

1. taking an introductory calculus course before coming to Cornell or
2. engaging in self-study (information on procedures and recommended books may be obtained from the assistant dean for student affairs of the school).

For those students who have not had previous work in calculus or who want a review, the school

offers a two-week course during August. This course is designed to be an intensive review of algebra as well as an introduction to, or review of, basic calculus. A special announcement will be made in the spring of 1981 about dates and tuition fees.

Graduate Management Admission Test

The Graduate School of Business and Public Administration at Cornell is a member of the Graduate Management Admissions Council, a group consisting of representatives of the fifty leading graduate management schools in the country. The council contracts with the Educational Testing Service to administer the Graduate Management Admission Test (GMAT), a three-and-a-half-hour aptitude test designed to measure certain mental skills important in the graduate study of management. The test is not a measure of achievement of knowledge in any specific subject area, and those who take the test are neither required nor expected to have had undergraduate preparation in management subjects.

The Admissions Committee prefers that all applicants, United States and foreign, take the GMAT. The committee will accept, however, aptitude scores from the Graduate Record



James W. Schmotter, assistant dean for admissions and student affairs, counsels students throughout their years at B&PA.

Examinations (GRE) for applicants to the M.P.A. and M.P.S. (H.H.S.A.) degree programs. Applicants to the M.B.A. degree program must without exception take the GMAT.

Applicants should write to GMAT, Educational Testing Service, Box 966, Princeton, New Jersey 08541, for an application for the GMAT and an explanatory pamphlet. The completed test application and payment of the \$23.50 fee should be received in Princeton at least three weeks in advance of the test date if the test is to be taken in the United States or Canada, and at least six weeks in advance for other countries.

The GMAT is given at many education centers in the United States and abroad, although it is not given at every test center on every date. In cases where the location is distant from the applicant's residence, the Educational Testing Service will, on request, arrange for a special administration of the test at a more convenient location on the same date, but such arrangements must be made at least two months in advance of the test.

Students currently enrolled in college are urged to take the test during their senior year, even if they intend to defer application for admission. The test dates for 1980–81 are:

Regular Saturday Administrations

October 25, 1980

January 24, 1981

March 21, 1981

Wednesday Administration

July 15, 1981

Monday Administrations

October 27, 1980

January 26, 1981

March 23, 1981

Monday test dates are limited to candidates whose religious convictions prevent their taking tests on Saturdays.

A candidate may retake the test, but retaking the test is not encouraged unless the candidate was ill the first time or was confronted with some other serious handicap or emergency. The average increase in retaking the test is about thirty points; however, 25 percent of those who retake the test actually score lower the second time. The score report of each candidate contains two previous GMAT scores. In general, if the test is taken more than once the Admissions Committee uses the highest set of scores.

Note: Applicants to the M.P.A. and M.P.S. (H.H.S.A.) degree programs who substitute test scores on the GRE for GMAT scores should be sure that scores are sent to the correct address. The Graduate School of Business and Public Administration (B&PA) and the University

Graduate School are separate entities at Cornell and are located in different buildings. Applications for admission to B&PA are not processed through the Graduate School. However, GRE scores meant for B&PA are often sent to the Graduate School in error, and an application for admission thus may not be complete for review by the Admissions Committee simply because the scores have not been received at B&PA.

Procedure before Admission

Documents

A complete application for admission to the M.B.A., M.P.A., or M.P.S. (H.H.S.A.) degree program consists of the following:

1. The application itself, completed on forms obtained from the Assistant Dean for Admissions and Student Affairs, Graduate School of Business and Public Administration, Cornell University, Malott Hall, Ithaca, New York 14853, and received by that office by February 15, 1981.
Note: Candidates who wish to be considered for financial assistance must file a separate application for financial aid with the Graduate and Professional Schools Financial Aid Service by January 15, so that the application reaches the school by February 15.
2. Payment made to Cornell University of the nonrefundable application fee of \$30. Foreign applicants may send an international money order or international postal coupons.
3. A report of test results of the GMAT and, if required, of the Test of English as a Foreign Language (TOEFL).
4. Transcripts of all previous academic work beyond the secondary level. **Note:** Before fall registration, entering students must have on file at the school a final transcript from each institution attended.
5. Two confidential letters of evaluation on forms supplied with the application by the school. These letters should be from persons who have known the applicant well for more than a year. The letters may be from either classroom instructors or supervisors at work, but a combination of these two types of evaluators is preferred.

The applicant is responsible for assembling all application materials and ensuring that they are received, in the prepared envelopes, by the



Edward G. Jordan, dean of the Graduate School of Business and Public Administration.

assistant dean for admissions and student affairs before the February 15 deadline. When the completed application package is received, acknowledgment will be made by the Office of Admissions and Student Affairs.

Interviews

The school strongly encourages interviews as part of the admission procedure. Visits to the school are often helpful in informing a prospective applicant about B&PA and they assist the school in appraising a student's eligibility for admission.

If time and distance do not permit a visit to the school, applicants may wish to speak with one of the more than two hundred recent alumni who interview for the office of admissions. The Office of Admissions and Student Affairs can assist in arranging a meeting in most areas of the United States, but only after a completed application has been received. Requests for alumni interviews can be made on the application form.

Requests for campus interviews can be made by writing or calling the assistant dean for admissions and student affairs (607/256-2327). Interview appointments should be scheduled at least two weeks in advance.

Admission Timetable

The Office of Admissions and Student Affairs starts a file on each applicant as soon as the completed application form is received. Applications should be filed as early as possible during the academic year preceding the year for which admission is sought and should be completed by February 15. Applicants should take the required admission tests in October. Those who are not able to take the required tests until January should make certain that the completed application package arrives in the admissions office by the February 15 deadline. Such an application will then be considered complete. When the results of the required examinations arrive later in February, the application will be referred immediately to the Admissions Committee for review. Applicants enrolled in the senior year of undergraduate education at the time of application should ensure that the registrar's office at their undergraduate college sends their fall term transcript to the admissions office as soon as it is available.

The admission decision process for the fall semester begins during the previous December and continues on a rolling basis throughout the rest of the year. The Office of Admissions and Student Affairs strives to respond to applicants within four weeks of the date when their applications are complete. During the height of the admission season, however, this response time is not always possible. Candidates completing their applications by February 15 will be notified of their status by the end of March. The school will consider applications that are completed after the February 15 deadline, but opportunities for admission are reduced after that date, and applicants who have completed their applications by February 15 are given priority.

The school subscribes to the common reply date of other graduate schools. Current agreement among these schools provides that applicants who have been accepted for admission for the term beginning in September are not required to confirm enrollment or any form of financial assistance earlier than the preceding April 15.

January Admission

New students are usually permitted to enter the school only at the beginning of the fall semester. Because of the integrated and sequential order of the school's core program, midyear admission in January is not encouraged and is permitted only in very unusual circumstances. Furthermore, admission in January, even for those candidates having the prerequisite academic background, is

made possible only by the very limited number of spaces that become available during the fall semester through leaves of absence and the infrequent graduation of students "out of sequence" in December.

Deferral of Admission

Individuals are admitted only for the term for which they have applied. If applicants are accepted for admission but decide to defer entrance because of work commitments, military service, reasons of health, or insufficient financial support, they should write to the assistant dean for admissions and student affairs as soon as possible to cancel the application process. Applicants who wish to enroll at a later time should write to the assistant dean in the December preceding the September in which they expect to register to request that their application be reactivated. If an application is reactivated for a future term, a recommendation reflecting the interim experience and certain other information may be required; however, a new application is not usually necessary, and the application fee of \$30 need not be paid again. The application will then go to the Admissions Committee to be evaluated with those of other applicants. Applicants who were accepted for admission before are likely to be accepted again if their credentials compare favorably with those of other applicants.

Applicants who have been rejected for admission may also reactivate and update their application a year or two later if their interest in admission to the school continues. Interim work experience may strengthen their credentials and may possibly reverse a previous unfavorable decision.

Procedure after Admission

Admission Deposit

Students accepted for admission are required to confirm their September enrollment by sending a deposit of \$100, payable to Cornell University, by May 1. Of this \$100, \$50 will become the University registration fee, and the remaining \$50 will be applied toward the student's tuition. The deposit is \$100 regardless of any prior connection with Cornell, the only exception being for those Cornell students admitted under combined programs with other departments and colleges of the University. If candidates decide after May 1 not to enroll in the school, the admission deposit is not refundable. Students receiving any form of financial aid that will cover full or partial tuition are still expected to remit the full deposit.

Health Requirements

Each entering student is expected to assume personal responsibility for fulfilling the following health requirements adopted by the Cornell University trustees. Permission to register for a new semester will not be granted unless all health requirements pertaining to the previous semester have been fulfilled.

Health History. Graduate students, when accepted, must promptly submit health histories to the Gannett Health Center on forms supplied by the University. A University physician will review the material before it becomes part of the student's permanent health record. All information given is confidential. After arrival at Cornell, a student may be given an appointment with a physician at the center if the medical history indicates a need for this. Students who have been away from the University for more than a year must, upon reentrance, submit an interim health history on a University form.

Tetanus Toxoid. It is strongly recommended by the Department of University Health Services that all students have immunization against tetanus before entering the University. The department will, however, make available at Gannett the initial and all booster tetanus toxoid immunizations at a nominal charge.

Information for Students from Foreign Countries

From its beginning, Cornell University has encouraged the attendance of students from countries outside the United States. The school welcomes applications from qualified persons from other countries, but such applicants must have qualifications that compare favorably with those of applicants from the United States.

Preliminary Application

Applicants from foreign countries (except Canada) who plan to hold a student or exchange visa while studying at Cornell are required to submit a preliminary application. No application fee is necessary when submitting the preliminary application, but a \$5 mailing fee is requested to cover the cost of overseas airmail. All academic transcripts and other documents supporting a student's application for admission should be accompanied by an official translation if the

original document is not in English. Certified or notarized copies or photostats may be submitted instead of original documents.

Upon receipt of the preliminary application and supporting documents, the assistant dean for admissions and student affairs evaluates the information, informs the applicant whether to proceed with a formal application for admission, and sends the appropriate forms for the formal application. The applicant then completes and submits these forms, along with the other required supporting documents and payment of the \$30 application fee, which may be in the form of an international money order or international postal coupons.

Test of English as a Foreign Language (TOEFL)

For all applicants whose native language is not English, the Test of English as a Foreign Language (TOEFL) is also required. TOEFL and the other tests mentioned are administered throughout the United States and in many major cities of the world by the Educational Testing Service. Inquiries and applications for these tests may be addressed to the Educational Testing Service, Princeton, New Jersey 08540. Although the tests are administered five times each year, applicants should note that the fall examinations are most convenient for the school and for the candidate. Applicants are responsible for arranging to have their test results sent directly to the Assistant Dean for Admissions and Student Affairs, Graduate School of Business and Public Administration, Cornell University, Malott Hall, Ithaca, New York 14853.

Deadline

Candidates whose applications are complete by February 15, except for the score from the GMAT taken in January, will be considered to have met the February deadline date for a completed application. In evaluating the GMAT scores of foreign applicants, the unique difficulties that such a test poses for those from a different education system and language background are taken into consideration.

Financial Aid

Applicants from foreign countries should realistically assess their financial needs for the period during which they will be pursuing graduate study in business and public administration. Except for very limited scholarship assistance to students from certain countries, the school is not able to offer any kind of financial aid to foreign students. Such students are therefore required to attest that they possess adequate financial support from their own funds or from other sources to cover all expenses for the entire two-year course of study, before leaving their country.

It should also be noted that the United States Immigration Service prohibits foreign students who enter the United States on visas from engaging in part-time employment during the first year in the United States. Furthermore, the United States visa-granting authority in the country of origin (ordinarily the United States Embassy) requires proof that sufficient funds are available for students to cover expenses for their entire course of study before they are granted either a student's visa (F-1) or an exchange visa (J-1). Requirements for immigration visas are even more stringent.

The following section on financial aid summarizes estimated living costs for students attending Cornell.

American Institutions of Higher Learning Represented in the 1979–80 B&PA Student Body

Alfred University
Amherst College
Arizona, University of
Baruch College
Bates College
Beloit College
Bethel College
Boston Architecture Center
Boston University
Bowdoin College
Brandeis University
Bridgeport, University of
Brooklyn College
Brown University
Bucknell University
California, University of, at
Berkeley
Davis
Irvine
Los Angeles
Santa Barbara
Santa Cruz

Carleton College
 Case Western Reserve
 Central Connecticut State College
 Chicago, University of
 Cincinnati, University of
 City College, New York
 Claremont Men's College
 Clark University
 Clarkson College
 Colby College
 Colgate University
 Colorado, University of
 Columbia University
 Connecticut, University of
 Cooper Union
 Cornell University
 C. W. Post College
 Daemen College
 Dartmouth College
 Delaware, University of
 Dickinson College
 Douglass College
 Drew University
 Drexel University
 Duke University
 Elmira College
 Emory University
 Fordham University
 Franklin and Marshall College
 Fresno State University
 General Motors Institute
 George Washington University

Georgetown University
 Georgia Institute of Technology
 Gettysburg College
 Grinnell College
 Hamilton College
 Hartford, University of
 Harvard University
 Haverford College
 Hiram College
 Hobart College
 Holy Cross, College of the
 Illinois, University of
 Indiana University
 Inter American University of Puerto Rico
 Ithaca College
 Johns Hopkins University
 Juniata College
 Kent State University
 Lafayette College
 Lawrence University
 Lehigh University
 Lemoyne College
 Lewis and Clark College
 Marian College
 Marietta College
 Maryland, University of
 Massachusetts, University of
 Miami University
 Michigan, University of
 Michigan State University
 Middlebury College
 Missouri, University of

B&PA 1979 Entering Master's Degree Candidates

Mean age 24.5 years
 Mean GMAT score 600*
 Mean grade point average 3.3*
 Full-time work experience 55%
 Female 30%
 Minority 7%

Geographic Distribution

Northeast 55%
 Midwest 10%
 West 15%
 South 10%
 Foreign 10%

Undergraduate Majors

Liberal arts 21.9%
 Social sciences 11.6%
 Economics 17.4%
 Science and mathematics 13.1%
 Business administration 10.9%
 Engineering 8.4%
 Other 16.7%

**Excludes foreign students' scores.*



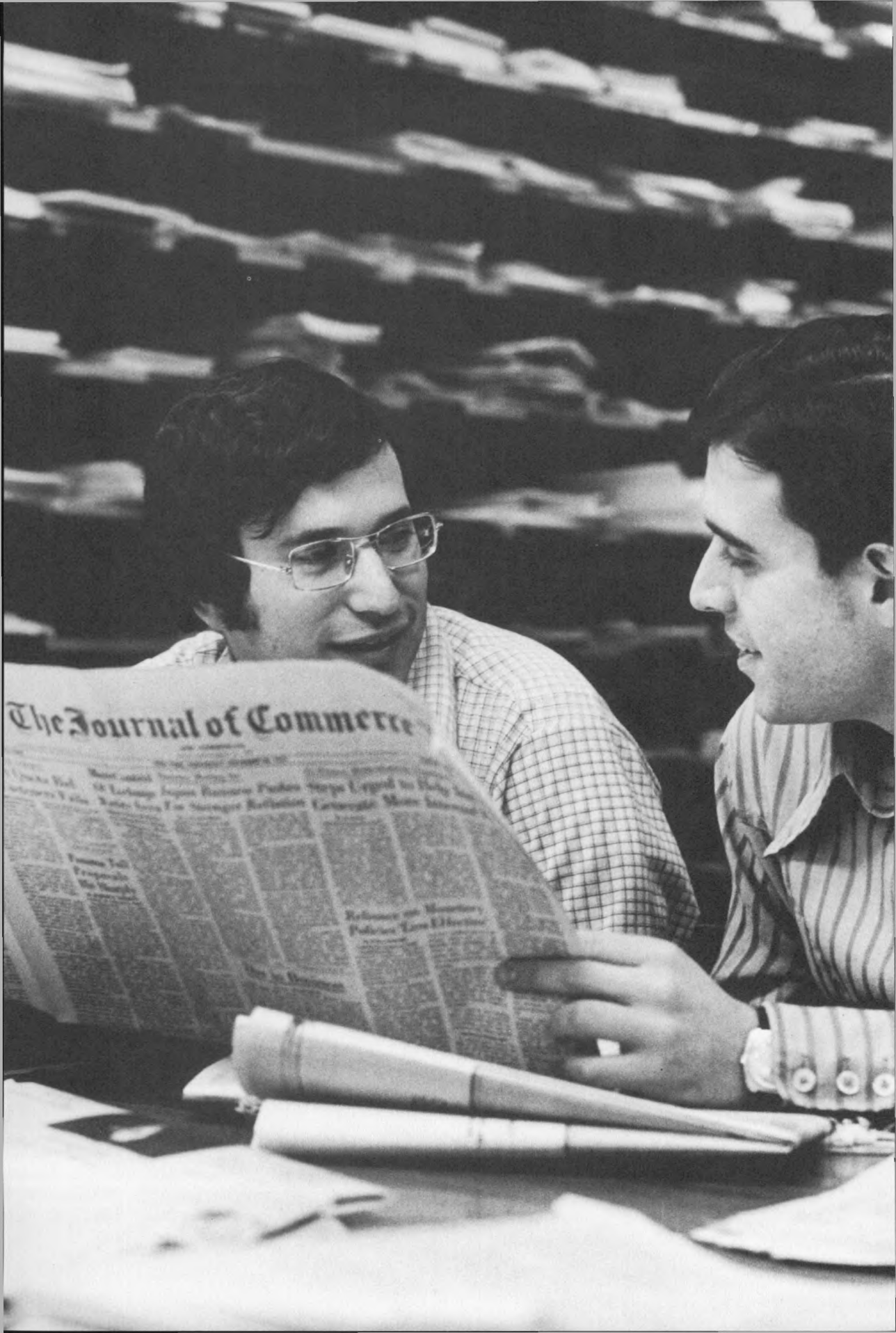
Mount Holyoke College
 Muhlenberg College
 Nebraska, University of
 New College
 New Hampshire, University of
 New Haven, University of
 New Mexico, University of
 New York, State University of, at
 Albany
 Binghamton
 Buffalo
 Stony Brook
 New York College, State University of, at
 Fredonia
 Geneseo
 Oneonta
 Oswego
 Potsdam
 North Carolina, University of, at
 Chapel Hill
 North Carolina State University

Northwestern University
 Notre Dame, University of
 Oberlin College
 Ohio State University
 Oregon State University
 Pace University
 Pennsylvania, University of
 Pennsylvania State University
 Princeton University
 Purdue University
 Quinnipiac College
 Rhode Island, University of
 Rochester, University of
 Rochester Institute of Technology
 Rocky Mountain College
 Rollins College
 Rutgers—The State University
 Saint John's University
 Saint Lawrence University
 Saint Thomas, College of
 Saint Xavier's College
 Seattle University
 Simmons College
 Skidmore College
 Smith College
 South Carolina, University of

Southern California, University of
 Southern Massachusetts University
 Stanford University
 Suffolk Law School
 Swarthmore College
 Syracuse University
 Temple University
 Texas, University of
 Trenton State College
 Trinity College
 Tufts University
 Tulane University of Louisiana
 United States International University
 United States Military Academy
 United States Naval Academy
 Utah, University of
 Vanderbilt University
 Vassar College
 Vermont, University of
 Villanova University
 Virginia, University of
 Virginia Polytechnic Institute and State University
 Washington and Lee University
 Washington University
 Washington, University of
 Wellesley College
 Wesleyan University
 West Virginia Wesleyan College
 Wheaton College
 Whitman College
 Wilkes College
 William Smith College
 Wisconsin, University of
 Yale University
 York College of Pennsylvania

Foreign Institutions of Higher Learning Represented in the 1979–80 B&PA Student Body

Academy of Economic Studies
 Bucharest
 Delhi, University of
 Ecole Centrale de Paris
 Escuela Politecnica
 Fu-Jen Catholic University
 Genoa, University of
 Hitotsubashi University
 Hokkaido University
 Indian Institute of Technology
 Bombay
 International Christian University
 Kanazawa University
 Keio University
 Keiogijuku University
 Kobe University
 Kyushu University
 London University
 Louvain, University of
 Malaya, University of
 McGill University
 Mexico, National University of
 Monterrey Technical Institute
 National Cheng Chi University
 Oxford University
 Seoul National University
 Singapore University
 Tokyo University
 Toronto, University of
 Waterloo, University of



Financial Aid

Costs

Tuition and Fees

Tuition in the Graduate School of Business and Public Administration is currently \$3,100 a semester. If a student enrolls in the two-year program and continues the second year without interruption, the second-year tuition charge will not increase. For students in certain special programs, and at the discretion of the dean, the above policy may be continued for a three-year period. Students who take leaves of absence will pay tuition at the first-year rate in effect at the time of their return.

There is a registration fee of \$50 for new students who have not previously enrolled at Cornell. For additional information about the rules of payment at Cornell, see the *Announcement of General Information*.

The amount, time, and manner of payment of tuition, fees, or other charges may be changed at any time without notice.

Estimated Living Costs

Living costs cannot be stated with the same degree of accuracy as regular University charges because they are dependent to a great extent on the individual's tastes and circumstances.

For a single student living in University dormitories and participating in the University's co-op dining plan (all one wishes to eat at each of three meals a

day), a liberal estimate for room and board combined is \$2,600 for the nine-month academic year. Students who choose to live and eat off campus will spend either more or less than this amount, depending on circumstances and tastes. Experience indicates that a single student spends approximately \$400 for books and \$1,100 for clothing, insurance, medical expenses, and incidentals. Total costs, including tuition and fees but excluding transportation, generally come to about \$10,640 for the full academic year for the single student. For the married student without children, the cost will range from \$2,500 to \$3,000 higher. The approximate living expense for each child is \$800 for the nine-month academic year.

Financial Awards

University General Funds

Scholarships are available for students enrolled in the school. Applications for financial aid are made separately from admission applications, and awards of aid are made independent of admission decisions. The school is a participant in the Graduate and Professional School Financial Aid Service (GAPSFAS), which permits candidates to request aid at several participating schools with one application, thus eliminating the need to provide information to each school. The GAPSFAS form may be obtained from the Office of Admissions and Student Affairs or from a financial aid officer at any college or university. Applicants

to B&PA who are also requesting financial aid must file a GAPSFAS Application for Financial Aid with the service. The form should be sent directly to GAPSFAS, Educational Testing Service, Princeton, New Jersey 08540, as soon as possible in order to ensure its receipt by the Office of Admissions and Student Affairs at the school by February 15. *Both the completed admission application and the completed GAPSFAS application must be received at the school by February 15 for candidates to receive advantageous consideration for financial aid.*

Students who enroll without financial assistance from the school should not expect to receive aid from the school for their second year. Although the Financial Aid Committee attempts to respond to requests of second-year students for assistance, the school's policy and perceived obligation is to respond first to requests for continued financial aid from those students who received assistance their first year. Certainly, the school will try to help in the case of any emergency or sudden change in a student's financial situation, but such aid will generally be in the form of a loan.

Students who apply for aid are expected first to have exhausted all possible outside sources of assistance. Only in this way can the school adequately respond to students not having access to outside sources of support.

Special Awards

In addition to the general funds of the school and the University for scholarships, the following special awards are available:

The Martin J. Alger Fellowships in Transportation, awarded to students pursuing a career in the area of transportation.

The Allied Chemical Foundation Fellowships, awarded to students in the business program.

The William H. Burns Scholarship of the Tompkins County Trust Company, awarded to a resident of Tompkins County.

The John W. de Forest Memorial Fellowship, awarded to a Canadian citizen or a member of the Cornell Chapter of the Delta Upsilon fraternity who is a candidate for either the M.B.A. or the M.P.A. degree.

The S. C. Johnson & Sons, Inc., Fellowship, awarded to a minority-group candidate for the M.B.A. degree.

The Chuji Kabayama Fellowship, awarded to a candidate from Japan.

The Ada Howe Kent Foundation Scholarships, awarded to students in the business program.

The Deane W. Malott Fellowship of the Owens-Corning Fiberglas Corporation, in honor of Mr. Malott, president emeritus of Cornell University.

Charles E. Merrill Fellowships, awarded to students pursuing careers in public affairs.

Monsanto Scholarship, awarded to students in the business program.

The Henry Morgenthau, Jr., Fellowships, awarded to students pursuing careers in public affairs.

The Neal Dow Becker Scholarship Fund Awards.

The Michael R. Riordan Memorial Scholarship, awarded to a candidate from an undergraduate division of Cornell.

The Walter C. Teagle Memorial Fellowship of the Standard Oil Company (New Jersey).

The William S. Smith Memorial Scholarship, awarded to a candidate with career interests in financial management.

Continental Grain Foundation Scholarships, awarded to students in the business program.

American Cyanamid Company Scholarship, awarded to a minority student in the business program.

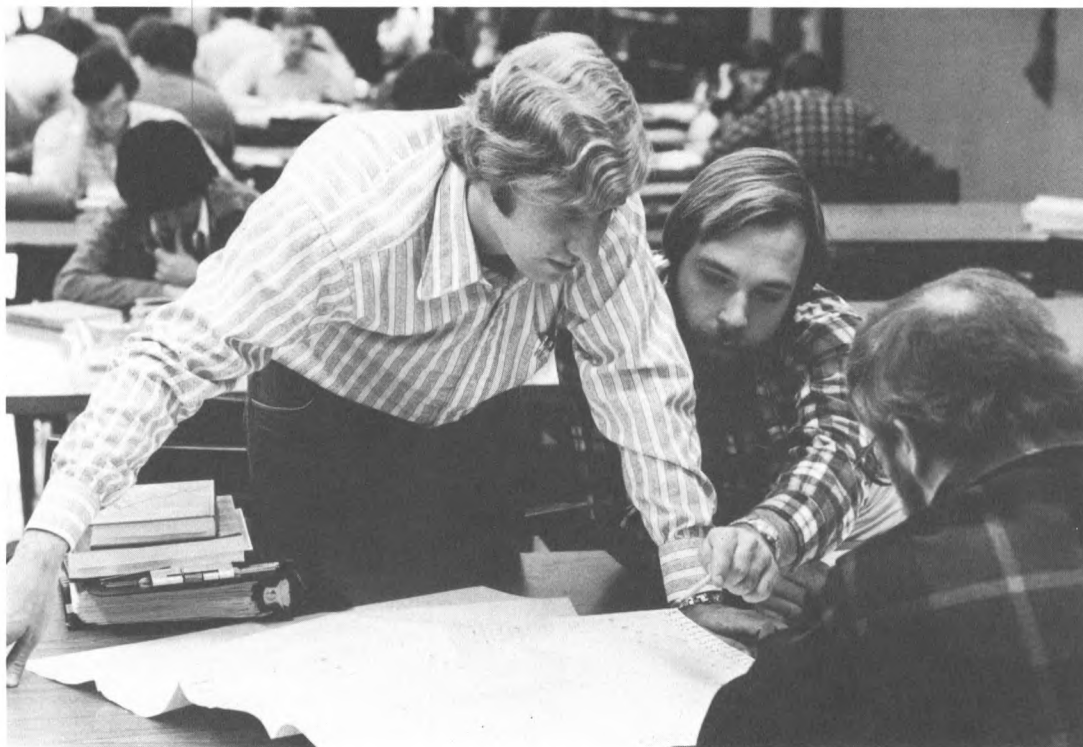
Exxon Minority Fellowship, awarded to a minority student in the business program.

The TRW Minority Scholarships, awarded to minority students in the business program.

The E. H. Litchfield Scholarship Fund, established in honor of the late Edward H. Litchfield, former dean of the school, and provided by contributions from faculty members of the school.

The Lester B. Knight Scholarships, ten \$4,000 scholarships for students in the joint M.B.A. and Master of Engineering program, provided by a gift from Lester B. Knight (Cornell '29) to B&PA and the College of Engineering.

The Council for Opportunity in Graduate Management Education (COGME), funded by the Alfred P. Sloan Foundation, provides financial assistance to outstanding candidates of minority groups wishing to pursue graduate study in management at the school or at one of nine other leading graduate schools of management. The candidates apply for admission to the member schools of interest to them. They also apply for the award by writing directly to COGME, Central Plaza, 675 Massachusetts Avenue, Cambridge, Massachusetts 02139. Once they are admitted to



one of the member schools, they are considered for a COGME award. If they receive an award, they may take it to any member school at which they were accepted.

A student wanting to pursue any of the school's master's degree programs is eligible to apply for a COGME fellowship. For the 1980-81 academic year, the fellowships provide 80 percent of a student's total need in the first year. The school is then responsible for providing support in the second year.

The amount of the COGME award is based on need. Eligibility is based on personal factors as well as academic merit. Attention is paid to accomplishments in an applicant's own cultural environment, motivation, personal growth potential, and potential for contribution to a management role in business, government, or community organizations.

Since most COGME award decisions are made during late March or early April of the academic year, candidates should complete their applications for admission well before this time.

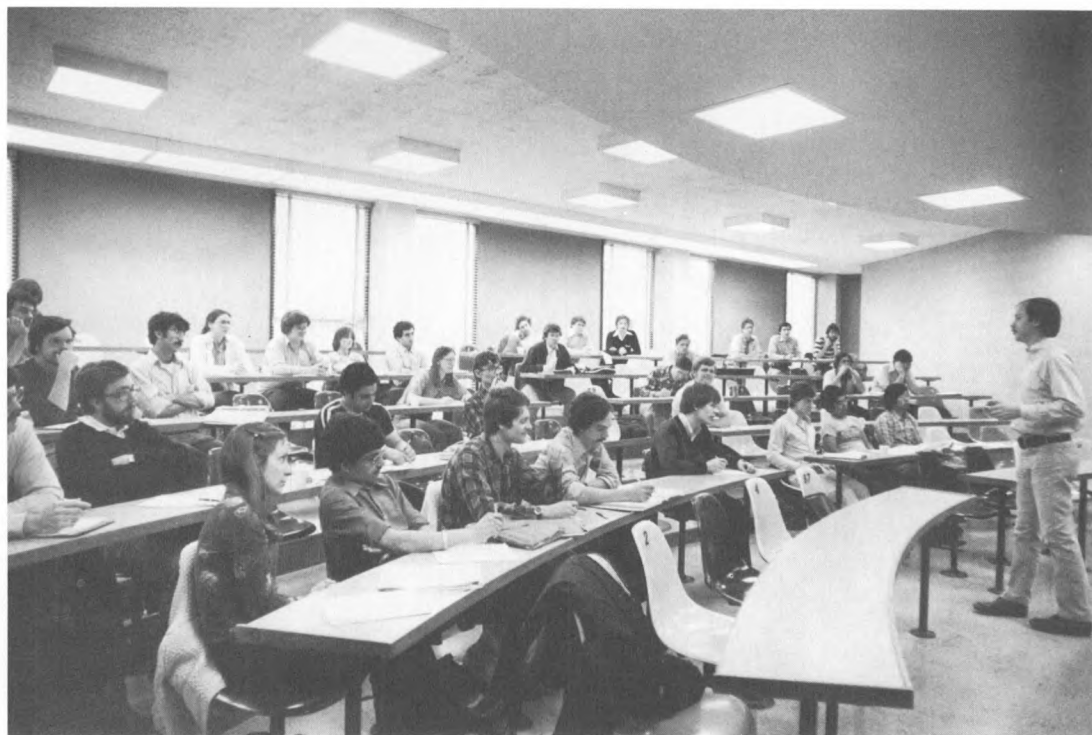
With the exception of the COGME awards, there are no special application procedures for the awards listed above. The Financial Aid Committee makes all scholarship awards on the basis of both financial need and merit and decides which

candidates are best qualified for specific scholarships. Candidates need only file the GAPSFAS forms, mentioned earlier, to be considered for these specified awards or the awards from the general funds.

New York Tuition Assistance Program

All candidates for the master's degree in the school who have been legal residents of New York State the preceding year are eligible for the Tuition Assistance Program for each term in which they are registered as full-time degree candidates. The amount of this award is based upon the net taxable balance of their income and the income of those responsible for their support, as reported on the New York State income tax return for the previous calendar year.

Further information and application forms may be obtained by writing to the New York Higher Educational Services Corporation, Student Financial Aid Section, Empire State Plaza, Tower Building, Albany, New York 12255.



G.I. Bill Assistance

Veterans and other persons who may be eligible for G.I. Bill payments should contact Mary Ann Robinson at the Office of the University Registrar, Cornell University, 222 Day Hall, Ithaca, New York 14853. They should have a copy of the DD-214 form or other proof of eligibility. For advance payment, a request must be presented in writing on the proper form. Enough time should be allowed so that Mrs. Robinson can process and submit this form to the Veteran's Administration regional office at least thirty days before the date of registration.

Long-Term Education Loans

Federally Insured Student Loan (FISL) Program

The school's limited grant and loan funds have obliged the administration to refer many new students to the Federally Insured Student Loan (FISL) program for assistance.

The FISL program was established by the Higher Educational Act of 1965. The program is usually operated by state agencies and is specifically designed to provide deferred-payment private

loans to full-time students. Although the program differs from state to state, the various state programs are similar in that commercial lenders make loan funds available at 7 or 8 percent, and the state and federal governments pay the interest charges while the student borrower is enrolled in an accredited education institution.

The maximum yearly loan disbursement per student is \$5,000, although some lending institutions may not agree to lend this full amount. The cumulative limit of loans for graduate students under this program is \$15,000 (which includes outstanding undergraduate loans). Students interested in applying for such loan assistance should begin the process by contacting a loan officer at a local bank or lending institution. Application for loans through the FISL program is a prerequisite to being eligible to apply for loans administered by Cornell University or the school's loan programs mentioned below.

Cornell University Administered Loans

Cornell University Federally Insured Loan (Cornell FISL) Program

Cornell University is a lender of long-term education loans, under the same federal authority as described above for banks under the state

program. A student who is unable to obtain a loan from a bank or other lending institution under the state FISL program may request similar loan assistance from Cornell University.

To be considered for Cornell administered loans (Cornell FISL), a student must have attempted to borrow under the state program and been refused a loan by at least two lenders or not have been loaned the full amount for which he or she is eligible on the basis of need. If the student has been refused FISL funds through a lending institution, the student should request the responsible lending officer to write an official letter stating that the lending institution has refused the loan request and the reasons for this refusal. This letter should be sent directly to the Office of Admissions and Student Affairs, Graduate School of Business and Public Administration, Cornell University, Malott Hall, Ithaca, New York 14853. Refusal letters from at least two separate lending institutions must be received before a request for a Cornell FISL will be processed by the University.

It should be noted that federal authority will not insure loans exceeding \$5,000 per year under this program. Thus, for example, if a bank or other commercial lending institution will loan a student \$2,500, then Cornell University may loan only another \$2,500, up to the maximum federal insuring authority of \$5,000.

National Direct Student Loan (NDSL) Program

Cornell University is also a lending agent for federal funds from the National Direct Student Loan (NDSL) program. The NDSL funds available to the University will be used to lend students the difference between their FISL funds and their need for the academic year. Most of these funds will therefore be reserved for those students who have already received either a state FISL or a Cornell FISL and who have additional need beyond the maximum \$5,000 available under these programs. Special consideration will be given to those students who have qualified for and received NDSL funding at the undergraduate level.

The NDSL program is essentially the same as the FISL program except that the interest on NDSL funds is only 3 percent per year, beginning nine months after the student graduates, and the federal estimate of need tends to be strict.

Kellogg Foundation Loan Fund for Students in the Sloan Program in Hospital and Health Services Administration

Several years ago the Kellogg Foundation endowed a loan fund restricting awards to students in the hospital and health services administration program of the school. The interest earnings from this endowment provide a limited amount of funds each year for loans to students in the Sloan program. The terms of these loans are the same as for Cornell FISL funds. The school authorizes loans from this fund; they are then processed through the University.

Louis and Theresa Seley Foundation Loan Fund for Students Majoring in Transportation Studies

The Seley Foundation has endowed a loan fund in the school restricted to students who major in transportation studies. This loan fund provides a limited amount of funds each year from the interest earnings of the original endowment. The terms of these loans are the same as for Cornell FISL funds.



Administration and Advisory Council

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Theodore Cooper, Provost for Medical Affairs

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Larry I. Palmer, Vice Provost

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Neal R. Stamp, Senior Counsel to the University

Kenneth I. Greisen, Dean of the University Faculty

Administration of the School

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Dean

David A. Thomas, M.B.A., Ph.D., C.P.A.,
Associate Dean for Academic Affairs

Edward T. Lewis, Ph.D.,
Associate Dean for External Affairs

Thomas J. Calo, M.A.,
Assistant Dean for Placement

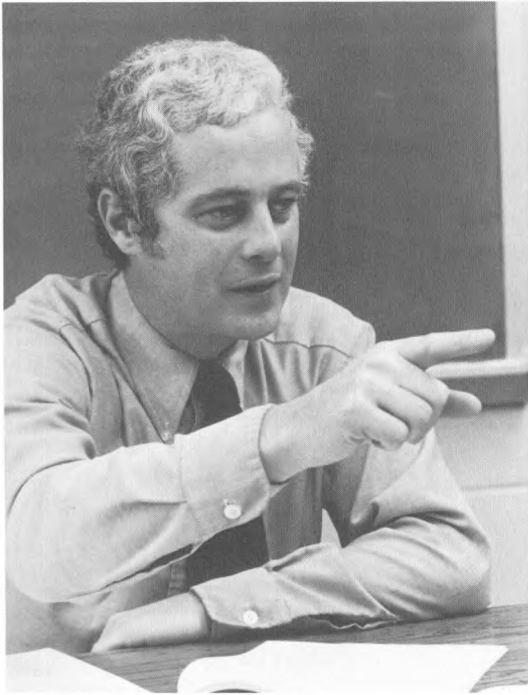
James W. Schmotter, Ph.D.,
Assistant Dean for Admissions and Student Affairs

Leslie J. Bird, B.A.,
Acting Registrar, and Acting Assistant Director of
Admissions and Student Affairs

Ann L. Calkins,
Director of External Affairs

Harriet A. Peters, M.S.,
Assistant Director of Placement—Sloan Program
and Assistant to the Dean

Wendy B. Phoenix, M.B.A.,
Director of Administration of the Public
Administration Program



Edward T. Lewis, associate dean for external affairs.

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Director of the Hospital and Health Services Administration Program

Frederick T. Bent, Ph.D.,
Coordinator of the International Program

Harold Bierman, Jr., M.B.A., Ph.D.,
Director of the Business Administration Program

Douglas R. Brown, Ph.D.,
Director of the Health Executives Development Program

Thomas R. Dyckman, Ph.D.,
Director of the Doctoral Program

Edward S. Flash, Jr., Ph.D.,
Coordinator of the Education for Public Management Program

Jerome E. Hass, Ph.D.,
Director of the Public Administration Program

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Editor of *Executive*

L. Joseph Thomas, Ph.D.,
Director of the Executive Development Program

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Editor of *Administrative Science Quarterly*

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Administrative Supervisor

Caroline Violette,
Coordinator of Publications
Managing Editor, *Administrative Science Quarterly*

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Betsy Ann Olive, B.L.S.,
Librarian

Donald W. Schnedeker, M.L.S.,
Senior Assistant Librarian

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Myrlie Evers, Director of Community Affairs, Atlantic Richfield Co.

Robert Gunn, President, American Association of Petroleum Geologists

Robert S. Hatfield, Chairman of the Board, The Continental Group, Inc.

G. Michael Hostage, President, ITT Continental Banking Co., Inc.

Klaus Jacobs, President and Chief Executive Officer, Paramount Group, Inc.

Charles L. Jarvie, President, Dr. Pepper Company

Spencer C. Johnson, Executive Vice President, Hospital Association of New York State, Inc.

James S. Labick, Partner, Arthur Andersen & Co.

Richard B. Loynd, President, The Eltra Corporation

George W. McCagg, Jr., Special Assistant for Overseas Analysis, General Motors Corporation

Dona O'Bannon, President, National Association of Women Business Owners; Alcade, Henderson, O'Bannon, and Kline

Roy H. Park, President, Park Broadcasting, Inc.

Patricia L. Pryse, Assistant Secretary, Chemical Bank

William W. Ross, Partner, Wald, Harkrader & Ross

Stephen Russell, President, Seatrain Lines

Harvey E. Sampson, President and Chairman, The Harvey Group, Inc.

Nelson Schaenen, Jr., Weiss, Peck & Greer

Nelson Schaenen, Sr., Advisory Council Member Emeritus

Lewis Thomas, President, Memorial Sloan-Kettering Cancer Center

David D. Thompson, Director, The New York Hospital

Paul R. Tregurtha, President, Moore McCormack Resources, Inc.

Richard F. Tucker, Executive Vice President, Mobil Oil Corporation (*Chairman of the Council*)

Thomas O. Waage, retired Vice President, Federal Reserve Bank of New York

Frederic W. West, Vice Chairman, Bethlehem Steel Corporation

Regional Advisory Council

James C. Morgan, President and Chief Executive Officer, Applied Materials (*Chairman of the West Coast Council*)

Robert W. Van Camp, Group Vice President, Gillette Co. (*Chairman of the Boston Council*)



David Rockefeller (standing left), Executive Forum guest and chairman and chief executive officer of Chase Manhattan Bank, exchanges greetings with Richard F. Tucker (standing right), Advisory Council chairman and executive vice president of Mobil Oil Corporation, and Associate Dean David A. Thomas (seated right).

Cornell Academic Calendar

1980-81

Registration

Thursday and Friday,
August 28 and 29
Tuesday, September 2

Fall term instruction begins

Fall recess:

Instruction suspended, 1:10 p.m.

Instruction resumed

Saturday, October 11
Wednesday, October 15

Thanksgiving recess:

Instruction suspended, 1:10 p.m.

Instruction resumed

Saturday, November 22
Monday, December 1
Wednesday, December 10

Fall term instruction ends, 5:00 p.m.

Final examinations begin

Final examinations end

Saturday, December 13
Monday, December 22

Registration

Thursday and Friday,
January 29 and 30
Monday, February 2

Spring term instruction begins

Spring recess:

Instruction suspended, 1:10 p.m.

Instruction resumed

Saturday, March 28
Monday, April 6

Spring term instruction ends, 1:10 p.m.

Final examinations begin

Final examinations end

Saturday, May 16
Tuesday, May 19

Commencement Day

Thursday, May 28
Sunday, May 31

The dates shown in the academic 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.

List of Announcements

Following is a list of Announcements published by Cornell University to provide information on programs, faculty, facilities, curricula, and courses of the various academic units.

Agriculture and Life Sciences
College of Architecture, Art, and Planning
College of Arts and Sciences
Graduate School of Business and Public Administration
Engineering at Cornell
Graduate Study in Engineering and Applied Science
General Information*
Graduate School
School of Hotel Administration
College of Human Ecology
School of Industrial and Labor Relations:
ILR Cornell
Graduate Study at ILR
Law School
Medical College (New York City)
Graduate School of Medical Sciences (New York City)
Officer Education (ROTC)
Summer Session
New York State College of Veterinary Medicine

*The *Announcement of General Information* is designed to give prospective students pertinent information about all aspects and academic units of the University.

In addition to the Announcements listed above, the University publishes a master catalog of University courses, *Cornell University: Description of Courses*, and a handbook for enrolled students, *Academic Information*.

Requests for the publications listed above should be addressed to

Cornell University Announcements
Building 7, Research Park
Ithaca, New York 14850.

(The writer should include a zip code.)

Office of University Publications
680 22M BP