Graduate School of Business and Public Administration



Cornell University Announcements 1972-73

CORNELL UNIVERSITY ANNOUNCEMENTS

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Cornell University

Graduate School of Business and Public Administration

1972-73

CORNELL ACADEMIC CALENDAR

	1972–73			
Convocation	W,	Aug. 30		
Registration, new students	Th,	Aug. 31		
Registration, continuing and rejoining students	F,	Sept. 1		
Fall term instruction begins, 7:30 a.m.	М,	Sept. 4		
Thanksgiving recess:				
Instruction suspended, 1:10 p.m.	W,	Nov. 22		
Instruction resumed, 7:30 a.m.	М,	Nov. 27		
Fall term instruction ends, 1:10 p.m.	S,	Dec. 9		
Independent study period begins, 2:00 p.m.	S,	Dec. 9		
Final examinations begin	Th,	Dec. 14		
Final examinations end	F,	Dec. 22		
Registration, new and rejoining students	Th,	Jan. 18		
Registration, continuing students	F,	Jan. 19		
Spring term instruction begins, 7:30 a.m.	М,	Jan. 22		
Spring recess:				
Instruction suspended, 1:10 p.m.	S,	Mar. 17		
Instruction resumed, 7:30 a.m.	М,	Mar. 26		
Spring term instruction ends, 1:10 p.m.	S,	May 5		
Independent study period begins, 2:00 p.m.	S,	May 5		
Final examinations begin	М,	May 14		
Final examinations end	Т,	May 22		
Commencement Day	F,	May 25		

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 Senate has scheduled classes on religious holidays. It is the intent of Senate legislation that students missing classes due to the observance of religious holidays be given ample opportunity to make up work.

For admission information and application materials, please correspond with:

Director of Admissions & Student Affairs Graduate School of Business and Public Administration Cornell University Malott Hall Ithaca, New York 14850 607/256-2327

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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.



I. INTRODUCTION

The School and the University

In its creation and development the Graduate School of Business and Public Administration has drawn support from and in turn has reflected the century-long traditions of Cornell University. From its very founding Cornell University broke from the then dominant emphasis on the classics and provided educational programs more closely related to the growth of American life and society. In the same spirit Cornell took the lead in welcoming students from overseas.

The pursuit of this broad purpose has made Cornell—a private institution but also the land-grant university of New York—a university of sixteen major schools and colleges, of which four are supported by New York State. Coeducational and nonsectarian, it has a student body of approximately 15,000, a faculty of over 2,000, and a library of over four million volumes. It is within this framework that the School has set its goals and fashioned its programs.

The School admitted its first students in 1946. It became an independent graduate school at Cornell in 1955, and its doctoral program was started that year. The Sloan Institute of Hospital Administration was also established as an integral part of the School in 1955.

Like the University of which it is a part, the School draws its student body from a wide variety of disciplines and cultural environments. The 385 master's degree candidates currently in residence come from approximately 100 American and foreign colleges and universities. More than half of all the students have a background of undergraduate studies in arts or sciences, while approximately one-quarter were engineering students as undergraduates. One-half began their graduate training immediately after receiving their bachelor's degrees and the remaining half following military or work experience.

Because of the diverse backgrounds of the School's students and the need for a common understanding of the environment and functions of management, much of the first-year program for each of the School's professional degrees is predetermined. Once this foundation is acquired, the student, with the approval of his adviser, may choose from a wide range of courses in building a purposeful program or "concentration" fitted to his needs and aspirations. Reflecting the multidisciplinary nature of the executive function, second-year programs are flexible and broad in scope and embrace not only the offerings of the School but also those of other parts of the University.

The programs of the School are not confined to studies for the professional master's degrees. Work for the degree of Doctor of Philosophy (Ph.D) is also offered. In addition, the School conducts several development programs for experienced executives and sponsors a number of research activities. Further, the School's interest in advancing the art and science of administration is expressed in the *Administrative Science Quarterly* and other publications. These programs and publications are described in greater detail in subsequent sections of this *Announcement*.

The School is housed in Malott Hall, which was completed during the spring of 1964. This building was designed to meet the specialized requirements of graduate education in administration. It houses the Eastwick Library, a center for student activities, faculty and administrative offices, and lecture, seminar, and case-discussion rooms.

Education for Management

Today's executive in business, government, or hospital and medical care administration must have competence in many disciplines in order to understand both the complexities of the external environment in which he operates and the internal workings of the organization of which he is a part. The continued development of science and technology, the rapid growth of our population, and the ever-changing nature of the international environment are among the factors which are significantly altering the scope and character of management decision making and imposing new responsibilities upon administrators at all levels. New developments in quantitative analysis are accompanied by a revolution in information processing, made possible by computers. On another front, rapid advances in the behavioral sciences are suggesting new approaches for management to employ in organizing human effort and in arriving at policy decisions. While the knowledge and analytical ability which a successful executive must possess will be developed in part from the constant challenge and stimulation of experience, education in administration can establish a sound basis for acquiring such knowledge and analytical ability and accelerate one's understanding of the environment. Graduate education for management can also help crystallize career objectives and improve mobility and discretion in the choice of employment. In the last analysis success will be determined by the student's own efforts to develop his abilities and potentialities. Graduate study in administration will expand his opportunities. The realization of those opportunities rests with the student.



II. MASTER'S DEGREE PROGRAMS

Approach and Content

The School's programs for the Master of Business Administration (M.B.A.), Master of Public Administration (M.P.A.), and Master of Professional Studies—Hospital and Health Services Administration (M.P.S.— H.H.S.A.) degrees require two years of study and the completion of sixty credit hours of course work. Much of the first year is taken up with core courses which introduce the student to the broad range of disciplines relevant to administration and provide him with the necessary background for more specialized studies. By contrast, the second year is devoted almost entirely to elective courses chosen by the student, in consultation with his adviser, to meet his own particular career interests and objectives.

Flexibility. Contributing to a high degree of flexibility in the master's degree programs of this School are: 1) the possibility of exemption from core courses in areas in which the student possesses an adequate background, 2) the availability of a wide range of elective courses in the School's curriculum, and 3) the opportunity for the student enrolled in the School to take a portion of his studies in other colleges and schools of Cornell University.

A student with a strong undergraduate background in one or more of the subjects included in the core curriculum may exempt a core course requirement on the basis of successful completion of an examination in the subject matter covered by the course. Exemption examinations for both the first and second semesters are administered immediately prior to the start of the school year. If a student scores at the "superior" level on a core course exemption examination, he may be granted advanced standing credit toward the degree in the amount equal to the credit hours of the course being exempted. If the student passes the exemption examination, but not at the "superior" level, then only the requirement to take the course may be waived. In this latter case, advanced standing is not awarded but the student may elect to take advanced work in the particular subject area or substitute elective courses in other areas. Thus, the number of elective courses which the student may take is increased and he can move more quickly into work in his special areas of interest.

The student is asked to choose his elective course with the guidance of his faculty adviser and with some purposeful pattern in view. Although no "major" is formally required, there is a wide range of fields of concentration, described in the following pages.

In working out his elective course program the student is often encouraged to enroll in courses offered in other divisions of the University. Of particular interest are the graduate courses of the Departments of Economics and Government of the College of Arts and Sciences; the School of Industrial Engineering and Operations Research of the College of Engineering; the Department of City and Regional Planning of the College of Architecture, Art, and Planning; the College of Agriculture and Life Sciences; and the School of Industrial and Labor Relations.

Method of Instruction. Teaching methods vary with the subject matter and with the preferences of the instructors. The case method, the lecturediscussion approach, and the seminar method are all employed. Cases are introduced in an effort 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 to integrate reading assignments and class materials. Some of the advanced courses are offered as seminars in which individual study and research are required, and ideas can be exchanged at length.

Computer Facilities. The principal computing facility at Cornell is an IBM 360 Model 65 located at Langmuir Laboratory at Cornell's Research Park. The system is equipped for remote access of several kinds. The operating system is designed so that very few users find it necessary to visit Langmuir. The primary terminals are high-speed reader-printers located in Upson, Clark, and Warren Halls. The latter two installations are each located less than a block from Malott Hall, the home of the Graduate School of Business and Public Administration. While these are remote job entry and delivery devices rather than conversational terminals, they permit convenient access, job turnaround-time in terms of minutes, and the use of on-line files. Each of these terminals is the core of a small computing center, with auxiliary equipment, consulting assistance, reference materials, and work space. In addition to these high speed terminals, teletypewriter terminals are available for individual projects that require interactive capability. In Malott Hall, there are four interactive terminals which are used for coursework in the School. Many students find these terminals convenient for use in homework or projects in a variety of courses.

Changes in Curriculum. The School regularly reviews its curriculum with the aim of maintaining its effectiveness and its responsiveness to the needs of a changing world. A major revision of curriculum for all programs of the School was completed during the spring of 1971. These changes are reflected in the discussion which follows.

Business Administration

The School's program in business administration is designed to provide an educational foundation for responsible business leadership. Organizational behavior and administrative relationships are examined with the aid of contributions from the behavioral sciences. The uses and limitations of quantitative approaches to managerial problems are explored. A foundation in economic analysis is presented in order to equip the student with analytical tools of proven value in decision making and to provide him with a better understanding of the environment in which business operates. The functions of marketing, operations management, and finance are investigated, and an effort is made to instill in the student an appreciation of the interrelationships of these functions and an understanding of the company-wide planning process. The political and economic foundations of the United States business community and the nature and impact of important public policies are also explored.

The Core Program in Business Administration

A large portion of the first year of study for the M.B.A. is devoted to core courses. These courses are required unless exempted by examination. During the first semester of the first year, M.B.A. candidates are required to take Managerial Accounting, Quantitative Methods for Management, Microeconomics for Management, Macroeconomics for Management, The Computer and Decision Making, and Institutions and Values in Contemporary Society. During the second semester of the first year, they must take Organizational Theory and Behavior, Marketing Management, and Corporate Financial Management. Operations Management, which is also required, may be taken in any of the first three semesters. The structure of the first-year curriculum is indicated on the chart below. Detailed descriptions of the core courses are presented on pp. 27–30.

First Semester		Second Semester	
122.	Managerial Accounting, 3 hrs.	120.	Organizational Theory and Behavior, 3 hrs.
123.	Quantitative Methods for Management, 3 hrs.	126.	Marketing Management, 3 hrs.
124A.	Microeconom- ics for Manage- ment, 2 hrs. 124B. Macroeco- nomics for Management, 2 hrs.	128.	Corporate Financial Management, 3 hrs.
125.	The Computer and Decision Making, 3 hrs.		Elective Course
129.	Institutions and Values in Contemporary Society, 3 hrs.		Elective Course

FIRST YEAR BUSINESS ADMINISTRATION PROGRAM

Course 200, Business Policy, is required for M.B.A. candidates in the first semester of the second year.

The M.B.A. candidate can take two elective courses during the first year. If he exempts required courses by examination, he can then take more than two electives.

Work Beyond the Core

For the most part, the candidate's second-year program may be made up of courses selected according to his particular career focus and needs. To assist the student in developing a purposeful pattern of courses for his work beyond the core program, the following fields of concentration have been defined:

Industrial Accounting. This concentration is designed to lead to careers in business or governmental accounting and in financial or general management. Its requirements are flexible and depend on the student's preparation prior to entering the School and on his vocational objectives. A typical program in this field includes second-year courses in finance, managerial economics, and computer applications as well as in intermediate, advanced, cost, and tax accounting.

Professional Accounting. This concentration, which is designed to prepare the student for a career in public accounting, meets the academic requirements for the Certified Public Accountant certificate in New York State. The regulations of the New York State Education Department specify that the C.P.A. candidate must be a graduate of an educational institution offering an accounting curriculum registered by that Department. He must have completed the following minimum semester credithour requirements in his academic program: sixty in liberal arts and sciences, twenty-four in accounting, nine in economic analysis, nine in finance, four in business law, and at least fourteen other business electives. These requirements may be met by combining undergraduate course credits with those received in this School. A student who plans to fulfill the academic requirements for the New York C.P.A. certificate must take the following courses: 300, Intermediate Accounting; 301, Advanced Accounting; 302, Managerial Cost Accounting; 303, Seminar in Financial Policy and Managerial Accounting; 305, Introduction to Taxation Affecting Business and Personal Decision Making; 306, Auditing; 308, Law of Business Associations; and 309, Advanced Business Law. He should also elect courses 304, Seminar in Financial Accounting, and 950, Introduction to Management Information Systems. For the student who has no prior work in accounting and who elects to take the C.P.A. concentration, one core course may be omitted. The core course to be omitted must be approved by the Academic Standards Committee. Because careful scheduling is necessary if C.P.A. course requirements are to be met, students contemplating the C.P.A. program are strongly urged to consult with a member of the accounting staff at the outset of their work in the School. (Note: for students with high academic records, six-week internships in public accounting firms may be arranged during the second year of study.)

Finance. This concentration is designed to provide a thorough understanding of the role of finance in administrative and decision-making processes and to familiarize the student, in some depth, with the mechanisms and operations of the financial system and the intricate interrelationships between business and government in the realm of finance. The program in business finance presents an integrated treatment of the operational aspects of business and investment finance, the functions of financial institutions and capital markets, and the basic economic and legal framework of financial organizations. This concentration meets the needs of students who look forward to specialized careers in the financial management of business and to careers in commercial, savings, and investment banking, in financial counseling, in brokerage houses, and in investment management.

International Business Operations. Students interested in careers in international business operations may develop a field of concentration based on courses offered in this School and elsewhere in the University

(see p. 41). In addition, the School offers a number of courses in the international development concentration which are relevant for students planning to work abroad. These include course work in the developing areas. Supplemental course work can be taken in the Department of Government and the Department of Agricultural Economics. For students with well-defined geographic interests, language and area studies offerings are also available.

Managerial Economics. This concentration is designed for students seeking careers either in general management or as professional economists in industry or in government. The rapidly expanding application of economic analysis in decision making is creating wider opportunities for men trained in its use both in line management posts and in staff positions in large industrial corporations, banks, insurance companies, investment firms, merchandising operations, and many departments of the federal and state governments. The student who elects this concentration should have had some previous training in economic studies, especially economic theory, and should possess some background in mathematics. His program may emphasize either a qualitative or a rigorously quantitative approach, but a basic understanding of both is needed and must be demonstrated. Thus, the student is expected to develop a firm grasp of the economic and institutional framework of business behavior and of government policies that affect business performance. He is also required to develop competence in the use of basic mathematical and statistical tools. In carrying out his program the student may focus in depth on the analysis of problems associated with the functions of finance, marketing, or business management, or he may elect to concentrate on the more general issues of government operations and public policy. In either case, with the consent of his adviser, he may call upon the varied resources of the University to complement and supplement courses in this School.

Marketing. This concentration provides the student with an understanding of the operational and policy aspects of the marketing function. The role of marketing in identifying and developing demand for products and services and in facilitating the orderly movement of goods through the productive stages to consumers is examined in detail. The dynamics of demand, channels of distribution, competitive behavior, sales forecasting, advertising strategy, marketing measurements and pricing, and product development policies are among the subjects emphasized.

The analytical tools of economics, behavioral science, and operations research are considered throughout the marketing concentration and the increasingly international character of marketing is recognized. Elective courses enable the student to experience the full dimensions of the decision-making process in a marketing setting and to apply analytical methods to marketing problems and opportunities currently before marketing executives.

Personnel Management. The objectives of this concentration are the following: to develop an understanding of personnel administration as a management function and of its relationship to other management activities; to familiarize the student with the policies, methods, and techniques utilized in the process of personnel administration; to develop the capacity to analyze personnel problems, select the most effective means of dealing with them, and plan appropriate courses of action; and to explore current trends and research in the field of personnel administration and human relations. Courses and seminars in this field deal with such topics as motivation, supervision, communications, selection, training, compensation, discipline, performance review, promotion, transfer, development, safety, and employee services and benefits. In addition to the courses and seminars in personnel management and human relations offered by this School, students interested in this field may also take advantage of a wide range of graduate courses related to personnel management in other divisions of the University. Of particular note are the graduate courses of the School of Industrial and Labor Relations in collective bargaining, labor union history and administration, industrial training, labor market economics, industrial psychology, selection and placement, social security, wage and salary administration, job analysis, and human relations.

Production and Operations Management. This concentration is designed to provide a thorough comprehension of the major economic problems of production and operations management, together with the analytical techniques most effective in their solution. Courses deal with such topics as process and equipment selection, product planning, aggregate production and work-force scheduling, production and inventory control, distribution systems, project control, job-shop scheduling, and quality control. Students develop an understanding of the effectiveness and the limitations of analytical techniques such as linear programming, classical methods of optimization, dynamic programming, and statistical analysis. Students interested in this field are encouraged also to take course work in the closely related areas of managerial economics and quantitative analysis.

Quantitative Analysis for Managerial Decision Making. This concentration is designed to develop skill in the use of mathematics and statistics for solving managerial problems. Work in this field is offered by the School in cooperation with the School of Industrial Engineering and Operations Research of the College of Engineering, and several courses are given jointly. Students electing this concentration may develop programs, with the assistance of their advisers, which include courses drawn from the School's offerings in operations research, computer applications to business, and managerial economics. They may also elect courses in other parts of the University, including the Departments of Mathematics and Economics in the College of Arts and Sciences and the School of Industrial Engineering and Operations Research. The facilities of the Computing Center are available for the use of students both in course work and in approved research projects.

Transportation. For students interested in careers in transportation, courses are offered, normally for second-year students, in the special features of transportation activities. With respect to railroads, motor carriers, airlines, and shipping firms, emphasis is placed on the features of pricing, service, operations, organization, finance, and public policy peculiar to each. Students take advanced work in supporting business subjects and in the field of public regulation of industry.

Special Programs. In addition to the fields of concentration noted above, special concentrations may be developed to meet a student's needs in other aspects of business administration, such as Agricultural Management and Organizational Theory and Behavior.

Public Administration

The objective of the graduate program in public administration at Cornell is to prepare its master's degree candidates for effective participation in public affairs. The fulfillment of opportunities existing in American society and the solving of problems that plague it represent crucial challenges to public policy. The responses to these challenges by public agencies depend upon their being led by trained personnel who can create and execute effective policies, analyze and evaluate complex ends-means relationships, and work within a political environment.

The M.P.A. curriculum is designed for young men and women who seek the knowledge and skills which are requisites for professional achievement as public managers or analysts or in such private capacities as consultants and staff of public interest organizations. The curriculum combines study in essential areas of administration, economics, and politics with elective concentrations that draw upon a wide range of relevant graduate study fields. Individuals are thus prepared for their initial postgraduate job. At the same time, they are provided with the appropriate intellectual foundation for long-term performance and development that may span various types of employment at national, state, local, or international levels. Study alternatives enable individuals to focus on policy areas as diverse as urban affairs and overseas economic development, on staff functions such as financial and budgetary analysis, or on combinations of both.

Education for a career in public affairs should provide the student with an awareness of the political processes of representative government and an appreciation of the decision-making and managerial processes of public agencies. It should also equip him with an understanding of the broad spectrum of public policy issues and a thorough knowledge of the intricacies of at least one major public policy area. Finally, it should develop in the student the analytical ability which is essential to successful policy formulation and execution.

Beginning in September, 1972, the public administration program is directly administered by the Public Policy and Administration Program (PPAP) within the School. PPAP is also responsible for the Field of Public Policy in the Graduate School. This relationship provides access for M.P.A. students to a number of faculty in various colleges and departments throughout the University who have interests in different aspects of policy studies. Many of these faculty will be associated directly with PPAP and will be offering specifically related courses.

The Core Program in Public Administration

A large portion of the first year of study for the M.P.A. is devoted to core courses. These courses are required unless exempted by examination. During the first semester of the first year, M.P.A. candidates are required to take Quantitative Methods for Management, Microeonomics for Management, Macroeconomics for Management, Institutions and Values in Contemporary Society, and The Conduct of Public Affairs I. During the second semester of the first year, they must take Organizational Theory

and Behavior and The Conduct of Public Affairs II. At the discretion of the candidate, and with the consent of his adviser, Managerial Accounting, which is required, may be taken in either the first semester of the first year or the first semester of the second year and The Computer and Decision Making, which is also required, may be taken in either the first or second semester of the first year. The structure of the first-year curriculum is indicated in the chart below, and detailed descriptions of the core courses are presented on pp. 27–32. These core courses introduce the student to the several disciplines essential to the practice of public administration and provide him with the basis for advanced work in his particular field or fields of interest.

First Semester		Second Semester	
122.	Managerial Accounting, 3 hrs.	120.	Organizational Theory and Behavior, 3 hrs.
123.	Quantitative Methods for Management, 3 hrs.	125.	The Computer and Decision Making, 3 hrs.
124A.	Microeconom- ics for Manage- ment, 2 hrs. 124B. Macroeco- nomics for Management, 2 hrs.		Elective Course
129.	Institutions and Values in Contemporary Society, 3 hrs.		Elective Course
130.	The Conduct of Public Affairs I, 3 hrs.	131.	The Conduct of Public Affairs, II, 3 hrs.

FIRST YEAR PUBLIC ADMINISTRATION PROGRAM

M.P.A. candidates also are required to take three hours in the area of public economics or finance such as Financial Management in Governmental Organizations, the Public Economy, or Public Investment Analysis (one of the courses in public investment taught elsewhere on the campus), or some similar level and type course as agreed to by the student's adviser. Candidates are encouraged to take at least one course beyond the core in the general area of quantitative methods such as decision theory, econometrics, or operations management.

The M.P.A. candidate may take up to three elective courses during the first year. If he exempts required courses by examination, he can then take more than three electives. The candidate, when he has sufficient course exemptions or electives, can take as few as twelve credit hours in a semester. However, candidates electing to take a twelve-hour semester

should keep in mind that a total of sixty credit hours is required for graduation.

Work Beyond the Core

For the most part, the candidate's second-year program may be made up of courses selected with regard to his particular career focus and needs. In addition to the courses offered by this School in public administration, public policy, and related fields, the student's elective program often involves work in the foreign area study programs, the Department of City and Regional Planning of the College of Architecture, Art, and Planning; the School of Industrial and Labor Relations; or in various departments of the College of Arts and Sciences.

As an important complement to their academic work, public administration students are strongly urged to obtain employment in public agencies during the summer between the two years of the M.P.A. program. The School's faculty and staff assist the student in finding a summer position which relates closely to his career plans. The experience provided by such employment has been found most helpful in contributing to a thorough understanding of the nature of governmental operations, in developing a focus for the student's second-year program, and in guiding his career choice.

The School expects to initiate in the summer of 1973 an experimental summer internship program. Participating students might be placed with executive or legislative units of national, state, or local government. Participants will be required to prepare a paper dealing with some programmatic or organizational aspect of the agency with which they will work.

To assist the student in developing a purposeful pattern of courses for his work beyond the core program, the following fields of concentration have been defined:

Economic Analysis and Public Policy. This concentration prepares students for careers on the economic staffs of federal, state, or local governmental agencies. Varying emphases are possible. A student may focus his attention on monetary and fiscal policies and their roles in contributing to high levels of employment, price stability, economic growth, and a satisfactory balance-of-payments picture. Alternatively, he may specialize in problems in the public regulation of business enterprise or in the field of economic planning at the national or community level. Students electing this concentration often take some of their work in



the Department of Economics in the College of Arts and Sciences, and they may also enroll in courses offered in other parts of the University.

General Public Administration and Policy Formulation. This concentration recognizes the continuing need for broad-gauged administrators who are characterized not by a high degree of specialization in a single field but rather by a comprehensive understanding of the nature of governmental operations. Organizational theory, management analysis, policy formulation, and decision theory are emphasized. The student is prepared for work in general administration or in budget analysis or organization and methods (O&M) analysis.

International Development. Designed for students interested in careers with international agencies and governmental activities abroad, this concentration is built on a wide range of international courses throughout the University, including offerings of this School. In addition to the School's courses in the theory of the developmental process, development administration, contemporary nationalism, and American operations abroad, work may be taken in international economics, agricultural economics, rural sociology, anthropology, and government. Credit may be given for advanced work in language, and students interested in public service abroad are urged to develop a fluent knowledge of one foreign language.

Cornell University's interest in the field of international development is reflected in several campus programs and overseas commitments. Cornell's Center for International Studies administers a substantial Ford Foundation grant for the support of international studies, brings distinguished visitors to the campus throughout the year, and arranges frequent seminars and discussions on international affairs. The University offers programs in Southeast Asian, South Asian, Chinese, and Latin American studies, and National Defense Education Centers have been established in support of these area programs. Work is also offered in African and Soviet studies, and there are special programs in International Population and International Agricultural Development. The University administers several government contracts and foundation grants involving the development of research and teaching institutions overseas. (Students interested in this field should consult pp. 41–45 and refer to the discussion of International Business Operations on p. 13.)

Metropolitan and Urban Affairs. The emergence of large urban and metropolitan areas as the dominant environmental pattern in the United

States has posed urgent challenges for public administrators at all levels of government. This concentration is concerned with challenges as broadly varying as civil rights, mass transportation, and health care. It also deals with the new tools and approaches which are being developed to contend with urban issues. Students select their advanced courses not only from this School but also from courses presented in the Department of City and Regional Planning and in other parts of the University. This concentration prepares students for work in urban planning and policy staffs, urban renewal operations, city management, or state and federal agencies concerned with urban problems.

Organizational Theory and Behavior. Here the student focuses his attention on the theory of bureaucratic organization, the application of the behavioral sciences to the field of public administration, and the interrelationships of politics and administration. Students interested in careers in government, politics, or research and consulting will find highly relevant new theoretical concepts and analytical approaches. Group dynamics, group problem solving, and the different methods of employee accommodation to large-scale organizations are but three of the many areas studied in which empirical research has enriched the literature of management.

Special Programs. In addition to the fields noted above, special concentrations may be developed to meet a student's needs in other aspects of public administration or public affairs. Particular attention is called to the concentration which may also be developed in *Science*, *Technology*, and *Public Policy*.

Hospital and Health Services Administration

Great changes are taking place in systems and facilities for the provision of medical care in the United States. These changes are accompanied by a manpower shortage in many health fields, and there are challenging careers ahead for men and women entering the fields of hospital and medical care administration, mental health services administration, and health planning.

With the aid of a substantial grant from the Alfred P. Sloan Foundation, the Sloan Institute of Hospital Administration was established as an integral part of the Graduate School of Business and Public Administration in 1955. Since that time a two-year master's degree program has been offered for students interested in administrative and planning careers

in the health field. Students entering this program will normally elect to take the Master of Professional Studies—Hospital and Health Services Administration degree. However, hospital and health administration students may elect to take the M.B.A. or M.P.A. degree but they must complete the particular requirements for one or the other of those degrees as well as the requirements for hospital and health services administration.

The Core Program in Hospital and Health Services Administration

A large portion of the first year of study for the M.P.S.-H.H.S.A. is devoted to core courses. These courses are required unless exempt by examination. During the first semester of the first year, M.P.S.-H.H.S.A. candidates are required to take Quantitative Methods of Management, Microeconomics for Management, Macroeconomics for Management, Institutions and Values in Contemporary Society, and Introduction to Hospital and Medical Care Organization. During the second semester of the first year, they must take Organizational Theory and Behavior and Introduction to Clinical Medicine and Public Health. At the discretion of the candidate, and with the consent of his adviser, Managerial Accounting, which is required, may be taken in either the first semester of the first year or the first semester of the second year and The Computer and Decision Making, which is also required, may be taken in either the first or second semester of the first year. The structure of the first-year curriculum is indicated in the chart below, and detailed descriptions of the core courses are presented on pp. 27-32.

FIRST	YEAR	HOSPITAL	AND	HEALTH	SERVICES
	AD	MINISTRAT	ION 1	PROGRAM	[

	First Semester		Second Semester
122.	Managerial Accounting, 3 hrs.	120.	Organizational Theory and Behavior, 3 hrs.
123.	Quantitative Methods for Management, 3 hrs.	125.	The Computer and Decision Making, 3 hrs.
124A.	Microeconom- ics for Manage- ment, 2 hrs. 124B. Macroeco- nomics for Management, 2 hrs.		Elective Course
129. Institutions and Values in Contemporary Society, 3 hrs.			Elective Course
140.	Introduction to Hospital and Medical Care Organization, 3 hrs.	141.	Introduction to Clinical Medicine and Public Health, 3 hrs.

The M.P.S.—H.H.S.A. candidate may take up to three elective courses during the first year. If he exempts required courses by examination, he can then take more than three electives. The candidate, when he has sufficient course exemptions or electives, can take as few as twelve credit hours in a semester. However, candidates electing to take a twelve-hour semester should keep in mind that a total of sixty credit hours is required for graduation.

Work Beyond the Core

For the most part, the candidate's second-year program may be made up of courses selected with regard to his particular career focus and needs. In addition to the introductory core courses for students in this program, a substantial range of additional courses relating to hospital and health services administration is available in the School. Subjects covered by these courses include health economics, quantitative models in the health field, evaluation of community health services, legal aspects of hospital administration, policy and planning in hospitals and health agencies, mental health and administration, sociology of community health care, seminar in health research, political economy of medical care services, and the health planning process.

A concentration leading to careers in comprehensive health planning is also available. In addition to the core requirements listed on p. 31, students taking this new concentration must also elect one approved course in each of six content areas. These areas are: demography-ecology, social organization and change, political processes, planning processes, mental and environmental health, and community health planning.

The summer between the two academic years is devoted to an administrative residency. With the cooperation of the New York Hospital– Cornell Medical Center, residencies are arranged in selected hospitals and other health care agencies in the New York City area where the student can gain experience under the guidance of particularly well qualified administrators. In order to provide further direct contact with the nature of hospital operations and health affairs, frequent field trips are made both to nearby hospitals and community health agencies.

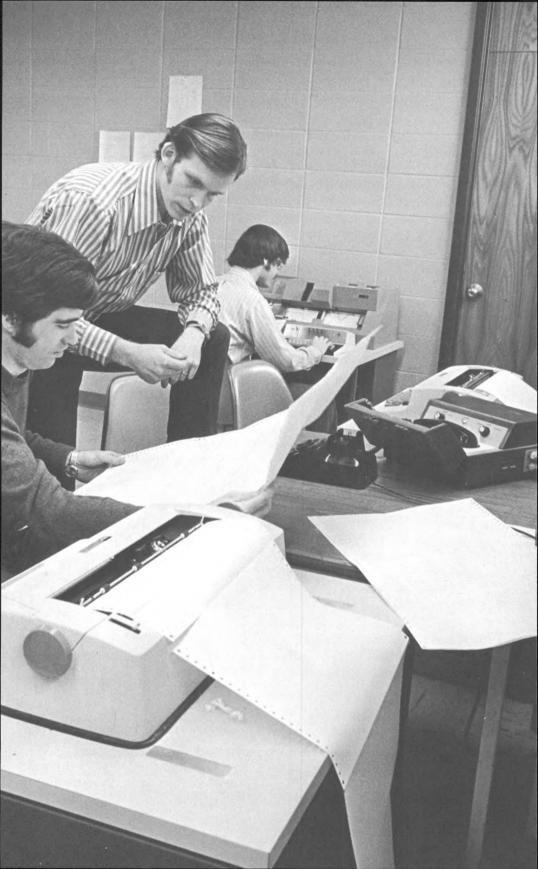
Note: A special brochure entitled Graduate Study in Hospital and Health Services Administration may be obtained by writing to the Sloan Institute of Hospital Administration, Graduate School of Business and Public Administration, Malott Hall, Cornell University.

Law and Administration

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 or Public Administration, and the J.D. degree in four years instead of the five which 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.

Normally, the first year's work is taken entirely within the Graduate School of Business and Public Administration and the second entirely within the Law School. In the third year the work is divided between the two schools, and in 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.

A student, to be admitted to the full combined program, must meet the admissions requirements of both schools. He should apply for admission to both schools and be acceptd by their respective admissions committees prior to entrance into the first year of the program. A student who decides to apply for the program after starting his residence in the Graduate School of Business and Public Administration should discuss his plans with both schools as soon as possible. No assurance can be given, however, that such a student will be permitted to undertake the combined program.



III. THE CURRICULUM

In the following pages the courses offered by the School are listed and described. Core courses are listed first. Elective courses are then presented under the following headings: accounting, business law, finance, hospital and health services administration, international business and development, managerial economics and economic policy, marketing, organizational behavior and personnel, production and operations management, public policy and public administration, quantitative analysis, information processing, transportation, miscellaneous, and research.

Only those courses which are offered by the Graduate School of Business and Public Administration and those courses which are offered jointly by this School with another school or college on the campus are described here. The student should note, however, that there are many courses in other portions 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 Industrial Engineering and Operations Research in the College of Engineering, and the Department of Agricultural Economics in the College of Agriculture and Life Sciences—which may be of interest to him. For information on the nature and content of these courses, the student should consult the *Announcements* of these other schools and colleges of Cornell. (For information about *Announcements* for these other schools and colleges, see the last page of this publication.)

In some instances, the professor shown as teaching a course, or helping with a course, may not be listed under the faculty of this School in the last section of this catalog. In these cases, the course is one of those jointly offered by this School and another school or college on the campus and the professor is a member of the Cornell faculty but is not a member of the faculty of this School.

The Common Core Program

All Students

120. ORGANIZATION THEORY AND BEHAVIOR. Second semester. Credit three hours. Messrs. Lodahl, Smith, and Weick.

Theories and empirical research on human behavior in business, public, and

medical care 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.

122. MANAGERIAL ACCOUNTING. First semester. Credit three hours. Messrs. Dukes and Hofstedt.

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.

123. QUANTITATIVE METHODS FOR MANAGEMENT. First semester. Credit three hours. Messrs. Dyckman and L. J. Thomas.

This course deals with basic elements of decision making under conditions of uncertainty. Topics discussed include set theory, 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 expected to have a limited knowledge of calculus. Students desiring more rigorous coverage of this material may substitute courses 600 and 601 in place of course 123.

Note: For those students who have had little or no mathematics, the Graduate School of Business and Public Administration conducts an intensive two-weeks 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 p. 64 of this catalog.

124A. MICROECONOMICS FOR MANAGEMENT. First half of first semester. Credit two hours. Mr. McAdams.

This course covers the basis of production and consumption behavior and the role and structure of markets and the pricing system in resource allocation. Nonmarket allocation systems are introduced.

124B. MACROECONOMICS FOR MANAGEMENT. Second half of first semester. Credit two hours. Mr. T. Willett.

The first part of this course focuses on the determination of national income, employment, and the maintenance of a high level of economic activity and price stability. Monetary and fiscal policies are studied with particular reference to their institutional setting and economic impact. The second part of the course is devoted to the fundamentals of international economics and the coordination of national and international economic goals.

Note: Separate exemption examinations for courses 124A and 124B will be given at the beginning of the first semester. The student may exempt one or both courses by examination.

125. THE COMPUTER AND DECISION MAKING. First and second semesters. Credit three hours. Mr. Lyons.

This course covers the use of computers in problem solving. Programming knowledge taught in the first part of the course is applied to the solution of problems at the introductory level in capital budgeting and linear programming. (M.B.A. candidates should take this course during the first semester.)

129. INSTITUTIONS AND VALUES IN CONTEMPORARY SOCIETY. First semester. Credit three hours. Messrs. Carter, Kover, and Schramm.

The purpose of this course is to explore the influence of institutions and values on decision making in business, public, and social service organizations. The course examines three broad areas: (1) the nature and source of individual values and the role of personal values in communication and decision making, (2) the characteristics of existing economic and political institutions and how institutional interactions and social concerns shape or constrain organizational choices, and (3) how current changes in attitudes, values, and institutions may affect the future environment for administrative decision making. Case materials and student participation techniques are used extensively.

The Program Core for M.B.A. Candidates

126. MARKETING MANAGEMENT. Second semester. Credit three hours. Mr. Rao.

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 be-

havioral and management sciences. These problems are approached within the framework of the changing environment of the firm.

127. OPERATIONS MANAGEMENT. First and second semesters. Credit three hours. Messrs. L. J. Thomas and McClain.

This course introduces major economic decision problems of production and operations management: selection and configuration of facilities, size and location of plants, aggregate production and work-force scheduling, multiplant allocation of product, large-scale project control (PERT), job design, production standards, production and inventory control, 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. *Prerequisite:* course 123 or the equivalent.

128. CORPORATE FINANCIAL MANAGEMENT. Second semester. Credit three hours. Messrs. Bierman and Hass.

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 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 the buy-lease decision, dividend policy, and investment risk analysis. *Pre-requisites:* courses 122 and 123 or the equivalent.

200. BUSINESS POLICY. First semester. Credit four hours. Mr. Gilmore.

This is an integrating course which examines the role of the chief executive in policy formation and administration. Through analysis of cases, the student is encouraged to develop a useful approach to the formulation and advocacy of business policy. Early in the course, attention is directed to sizing up situations, formulating policies, discovering opportunities, assessing risks, and planning programs of action. The focus then shifts to organizing administrative personnel and putting plans into action. Next, a series of cases is explored which emphasizes problems of measuring, controlling, and motivating administrative personnel. The cycle is completed by considering follow-up and reappraisal of policies formulated earlier. The course concludes by examining some of the additional dimensions which grow out of international operations and consideration of public responsibility. *Prerequisite:* open to second-year M.B.A. students and to others with consent of the instructor.

The Program Core for M.P.A. Candidates

130–131. THE CONDUCT OF PUBLIC AFFAIRS I AND II. First and second semesters. Credit three hours each semester. Public Administration Staff and others.

The principal objectives of this sequence of courses is to familiarize the future administrator or analyst with the nature of public affairs and to create an appreciation of the interaction among policy formulation, resource allocation, policy implementation, and evaluation. The sequence focuses on the processes of government at all levels. It undertakes to expose students to these processes from the different perspectives of administration, politics, and economics. Particular attention is given to the workings of the national government and its federal system, to realities of and reasons for cooperation and competition that characterize relations between national, state, and local governments, and to the nature and rationale of emerging public institutions. Selected readings and case materials are used to develop those topics and to illustrate the manner in which practitioners and analysts oriented primarily toward institutional, political, or economic considerations tend to view and approach issues under discussion. Major emphasis is placed on simulating the working environment by requiring at different stages of the sequence the preparation of advice memoranda, option and position papers, and other materials used in government practice.

The Program Core for M.P.S.–H.H.S.A. Candidates

140. INTRODUCTION TO HOSPITAL AND MEDICAL CARE ORGANIZATION. First semester. Credit three hours. Mr. Battistella.

Health services are described and analyzed against the backdrop of recent political, social, and economic developments in the United States and Western Europe. For purposes of organization and understanding of forces for change, health services are viewed as a social system—the Medical Care System—organized along structural-functional lines. 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 and rising expectations for medical care. 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.

141. INTRODUCTION TO CLINICAL MEDICINE: THE PHYSICIAN, THE HOSPI-TAL, AND THE MEDICAL CARE DELIVERY SYSTEM. Second semester. Credit three hours. Dr. Samson.

The origins, selection, and training of physicians is discussed. Particular attention is given to the evaluation of hospital experience as it applies to medical students and resident physicians. Human biology is surveyed with discussion centering on

structure, function, and diseases of the major body systems. The training of medical specialists and allied health workers for the ambulatory and hospital setting is reviewed. Medical data collection, evaluation of medical care, and medical staff organization in the hospital are discussed. Medical care systems in several countries are discussed and compared.

Elective Courses

Announcements for other schools and colleges of the University which contain descriptions of courses mentioned in this publication are listed on the last page of this Announcement.

Accounting

300. INTERMEDIATE ACCOUNTING. First semester. Credit three hours. Mr. Hofstedt.

This course involves a review of accounting concepts and procedures with particular emphasis on the reasoning behind methods of measuring and recording such items as depreciation, inventory flows, and revenues. The implications of accounting theory and practice for the measurement of income and financial positions are investigated. The uses and limitations of accounting data presented in published financial reports for financial analysis, including ratio analysis, are considered. The course gives the student an opportunity to study the concepts of financial accounting in the context of current issues and practices. *Prerequisite:* course 122 or equivalent.

301. ADVANCED ACCOUNTING. Second semester. Credit three hours. Mr. Dukes.

This course, a continuation of course 300, also deals with advanced topics of financial accounting. Among the specialized situations covered are consolidated statements, multinational operations, and price level changes. The student is encouraged to develop an ability to cope with a variety of different situations requiring evaluation and reporting of financial results. *Prerequisite:* course 300 or consent of the instructor.

302. MANAGERIAL COST ACCOUNTING. First semester. Credit three hours. Mr. Dyckman.

The course concentrates on the controller's function in the decision-making activities of the firm. Topics covered include: the relevance of cost variances to decisions, cost control and estimation techniques, the interrelationships of costprice and volume decisions, behavioral aspects of cost control, inventory costs in decisions, joint costs and decisions, nonmanufacturing cost analysis, performance measurement, transfer pricing, network methods including PERT-cost methods,

and capital budgeting models. Some use is made of dynamic cases and outside speakers. *Prerequisites:* courses 122, 123, 124, and 125 or consent of the instructor. Course 456 is recommended as a prerequisite but not required.

303. SEMINAR IN FINANCIAL POLICY AND MANAGERIAL ACCOUNTING. First semester. Credit three hours. Mr. Bierman.

This course deals with a variety of problems of managerial decision making. Many of the situations involve the use of accounting information and internal reporting systems (and measurement techniques). A large portion of the course is concerned with capital budgeting decisions (evaluating investment proposals) and financial policy decisions. The financial decisions are approached (where feasible) from a model building analytical point of view. Among the financial decisions considered are dividend policy, credit, cash management, stock reacquisitions, stock options, warrants, cost of capital, and capital structure. *Prerequisite:* open to second-year students only.

304. SEMINAR IN FINANCIAL ACCOUNTING. Second semester. Credit three hours. Mr. Bierman.

This course is concerned with the theory of income determination and asset and liability measurement. Economic concepts of income and problems of measurement are explored with reference to their applicability to the manager and financial analyst. *Prerequisite:* course 300 or consent of the instructor.

305. INTRODUCTION TO TAXATION AFFECTING BUSINESS AND PERSONAL DECISION MAKING. Second semester. Credit three hours. Messrs. Bugliari and R. S. Smith.

This course deals with both state and federal taxation and its impact on business and personal decision making. Attention is given to income tax management for operators of unincorporated businesses and smaller corporate firms. Both tax policy and the mechanics of taxation as they affect business and personal decision making are covered. *Prerequisite:* one course in accounting.

306. AUDITING. Second semester. Credit three hours. Messrs. Davidson and Hofstedt.

This course is designed for the student interested in a career in public accounting and/or wishing to fulfill the New York State requirements for the Certified Public Accountancy concentration. Lectures focus on current problems of the auditor and theoretical issues. A laboratory session is devoted to work on a detailed and comprehensive practice audit set. Guest lecturers are utilized to discuss specialized topics.

307. EVALUATION OF FINANCIAL STATEMENT INFORMATION. Second semester, Credit three hours. Mr. Dukes.

This course focuses upon issues of accounting information evaluation, with special emphasis on the use of financial statements by decision makers external

to 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 with respect to several decision contexts, such as solvency determination, value of the firm, security returns, security risk, and dividend policy. *Prerequisites:* courses 128 and 300 or consent of the instructor. Enrollment in courses 301 and 427 is also recommended.

Business Law

308. LAW OF BUSINESS ASSOCIATIONS. First semester. Credit four hours. Mr. Bugliari.

This course is an introduction to the basic purposes and logic of the law as it applies 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.

309. Advanced Business Law. Second semester. Credit four hours. Mr. Bugliari.

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:* course 308 or consent of the instructor.

Finance

426. SHORT-TERM FINANCIAL MANAGEMENT. Second semester. Credit three hours. Mr. Stone.

This course focuses on short-term financial management. Topics covered include cash management, banking relations, working capital management, forecasting, and balance sheet simulation. The focus of the course is on the development and analysis of quantitative decision models. The use of quantitative methods is emphasized. *Prerequisites:* courses 123, 125, and 128.

427. INVESTMENT MANAGEMENT. First and second semesters. Credit three hours. Messrs. Ahlers and Stone.

This course emphasizes portfolio theory, performance measurement, fundamental and technical security analysis, risk analysis, and security price formation. The focus of the course is on the application of financial theory and management

science to the investment management process. A variety of quantitative techniques will be surveyed. The viewpoint assumed is that of an investment management organization. *Prerequisites:* courses 123, 124, 125, and 128.

428. THE PUBLIC ECONOMY. Second semester. Credit three hours. Mr. Tollison.

This course deals with various microeconomic problems in public finance and nonmarket decision making. Primary attention is given to the general theoretical problems of public goods and externalities, the impact of fiscal institutions on fiscal choice, and economic theories of democratic process. *Prerequisite:* consent of the instructor. [*Not offered in 1972–73.*]

429. The Economics of Securities Markets. First semester. Credit three hours. Mr. Smidt.

This course analyzes the institutions and operations of securities markets in the United States. Specific topics covered include: (1) the analysis of the mechanisms by which securities markets bring buyers and sellers together, establish prices, and execute transactions; (2) the determinants of transactions costs; (3) the relationship between speculative activities and securities price movements; and (4) the behavior of stock market prices. Particular emphasis is given to the markets for corporate equities, United States government securities, and municipal bonds. Most analyses are presented in the form of a simple noncomputerized simulation model. *Prerequisite:* course 128.

430. MONEY AND BANKING. First semester. Credit three hours. Mr. Hass.

Monetary factors influencing the level of national income, the rate of interest, and the price level are examined in this course. The traditional roles of commercial banks, the Federal Reserve, and the Treasury in affecting the demand and supply of money are investigated. Attention is focused on the extent to which growth of nonbank financial intermediaries and recent international monetary developments have altered these roles. Issues in the formation of policies for monetary stabilization are studied.

433. SEMINAR IN ORGANIZED MARKETS. Second semester. Credit three hours. Mr. Smidt.

Organized markets are those in which buying and selling are done only by professionals acting as brokers or trading for their own account. Examples are the New York Stock Exchange, the Chicago Board of Trade, and the government bond market. This course offers a comparative study of several such markets, considered as economic institutions. Examples of topics that may be considered are the economic and historical conditions under which organized markets originate, reasons for differences in institutional structure among such markets, the role of professionals who trade for their own account, factors determining the demand and supply of liquidity, transaction costs, government regulation of organized markets, the random walk theory, and the response of market participants to new information. Except incidentally, the course does not consider methods of estimating the intrinsic value of the assets traded on such markets. Students are expected to become thoroughly familiar with the institutional arrangements of at least one organized market and to prepare a seminar report on at least one topic or problem common to several organized markets. *Prerequisites:* courses 123 and 429 or consent of the instructor.

434. CURRENT PROBLEMS IN CORPORATE FINANCE. Second semester. Credit three hours.

The objective of this course is to provide students with experience in applying theoretical concepts of finance and analytical techniques to a series of important problems in corporate finance. The course relies heavily on the use of comprehensive cases presented by members of the faculty and actual business problems presented by visitors working in the field of corporate finance. The problems considered are drawn from the areas of capital budgeting, working capital management, short-term financing, capital structure analysis, dividend policy, and mergers and acquisitions. *Prerequisite:* course 128.

435. SEMINAR IN BANK MANAGEMENT. Second semester. Credit three hours. Mr. Ahlers.

This course has two primary objectives. The first is to present to the student the problems facing bank management in such areas as asset and liability management, decentralization, market planning, operating efficiency, and corporate expansion. Executive managers from the banking community will augment the instructor in this phase of the course. The second objective is to assist the student in gaining insight as to how he might use new tools and concepts in solving management's problems. Recently graduated M.B.A.'s working in banking will aid the instructor during this phase of the course. Although the focus of the course is on banking, the principles discussed are applicable to corporate financial management in general. At the completion of the course, the student should have an awareness of the difficulties he would be likely to encounter in trying to change the management behavior of financial corporations as well as some tangible guidelines on how to overcome these difficulties. *Prerequisites:* courses 120, 123, 125, and 128 or consent of the instructor.

436. FINANCIAL MANAGEMENT IN GOVERNMENTAL ORGANIZATIONS. Second semester. Credit three hours. Mr. Schramm.

This course introduces the basic principles and actual practices of managing financial resources in public organizations. Focusing primarily on governmental organizations, the topics covered include budgeting techniques, analysis of public expenditures, management of working capital, debt financing, and methods of taxation. Other topics and types of public organizations considered depend on the specific interests of the students.

906. SEMINAR ON FEDERAL TAX POLICY AND GOVERNMENT FINANCE. Second semester. Credit three hours. Mr. Schramm.

This course examines the economic and political basis of federal tax policy, testing existing economic and political theories of policy formulation with actual experience in the business tax area. Examples are drawn from such areas as the corporate income tax, the investment tax credit, depreciation and depletion allowances, and environmental taxes affecting business. *Prerequisite:* consent of the instructor. [*Not offered as a formal course in 1972–73.* Students interested in individual projects in this area should contact Mr. Schramm.]

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

303. SEMINAR IN FINANCIAL POLICY AND MANAGERIAL ACCOUNTING, described on p. 33.

304. SEMINAR IN FINANCIAL ACCOUNTING, described on p. 33.

305. INTRODUCTION TO TAXATION AFFECTING BUSINESS AND PERSONAL DECI-SION MAKING, described on p. 33.

307. Evaluation of Financial Statement Information, described on p. 33.

308. LAW OF BUSINESS ASSOCIATIONS, described on p. 34.

309. Advanced Business Law, described on p. 34.

379. ECONOMIC EVALUATION OF CAPITAL INVESTMENT PROJECTS, described on p. 47.

624. THE INTERNATIONAL MONETARY SYSTEM, described on p. 41.

Hospital and Health Services Administration

Note: The two core courses offered in this field are listed and described on pp. 31–32.

142. THE SOCIAL PSYCHOLOGY OF HOSPITALS. Second semester. Credit three hours. Mr. Smith.

The aim of the course is to provide future administrators, planners, and researchers with skill in analyzing the human problems in hospitals, a knowledge of the social-psychological dynamics involved, and the sensitivity to deal with them intelligently. Specific topics include analysis of professionalism, role conflicts within the hospital, the sick role, illness behavior, and the management of institutional change. Some field work experience designed to enrich and reinforce the course content will be included. 450. EVALUATION OF COMMUNITY HEALTH SERVICES. First semester. Credit three hours. Mr. Brown.

This course allows students the opportunity to apply their knowledge concerning the organization and provision of health services in an actual community setting. In cooperation with a community group such as a county health planning council, the students undertake an evaluation of the area's medical care services in relation to the comprehensive health needs of the population. A report is prepared, and students are afforded the opportunity to present their findings and recommendations to interested citizens in the community. Special attention is given to the methods of community health evaluation and new approaches to community health care delivery systems.

451. PSYCHIATRIC INSTITUTIONS: ADMINISTRATION AND PRACTICE. Second semester. Credit three hours. Drs. Daly and Johnson.

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 in-programs of prevention. The contributions of diverse sciences, technologies, and arts to the organization of theory and practice are emphasized throughout the course.

452. SOCIOPOLITICAL ASPECTS OF COMMUNITY HEALTH SERVICES AND PLANNING. Second semester. Credit three hours. Messrs. Battistella and Brown.

This course is designed to provide the student with an introduction to social and political theory and research useful for the formulation and delivery of community health services. The course emphasizes two major areas. The first concerns the significance of sociocultural and social-psychological factors for the initiation and utilization of health services. Specific topics covered include disease and its interpretation, sick role theory, volitional-stage patient behavior, and the role of health care facilities and treatment patterns in bringing about behavioral change. The second major area emphasized in the course is that of the structure and dynamics of community decision making and planning. Key topics in this area are community power structures and pathways to social change. Particular emphasis is given to the interrelationship between abstract concerns and practical affairs.

453. LEGAL ASPECTS OF HOSPITAL ADMINISTRATION. First semester. Credit two hours. Mr. Bugliari.

This course introduces those principles of the law which 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, pharmacy, labor law, and confidential communications.

454. POLICY AND PLANNING FOR HEALTH CARE. Second semester. Credit three hours. Mr. Van Ness.

This course examines the decision-making processes of health care, whether physical, mental, or environmental, as they relate to the development of public and private health policies. Comprehensive health planning as an instrument of change is described and analyzed within the context of contemporary health affairs. Attention is given to the interrelationships of policy and planning within the larger sociopolitical framework.

455. SEMINAR IN HEALTH RESEARCH. First semester. Credit three hours. Mr. Smith.

The primary objective of the course is to increase the student's ability to evaluate research reports and other studies, to assess their relevance for the field, and to formulate his own problems in a manner conducive to scientific investigation. An examination is made of the contributions of the social sciences and other disciplines to an understanding of current problems in the health field and in hospital administration in particular.

457. HEALTH ECONOMICS. First semester. Credit three hours. Mr. Kelman.

This course considers the provision of medical care as an economic activity. Individual, family, and national expenditures for medical care are studied in relation to the various factors which influence them, including supply and demand, unit costs, utilization rates, traditional and evolving patterns of distribution, and changing medical technology. Major emphasis is given to the problem of the rising costs of hospital care and to the actual and potential role of administration in helping to control them. The principles underlying commercial health insurance, nonprofit prepayment and service plans, and health programs under social security and public welfare are analyzed in detail. Government programs of health care in this country, existent and proposed, are analyzed and compared with experiences with similar programs in foreign countries. *Prerequisite:* course 124A or the equivalent.

458. HEALTH AND WELFARE POLICY: FOUNDATIONS AND STRATEGIES. First semester. Credit four hours. Mr. Battistella.

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 alternative 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 main-spring 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.

459. THE POLITICAL ECONOMY OF MEDICAL CARE SERVICES. Second semester. Credit three hours. Mr. Kelman.

This course employs an historical conflict analysis to examine the development of the American medical care system from that of a cottage industry in the early part of this century to a sector of advanced industrial capitalism today. It begins with a discussion of the methodology of dialectical analysis and the nature of epidemiology in a class-based, competitive industrial society. The emphasis of the course is on the evolving nature of the medical care delivery system as related to the interactions of interest group dynamics, social class divisions, and technological change.

460. QUANTITATIVE MODELS IN THE HEALTH FIELD. First semester. Credit three hours. Mr. McClain.

The course examines the potential application of quantitative methods in the health field. Particular attention is given to problems in the areas of hospital administration and comprehensive health planning. Class members will be expected to play an active role in discussions dealing with the abstracting of real situations into models for analysis and with interpretation of the results. *Prerequisite:* course 123 or the equivalent.

462. SEMINAR IN HOSPITAL AND HEALTH SERVICES ADMINISTRATION. Second semester. Credit three hours. Mr. Brown.

Employing a variety of methods (case studies, visiting scholars and practitioners, and field trips to regional health facilities), students are given an opportunity to explore a number of major managerial-economic issues and topics associated with the administration of hospitals and health care agencies, for example: executive leadership in diffuse power settings, trade-off decisions in multiple goal organizational settings, program planning and evaluation, managerial information systems, and externalities and social responsibility. To promote a better relationship between theory and practice, each student will be expected to complete a term project dealing with a management problem based on data from a health facility in central New York State.

464. FIELD STUDIES IN HEALTH ADMINISTRATION AND RESEARCH. First and second semesters. Credit three hours. Hospital and Health Administration Staff.

Students interested in developing administrative and program planning research skills will be given an opportunity to evaluate an on-going 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 faculty of the Graduate School of Business and Public Administration.

465. SEMINAR IN COMPREHENSIVE HEALTH PLANNING. Second semester. Credit three hours. Messrs. Brown, DeFriese, and Riordan.

Designed especially for students in city and regional planning, sociology, and the Sloan Institute of Hospital Administration, this is an integrative seminar on comprehensive health planning. By focusing on contemporary issues the course attempts an interdisciplinary approach to the study of planning, organization, and delivery of health services and tries to demonstrate the relations between theoretical and practical aspects of comprehensive health planning. Social, economic, and political considerations of the health planning endeavor as well as technical and organizational developments are analyzed and discussed from a conceptual and pragmatic standpoint. Wherever possible, health planning comparisons with other countries are drawn from the literature.

Note: For requirements in the concentration in comprehensive health planning see p. 24.

International Business, International Development, and International Economics

624. THE INTERNATIONAL MONETARY SYSTEM. Second semester. Credit four hours. Mr. T. Willett.

This course seeks to provide theoretical, empirical, and institutional knowledge necessary for an understanding of the operation of the international monetary system. It focuses on the basics of international monetary theory and on the major political and economic problems surrounding the operation of the international monetary system. Topics covered include the problems of international liquidity, confidence, and adjustment under the present international monetary system; the balance of payments accounts and the special role of the dollar in the international monetary system; the foreign exchange market, speculation, and arbitrage; international investment and the interrelationships between international trade and monetary problems; United States balance of payments policy; exchange-rate flexibility; and reform of the international monetary system. *Prerequisites:* courses 124A and 124B or consent of the instructor.

625. INTERNATIONAL BUSINESS POLICY. Second semester. Credit three hours. Mr. Gilmore.

As a sequel to course 200, this course stresses the problems of planning and organizing worldwide operations. Utilizing business-policy concepts of strategy

formulation and implementation developed in course 200, the student explores case problems in European, Latin American, and multinational companies. Discussion centers on general managers who are assigned profit responsibility. Student teams compete in an international operations simulation, a complex, computerized, general management game. The course affords the student an opportunity to gain further experience in dealing with business policy situations rendered more complex by virtue of such additional considerations as exchange problems, tax policies, nationalistic pressures, and differences in language, currency, laws, and culture. Of particular concern is the difficulty of devising effective means of managing decentralized operations on a global scale. *Prerequisite:* course 200 or consent of the instructor.

627. AMERICAN BUSINESS OPERATIONS ABROAD. First semester. Credit three hours. Mr. Bent.

This is an introductory course in international business which surveys the various problems facing American business operated outside the United States. The topics of discussion include the effect of the overseas environment on American business, selected organizational and administrative problems of international business, and the impact of United States government policies and regional agreements on American overseas business operations. Visiting lecturers from business and government are invited to discuss selected topics. *Prerequisite:* course 120 or consent of the instructor. [Not offered in 1972–73.]

629. ADMINISTRATION OF PUBLIC OPERATIONS ABROAD. Second semester. Credit three hours. Mr. Bent.

This course considers the politics and administration of United States government overseas operations. Specific attention is given to the Departments of Defense and State, the Agency for International Development, and the United States Information Agency. The planning, coordination, and evaluation of foreign aid policy are studied along with the role of Congress in determining objectives and assessing results. Certain recipient countries are selected in order to study the problems of implementation and the effects of foreign aid on political, social, and economic development. *Prerequisite:* course 120 or consent of the instructor. [Not offered in 1972–73.]

631. SEMINAR IN POLITICAL DEVELOPMENT AND SOCIAL CHANGE (Government 537). First semester. Credit four hours. Mr. Ashford.

This seminar introduces problems of political and administrative reorganization in rapidly changing nations. Analytical problems of identifying trends and critical relationships are considered, and a critical assessment is made of several different approaches to generalizations about rapid change in developing countries. The seminar presents materials useful to students considering careers in United States public and private agencies overseas and international organizations and to those interested in research in developing countries.

632. SEMINAR ON DEVELOPMENT ADMINISTRATION. Second semester. Credit three hours. Mr. Esman.

This seminar deals with (1) the role of government and public administration in the social and economic development of modernizing societies; (2) the development of administrative capabilities and institutions and the behavior of public bureaucracies in a comparative perspective; and (3) the shaping, management, and evaluation of action programs designed to achieve economic growth, social change, and increased public participation.

636. SPECIAL TOPICS IN INTERNATIONAL FINANCE. Second semester. Credit three hours. Mr. T. Willett.

This reading seminar provides the opportunity for advanced study of selected aspects of international finance and the political economy of international monetary relations. *Prerequisite*: course 624 or the equivalent (may be taken concurrently) or consent of the instructor. [*Not offered in 1972–73.*]

638. TUTORIAL IN EXPORT PROMOTION. First and second semesters. Credit three hours. Mr. Bent.

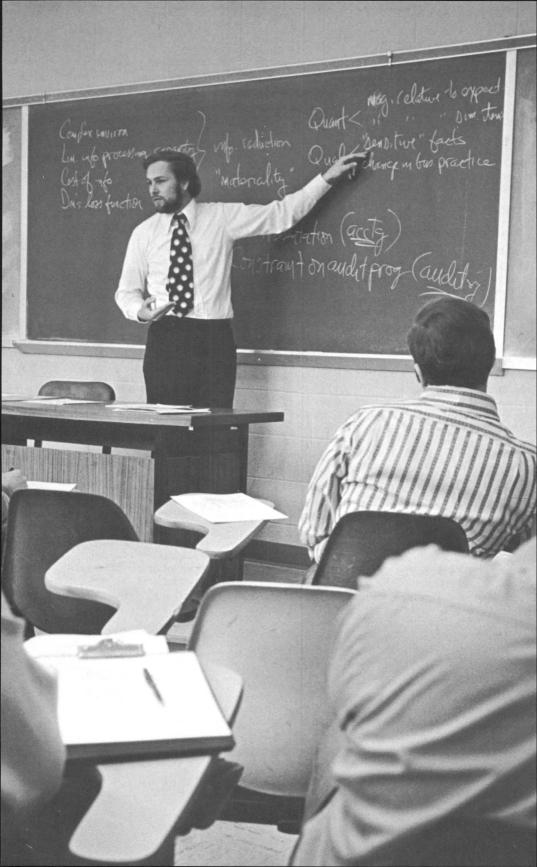
This course gives to students the opportunity to consult with two small business firms during the semester on export possibilities for their products. The companies are selected either by the School or by the United States Department of Commerce and are generally within easy commuting distance of Ithaca. Each student prepares a written analysis of market opportunities for each of the firms studied. Enrollment is limited to second-year students who have taken course work in the general area of international finance and business. [Not offered in 1972–73.]

639. SCIENCE, TECHNOLOGY, AND DEVELOPMENT. First semester. Credit four hours. Mr. Esman.

The course deals with scientific and technological transfers between the industrialized and the less-developed countries. These flows occur through agencies such as bilateral assistance programs, foundations, universities, international organizations, and international business enterprises. The course entails a study of choices of technology; the instruments of transfer; technological adaptation problems; the recipient countries' institutionalization and biological, physical, and social technologies; and the implication of technology transfer for economic growth, social change, political integration, and international cooperation. *Prerequisite*: consent of the instructor.

640. SCIENCE, TECHNOLOGY, AND INTERNATIONAL RELATIONS. First semester, Credit four hours, Mr. Esman.

This seminar focuses on science/technology relations among advanced industrialized countries and the foreign policy implications of scientific and technological change. It deals with problems of domestic science/technology policy, national structures established to operate in this field, the activities of international and regional organizations (especially OECD), the substantive interactions



between international organizations and national policies, the meaning of socalled technology and management "gaps," and the consequences of international cooperation and conflict (including East-West) regarding peace, economic growth, and quality of life. (This is the second of a two-course sequence in international science and technology, the first having dealt with science and technology transfer between industrialized and less developed countries.) *Prerequisite:* open to graduate students from any discipline or professional school and to seniors with consent of the instructor. [*Not offered in 1972–73.*]

Note: Students should also consider course offerings in the international area available in other parts of the University (for other *Announcements*, see the last page of this publication), particularly in the Economics Department, the Government Department, the Center for International Studies, the College of Agriculture and Life Sciences, and the School of Industrial and Labor Relations. Such courses in the Economics Department and the Government Department include:

Economics

364. The United States in the World Economy

365. Economic Policy and Development in Southeast Asia

367. Comparative Economic Systems: Soviet Union and Europe

368. CONTEMPORARY BRAZIL

369. INTRODUCTION TO THE ECONOMY OF CHINA

371. Economic Development and Sociopolitical Modernization

525. Economic History of Latin America

561-562. INTERNATIONAL ECONOMIC THEORY AND POLICY

565. Economic Problems of Latin America

572. PROCESSES OF ECONOMIC GROWTH AND DEVELOPMENT

674. Economic Planning

Government

206. INTRODUCTION TO INTERNATIONAL RELATIONS

370. Theories of International Relations

- 374. The Politics of Population
- 410. FROM POLITICS TO POLICY: THE POLITICAL ECONOMY OF CHOICE
- 411. ELITES AND SOCIETY: THE POLITICAL ECONOMY OF POWER

Managerial Economics and Economic Policy

202. BUSINESS ENTERPRISE AND PUBLIC POLICY. Second semester. Credit three hours. Mr. Hutchins.

This course is an integrating study of the interrelations among individuals, business firms, and governments in American society. It focuses attention on the problems of exercising socially responsible business leadership and on the nature and objectives of selected public policies impinging on business. The more important topics covered are management and the individual, or the philosophy of the business society; management's responsibilities to the organization, including certain problems of posture and practices; management's relations with rivals, especially problems of monopoly and competition and the antitrust laws; management's responsibilities to customers, particularly with respect to promotional practices; the special responsibilities of those businesses affected with a public interest, such as transportation companies; the unusual problems of managements entrusted with roles in the national defense, especially in connection with radical innovation and technological development; the positions of firms receiving subsidies designed to promote public objectives, such as shipping enterprises; and finally management's role in the foreign relations of the United States, particularly with respect to trade, investment abroad, and foreign policy. Lectures and cases are used.

375. ECONOMIC AND BUSINESS HISTORY. First semester. Credit three hours. Mr. Hutchins.

This course focuses on the evaluation of economic organization and on the development of the role of the business firm therein. The primary emphasis is on the United States since 1750, although some attention is given to earlier times and to European origins and developments. The analysis of the development of business organization, administration, and policy proceeds in part by means of historical case studies. Attention is paid to the relations between business policies and the rise and fall of firms and industries and to the interactions of business and public policies.

377. CORPORATE BEHAVIOR AND THE PUBLIC INTEREST. First semester. Credit three hours. Mr. Schramm.

This course examines a variety of actual or proposed public policies designed to assure corporate behavior in the public interest. After reviewing the main issues raised by the growth of the modern corporation, such as the concentration of economic power, the separation of corporate ownership and control, and political activity of corporations, the course focuses on public policy responses to these issues. Antitrust, regulation, nationalization, taxation and subsidies, federal charters, and increased consumer and worker control are among the major public policies considered.

379. ECONOMIC EVALUATION OF CAPITAL INVESTMENT PROJECTS. Second semester. Credit three hours. Mr. Smidt.

This course deals with the economic evaluation of proposed capital investment projects. Theoretical literature and case studies of particular projects are considered, with a view to providing the student with a reasonable background for practical work in project evaluation and for independent research on the many unsolved analytical problems in this field. Illustrative of the topics considered are the following: the selection of the best project in a group of mutually exclusive alternatives, criteria for determining the total size of an investment budget, methods of allowing for uncertainty about project outcomes, and the effect on project selection of the financial environment in which an organization operates. Capital project evaluation is of practical significance to private business firms, to nonprofit organizations, and to local and national governmental bodies. The main analytical techniques apply with only slight modifications in all of these institutional contexts, and an analysis of the financial environment of any one type of institution requires a consideration of the interrelationships among the various institutions. *Prerequisites:* courses 123 and 128.

380. MANAGEMENT ECONOMICS WORKSHOP. Second semester. Credit three hours. Mr. McAdams.

This course, given by a group of interested faculty members, deals with topics of mutual interest to students and faculty as determined at the first organizational meeting of the course. The range of possible topics includes advanced approaches to investment analysis, specific studies and cases in the managerial use of regression analysis, dynamic programming as a management tool, breakeven analysis under conditions of uncertainty, an approach to pricing of computer time as an example of utility pricing, capital budgeting in nonprofit industries, methods of subsidization as influences on decision making, and Markov processes for analysis of management problems.

381. TOPICS IN UNITED STATES ECONOMIC POLICY. Second semester. Credit three hours. Mr. E. Mitchell.

After introductory discussions of political economy and the economic approach to social problems and contrasting views on the proper role of economists in government and government in the economy, a number of current policy issues are considered. Probable topics include wage and price controls; the problems of population, pollution, and the environment; and the role of government regulatory agencies. *Prerequisites:* courses 124A, 124B, or consent of the instructor.

382. THE POLITICAL ECONOMY OF POLLUTION CONTROL. First semester. Credit three hours. Mr. McAdams.

In this course the theory of externalities is reviewed in the context of problems of pollution. The theory is then used to develop an appropriate basis for establishing pollution control strategies for the nation. These strategies are compared with the approaches currently used for control of pollution in this country. The rationale for existing U.S. strategies, the proposed changes in those strategies currently before the Congress and the political and economic factors which are likely to determine change are then explored. The final topic of the course is the impact of pollution control on particular industries and on the economy as a whole including its international trade aspects.

383. ECONOMICS OF COOPERATIVE ENTERPRISE. Second semester. Credit three hours.

This course deals with decision making in cooperative enterprises. The topics dealt with include: concepts of participatory control, economic theory of cooperative enterprises, evaluation of their performance and special aspects that this form of organization can exhibit with respect to incentives, involvement, efficiency, and development of communities and nations.

384. INDUSTRY AND ECONOMIC POLICY. First semester. Credit three hours. Mr. E. Mitchell.

The subject of this course is the analysis of American industry from the point of view of the investor, the consumer, and the public. Emphasis is placed on individual research. The student is required to prepare a paper on a specific industry or on a contemporary public-policy issue closely related to industry. During the 1972–73 academic year the instructor will draw heavily upon examples from the U.S. energy industry and the public issues surrounding it.

Note: Students interested in managerial economics should also consider the following Graduate School of Business and Public Administration courses:

429. The Economics of Securities Markets, described on p. 35.

430. MONEY AND BANKING, described on p. 35.

433. SEMINAR IN ORGANIZED MARKETS, described on p. 35.

624. THE INTERNATIONAL MONETARY SYSTEM, described on p. 41.

906. SEMINAR ON FEDERAL TAX POLICY AND GOVERNMENT FINANCE, described on p. 37.

Students should also consider courses in economics offered by the Economics Department in the College of Arts and Sciences, and courses in economics offered by the College of Agriculture and Life Sciences, the College of Human Ecology, the College of Architecture, Art, and Plan-

ning, and the School of Industrial and Labor Relations. Courses which may be of special interest include:

Economics

301. Economics of Market Failure

302. The Impact and Control of Technological Change

335. PUBLIC FINANCE: RESOURCE ALLOCATION

338. MACROECONOMIC POLICY

511. MICROECONOMIC THEORY

512. MACROECONOMIC THEORY

519–520. QUANTITATIVE METHODS

551. INDUSTRIAL ORGANIZATION

522. PUBLIC REGULATION OF BUSINESS

561-562. INTERNATIONAL ECONOMIC THEORY AND POLICY

572. PROCESSES OF ECONOMIC GROWTH AND DEVELOPMENT

641–642. LABOR ECONOMICS

651-652. INDUSTRIAL ORGANIZATION AND REGULATION

I.L.R.

549. Economics of Poverty

Agricultural Economics

450. Resource Economics

510. Econometrics I

511. Econometrics II

550. Economic Analysis of Public Investment

Marketing

475. MARKETING OPERATIONS. First semester. Credit three hours. Mr. Rathmell.

The administration of the marketing function is the main focus of this course. Organization, staffing and supervision, market potential determination and sales forecasting, coordination of marketing and other functions of the firm, and public regulation of marketing are the major topics considered. *Prerequisite:* course 126 or consent of the instructor.

476. MARKETING RESEARCH. Second semester. Credit three hours. Mr. R. Willett.

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, and the use of mathematical models. As part of the course requirements, groups of students conduct empirical studies which include all phases of a typical marketing research project. *Prerequisites:* courses 123 and 126.

478. Advertising Management. Second semester. Credit three hours.

This course is designed to develop the student's ability 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 in tactics, discussions of copy, layout, art, and typography are omitted. Reading assignments stressing concepts and methodology are followed by cases that provide an opportunity to apply advertising principles. The last third of the course includes discussion of the regulation of advertising, social and economic effects, and new developments such as advertising experiments, mathematical models, and computer applications. *Prerequisite:* course 126 or consent of the instructor. [Not offered in 1972–73.]

480. MARKETING STRATEGY. Second semester. Credit three hours. Mr. R. Willett.

This course considers the role of product, pricing, promotion, and channel and physical distribution in the development of a firm's integrated marketing program. The contributions of marketing research and operations analysis are stressed. Cases are used extensively to evaluate and compare alternative courses of action. Team reports are submitted to a business enterprise on problems of marketing strategy with which it is currently concerned. *Prerequisite:* course 126 or consent of the instructor.

481. SEMINAR ON CHANGE IN MARKETING. First semester. Credit three hours. Mr. Rathmell.

This course is concerned with the effect of environmental change on marketing, innovation in marketing to meet external change, and long-term planning. Conventional theory and concepts are challenged concerning their relevancy. New approaches to demand, product mix, and organization are considered. *Prerequisite:* course 126 or consent of the instructor.

482. SEMINAR IN MARKETING AND MANAGEMENT SCIENCES. First semester. Credit three hours. Mr. Rao.

This seminar is directed to several topics in the application of management science methods and mathematical models to marketing problems. Principal

emphases are placed on understanding the nature and complexity of marketing decision areas, structuring marketing problems into analytical models, and evaluating the utility of existing models and associated measurements for marketing management. The course covers models in the four principal decision areas: product, pricing, promotion, and distribution. Students are required to present papers and undertake projects. *Prerequisite:* course 126 or consent of the instructor.

483. CONSUMER BEHAVIOR. First semester. Credit three hours.

An interdisciplinary approach is used to achieve an understanding of the complexity of buying behavior and the purchase decision in both the consumer and industrial markets. The buyer is analyzed at the individual level in terms of learning, motivation, perception, and cognition. The social influences on buying behavior of family, reference groups, class, and culture are discussed, as are economic influences. Industrial buying behavior is considered in the context of organizational variables. Alternative recent models of the buying process are discussed, compared, and extended, providing a focus for the introduction of the concepts listed above. *Prerequisite:* course 126 or consent of the instructor; parallel enrollment in (or prior completion of) course 476 is suggested. [Not offered in 1972–73.]

485. SERVICE AND PUBLIC MARKETING. Second semester. Credit three hours. Mr. Rathmell.

The focus of this course is on the marketing of services by private profit, private nonprofit, and public institutions and agencies. Accepted principles and practices of marketing which have evolved from the study of the marketing of goods are applied or modified in the process of treating marketing in the services sector. Each student explores the marketing of a specific service: health care, financial, recreational, or public utilities services, for examples. Prerequisite: second-year status or consent of the instructor. [Not offered in 1972–73.]

Organizational Behavior and Personnel

121. PERSONNEL ADMINISTRATION AND HUMAN RELATIONS. First and second semesters. Credit three hours. Mr. Brooks.

The objective of this course is to develop an understanding of the policies, methods, and techniques, utilized 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, 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 is also given to analysis of trends in personnel management. 500. PROCESSES AND TECHNIQUES IN ORGANIZATIONAL DEVELOPMENT. First semester. Credit three hours. Mr. Lodahl.

Organizational development as a field integrates much 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. A T-group laboratory, probably held on a weekend, is part of the course. *Prerequisite:* consent of the instructor.

502. Organizational Behavior and Administration. First semester. Credit three hours. Mr. Brooks.

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. *Prerequisite*: course 121.

503. BUSINESS AND INDUSTRIAL PERSONNEL. Second semester. Credit three hours. Mr. Brooks.

This course is concerned with the advanced study of selected areas of personnel administration. The role of action research is stressed. Individual and group research projects are emphasized. In addition, readings, case studies, and guest speakers are utilized. *Prerequisite:* course 121. Enrollment limited to twenty-four students.

900. The Design of Organizations. Second semester. Credit three hours. Mr. Kover.

This course deals with some of the theoretical and practical issues involved in the design of effective organizations. The course begins with the idea that both classical bureaucratic and human relations theories may blind organizational planners to other needs and possibilities not subsumed by these approaches. After a short examination of these theories, greater attention is paid to works with different starting points and approaches: Lawrence and Lorsch, Miller and Rice, J. Thompson, and others. Following this, students are asked to synthesize their own theoretical approaches and to apply them to several cases of organizational design. Finally, as time permits, such practical problems as the roles of the organizational planner and internal political pressures are covered. *Prerequisite:* consent of the instructor.

901. THE ROLE OF THE INDIVIDUAL IN TECHNOLOGICAL SOCIETY. Second semester. Credit three hours. Mr. Kover.

With the growth of mass technology and large industrial and business enterprise in Western society has come increasing question about the role played by

the individual. A specific aspect of this question is the growth of personal alienation and loss of community. These issues are of institutional and personal importance as well as theoretical interest. The worth of the person, the value of a career, personal industriousness and sobriety, organizational loyalty, patriotism, all formerly taken for granted, are being examined anew and have been abandoned by some. This course will examine these issues. It will begin with a brief historical review; then (using the writings of Ellul and others) it will examine contemporary personal and organizational manifestations. The course will conclude with intensive explorations of possible individual solutions of these problems among members of the class. The format of the course and specific readings will be determined in part by class members. *Prerequisite:* consent of the instructor. [Not offered in 1972–73.]

902. Seminar in Organization Theory. First semester. Credit four hours. Mr. Kover.

This course involves a systematic assessment of the current state of knowledge about complex organizations. The basic approach is interdisciplinary, but somewhat greater emphasis is placed on organization as integrated structures than on organizations as environments for individual behavior.

904. CORPORATE ORGANIZATION AND AMERICAN SOCIETY. Second semester. Credit three hours. Messrs. Kelman and Reed.

This course views the private corporation as the central economic unit of American society. The emphasis of the course then considers the implications of this for the functioning of governmental institutions, the development of social classes and racial divisions, the nature and function of education, the delivery of medical care, the roots of foreign economic policy, and the quality of individual life. Alternative social models are then considered.

907. SPECIAL TOPICS IN ORGANIZATIONAL THEORY AND BEHAVIOR. First and second semesters. Credit one hour. Messrs. Kover and Lodahl.

This course consists of a concentrated exploration of the techniques and experiences of applied behavioral science (T- or encounter group learning) to personal growth and enrichment. The course meets for one full weekend in the middle of the first semester; this will be the only time that the course meets. Those desiring to participate must have prior written permission from either Mr. Lodahl or Mr. Kover. Participants will also be charged a fee (tentatively estimated to be \$25) for room and board during the weekend experience. Although no grades will be given, participants will be expected to contribute their full energies to the course during the weekend that it meets.

Note: Students interested in this field may also elect courses 451, Psychiatric Institutions: Administration and Practice, described on p. 38.

Production and Operations Management

525. PROBLEMS AND TECHNIQUES IN PRODUCTION MANAGEMENT. First semester. Credit three hours. Mr. L. J. Thomas.

Major economic decision problems in production management are examined. Various methods of analysis are used, including traditional intuitive rules, schematic models, and quantitative techniques. Problem areas considered include size and location choices, process and equipment selection, aggregate production planning and scheduling, production and inventory control, distribution systems, project control, assembly-line balancing, sampling inspection and quality control, and process control. Techniques studied include calculus, linear programming and extensions, dynamic programming, computer simulation, critical path methods, heuristic programming, and statistical analysis. *Prerequisite:* course 127 or consent of the instructor.

526. CASE STUDIES IN PRODUCTION AND OPERATIONS MANAGEMENT. Second semester. Credit three hours. Mr. McClain.

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 the awareness and resolution of difficulties encountered when one attempts to apply theoretical models to actual decision situations. *Prerequisite:* course 127 or 525 or consent of the instructor.

Note: Students interested in this field may also elect courses 602 and 604, Operations Research I and II, described on p. 57.

Public Policy and Public Administration

554. SEMINAR IN URBAN GOVERNMENT AND ADMINISTRATION. First semester. Credit three hours. Mr. Flash.

Consideration of economic, sociological, and technological developments provides a background for an analysis of urban government operations and issues in an era of metropolitan growth and change. The following areas are studied: (1) the politics of urban government; (2) structuring and functioning of urban governmental institutions; (3) problems of reorganization, intergovernmental relations, and public leadership; and (4) governmental responses to critical issues such as urban renewal, transportation, integration, and education. For the future administrator, planner, and researcher, the course provides understanding of issues, patterns of analysis, and familiarity with relevant literature.

555. TOWARDS THE RESOLUTION OF PUBLIC ISSUES. First and second semesters. Credit three hours. Public Administration Staff.

This course, conducted as a seminar, is project oriented. Open to second-year students regardless of their degree candidacy, the course requires application of the knowledge, concepts, and analytical tools that students have developed to contemporary issues challenging modern government. Individually or in groups, participants select local, regional, national, or international projects to pursue. Interdisciplinary in nature, these projects may involve both field and library research. Written reports are required. These reports may be prepared for presentation to government agencies and may lead to publication. Although one faculty member serves as coordinator, a number of faculty members are active in the seminar as participants and advisers. Seminar discussions concerning individual or group projects are complemented by the participation of outside speakers.

557–558. SEMINAR IN POLITICAL ECONOMY AND PUBLIC POLICY. First and second semesters. Credit three hours each semester. Messrs. E. Mitchell and W. Mitchell and participation by Messrs. Carter, T. Willett, and others.

The major purpose of this interdisciplinary seminar is to serve as a forum to bring together faculty and advanced graduate students throughout the University who are interested in the areas of political economy, policy analysis, public administration, and public policy. The seminar normally meets weekly throughout the year to consider topics in political economy, public choice, and public policy and to discuss papers by Cornell faculty and students and outside visitors. Emphasis during the first semester will be placed on the development of analysis in this area. Course credit for students taking the second semester will be based upon the preparation of a research paper under the direction of a member of the faculty and presentation of the paper to the seminar. *Prerequisite:* consent of the instructor.

559. SCIENCE, TECHNOLOGY, AND PUBLIC POLICY. Second semester. Credit three hours.

This graduate faculty seminar deals with development and application of U.S. policies for science and technology. Emphasis is on federal policies, patterns of interaction between Congress and the scientific and technical communities, and the activities of such federal agencies as: Office of Science and Technology; National Science Foundation; Department of Defense; HEW; and NASA. Specific consideration will be given to: national science policy; policies for encouragement of technical innovation; and research and development for defense and space.

562. COMPARATIVE LOCAL GOVERNMENT (Government 544). Second semester. Credit four hours. Mr. Ashford.

This course involves a comparative analysis of how ecological, attitudinal, and policy factors at the local level relate to national policies in both developed and undeveloped nations. *Prerequisite:* consent of the instructor.

750–751. INTEGRATIVE SEMINAR: EDUCATION FOR PUBLIC MANAGEMENT PROGRAM. First and second semesters. Credit three hours each semester. Mr. Flash and Staff.

This seminar is designed to integrate the study programs of the participants in the Education for Public Management Program (see p. 106). Its primary focus is on the impact of major substantive, political, and administrative developments on public policies. During the first term, consideration is given to the significance of quantitative analysis in decision making in large-scale programs, to the dimensions of micro- and macroeconomic analysis, and to the nature of the interdependence between the nation's public and private organizations. The content and operation of the seminar during the second term are geared to the interests of the program participants and are, hence, in large measure designed by them during the course of the fall term. Normally the participants collaborate in an analysis of particular problems such as regional economic development and intergovernmental relations. Members of the School faculty and other faculty join in conducting portions of the seminar, and scholars and practitioners from outside the campus are invited to participate in particular sessions.

Quantitative Analysis

600. INTRODUCTION TO PROBABILITY THEORY (Industrial Engineering 9460). First semester. Credit four hours. Mr. Prabhu.

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 course 123 in the core requirements.)

601. INTRODUCTION TO STATISTICAL THEORY (Industrial Engineering 9470). Second semester. Credit four hours. Mr. M. Brown.

This course considers the application of statistical theory to problems associated with the analysis of data. Involved are principles of statistical inference, estimating the value of unknown parameters of probability distributions and the testing of hypotheses concerning these parameters, and elements of statistical decision

theory. An introduction to correlation theory and curve fitting by least squares is included: *Prerequisite:* course 600 or the equivalent. (*Note:* This course may be substituted for course 123 in the core requirements.)

602. OPERATIONS RESEARCH I (Industrial Engineering 9522). First semester. Credit three hours. Mr. Nemhauser.

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, dynamic programming, and introduction to inventory theory. Emphasis is placed on comprehensive problems and case studies.

604. OPERATIONS RESEARCH II (Industrial Engineering 9523). Second semester. Credit three hours. Industrial Engineering Staff.

This course deals with decision making under risk and uncertainty, game theory, 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 will examine the broad range of operations research problems and the standard techniques used to approach them. *Prerequisite:* course 600 or consent of the instructor.

605. MULTIDIMENSIONAL MEASUREMENT AND SCALING. Second semester. Credit three hours. Mr. Rao.

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 his interest. *Prerequisite:* consent of the instructor.

606. STATISTICAL INFERENCE IN MANAGERIAL DECISIONS AND RESEARCH. Second semester. Credit three hours. Messrs. Dyckman and Rao.

This course emphasizes the classical approach to statistical methodology. The course covers in some detail the topics of testing hypotheses, multiple regression, time-series analysis and various nonparametric methods of inference. It is oriented toward applications of these methods in several areas of decision making and research including problems in the not-for-profit sectors of the economy.

Doctoral students electing this course are given special readings and assignments designed to improve their competence in applying research methodology.

607. BAYESIAN DECISION THEORY. Second semester. Credit three hours. Mr. Dyckman.

This course offers an extension of some of the topics introduced in course 123. Topic coverage includes a review of the basic decision problem, utility theory, sampling and the revision of subjective probabilities, risk functions, the place of classical statistics in decision theory, problems of optimal size, and Bayesian regression analysis. One-time and sequential problems are considered. Problems and cases are both used. The orientation of the course is directed to normative decision-making techniques in organizational settings. *Prerequisite:* course 123. [Not offered in 1972–73.]

Information Processing

950. INTRODUCTION TO MANAGEMENT INFORMATION SYSTEMS. First semester. Credit three hours. Mr. Lyons.

The first part of this course focuses on data base management topics such as file structure, searching and sorting, and data retrieval. To illustrate these points, the student will be given programming assignments in the ASAP language, a management oriented data retrieval language. The second part of the course considers the methodology of information systems design and the organizational impact of information systems. *Prerequisite:* course 125 or consent of the instructor.

951. INTRODUCTION TO COMPUTER SYSTEMS ANALYSIS. Second semester. Credit three hours. Mr. Ahlers.

The first part of this course provides a technical and economic survey of general purpose computer systems. The purpose is to provide the student with an understanding of the structure of such systems and with the background necessary to make intelligent decisions about computer systems. The second part of the course covers simulation as a tool for analyzing computer systems and other complex systems. A term project involving the simulation of a computer system will be required. *Prerequisite:* course 125.

Transportation

575. TRANSPORTATION: RATES AND REGULATIONS. First semester. Credit three hours. Mr. Hutchins.

This study of American transportation is focused on economic organization, public policy, and the rate-making process. The emphasis is on the theory and practice of rate making in an environment complicated by fixed, joint, and common costs; by competition among differing modes of transport; and by complex patterns of regulation. Although primary attention is given to railroad

economics and policies, other modes are considered from time to time. Cases are used. Among the topics discussed are rates and the location of industry and trade, the theory of rates, the development and current content of United States inland transportation policy, the construction of rate systems, problems in competitive marketing, new types of rates and services, certain detailed problems of regulation, and the complexities of intercarrier relations within a national transportation system.

576. TRANSPORTATION: STRUCTURES, OPERATIONS, AND POLICIES. Second semester. Credit three hours. Mr. Hutchins.

This course is a continuation of course 575 (which is a desirable, but not essential, prerequisite). Attention is focused first on the features of industrial organization in merchant shipping, air transportation, and domestic surface transportation (rail, truck, and barge), with special emphasis on market structures, business conduct, and relevant public policies. In this connection various problems of inter- and intramodal relations are discussed, including consolidations, finance, and public promotion. The second portion of the course is devoted to problems of business administration in transportation under the headings of carrier organization, operations, finance, and general policy. In this part of the course cases and illustrations are drawn from all of the modes of transportation, and discussion is based on the earlier studies of industrial organization in the several modes.

Miscellaneous

775. SMALL BUSINESS MANAGEMENT. Second semester. Credit three hours. Mr. Gilmore.

This course concentrates on the characteristics, opportunities, risks, and management approaches of small business enterprises. During the first part of the course, topics include: planning the initial strategy for a new enterprise; deciding on the form of business organization; launching a new corporation; operating the young business; and adapting to changing conditions. Each week starts with a lecture on one of the above topics; in other classes, cases bearing on the topic will be explored. During the last four weeks of the course student teams compete in a complex, computerized simulation involving small business enterprises. In a final exercise the three teams having the largest total net earnings after twelve quarters of play compete in oral presentations covering original business plans, results, important turning points, current strategy, and action potential for the future.

Research

010. DIRECTED READING AND RESEARCH. First and second semesters. Credit hours are adjusted to the work load assumed by the student.

Research 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. The student may carry on research in fields of special interest in either business or public administration.

905. STRATEGIES FOR ORGANIZATIONAL RESEARCH. Second semester. Credit three hours. Mr. Weick.

Students are exposed to a variety of research strategies that are especially appropriate for rendering the field of organizational theory more empirical. Strategies examined include organizational replicas, realistic simulation, unobtrusive measures, tempered naturalness in field settings, and field experiments. Sample studies using each strategy are critiqued and redesigned using one or more strategies not adopted by the original author. Examination of specific strategies are preceded by study of the research problems of realism, generalization, efficiency, and ethics. The course is designed to develop an understanding of research issues for those who will be consumers of research as well as for those who will be producers.

908. RESEARCH SEMINAR FOR DOCTORAL CANDIDATES. First semester. Credit three hours.

This seminar provides students with an opportunity to study recent research in administration and to develop research papers under faculty guidance. The area of study varies from year to year to reflect student interests and to allow wide faculty participation. Students present research proposals to the seminar for discussion and report research results as their studies progress throughout the term. The research work provides an opportunity to explore possible dissertation topics. *Prerequisite:* consent of the instructor. (*Note:* Students interested in health research should consider course 455, Seminar in Health Research, listed under "Hospital and Health Services Administration.") [*Not offered in 1972–73.*]

909. SOCIAL PSYCHOLOGY OF ORGANIZING. First semester. Credit three hours. Mr. Weick.

This course examines systems theory from a psychological 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, casual mapping, and exchange 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 concepts covered 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.

910. WORKSHOP IN MONEY, FINANCE, AND INTERNATIONAL MONETARY RE-LATIONS. First and second semesters. No credit. Mr. T. Willett and other interested faculty.

The purpose of this workshop, presented jointly by interested members of the faculty of this School and the Department of Economics, is to generate interaction

between faculty and advanced graduate students doing research in the areas of monetary and financial theory, policy, and international economic relations. The workshop meets periodically throughout the year to discuss research papers by students, faculty, or visitors or to discuss current topics of mutual interest.

911. WORKSHOP IN INDUSTRIAL ORGANIZATION AND PUBLIC FINANCE. First and second semesters. No credit. Messrs. Blackstone, Mueller, T. Willett, and other interested faculty.

The purpose of this workshop is to generate interaction among faculty and advanced graduate students doing research in the areas of industrial organization, public finance, and applied microeconomics. The workshop meets periodically throughout the year to discuss research papers by students, faculty, or visitors or to discuss current topics of mutual interest.



IV. ADMISSIONS AND STUDENT AFFAIRS

Each year approximately 225 new students enter the master's degree programs of the Graduate School of Business and Public Administration at Cornell. Admissions standards and procedures are explained in the first section below. The following sections describe costs, financial assistance, and student activities and services.

Admissions Policy, Standards, and Procedures

Admissions Policy

The Admissions Committee considers a series of important variables in the admissions decision process which measure the applicant's capacity and motivation for graduate work in the School and for his or her later performance as a responsible and creative executive. The admissions decision model used by the School is a compensatory model which attempts to achieve a balanced assessment of the applicant as a whole person. In this sense, there are no arbitrary cutoffs in terms of a student's former academic grade-point average or scores on the required admissions tests. Certainly, the Admissions Committee is careful not to accept applicants for whom there is serious doubt about satisfactory academic performance. However, impressive records of leadership in employment experience, military service, and extracurricular activities may compensate for what might otherwise be considered a modest set of academic qualifications.

It is in light of this compensatory admissions decision model that over half of the School's student body enters the School following significant work experience between graduation from undergraduate school and admission to the School. The Admissions Committee thus regards as particularly important the applicant's general aspirations and motivation for undertaking graduate study in the program for which he or she is applying and the degree of focus in the applicant's career plans for the future.

It is the policy of Cornell University actively to support the American ideal of equality of opportunity for all. No student shall be denied admission or be otherwise discriminated against because of race, color, creed, religion, or national origin.

Eligibility

Admission to candidacy for the M.B.A., M.P.A., or M.P.S.-H.H.S.A. degree programs is open to qualified men and women holding baccalaureate degrees from accredited colleges, universities, or technical schools in this country or abroad. Only in rare instances is an exception made to this policy.

Undergraduate Preparation

In light of the specialization inherent in professional education at the graduate level and in subsequent professional careers, candidates are urged to pursue as broad an education at the undergraduate level as their curricula allow. Undergraduate courses in business administration do not enhance a candidate's eligibility for admission nor do they necessarily assure satisfactory academic performance here. The School's three master's degree programs are specifically designed for candidates who have majored in nonbusiness fields at the undergraduate level. More than half of all the students enrolled in the School have a background of undergraduate studies in arts or sciences. Approximately one-quarter were engineering students as undergraduates.

Although no specific undergraduate courses are required for admission, it is recommended that students planning to enter the School include in their undergraduate programs courses in economics, American government, the humanities, the behavioral and social sciences, and mathematics.

Recent years have seen a rapid increase in the use of computers and quantitative techniques in business, health, and government. As you may observe, course 123, Quantitative Methods for Management, described on p. 28, requires a knowledge of algebra and a limited knowledge of calculus. A number of applicants, particularly those with backgrounds in the social sciences and liberal arts, may have had little or no work in mathematics. Those who have had no calculus and who plan to enter the School are strongly urged to take an introductory course in the subject before enrolling here.

The School does not intend to discourage those who have had a highly qualitative social sciences or liberal arts background from enrolling. On the contrary, these students are welcomed. (As stated earlier, each year over half of the students in the entering class have pursued undergraduate

majors in liberal arts areas.) There are several ways in which the necessary background can be obtained:

1. Take an introductory calculus course before coming to Cornell.

2. Take the special two-week preparatory course which the Graduate School of Business and Public Administration offers in algebra and calculus here in Ithaca during August. A special announcement will be made in the spring of 1973 concerning the dates of and tuition charges for the course to be offered starting in mid-August, 1973.

3. Engage in self-study. Those who wish to study algebra and calculus on their own can obtain instructions on how to proceed and book references by writing to the School's Director of Admissions and Student Affairs.

For the applicant who may be unsure as to whether his calculus background is sufficient, a working knowledge of the following topics is assumed when the first semester begins (the algebra need is suggested by the calculus topics) :

- a. the concept of a limit;
- b. differentiation of simple polynomials, exponential functions, and of logarithmic functions;
- c. integration of the simple functions contained in (b) above;
- 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.

Application Procedure

A completed application for admission to the M.B.A., M.P.A., or M.P.S.-H.H.S.A. program consists of the following:

1. The application itself, completed on forms available from the Office of Admissions and Student Affairs, Graduate School of Business and Public Administration, Malott Hall, Cornell University, Ithaca, New York 14850, and received by this office by February 15, 1973. Correct addressing of the transcripts is important since there are several admissions offices at Cornell.

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 (GAPSFAS) not later than January 15 so that the application reaches the School by February 15 (please refer to the following section on financial assistance for procedural details). 2. A nonrefundable application fee of \$25 payable to Cornell University. A foreign applicant may send an international money order.

3. A report of test results on the Admission Test for Graduate Study in business (ATGSB). (Please refer to the special descriptive section which follows for more details on this test.)

Applicants for M.P.A. and M.P.S.-H.H.S.A. candidacy may substitute test scores on the aptitude portion of the Graduate Record Examination (GRE). However, the GRE is not an acceptable substitute for the ATGSB for M.B.A. candidates. For all applicants whose native language is not English, a score report on the Test of English as a Foreign Language (TOEFL) is also required. All of the 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 all of these tests may be addressed to the Educational Testing Service, Princeton, New Jersey 08540. While the tests are administered five times each year, applicants should note that the autumn examinations are most convenient for the School and for the candidate. Applicants are responsible for arranging to have their test results sent directly to: Director of Admissions and Student Affairs, Graduate School of Business and Public Administration, Malott Hall, Cornell University, Ithaca, New York 14850.

Note: For M.P.A. and M.P.S.-H.H.S.A. candidates who substitute test scores on the Graduate Record Examination, a problem frequently occurs in the School's receipt of the scores because of the way in which the scores are addressed. The Graduate School and the Graduate School of Business and Public Administration are different entities at Cornell and are located in different buildings. Applications for admission to this School do not go through the Graduate School. Nonetheless, GRE scores are often sent to the Graduate School in error and we have no way of knowing this. An applicant's application for admission thus may not become complete for review by the Admissions Committee simply because we have not received the GRE results.

4. Transcripts of all previous college or university academic work beyond the secondary level. A transcript should be sent directly to the Director of Admissions and Student Affairs by the registrar of each institution attended by the candidate. (Please refer to additional information about transcripts in the section on the Admissions Time Table.)

Note: Before autumn registration, entering students must have on file at the School a final transcript from each institution attended.

5. Two letters of reference on forms supplied with the application by

the School. These letters should preferably be from persons who have taught the applicant and know the applicant well. Applicants who have been out of college for some time may have recent supervisors submit reference letters.

It is the applicant's responsibility to insure that all required application materials are received by the Office of Admissions and Student Affairs prior to the February 15 deadline. The Admissions Office staff will attempt to make periodic searches through the application folders for purposes of informing applicants which items are still needed to complete his or her application. However, at the peak of the admissions activity in January and February this becomes an almost impossible task on a regular basis. As the February deadline approaches, applicants are urged to call or write the Office of Admissions and Student Affairs to check as to whether their application folders are complete and, if not, what items are still missing.

Interviews are not required of prospective master's degree candidates as part of the admissions procedure. However, the School welcomes visits by prospective applicants to discuss the School in general and the particular degree programs. Members of the staff of the Director of Admissions and Student Affairs are available during the academic year to meet with applicants. Visits to the School are often helpful in informing a prospective applicant about the School and may assist in appraising a student's eligibility for admission. However, applicants should not feel compelled to visit the School unless time and distance permit. Interview appointments should be scheduled at least two weeks in advance by writing or calling the Office of Admissions and Student Affairs (607/256-2327).

Admissions Timetable

New students are normally permitted to enter the School only at the beginning of the fall semester in September. Because of the integrated and sequential nature of the School's core program, admission at midyear in January is not encouraged and is permitted only in very unusual circumstances. Furthermore, admission in January, even for those candidates having the necessary prerequisite academic background, is made possible by the very limited number of spaces which become available during the fall semester through leaves of absence and the infrequent graduation of students "out of sequence" in December.

Applications for admission to the School should be filed as early as possible during the academic year preceding that year for which admission is sought and, in any event, should be completed by February 15. It is rec-

ommended that applicants take the required admissions tests (described in the section on Application Procedure) in November. However, those applicants who are not able to take the required tests until the February offering should insure that all other documentation, as required in the application procedure, has been provided the Office of Admissions and Student Affairs by the February 15 deadline. Such an application will be regarded as having been complete by the deadline. Then when the results of the required examinations are received later in February, the application can be immediately referred to the Admissions Committee for review without further delay. Although the School occasionally acts favorably on applications completed after the February 15 deadline, opportunities for admission are somewhat reduced after that date and applicants who have completed their applications by February 15 are given priority.

An admission decision cannot be made until the application and all supporting materials are received by the Office of the Director of Admissions and Student Affairs. Applicants are urged to submit their application forms as soon as possible, even though some of the supporting documents may not be received until a later date. A file is started on an applicant at the time the Office of Admissions and Student Affairs receives the completed application form. The sooner the application form is received the easier it is to expedite the admissions process.

Applicants are notified of their status as promptly as possible after their admissions folders have been completed. For those applicants who have fully completed their undergraduate education prior to applying for admission, a decision from the Admissions Committee will be forthcoming more quickly than for those applicants enrolled in an undergraduate program at the time of application. In the latter case, the Admissions Committee will wish to receive the latest academic transcripts from the applicant's fall semester or quarter of the senior year before reviewing the application. An applicant enrolled in the senior year of undergraduate education at the time of application is thus advised to insure that the registrar or student records office at his undergraduate college immediately sends the fall term transcript to the Director of Admissions and Student Affairs at the end of the term.

The Graduate School of Business and Public Administration at Cornell subscribes to the common reply date of other graduate schools. Common agreement among these schools provides that applicants who have been accepted for admission for the term beginning in September are not required to confirm admission or any form of financial assistance earlier than April 15.

Admissions Deposit

Students accepted for admission are required to submit an admissions deposit of \$100, payable to Cornell University, by May 1 of the year prior to enrollment in September. Of this amount, \$50 will become the University matriculation fee, mentioned on p. 79, and the remaining \$50 will be applied toward the student's first semester tuition. The entire \$100 is thus applied against tuition and fees cost. 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. Should a candidate decide later not to enroll in the School, the admissions deposit is nonrefundable. Students receiving any form of financial aid which will cover full or partial tuition are still expected to remit the full deposit. The deposit less the matriculation fee will be refunded during the first semester.

Deferral of Admission

Admission may not be deferred automatically from one year to the next. If an applicant is accepted for admission but decides to attend later due to work, military service, reasons of health, or insufficient financial support, he should write to the Director of Admissions and Student Affairs as soon as possible to cancel his application. Individuals are admitted only for the term for which they have applied. If they wish to enroll at a later time, they should write to the Director of Admissions and Student Affairs in January of the year in which they expect to register to request that their application be reactivated. Upon reactivation and updating of an application for a future term, a recommendation covering the interim experience and certain additional information will be required. However, a new application will normally not be required and the application fee need not be paid again. The application will then go to the Admissions Committee and be evaluated in view of the competition for that year. If the applicant was accepted for admission before, he will likely be accepted again if his credentials meet the competition of the entering class.

Deferred admission is granted to those applicants who have been accepted for admission to the School and have confirmed their enrollment but are then drafted for military service.

An applicant who has been rejected for admission may also reactivate and update his application a year or two later if interest in admission to the Graduate School of Business and Public Administration continues.

In view of the School's admissions policy previously described, significant work experience following graduation from undergraduate college can compensate for modest academic qualifications.

Admission Test for Graduate Study in Business

The Graduate School of Business and Public Administration at Cornell is a member of the Graduate Business Admissions Council, a group consisting of representatives of thirty-four graduate business schools. The Graduate Business Admissions Council contracts with the Educational Testing Service to administer the "Admission Test for Graduate Study in Business" (ATGSB). The ATGSB is a three-and-one-half hour aptitude test designed to measure certain mental capabilities important in the graduate study of management. The test is not a measure of achievement or 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.

All applicants for admission (native and foreign) are required to take this test. (Aptitude scores from the Graduate Record Examination [GRE] are acceptable for applicants to the M.P.A. and M.P.S.-H.H.S.A. degree programs, but the GRE is not acceptable for those candidates wishing to pursue the M.B.A. program.) Whenever possible, applicants for entrance in the September semester should take the test not later than the preceding February administration date (although the preceding November date is preferred).

Applications for the test and an explanatory pamphlet may be obtained by writing to the Admission Test for Graduate Study in Business, Educational Testing Service, Princeton, New Jersey 08540. A completed test application and the \$12 fee must 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. For other countries, a lead time of six weeks must be allowed.

The ATGSB is given at many educational 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. Such arrangements must be made at least two months in advance.

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 1972–73 are:

Regular Saturday Administrations	Monday Administrations*
November 4, 1972	November 6, 1972
February 3, 1973	February 5, 1973
April 7, 1973	April 9, 1973
June 30, 1973	July 2, 1973
August 11, 1973	August 13, 1973

A candidate may retake the test one or more times, but retaking the test is not encouraged unless the candidate was ill the first time or was confronted with some other serious detraction or emergency. The average increase in retaking the test is about thirty points. However, twenty-five per cent of the repeaters actually score less the second time. The score report of each candidate will contain all previous ATGSB scores. In general, if the test is taken more than once, the results will be averaged before submitting the application to the Admissions Committee.

Special Information for International Students

From its beginning, Cornell University has encouraged the attendance of students from outside the United States, and currently there are some eighty-four countries represented among the University's student body. The Graduate School of Business and Public Administration welcomes applications from qualified persons from other countries. Requests for admission to the School have become so numerous, however, that we are compelled to limit our consideration of applications to persons having superior qualifications.

Foreign applicants who plan to hold a student or exchange visa while studying at Cornell are required to submit a *preliminary application* along with transcripts or official records of all academic work from each college or university attended, showing all courses taken and grades received, plus any other supplementary information considered helpful. No application fee is necessary when submitting the *preliminary application*. All academic transcripts and other documents supporting a stu-

^{*} Limited to candidates whose religious convictions prevent their taking tests on Saturdays.



dent'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.

Warder to

Upon receipt of the *preliminary application* and supporting documents, the Office of Admissions and Student Affairs evaluates the information and informs the applicant whether or not he should proceed with a formal application for admission. If the applicant is advised that he may file the formal application, the appropriate forms are sent to him. The applicant then submits this form appropriately completed along with scores on the Admission Test for Graduate Study in Business (ATGSB) and the \$25 application fee. This fee should be in the form of an international money order.

Foreign students accepted for admission to the School must be prepared academically to undertake a rigorous program of studies. They must be sufficiently proficient in English to follow lectures closely, to participate actively in discussions, to absorb a heavy program of reading, to write required papers, and to take written examinations. Therefore, foreign applicants whose native tongue is not English, and who have not received a university degree in a native English-speaking country, are also required to take the Test of English as a Foreign Language (TOEFL) administered throughout the world several times a year by the Educational Testing Service, Princeton, New Jersey 08540, U.S.A.

Candidates whose applications are complete by February 15, except for the score from the ATGSB taken on February 3 or the TOEFL taken in January, will be considered to have met the February 15 deadline date for completing their application. ATGSB scores from foreign applicants are evaluated by taking into consideration the unique difficulties which such a test poses for those from differing educational systems and language backgrounds.

It is essential that the foreign applicant *plan realistically* his financial needs for the period during which he will be pursuing graduate study in business and public administration. Admission to the School does not imply that financial assistance of any kind will be granted unless a definite commitment in writing has been made. Foreign students are urged to insure that they possess adequate financial support to cover the entire two year course of study in the School prior to leaving home. Other than the very limited scholarship assistance mentioned in the section on Fellowships, Scholarships, and Grants, which is restricted to students from certain foreign countries, financial assistance from the School is typically not available. Since the School is seldom able to offer any kind of financial assistance to foreign students, such students should be prepared to meet all of the expenses from their own funds or from government sources. It should also be emphasized that the United States Immigration Service prohibits foreign students who enter the United States on student visas from engaging in part-time employment during the first year in the United States. Furthermore, the U.S. visa-granting authority in the country of origin, ordinarily the U.S. Embassy, requires proof that sufficient funds are available for a student to cover his first year before he is granted either a Student's Visa (F-1) or an Exchange Visa (J-1). Immigration visa requirements are even more rigorous.

Length of Program and Residence

The School does not offer part-time, summer, or evening degree programs. All of the School's three professional master's degree programs are full-time programs comprising two academic years in residence and completion of sixty credit hours of course work taken while registered in the School. The only exceptions to this policy are under the specific provisions for advanced standing explained in the section below. Normally a maximum of sixteen credit hours can be earned in any one semester toward the degree requirement. However, with the approval of the student's faculty adviser, a student may register for more than sixteen hours of course work. Credit towards graduation for up to four hours work taken in excess of sixteen hours per semester will be granted only when exceptional grades are made in all courses. All such work will be recorded and computed in the normal manner for determining grade averages and academic standing.

Advanced Standing

In certain instances, it is possible for a student to receive advanced standing credit toward a degree in the School. However, excluding provisions in the special combined degree and exchange programs explained in subsections three and four below, no student will receive more than sixteen hours of advanced standing regardless of derivation.

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

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 prior to 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 materials in the common or program core courses required by the School. Applicants for admission wishing to be considered for advanced standing should apply for such credit to the Director of Admissions and Student Affairs at the time they submit their applications for admission.

2. For core course exemption examinations passed at a "superior" level. All of the School's common and program core courses may be waived by passing the exemption examinations for these courses as outlined in the section on Exemption of Core Courses which follows. Furthermore, a student who passes a core course exemption examination at a level determined to be "superior" may be granted advanced standing credit toward the degree in the amount equal to the credit hours of the course being exempted.

3. As stipulated under provisions of combined degree programs with other Cornell Schools and Departments. Advanced standing will be granted at the time of admission for Cornell seniors who are admitted to the School according to the specific formalized combined degree programs with other schools and departments of the University.

4. As arranged under the provisions of the exchange program with Catholic University of Louvain, Belgium. Advanced standing will be granted to those students admitted to the School from the Catholic University of Louvain in Belgium who have been nominated and selected by that University as participants in the formalized exchange program arranged with the Graduate School of Business and Public Administration at Cornell.

5. For courses in the Graduate School of Business and Public Administration taken and passed before admission and independently of double registration. Advanced standing may be given for courses in the School which have been taken and passed prior to admission and independently of the double registration provisions explained in subsection three above. This applies to students who have taken courses in the School while on special nondegree status, extramural status, or to Cornell undergraduate or graduate students enrolled in degree programs in other parts of the

University. In the latter case, however, a Cornell student enrolled in another department 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 Director of Admissions and Student Affairs.

Exemption of Core Courses

A student may exempt or waive 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 and orientation week at the beginning of the fall semester. It should be noted that passing the exemption examinations is the only method of waiving the requirements to take the required common or program core courses during the academic year. This is true even for those candidates who receive advanced standing credit for graduate work taken elsewhere as explained in subsection one of the section on Advanced Standing above.

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.

There are two levels of "pass" for the exemption examinations. If the student passes the exemption examination for a particular course at what is determined to be a "superior" level, advanced standing credit for a degree may be granted under the provisions outlined in subsection two of the section on Advanced Standing above. If the student passes the exemption examination, but not at a "superior" level, then only the requirement to take the course may be waived. In this instance, advanced standing credit is not awarded, but the student may then elect to take more advanced work in the particular subject area or substitute elective courses in other areas. There is no penalty for failing a core course exemption examination other than the requirement to take the respective core course for credit during the academic year. If a student passes an exemption examination but not at the "superior" level required for advanced standing, he may still elect to take the course for credit. If he does so, the course must be taken on a compulsory satisfactory/unsatisfactory basis.

Nondegree Candidates

The School accepts a very limited number of qualified students who, because of special circumstances (e.g., one year's leave of absence from

employment or a one-year fellowship for a foreign student), are not candidates for degrees. Admissions standards and procedures in such cases are the same as those for degree candidates. Interested candidates should write to the School's Director of Admissions and Student Affairs and complete an application for admission form in the normal manner.

Combined Programs

The long-standing tradition of cooperation among the various units of Cornell enables the School to join in offering combined degree programs with several of the other schools and colleges on the Ithaca campus. Formal combined degree programs have been established with the College of Agriculture and Life Sciences, the College of Engineering, and the Department of Government. Combined degree programs can also be arranged for students enrolled in the College of Architecture, Art, and Planning, the School of Industrial and Labor Relations, the School of Hotel Administration, and the College of Human Ecology. Admission to these combined programs is limited to particularly promising candidates and careful planning is required if a successful integration of the work for the two degrees is to be achieved. Accordingly, Cornell students who are interested in completing the first year requirements for the master's degree during their last year of undergraduate studies in the schools and colleges listed above are advised to meet with a staff member of the Office of Admissions and Student Affairs before the end of the first semester of the year preceding their last full undergraduate year.

Composition of the Student Body

A large number of the School's students come from the Northeast and Middle Atlantic States, but other regions of the United States and more than fifteen foreign countries are also represented in the student body each year. As indicated previously, more than half of the School's students did their undergraduate work in the liberal arts and sciences, roughly twenty-five per cent were engineering students, and about seven per cent majored in business administration. The undergraduate colleges and universities represented in the current student body are listed in the table on p. 78.

Institutions of Higher Learning Represented in the 1971–72 Student Body

Colleges and Universities in the United States

Albany College of Pharmacy Alfred University American International College Arizona, University of Augustana College Bates College Baylor University Boston College Boston University Boston College Brooklyn College Brown University Bryant College Bryant College Bucknell University California, University of at Berkeley at Los Angeles at Riverside et Sonto Barbaro at Santa Barbara California State Polytechnic College Canisius College Cansisus College Carleton College Carnegic-Mellon University Case Western Reserve University Cincinnati, University of City College of New York Claremont Men's College Clark University Clark University Clarkson College of Technology Colby College Colgate University Connecticut, University of Cornell University C. W. Post College Dartmouth College Delaware State College DePaul University Detroit, University of Dickinson College Duke University Embry-Riddle Aeronautical University Florida State University Fordham University Georgetown University

Gettysburg College Harvard College Harvard College Hobart College Hofstra University Hobstra University Holy Cross, College of the Howard University Indiana University Indiana University Indiana University Ithaca College Kentucky State College Kentucky State College Kentucky State College Kentucky State College Lafayette University Linfield College Loyola College Marquette University Massachusetts Institute of Technology Massachusetts Institute of Michigan State University of Michigan Technological University Michigan Technological University Michigan State College Morgan State College Morgan State College Mount Saint Vincent, College of Nathaniel Hawthorne College North Dastate University of Nathaniel Hawthorne College New York University North Carolina, University of North Dakota State University North Carolina, University of North Dakota State University Northeastern University North Carolina, University of Oberlin College Ohio Wesleyan University Oregon, University of

Pennsylvania State University Pennsylvania, University of Princeton University Purdue University Queens College Quincy College Redlands, University of Rediands, University of Reed College Rensselaer Polytechnic Institute Rhode Island, University of Ripon College Rochetser, University of Rutgers University Saint Bonventure University Saint John's University Saint Lawrence University Saint Michael's College Seattle, University of Simmons College Southern Mississippi, University of State University of New York at Binghamton at Buffalo at Fredonia Stetson University Swarthmore College Syracuse University Temple University Texas Christian University Trinity College Union College U. S. Merchant Marine Academy U. S. Military Academy U. S. Naval Academy Vanderbilt University Vermont, University of Virginia, University of Wikhington College Virginia, University of Washington and Jefferson College Washington, University Wesleyan University Wesleyan University Wisconein, University of Wisconsin, University of Yale University

Foreign Institutions

Alberta, University of Asian Institute for Economic Development Ateneo de Manila University Bologna, Università Degli Studi Bristol, Università Degli Studi British Columbia, University of Buenos Aires, Universidad Nacional de Calcutta, University of Downing College École Nationale Supérieure de la Métallurgie et de l'Industrie des Mines, Nancy École Polytechnique, Paris École Supérieure de Commerce et d'Administration des Entreprises de Lille École Supérieure des Sciences, Économiques, et Commerciales International Christian University Keio University

La Plata, Universidad Nacional de London, University of London, University College Louvain, Université Catholique de Luigi Bocconi, Università Commerciale McGill University Middle East Technical Institute Montreal, University of New Brunswick, University of Oxford, University of Queen's University Sir George Williams University Surrey, University of Tokyo, University of University of University of Waseda University West Indies, University of

Costs and Financial Assistance

Tuition and Fees

The charge for tuition in the Graduate School of Business and Public Administration is currently set at \$1,600 per semester.

There is a matriculation fee for new students who have not previously enrolled at Cornell. For information about this please refer to p. 69 of this *Announcement*. For additional information about the rules of payment at Cornell, see the *Announcement of General Information*. A list of *Announcements* may be found on the last page of this *Announcement*.

Tuition or other fees may be changed by the Board of Trustees at any time without notice.

Estimated Living Costs

Living costs cannot be stated with the same degree of certainty as regular University charges, because they are dependent to a great extent on the individual's tastes and circumstances. However, experience indicates that a single student spends approximately an average of \$800 for room, \$900 for board, \$150 for books and supplies, \$150 for insurance and medical expenses, \$600 for clothing, entertainment and other personal items, and \$100 for incidentals. Total costs, including tuition and fees, but excluding transportation, generally come to about \$6,000 for the full academic year for the single student and \$7,200 for the married couple without children. The approximate expense for each child is \$500 for the tenmonth academic year.

Fellowships, Scholarships, and Grants

Fellowships, scholarships, and grants-in-aid are available for students enrolled in the School. Fellowships and scholarships are awarded on the basis of a combination of merit and need, while grants-in-aid are smaller awards based solely on need.

Applications for financial aid are separate from admission applications. The Graduate School of Business and Public Administration is a participant in the Graduate and Professional School Financial Aid Service (GAPSFAS). The Graduate and Professional School Financial Aid Service permits candidates to request aid at several participating schools of the same or differing types, with one application, thus eliminating the need for them to provide information for each school. The GAPSFAS form requests information required by most graduate and professional schools.

All applicants for financial aid must file a GAPSFAS Application for Financial Aid with the Service. The GAPSFAS form may be obtained from the Office of Admissions and Student Affairs or from a financial aid officer at any convenient college or university. The form should be sent directly to the GAPSFAS at the Educational Testing Service, Princeton, New Jersey 08540, no later than January 15 in order to assure its receipt by the Office of Admissions and Student Affairs by February 15. Both the completed admission application and the completed GAPSFAS form must be received at the School by February 15 for candidates to receive financial aid consideration.

It should be noted that the financial aid decisions in the School are made independently of the admissions decisions. Therefore, a student should not hesitate to file a GAPSFAS application for financial assistance with the Service because of apprehension that doing so might affect the admissions decision.

Students who enroll without financial assistance from the School should not plan on receiving aid from the School for their second year, regardless of how well they perform academically during the first year. Likewise, they should not exhaust all their resources the first year and expect the School or the University to "fill the gap" for their second year of studies. The School will try to respond 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 to exhaust all possible outside sources of assistance. Only in this way can the School adequately respond to those students not having access to outside sources of support.

In addition to the general funds of the School and the University which are made available for scholarship purposes, the following special awards may be noted:

The Bache and Company Scholarship, in finance.

- 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 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 Deane W. Malott Fellowship of the Owens-Corning Fiberglas Corporation, in honor of Mr. Malott, President Emeritus of Cornell University.

The Martin McVoy Fellowships and Scholarships (with preference given to members of Alpha Delta Phi).

The Neal Dow Becker Scholarship Fund Awards.

The Price Waterhouse Foundation Scholarship, for study in accounting.

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

- The Walter C. Teagle Memorial Fellowship of the Standard Oil Company (New Jersey).
- Public Health Service Traineeships for study in hospital and health services administration and comprehensive health planning.
- The E. H. Litchfield Scholarship Fund, has been established in honor of the late Edward H. Litchfield, former Dean of the School. The scholarship is provided by contributions from faculty members of the School.

General funds from which scholarships are awarded are provided by the following companies: Goldman, Sachs and Company and Smith, Barney and Company.

The Council for Opportunity in Graduate Management Education (COGME) exists to provide financial assistance to outstanding minority group candidates wishing to pursue graduate study in management. The basic funding for COGME is provided by the Alfred P. Sloan Foundation. Students wishing to pursue any of the School's master's degree programs are eligible to apply for these fellowships. For the 1972–1973 academic year the fellowships provide sixty per cent of a student's total need in the first year. Married and single students may apply. A two-year commitment of support is made to a fellowship recipient. For the second year fifty per cent of total need is met through COGME support with the remainder made up from School scholarships and loans.

The School participates in the COGME program with nine other leading graduate schools of management. Separate admission application must be made to each school in which a candidate is interested. Upon acceptance by any member school, a candidate is then considered for a COGME award. If an award is received, the candidate may then take it to any member school at which he has been accepted.

COGME award applications may be obtained by corresponding directly with COGME, Central Plaza, 675 Massachusetts Avenue, Cambridge, Massachusetts 02139. The majority of COGME award decisions are made during late March or early April of an academic year. It is thus important that candidates complete applications for admission well before this time.

Award amounts are based on need. Award eligibility is based on personal factors as well as academic merit. Attention is paid to accomplishments in an applicant's own cultural environment, his motivation, personal growth potential, and potential for contribution to a management role in business, government, or community organizations.

New York State Scholar Incentive Awards

Any master's degree candidate in the School who has been a legal resident of New York State for the preceding year is entitled to a Scholar Incentive Award for each term in which he is registered as a full-time degree candidate. The amount of this award is based upon the net taxable balance of his income and the income of those responsible for his support, as reported on the New York State income tax return for the previous calendar year.

Further information and application forms may be obtained from the Regents Examination and Scholarship Center, State Education Department, Albany, New York 12224.

G. I. Bill Assistance

Any veteran who is eligible for assistance under the G.I. Bill of March, 1966, should apply to his regional office of the Veterans Administration for a Certificate of Eligibility immediately upon receipt of admission notification. By July 1 he should request a change of address form, V.A. Form 572, and submit it to his regional office. Two copies of the Certificate of Eligibility should be presented at registration or, preferably, sent ahead of time to the Registrar's Office, 240 Day Hall, Cornell University, Ithaca, New York 14850. This procedure will expedite the receipt of benefit checks.

Loans

University Loans

The University's Office of Scholarships and Financial Aid in Room 105 Day Hall administers University and National Defense Education 82 Act loan funds. This office may also recommend students for long-term loans through community banks under the guaranteed-interest loan programs available in most states.

The W. K. Kellogg Foundation has established a loan fund for students interested in the hospital and health administration program. This fund is also administered through the Office of Scholarships and Financial Aid.

With rising educational costs and continued limitations on financial aid grant resources, the School has encouraged increasing numbers of students to borrow to supplement expenses. With requisite need and availability of University loan funds, as much as \$1,500 can be borrowed during a single academic year. However, these Cornell University sponsored loans are primarily reserved for those students who do not have access to one of the state-federal guaranteed loan programs mentioned below.

The Federal-State Guaranteed Loan Program

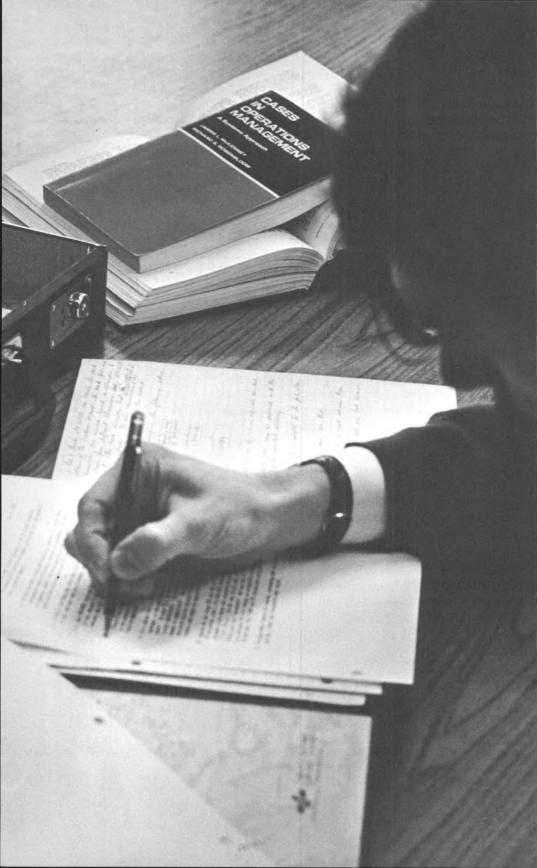
This program was established by the Higher Educational Act of 1965 to assist students in obtaining private loans to help finance their educational programs. The program is somewhat complex since it involves the federal government, state governments, commercial banks, and individual students. Essentially, the program operates as follows: (1) the student applies for a loan (up to \$1,500 per year) at a bank or other eligible lending institution in his home state; (2) the student's school certifies that he is a student; (3) the lender makes the loan directly to the student; (4) a state agency or private, nonprofit agency "guarantees" the loan; and (5) the federal government pays a portion of the interest on behalf of the eligible student.

This program is available in several states. Many students in the Graduate School of Business and Public Administration have received assistance through this program.

Our limited grant and loan funds have obliged us to refer many new students to these sources of loan funds. Students interested in applying for such loan assistance should contact a loan officer at a local bank.

United Student Aid Funds, Inc.

United Student Aid Funds, Inc., is a private, nonprofit corporation which endorses low-cost educational loans made by participating hometown financial institutions. The procedures for processing a loan through United Student Aid Funds, Inc., are quite similar to those employed under the state-federal guaranteed programs. Full details of this program and



necessary application forms are available from: USA Funds, 5259 North Tacoma Avenue, Indianapolis, Indiana 46220. It should be noted that this program is specifically designed to serve those students who are not from states having viable state-federal guaranteed educational loan programs.

Part-time Employment for Students

Although students enrolled in the Graduate School of Business and Public Administration occasionally find part-time employment as a means of earning needed funds, prospective students are cautioned against seeking outside employment during their first year in the School. Experience indicates that most first-year students should not rely on part-time work as a source of financial assistance. The School's Director of Admissions and Student Affairs, Director of Placement, and Assistant Dean for External Affairs are all available for counseling and guidance of second-year students seeking employment around the University and in the Ithaca area.

Employment for Spouses

With perseverance and patience, it is usually possible for spouses of students to obtain employment at the University or in the greater Ithaca area. The key to finding employment in the area is to make a trip to Ithaca as early as possible in the spring or summer preceding the September in which the student will enroll and apply for jobs in person. Although the Office of Admissions and Student Affairs does not find employment for student spouses, this office provides a list of local elementary and secondary school superintendents, and of personnel directors within the University. The Director of Admissions and Student Affairs will provide what assistance he can.

Student Activities

As a supplement to academic programs of the School, a range of activities is organized and administered by the student body. The objectives of these programs include the development of a professional attitude among students and the promotion of closer student-faculty relationships.

The several activities described below also afford excellent opportunities for interested students to develop their organizational and administrative talents.

Student-Faculty Committee

The Student-Faculty Committee (SFC) is the representative government organization of the Graduate School of Business and Public Administration. The authority of the SFC is derived from the electoral process by which the student body as a whole exercises its right to express its views on matters affecting student-faculty administration relationships. The SFC is composed of ten student representatives elected at large from the student body, four faculty representatives appointed by the Dean of the School, the Director of Admissions and Student Affairs, and the Director of Placement.

The Student Association

The student activities program is carried on under general sponsorship of the Student Association, with the guidance of its Executive Council. The president, vice-president, secretary, and treasurer of the Association are elected each December by Association members for one-year terms. Three representatives from the first-year class are elected in September to serve until December. The remaining members of the Council are the appointed chairmen of various subsidiary committees and organizations. The Association's social, orientation, and athletic committees and the Old Ezra Investment Club sponsor formal and informal gatherings during the year. A fee of \$15 covers membership in the Association for the two years of residence at the School. The Student Association office is adjacent to the student lounge.

Coalition of Black Administration Students

The Coalition of Black Administration Students is an organization of black and other ethnic American minority students in the School. The organization is involved in a variety of activities within the School. It generally promotes continuing communication between minority students and the rest of the student body and between the students, the faculty, and administration of the School. The Coalition works in liaison with the Student Association in providing a range of orientation activities during the first month of the fall semester which are specifically designed for

minority students. It also carries on social and professional extracurricular activities during the year.

Sloan Association

The Sloan Association is an organization of the students and faculty of the Sloan Institute of Hospital Administration within the Graduate School of Business and Public Administration. The Association promotes and maintains close association and cooperation among students and between students and faculty in the Sloan Institute. It represents students in matters relating to the curriculum, field experience requirements, and career placement activities, and provides social and professional extracurricular activities for members.

International Club

The International Club is open to international students enrolled in the School. It is affiliated with the Student Association and carries on activities for both the international and American students of the School. The Club's activities aim at promoting mutual understanding and cooperation among international and American students in the School. It assists international students in all aspects of orientation to the University and provides counsel to the faculty and administration of the School on academic and social matters pertaining to international students. It also promotes and coordinates the activities of international alumni organizations of the School.

B&PA Wives' Club

More than forty per cent of the students attending the School are married. The wives have formed the B&PA Wives' Club which sponsors a program of activities throughout the year. The Wives' Club is affiliated with the Student Association and works closely with the Association's social committee in arranging activities.

AIESEC

AIESEC, the Association for the International Exchange of Students in Economics and Commerce, is an independent, nonprofit, international organization established and operated by students from more than fortythree countries. Since 1956 the Graduate School of Business and Public

Administration has sponsored AIESEC on the Cornell campus. AIESEC students interested in area studies meet with business and political leaders from developing nations and become involved in their political, sociological, and economic problems. For those interested in the economic aspects of a developing country, there is the opportunity to play a role in solving the problems of development either in a private enterprise or a government agency. AIESEC places special emphasis on personal experience for the student working in a foreign business. The participant is offered the opportunity to work, train, and live in a foreign culture.

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 months) 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.

The Old Ezra Investment Club

The Old Ezra Investment Club is an affiliate of the Student Association. The membership is made up of Graduate School of Business and Public Administration and Law School students interested in gaining experience in making investments. In addition to regular meetings, the Club organizes programs of events which are designed especially for small investors.

The Management Forum

Over the course of the year, a number of prominent individuals from business and public agencies are brought to the School to speak to students, faculty, and guests. Sessions with visiting speakers are presented by the Management Forum at an hour set aside for that purpose. These sessions often approach, from a unique personal view, subjects of considerable interest to students in the School and also help give direction in career planning.

B&PA News and Issues

B&PA News and Issues is a bi-weekly publication providing news of students and faculty activities. News and Issues is a Student Association

affiliated activity. Regular features in each issue include current news items of School activities, alumni news, an examination of some aspect of faculty research, a review of new acquisitions by the library, and commentaries on current issues.

Lounge and Snack Area

The Student Lounge, located on the second floor of Malott Hall is maintained by the Student Association for students of the School. The lounge contains space for relaxing, reading, and informal discussions. It includes a snack area.

Student and Alumni Services

Housing

Although many students prefer to live in private dwellings or apartments, University housing is available for both single and married students.

The Sage Graduate Center, in the heart of the Cornell campus, provides housing and dining facilities for single students who are candidates for advanced degrees in any field. The Center houses approximately 190 graduate students, about forty per cent of whom are men and sixty per cent women. Cascadilla Hall is the other University housing facility specifically reserved for single graduate students. Cascadilla Hall which houses about 160 graduate students is conveniently located near the southwest entrance to the campus and the center of campus itself.

For those students interested in an internationally oriented community, the International Living Center provides housing for graduate and upperclass single students. Approximately half of the residents are from foreign countries. Additional information concerning the Center may be obtained by writing directly to the Head Resident, International Living Center, North Campus, Cornell University, Ithaca, New York 14850.

For married students and their families, the University maintains three unfurnished apartment developments: Cornell Quarters, Pleasant Grove Apartments, and Hasbrouck Apartments. Comfortable one- and two-bedroom units are provided for about 420 families. All units are moderately priced and 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 concerning these University apartments is presented in a booklet, *Housing Information for Married Students*, which is available upon request from the Married Student Housing Office, Hasbrouck Apartments, Pleasant Grove Road, Ithaca, New York 14850.

Assignments in all University housing facilities are made by the Department of Student Housing in the order in which room applications are received. Thus, all students accepted for admission, who plan to matriculate, are urged to submit the necessary application forms as soon as possible, if they desire to live in University operated housing facilities.

Off-campus housing is plentiful, but varies greatly in quality, desirability, and cost. Therefore, it is only through personal inspection that a prospective tenant can compare and evaluate the housing in terms of his or her personal requirements. In order to select off-campus living quarters properly, the student should plan to make a visit to Ithaca well in advance of the beginning of the term to follow up any leads which the Department of Student Housing may have. Although the Department of Student Housing is unable to make contacts or negotiate contracts on behalf of students, the Department does maintain a listing of available off-campus housing accommodations. The Department functions as a bureau for listings only, keeping files of accommodations voluntarily listed by landlords for students. Because the notices are constantly changing, it is not possible to compile or mail listings, nor is it feasible to maintain a waiting list of persons seeking accommodations.

Rental prices of off-campus rooms range from \$30-\$90 a month for single rooms and from \$28-\$80 a person per month for double rooms. Off-campus apartments are available for single or married students, with rentals ranging from \$100 a month for small efficiency quarters to more than \$200 a month for larger apartments accommodating families or groups of students.

Requests for additional information or clarification should be addressed to the Department of Student Housing, 223 Day Hall, Cornell University, Ithaca, New York 14850.

Student Counseling

Each student is assigned to a faculty adviser for academic counseling. The attempt is made to match respective academic and career interests of both the faculty member and student. The School's Director of Admissions and Student Affairs, Director of Placement, and Assistant Dean for External Affairs are also available for counseling purposes.

The International Student Office in Barnes Hall maintains a staff to assist in meeting the special counseling needs of students from other countries. Foreign students are urged to avail themselves of this service and to call upon the staff of the International Student Office for assistance on such matters as finding living quarters and other aspects of their needs in Ithaca. It is suggested that foreign students write to the director of the International Student Office before they come to Ithaca, or call upon him when they arrive.

Dining Arrangements

The University operates a wide range of dining facilities which are convenient both to housing accommodations and to Malott Hall, the home of the Graduate School of Business and Public Administration. Meals are served regularly in Willard Straight Hall, the North Campus Union, Sage Graduate Center, Martha Van Rensselaer Hall, Stocking Hall, the Agnes and Jansen Noyes Center, Hughes Hall, and Noyes Lodge (a student facility located on Beebe Lake, not far from the School).

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.

Immunization. A satisfactory certificate of immunization against smallpox, on the form supplied by the University, must be submitted before registration. It will be accepted as satisfactory only if it certifies that within the last three years a successful vaccination has been performed. If this requirement cannot be fulfilled by the student's home physician, opportunity for immunization will be offered by the Cornell medical staff during the student's first semester, with the cost to be borne by the student. If a student has been absent from the University and if he has not been vaccinated within the past three years, immunity will be considered to have lapsed, and a certificate of revaccination must be submitted. X Ray. Every student is required to have a chest x ray. Opportunity is given to satisfy this requirement during the student's first week on campus. The cost of the x-ray examination is included in University charges. When a student who has been away from the University for more than a year wishes to reenter, he must, at his own expense, again fulfill the chest x-ray requirement.

Health History. Graduate students, when accepted, must submit health histories on forms supplied by the University. These should be returned promptly to the Gannett Medical Clinic. 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, if the medical history indicates a need, a student will be given an appointment to consult a physician at the Clinic. When a student has been away from the University for more than a year, he must, upon reentrance, submit an interim health history on a University form.

Tetanus Toxoid. While not required, it is strongly recommended by the University Health Services that all graduate students have immunization against tetanus before entering the University. The Health Services will, however, make available at the Gannett Clinic initial and all booster tetanus toxoid immunizations at a nominal charge.

Health Services

The University Health Services provide facilities for comprehensive medical care of students. To help students achieve their educational goals the objectives are: (1) the diagnosis and treatment of illness (physical and emotional) with a minimum time loss from academic work; (2) the prevention of acute physical and emotional disorders whenever possible; and (3) the development of an intelligent and realistic attitude toward health on the part of every student.

Eligibility. All graduate students regularly registered in the University are eligible for the University health services. The cost is included in University charges.

The Clinic and Infirmary

Outpatient care is centered in the Gannett Medical Clinic, 10 Central Avenue. Hospital care is given in the Sage Infirmary. The Infirmary is on Sage Place, with the entrance on East Seneca Street between Stewart Avenue and Schuyler Place, about five blocks from the edge of the campus.

The Clinic and Infirmary medical staff, under the supervision of the clinical director, consists of attending physicians from the University staff and of consulting physicians and surgeons in the various medical fields from Ithaca and vicinity.

A student may consult a physician at the Clinic whenever need arises. Appointments with individual doctors at the Clinic should be made by calling or coming in person to the Clinic. An acutely ill patient will be seen promptly whether he has an appointment or not. An initial consultation with a medical specialist is provided when requested by a clinic physician. Further care by a specialist is the financial responsibility of the student.

Emergency Service. Students who need medical attention during the hours when the Clinic is closed, may go to Sage Infirmary. If an accident or serious illness occurs, the physician on Emergency Service may be reached by calling 256-3493 during Clinic hours or 256-6962 after Clinic hours.

Hospitalization in Sage Infirmary for a maximum of fourteen days each term is covered by University charges. (A per diem charge is made if hospitalization extends beyond fourteen days.) Hospital service includes medical and emergency surgical care, as well as most laboratory and x-ray examinations indicated for diagnosis and treatment. Emergency surgery is done at Tompkins County Hospital. In providing these services the agreement between Tompkins County Hospital and Cornell is that the Hospital will look to available insurance carried by the student, his family, or a responsible third party as the primary source of payment. Cornell will provide payment to the extent that other available sources do not cover charges during the first fourteen days. (Emergency surgery is defined as initial surgical procedure which, in the opinion of the clinical director, is necessary for the immediate welfare and safety of the patient.) The University charges do not include surgery for the correction of chronic

remedial defects or obstetrical care. There is an additional fee for emergency house calls.

In providing these services, the University reserves the right to bill the student's employer or other third party, including a pre-existing insurance carrier, legally responsible for providing hospitalization and medical care and to be subrogated to the student's right against these parties for the cost of these services when such liability exists.

A student in Sage Infirmary may, if he so desires, employ a private physician from the visiting staff. A student may also receive medical care from a private physician rather than consult the Clinic. University charges do not, however, cover the cost of such private arrangements.

Prospective students are urged to have dental, visual, and other remedial defects corrected before entering the University.

If, in the opinion of the University authorities, the student's health makes it unwise for him to remain in the University, he may be required to withdraw.

Elective Insurance Plan

Insurance is available on a voluntary basis to supplement the services as outlined above. For example, hospitalization in Sage Infirmary in excess of fourteen days a term, and expenses for illness or accidents outside Ithaca both during the academic year and during vacation would be covered. Unless students have other insurance to supplement medical services provided by the University Health Services, they are strongly urged to take advantage of this plan. Information about this insurance may be obtained at the Gannett Medical Clinic where a representative of the elective insurance company has an office.

Alumni Services

The Business and Public Administration Alumni Association maintains liaison between the School and its graduates associated with private and public organizations in this country and overseas. The School's alumni assist in various activities of the School, including serving as guest lecturers in advanced seminars, providing case materials, and interviewing for the School's admissions program. The placement program of the School is at the disposal of the School's alumni.

Placement Services

The School's Placement Office, which engages in both job placement and career counseling, is available for use by students and alumni for career and job decision-making assistance. The Office provides information about employment opportunities in the business, public, and health areas in organizations throughout the country.

Each year a large number of firms, as well as some public agencies and health organizations, send representatives to the campus to interview graduating students and first-year students seeking summer employment. Those organizations not sending representatives, keep the Placement Office advised about their openings.

Through close contact with alumni, faculty, and the business, health, and government communities, and with its large reference facilities, the Placement Office strives to improve continually the number and quality of employment opportunities and counseling available to the student and alumnus. With New York City as the Eastern financial and industrial center, communication between the student and perspective employers throughout the country is greatly enhanced.

The Placement Office publishes for wide distribution annually, a Resume Book which contains summaries of the credentials and qualifications of the year's graduates. Student participation in this program is voluntary. Participants prepare their own resumes.

Counseling services provided by the Placement Office are generally career and/or job oriented. Work is also conducted in improving the interviewing abilities and overall effectiveness of the students in their employment search.

Further Information

Prospective students are urged to consult Cornell University's Announcement of General Information for details regarding health requirements and services, vocational testing and guidance, the use of motor vehicles, and the University-wide social and cultural activities. Copies of that Announcement may be obtained from the Visitor Information Center, Edmund Ezra Day Hall, or by writing to Cornell University Announcements, Edmund Ezra Day Hall, Ithaca, New York 14850.



V. DOCTORAL AND RESEARCH PROGRAMS

Approach and Content of the Doctoral Program

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. Accomplishment is judged not primarily by the fulfillment of assigned courses but rather by the development of the depth of understanding essential to the advancement of knowledge. Course credits as such are not accumulated, but the candidate must complete a study program worked out by his Special Committee. The requirements for the Ph.D. degree are established and administered by the Graduate School of Cornell University. Business and Public Administration is one of a number of Fields of study offered by the Graduate School. A prospective student should therefore obtain the Announcement of the Graduate School and Graduate School: Course Descriptions. (For address, see last page of this Announcement.)

The candidate for the Ph.D. degree in Business and Public Administration is required to select a major subject in this Field and two minor subjects. For his Special Committee, which directs his studies, he selects faculty members representing those subjects. The major subject must be selected from either Group I or Group II as detailed below. The first minor must be selected from the group not used for the major, with exceptions as indicated below:

Major and Minor Subjects

Group I

Managerial Economics Organizational Theory and Behavior Quantitative Analysis for Administration*

Group II

Accounting Business Policy

* These two subjects may not be taken together as major and first minor.

Finance Business and Public Policy International Development Marketing Transportation Economics and Policy Medical Care Organization and Administration Production and Operations Management* Public Administration Administration of Higher Education (Minor subject only)

It is recognized that 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 subject 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 in cases where the candidate can demonstrate that the change is relevant to his career objectives. To secure uniform administration of these exceptions the Field requires that all substitutions in Groups I and II be approved by the chairman of the Committee on Advanced Degrees.

The Field requires that the first minor be relatively extensive, and that it demand a level of competence equivalent to that expected of majors. The second minor may be selected from the above subjects or from another Field. If the first minor is not taken outside this Field, a student may be encouraged to take the second minor in another Field, provided that this minor is relevant to his program. An outside minor is normally taken either in an underlying discipline or in an area of applied knowledge related to the program of this Field.

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 decision making. A candidate may study the problems of the total economy, of industries, or of the firm, and may do so within the context of any particular study area, such as international economic relations, economic development, business-government relations, money and banking, investment project analysis, or transportation. He is expected to develop a

* These two subjects may not be taken together as major and first minor.

thorough grasp of relevant economic theory and institutions and a basic understanding of both qualitative and quantitative analysis.

Organizational Theory and Behavior focuses on social and behavioral science approches to the study of human activity in organizational settings. The major concern is with regularities, differences, and relationships in human 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.

Quantitative Analysis for Administration stresses the modern developments in the uses of mathematical and statistical tools and computer technology for the solution of managerial problems, including decision making under uncertainty.

Group II

Accounting involves the study of the theory and practice of developing financial data for the two ends of enabling management to control and plan the development of the enterprise and of enabling others to appraise its condition.

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

Finance focuses on the financial structures and requirements of corporations and on the problems of developing and maintaining sound financial condition. It also deals with the organization and behavior of financial markets of various types, and on influence of public policies at home and abroad on these markets and on corporate finance. A knowledge of accounting is essential.

Business and Public Policy involves the study of the three-way relationship among individuals, business firms, and government. Emphasis may be either on the United States or a foreign area. A substantial knowledge of the political and economic background of public policies is essential. Emphasis is placed on the impact of public policies and regulation on business and of business policies on government. The problems of developing socially desirable policies in both the public and private sectors are also stressed. International Development emphasizes the study of the problems of developing effective public and business institutions in developing parts of the world, with special emphasis on problems of administration, public and private, 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 for this subject area.

Marketing involves the study of how the analytical tools derived from economics, psychology, sociology, and operations research can be applied in the development of operational and policy aspects of the marketing function.

Transportation Economics and Policy is the study of the economics of an important business function influencing the geographical structure of economic life, and of the associated problems of carriers, shippers, travelers, and governments.

Medical Care Organization and Administration comprises the study of the complex problems of public policy and administration associated with the organization, financing, and delivery of personal health services. Health systems are studied employing a systems framework. Public and private health care arrangements are examined at micro and macro levels.

Production and Operations Management concentrates on the major economic decision problems involved in production and operations management. Various analytical techniques are used, and their effectiveness and limitations are explored.

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

Administration of Higher Education (minor subject only) focuses on the use of behavioral, economic, and quantitative methods of analysis and of such applied subjects as accounting and finance in dealing with the peculiar problems of the large American university.

Candidates for advanced degrees with majors in other Fields may elect minors in this Field provided that they have sufficient preparation to do the graduate work involved. Twelve to fifteen hours of work are normally

required as a minimum for a minor, depending on the degree sought and the extent of a candidate's preparation.

Requirements

Shortly after the candidate enrolls, a qualifying examination, usually both written and oral, is given in order to determine whether he is properly prepared to continue in the subject area he has selected. The qualifying examination also serves as a basis for the Special Committee to assist the student in working out his program of study. A comprehensive examination is given on the major and minor subject areas after the candidate has had adequate preparation therein, ordinarily after four terms of residence have been completed. The comprehensive examination is always given in two parts, written and oral. A thesis is required and is prepared under the direction of a Committee member. After a manuscript has been approved in substance by the Committee, an oral thesis examination is given.

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 the Committee. These decisions are based on the potential usefulness of the language to the student in his research and future scholarly activities.

A minimum of six terms of full-time residence beyond the bachelor's degree is a requirement for the doctorate, 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 revelant graduate programs. Such transfer of credit may be allowed by the Graduate School on recommendation of a student's Special Committee after matriculation, but it is by no means automatic. Ordinarily two terms of residence credit toward the doctorate are granted for the completion of a four-term professional master's program. However, a candidate for the M.B.A., M.P.A., or M.P.S.-H.H.S.A. degree at Cornell, if he so elects during the first year, may be placed under the direction of a special committee within the School and will then follow a more researchoriented program than is usual in the master's program. By so doing he may receive up to three terms of residence credit toward the doctorate upon completion of the M.B.A., M.P.A., or M.P.S.-H.H.S.A. degree. In such instances a master's thesis and a comprehensive oral and written examination are required.

Admissions 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, Sage Hall. 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 Admission Test for Graduate Study in Business. In addition, those students whose native language is not English must take the Test of English as a Foreign Language (TOEFL). 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 the quality of an applicant's academic record, the suitability of his prior work for the intended program, his career objectives, his test scores, and the opinions expressed in letters of recommendation. In general, students without prior work in the appropriate disciplines and in the institutional environment should take a professional degree first, or otherwise make up their deficiencies. Students having strong undergraduate preparation in one or more of the social sciences can proceed directly to graduate work in this field but should plan to remedy any deficiencies with respect to the various aspects of administration. Candidates with undergraduate work in business or public administration may be prepared to enter the doctoral program, but they will often be required to develop a more adequate foundation in the social sciences. Thus, while preparation for graduate study in important segments of the student's program is necessary, the possession of a master's degree, though common, is not essential.

The School has funds available for the support of Ph.D. candidates through fellowships and assistantships, primarily the latter. These are awarded on a competitive basis to both new and continuing candidates, with renewals based on the student's academic performance. In addition to the fellowships and assistantships offered by the School, a number of University fellowships and scholarships are available and are awarded in a general competition which closes in February.

Further information on admissions and financial aid may be secured by writing to the Office of the Director of the Doctoral Program, Graduate School of Business and Public Administration, Malott Hall, Cornell University, Ithaca, New York 14850.

Research Programs

Through its research program the School seeks a combination of related objectives: the advancement of basic knowledge, the utilization of that knowledge in teaching programs, and the further encouragement of both faculty and graduate students in the use of research for decision making and other administrative purposes.

The School has stressed empirical studies of business firms, governmental agencies, hospitals, and similar enterprises. Here management is observed in interaction with its environment, and research is focused on the ways in which objectives are determined, resources acquired and controlled, and activities coordinated. This approach not only breaks new ground in organizational analysis but also provides a base for theory. Studies of this type have included a large-scale analysis of the social origins, training, and career patterns of federal governmental executives, a community power structure survey, an analysis of state capital budgeting policies and procedures in the United States, a survey of banking policies with regard to the handling of cash and marketable securities, studies of hospital organization and operation, an examination of the policy formulation processes of various business enterprises, a broad inquiry into organizational and economic trends in the field of agricultural industries, and an analysis of the top-level decision-making process in the National Aeronautics and Space Administration. Other ongoing research efforts concern the development of capital budgeting in both business and govenment, the study of executive personality, the comparative analysis of the effects of centralization and decentralization in two large concerns, the development of concepts of managerial accounting, an investigation of the economics of the steel industry in Western Europe, work on the modernization and political development of the less developed parts of the world, empirical study of employee job attitudes and motivation, and work on the integration and use of behavioralscience findings in organizational activity.

The School maintains close association with Cornell offices and departments concerned with social and organizational research, particularly the Office of Computer Services, the facilities of which are available to students in the School. The research program provides a number of stipends as well as training and dissertation opportunities for advanced graduate students.

Publications

Since 1956 the School has published the Administrative Science Quarterly, a scholarly journal concerned with advancing the basic understanding of administration through empirical investigation and theoretical analysis. The Quarterly contains articles, book reviews, and abstracts relating to administration in several types of enterprises and environments, including business, governmental, hospital, military, and educational. Special issues of the Quarterly are published occasionally. Inquiries relating to the Administrative Science Quarterly should be sent to the editor, in care of this School.

The School also publishes books and monographs on various aspects of administration and policy.

Library Resources

The Eastwick Library of the Graduate School of Business and Public Administration now contains more than 110,000 volumes on the administrative process and on various aspects of business and public affairs. The Library, which is housed in Malott Hall, has comfortable facilities for readers, including a large number of open and locked carrels. The Library maintains files of periodicals, journals, financial and advisory services, government publications, and selected company reports.

A reference collection is maintained and professionally staffed to provide direct assistance to students in the solution of academic and research problems.

In addition to the library of the School, the John M. Olin Graduate Research Library and other Cornell libraries, notably that of the School of Industrial and Labor Relations, are also open to students of the School. The government documents collection of the University Libraries is one of the largest in the country. Altogether, the library holdings of the University total over four million volumes, making Cornell one of the major library research centers in the United States.

VI. SPECIAL PROGRAMS

The School develops and conducts institutes, seminars, conferences, and other types of special training programs to meet the needs of business organizations, governmental agencies, and hospitals and health organizations. These programs are tailored to the requirements of the participating groups and vary in length from a few days to six weeks. They are usually conducted on the University's Ithaca campus, thereby gaining the full advantage of resident faculty participation, libraries, and University housing arrangements. Current programs are described below.

Cornell Executive Development Program

The Executive Development Program offers an intensive six-week seminar designed to contribute to the continuing education of executives for management. Participants are brought together with professors and business and government leaders to explore management's task in the face of accelerating technological change and mounting social, economic, and political demands. The program was established by the Graduate School of Business and Public Administration in 1953. Since that time more than 1,200 executives have participated in the annual sessions.

The method of the program is to engage each participant in a broad study of the role of management for the purpose of increasing that awareness so important to effective and responsible executive leadership. The program is designed, accordingly, to facilitate an examination of the expanding consequences of executive decisions and the broader considerations governing company policy. Each participant is encouraged to take a company-wide viewpoint, and to search out and apply financial and economic standards in the formulation and appraisal of company policies. He is stimulated to become more sensitive to the elements of effective organization and more enlightened ways of enlisting human effort, and to heighten his awareness of environmental factors which affect management's ability to control the firm's future and which impose new responsibilities on the exercise of authority. The case method of instruction is employed extensively. For those who wish to participate on a voluntary basis, special sessions are conducted on decision making under uncertainty, executive reading, and applying operations research to business.

The twenty-first annual Executive Development Program will begin in late June, 1973. Applications should be submitted by March 1, 1973.

Health Administrators Development Program

The Health Administrators Development Program offers to a selected group of experienced administrators and planners a two-week course of lectures, readings, and discussions dealing with a broad spectrum of trends and issues affecting their responsibilities. Health leaders from all parts of the United States, Canada, and overseas are brought together in stimulating contact with resident and visiting faculty members chosen for their ability to contribute to a better understanding of medical care policy, comprehensive health planning, administrative and technological development, and international health care trends.

The sixteenth annual Health Administrators Development Program will be offered in June and July, 1973.

Agribusiness Executives Program

The Agribusiness Executives Program is an intensive two-week educational program presented specifically for management personnel serving the agricultural sector of the economy. It is designed to help managers in their efforts to keep abreast of the rapidly changing nature of the agricultural industries. The program focuses on long-range planning as an aid to sound decision making.

The tenth annual Agribusiness Executives Program will be offered during the summer of 1973.

Education for Public Management Program

Cornell University conducts a nine-month, nondegree, educational program for a limited number of midcareer executives from federal, state, and local governmental agencies. Known as "Education for Public Management," this undertaking is sponsored by the United States Civil Service Commission and is coordinated by the Graduate School of Business and Public Administration. Similar programs are in operation at seven other universities.

The purpose of the program is to provide a link between the individual's employment experience to date and his long-term career interest. Its emphasis is on intellectual breadth rather than job-related specificity.

In selecting courses appropriate to their respective needs and aspirations, participants avail themselves of study opportunities and develop close associations with appropriate faculty members throughout the University. They participate in a special seminar designed to integrate their individual study programs into a sophisticated exploration of selected public policy issues.

Further information concerning this program is set forth in a special brochure which may be obtained by writing to the School.

Food Industry Management Program

A cooperative program in food industry management, conducted by the College of Agriculture and Life Sciences and the Graduate School of Business and Public Administration, is designed to provide full-time academic training for those already employed in the food manufacturing and distribution industry and for students who wish to combine a study of the fundamentals of business administration with a study of food distribution. Three types of training are offered: (1) "special" student training, usually for one year, for those who are not interested in becoming candidates for degrees, (2) four-year undergraduate degree training for those who desire broad training with specialization in the food distribution field, and (3) graduate work leading to the master's and doctor's degrees for qualified students who have bachelors' degrees. Students in the Graduate School of Business and Public Administration may elect this program as a field of concentration during their second year of study.

Special students and four-year undergraduate students register in the College of Agriculture and Life Sciences. Candidates for the graduate degrees register in the Graduate School and take their major in agricultural economics. The National Association of Food Chains has made available a number of fellowships of \$1,500 each for employees in the food industry. Further information may be obtained by writing to Professor Wendell Earle, Food Industry Management Program, Warren Hall, Cornell University, Ithaca, New York 14850.

International Programs

Over the last several years the School's faculty has become increasingly committed to participation in projects with an overseas focus. These projects serve the twin objectives of assisting in the development of foreign institutions and generating expanded opportunities for international studies in the School. From 1962 through 1969, the School participated in the development of a program in business administration at the Middle East Technical University (METU) in Ankara, Turkey. Under a contract financed by the Agency for International Development of the Department of State, eighteen members of the staff of METU came to Cornell and other universities for degree programs in business administration, and eleven professors have served in Ankara for periods ranging from one to three years.

A student exchange program was inaugurated with Louvain University, Belgium, in 1969. Each year four students from the Graduate School of Business and Public Administration are eligible to enroll in the Department of Applied Economics at Louvain for a one-year program leading to a License degree. These students return to Cornell for one additional semester to complete the Master's degree. Similarly, four Belgian graduate students come to the Graduate School of Business and Public Administration for Master's degree work. The Belgian candidates coming to Cornell are called Deneffe Scholars in memory of the late Professor Paul Deneffe, of Louvain, who taught at Cornell in 1968. Louvain pays the tuition, fees, and maintenance for two of the four Cornell students and Cornell pays tuition and fees for two of the four Belgian students. Prior to beginning their work at Louvain, the Cornell students spend three months in Europe working for a Belgian firm or taking intensive French language instruction. All students in this School may apply for the exchange. Candidate selection is based on academic average, language skill, and interest in studying and living abroad for one year.

During the past eight years the School has cooperated in the establishment of a program in management at the University of the West Indies. Several Cornell professors have participated in four-week management development programs in Trinidad, and shorter programs have also been held. Members of the School's faculty are serving as consultants to officers of the University of the West Indies. Graduates of this School and other divisions of the University are engaged in teaching and research in Trinidad, and several students with an interest in management from Trinidad have received advanced degrees at Cornell.

Program on Science, Technology, and Society

Cornell has instituted an interdisciplinary Program on Science, Technology, and Society to stimulate teaching and research on the interaction

of science and technology and contemporary society. New research and teaching efforts have been and are being initiated, and the program lends support in the coordination of the activities in the area.

Among the topics considered are science, technology, and national defense; world population and food resources; legal and moral implications of modern biology and medicine; national policy for the development of science; sociology of science; and the ecological impact of developing technology.

Courses, seminars, workshops, special studies, and research programs are or will be employed in implementing the program. Faculty and students from all the schools and colleges at Cornell are invited to participate.



VII. FACULTY, STAFF, AND ADVISORY COUNCIL

Listed below are the officers of administration, the faculty, and the administrative staff of the School. Brief descriptions of the background and interests of those currently teaching in the School are presented. The School's Advisory Council is also noted.

Administration of the University

DALE R. CORSON, President of the University
ROBERT A. PLANE, University Provost
W. DONALD COOKE, Vice President for Research
LEWIS H. DURLAND, University Treasurer
WILLIAM D. GUROWITZ, Vice President for Campus Affairs
SAMUEL A. LAWRENCE, Vice President for Administration
E. HUGH LUCKEY, Vice President for Medical Affairs
THOMAS W. MACKESEY, Vice President for Planning
PAUL L. MCKEEGAN, Vice Provost
ARTHUR H. PETERSON, University Controller
RICHARD M. RAMIN, Vice President for Public Affairs
ROBERT F. RISLEY, Vice Provost
NEAL R. STAMP, Secretary of the Corporation and University Counsel

Administration of the School

H. JUSTIN DAVIDSON, M.S., C.P.A., Dean of the School
DAVID A. THOMAS, M.B.A., Ph.D., C.P.A., Associate Dean of the School
ROGER M. BATTISTELLA, M.P.H., Ph.D., Coordinator for the Sloan Institute of Hospital Administration
FREDERICK T. BENT, Ph.D., Coordinator of the International Program
EARL BROOKS, M.S., Director of the Executive Development Program
DOUGLAS R. BROWN, D.P.A., Director of the Health Administrators Development Program
LISLE C. CARTER, JR., LL.B., Director of the Public Policy and Administration Program
THOMAS R. DYCKMAN, M.B.A., Ph.D., Director of the Doctoral Program

EDWARD S. FLASH, JR., M.P.A., Ph.D., Coordinator of the Education for Public Management Program

PETER J. HOPKINS, M.B.A., Director of Placement

- THOMAS M. LODAHL, Ph.D., Editor of the Administrative Science Quarterly
- CHARLES G. McCORD, M.A., Assistant Dean for External Affairs and Associate Director of the Executive Development Program
- FREDERICK C. POWELL, M.P.A., Director of Continuing Education for the Sloan Institute of Hospital Administration

GEORGE A. RIDENOUR, M.S., Director of Admissions and Student Affairs

Faculty

DAVID M. AHLERS, M.S. (Carnegie-Mellon), Visiting Lecturer in Finance • Mr. Ahlers' experience has been in restructuring the financial management of corporations to take advantage of new management concepts. He is concerned about solving the problems encountered when many different disciplines ranging from finance and computer science to organization theory must be integrated in order to have a practical impact on corporate financial management. Mr. Ahlers is on a one-year leave from Bankers Trust Company, where as a Vice President, he was Director of the Bank's Management Science Division and a member of the Chairman's Corporate Planning Task Force. He is the author of the *Investment Analysis Language* sponsored by the American Bankers Association and past member of the ABA's National Automation Committee. Mr. Ahlers has been a faculty member of the Stonier Graduate School of Banking, IBM's Bank Executive Program, and is a frequent speaker at national and international conferences. His teaching and research interests include security analysis, portfolio management, and financial planning and forecasting.

DOUGLAS E. ASHFORD, M.A. (Oxford), Ph.D. (Princeton), Professor of Public and International Affairs

• Professor Ashford's research and teaching are focused on the problems of modernization and political development in the less developed parts of the world. His several books and articles in this field draw heavily on research he has undertaken in North Africa. He has served as an area studies director in a Peace Corps training program and as a consultant for the Institute for Defense Analyses. He is also a professor in the Department of Government.

ROGER M. BATTISTELLA, M.P.H., Ph.D. (Michigan), Associate Professor of Medical Care Organization

• Formerly a staff member of the United States Senate's Special Committee on Aging, Professor Battistella is interested principally in public policy issues involving health planning and the organization, financing, and delivery of personal health services. He has done research on utilization of health services under voluntary insurance plans and the health behavior of late adulthood persons. He has written in the areas of health affiairs, regional and comprehensive

health planning, and medical sociology. He serves as coordinator of the program in hospital and health services administration and as a seminar chairman in the School's Health Administrators Development Program. He is active as a consultant to HEW and state and local governmental bodies.

FREDERICK T. BENT, Ph.D. (Chicago), Associate Professor of Public Administration

• International and comparative administration are Professor Bent's chief interests. He is coordinator of the School's International Program. He has taught at the American University of Beirut and at Middle East Technical University in Ankara, Turkey. He has also served as acting editor of the *Administrative Science Quarterly* and as associate director of Cornell's Center for International Studies. Professor Bent will be on leave during the academic year 1972–73.

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 business decision making with the aid of quantitative techniques. He has had experience in public accounting and industry and is the author of a number of books and articles in the fields of accounting, finance, taxation, and quantitative analysis. He is a coordinator of the School's Executive Development Program.

EARL BROOKS, M.S. (American University), Professor of Administration

• Professor Brooks teaches in the fields of organizational behavior and personnel management. He serves as director of the School's Executive Development Program and as a management consultant in this country and overseas. He has published several articles on delegation, labor relations, communications, management by objectives, and management development.

DOUGLAS R. BROWN, D.P.A. (Syracuse), Associate Professor of Hospital and Medical Care Administration

• Professor Brown joined the Cornell faculty after serving in an administrative capacity in several hospitals. His research commitment is in the area of planning for health services. He is the director of the School's Health Administrators Development Program.

ROBERT W. BROYLES, Ph.D. (Michigan), Assistant Professor of Medical Care Organization

• Professor Broyles' interests include health care finance, medical economics, and the application of economics to medical care problems. In a recent study he examined the determinants of hospital utilization and investigated substitutability among hospital resources.

JOSEPH B. BUGLIARI, LL.B. (Cornell), Associate 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, Third Department. He is interested in the law pertaining to farming operations, business associations, estate planning, and legal problems in the hospital-health area.

LISLE C. CARTER, JR., LL.B. (St. John's), Professor of Public Policy

• Although he has devoted a portion of his career to the private practice of law, Professor Carter has been most active in the area of social and urban problems. He has been affiliated with the National Urban League and the Office of Economic Opportunity, and most recently he served as assistant secretary of HEW for Individual and Family Services. His interests have included programs for the handicapped and the achievement of social welfare through planning, participation, and manpower. Professor Carter has also served as vice president for social and environmental studies at Cornell.

RICHARD W. CONWAY, Ph.D. (Cornell), Professor of Computer Science

• Professor Conway specializes in the fields of operations research and computer science. He has been a consultant to a number of large companies and to the Rand Corporation in these fields. He is currently director of National Science Foundation research projects on the theory of scheduling and on computer language development.

ROBERT W. DALY, M.D. (State University of New York at Syracuse), Visiting Professor of Administrative Medicine

• Dr. Daly's major interests are in the fields of personality theory, psychopathology, psychoanalysis, and the history and sociology of psychiatric institutions. He has served as a consultant to the social studies curriculum committee of the Maxwell School at Syracuse University and to Life Sciences Division of the Inter-University Communications Council from the National Library of Medicine in Washington, D.C. He is currently a member of the Board of Consultants of *The Psychoanalytic Review*. As a member of the Department of Psychiatry of the State University of New York, Upstate Medical Center at Syracuse, he serves as director of the Adult Outpatient Psychiatric Services and as a coordinator of undergraduate training in psychiatry for the College of Medicine.

H. JUSTIN DAVIDSON, M.S. (Carnegie-Mellon), C.P.A., Professor of Administration

• Professor Davidson is interested in the application of quantitative techniques to management problems, information systems for public and private organizations, and long range planning. Prior to coming to Cornell, he was a consulting partner in the firm of Touche Ross & Company and was that organization's director of planning. Mr. Davidson has written widely in the fields of manage-

ment and accounting. He has participated actively in the affairs of the American Institute of Certified Public Accountants, including service as chairman of the Institute's Planning Committee.

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, he has played an active part in development planning in India, Iran, Japan, and the Philippines.

ROLAND E. DUKES, M.B.A. (Stanford), Lecturer in Accounting

• Mr. Dukes' teaching interests are in the field of financial reporting, information economics, and capital market theory. He is working on a Ph.D. thesis in the field of accounting. His current research interests include investigating the efficiency with which capital markets process information and determining the implications of efficient capital markets for financial reporting.

THOMAS R. DYCKMAN, M.B.A., Ph.D. (Michigan), Professor of Accounting and Quantitative Analysis

• Accounting, statistics, and quantitative approaches to decision making are Professor Dyckman's fields of interest. His publications have dealt with such topics as automobile sales and installment credit, the investment decision, the effects of alternative accounting techniques on management decisions, and statistical decision theory applications relating particularly to accounting problems. He is currently engaged in research on certain issues associated with normative and descriptive decision making. He is a coordinator in the School's Executive Development Program and director of the doctoral program.

MILTON J. ESMAN, Ph.D. (Princeton), John S. Knight Professor of International Studies

• Professor Esman is interested in the politics of development administration, approaches to international development, and institution building in national development. He has worked for the Department of State and the United States Civil Service Commission. He is on the editorial board of the *Public Administration Review*. Professor Esman is also a professor in the Department of Government and serves as director of Cornell's Center for International Studies.

EDWARD S. FLASH, JR., M.P.A., Ph.D. (Cornell), Associate Professor of Public Administration

• Professor Flash's teaching and research interests focus on the development and implementation of public policy, particularly in such areas as urban affairs, intergovernmental relations, and the structure and operation of public bureaucracies. He has written on the knowledge-power relationship with particular reference to the Council of Economic Advisers and has conducted research on the policy, political, and administrative aspects of water resources development. Professor Flash is an experienced public servant, having served and consulted with a number of federal agencies. He is currently coordinator of the Federal Government's program of Education for Public Management at Cornell.

FRANK F. GILMORE, S.M. (M.I.T.), Professor of Business Administration

• The fields of executive development and business policy, both domestic and international, are the major concerns of Professor Gilmore. His work in these subjects is based on experience both as an executive and as a consultant in several firms. He is now a consultant to the Mobil Oil Corporation on executive development. His recent research and writings have been in the area of corporate planning. He serves as a coordinator of the School's Executive Development Program.

JEROME E. HASS, M.B.A., Ph.D. (Carnegie-Mellon), Associate Professor of Managerial Economics and Finance

• Applied mathematical economics, finance, and macroeconomic theory and use are Mr. Hass' fields of interest. His publications have dealt with such topics as the application of mathematical programming techniques to the divisionalized firm and natural resource utilization and the theory of merger and acquisition decision. He is a member of an interdisciplinary research team exploring the nature and extent of future energy requirements, methods of energy generation, and their cost both in terms of inputs and impact on the environment.

THOMAS R. HOFSTEDT, Ph.D. (Stanford), Assistant Professor of Accounting

• Professor Hofstedt's teaching interests include financial reporting and managerial accounting. Current research involves empirical studies of financial indicators and individual decision processes.

JOHN G. B. HUTCHINS, Ph.D. (Harvard), Professor of Business History and Transportation

• Professor Hutchins is primarily concerned with the fields of transportation, economic and business history, and business-government relations. His current research deals with problems and public policies relating to the maritime industries. He has written a book on American shipping and shipbuilding and numerous shorter pieces on this and other topics. He is a director of Brown-Wales Company, a steel warehousing enterprise in Cambridge, Massachusetts.

FRANK A. JOHNSON, M.D. (Illinois), Visiting Professor of Administrative Medicine

• Dr. Johnson is coordinator of graduate training in the Department of Psychiatry at the State University of New York, Upstate Medical Center at Syracuse. He

has served as a lecturer and field psychiatrist for the Peace Corps and has been a consultant in hospital programming with the New York State Department of Mental Hygiene in Albany. He has written in the areas of mental hospital organization and psychiatric education. His current research interests include the theoretical and instrumental relationships that exist between psychiatry and the social sciences.

SANDER KELMAN, Ph.D. (Michigan), Assistant Professor of Medical Economics

• Professor Kelman is interested in political economy, the economics and political economy of medical care, and econometrics. His research includes work on an econometric model of the United States economy, an econometric model of the medical care sector of the economy, a statistical study of the hard-core unemployed, and an international model predicting the onset of war.

DAVID C. KNAPP, Ph.D. (Chicago), Professor of Administration

• Professor Knapp, dean of the New York State College of Human Ecology at Cornell, has held academic and administrative positions at several universities and has been a Fulbright Scholar in Finland and a Bullard Fellow at Harvard. His research and teaching interests are in the fields of public policy and higher education.

ARTHUR J. KOVER, Ph.D. (Yale), Assistant Professor of Organizational Behavior

• Mr. Kover worked eight years in the advertising business, his last position being vice president and manager of the Research Department of a large advertising agency. His academic interests are the structures of complex organizations and the roles of organizational ideologies in shaping behavior. His interests are to find ways of increasing personal expression and freedom within large business organizations. He has published articles in both sociological and advertising journals about these subjects.

THOMAS M. LODAHL, Ph.D. (California at Berkeley), Professor of Administration

• A specialist in social-industrial psychology, Professor Lodahl has done research on leadership, group learning and problem solving, and the definition and measurement of job involvement. As an associate of the National Training Laboratories, he has consulted with various organizations on problems of improving leadership and human-relations skills of members. He is currently working on research projects on personality and buying behavior and on organizational change. He serves as editor of the *Administrative Science Quarterly*.

NORMAN R. LYONS, Ph.D. (Carnegie-Mellon), Assistant Professor of Computer Science and Information Systems

• Mr. Lyons' teaching and research interests lie in the area of information systems and operations research. He has worked as a systems analyst for the Control Data Corporation and more recently as an operations research analyst for the Irving Trust Company. He has recently completed research in the area of scheduling.

ALAN K. MCADAMS, M.B.A., Ph.D. (Stanford), Associate Professor of Managerial Economics

• Professor McAdams' interests and publications are in the fields of managerial economics and business-government relations. He has made a study of the impact of new technology on the steel industry of Western Europe. He has served as a consultant to industry and to the Ford Foundation and as a staff economist for the President's Council of Economic Advisers.

JOHN O. McCLAIN, Ph.D. (Yale), Assistant Professor of Quantitative Analysis

• Professor McClain's interests involve the application of quantitative methods to managerial problems. His current teaching and research efforts are focused on applications of operations research techniques to medical care problems. He has done research in the areas of medical decision making and, more recently, forecasting.

EDWARD J. MITCHELL, Ph.D. (Pennsylvania), Visiting Associate Professor of Economics

• Professor Mitchell's teaching interests include economics, public policy, and quantitative methods. His research includes industry studies in the energy and natural resources field, econometric studies, and work on the economic and social structure of England during the medieval period. Immediately before coming to the School, Mr. Mitchell served as Senior Staff Economist for the President's Council of Economic Advisers. He has also been a staff member of the Rand Corporation, taught at the California Institute of Technology, and was a member of the Institute for Advanced Study at Princeton.

WILLIAM C. MITCHELL, Ph.D. (Harvard), Visiting Professor of Public Administration

• Professor Mitchell's teaching and research interests include the use of economic models in the analysis of public policy and politics. He has written widely on these subjects. On leave from the University of Oregon, he is also a Visiting Professor in Cornell's Department of Government. Professor Mitchell has also taught at the University of California in both Berkeley and Los Angeles and was

a Fellow in the Center for Advanced Study in the Behavorial Sciences, Stanford, California.

VITHALA R. RAO, Ph.D. (Pennsylvania), Assistant Professor of Marketing and Quantitative Methods

• Professor Rao's research interests include application of multidimensional scaling 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 area of salience of price in the perception and evaluation of product quality, and he has written papers in the fields of statistics and measurement in marketing.

JOHN M. RATHMELL, M.B.A., Ph.D. (Pennsylvania), Professor of Marketing

• The decision-making process of the firm as it relates to both the operation of the marketing group and the administration of the marketing program represents Professor Rathmell's central teaching interest. He is developing two new courses, one focusing on the impact of environmental change on the marketing process and the other on marketing in the services sector of our economy. In addition, he is nearing completion of a study of the effect of divestiture on competition. Professor Rathmell will be on leave during the second semester of the academic year 1972–73.

DONALD C. SAMSON, M.D. (Syracuse), Visiting Professor of Administrative Medicine

• Dr. Samson, who teaches part-time in the Sloan Institute of Hospital Administration, is Professor of Medicine, Director of House Staff Affairs and Director of Emergency Services at the State University of New York, Upstate Medical Center in Syracuse. He has published work on cerebral metabolism in pernicious anemia, migrant health care, and drug abuse. He has developed a programmed examination technique utilizing a punchboard device which has the advantages of serving not only as an evaluation tool but also as an immediate feedback learning instrument.

RICHARD SCHRAMM, Ph.D. (Carnegie-Mellon), Assistant Professor of Economics and Finance

• Professor Schramm's research and teaching interests are in the area of capital theory and investment behavior. He has studied the determinants of manufacturing investment in the United States and France, focusing on the role of tax and monetary influences on investment behavior. He has made a study of the interrelationships between fixed and working capital management. In current research, he is applying capital theory to the study of corporate behavior and the public policy implications of a capital managed economy. His teaching interests include government and corporate finance.

SEYMOUR SMIDT, Ph.D. (Chicago), Professor of Managerial Economics

• 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 in the field of agricultural economics. 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 most recently as associate director of the Securities and Exchange Commission's Institutional Investor Study.

DAVID B. SMITH, Ph.D. (Michigan), Assistant Professor of Medical Care Organization

• Professor Smith's interests include medical sociology and the application of social psychology to health care problems. He is also interested in the methodology of social research. His recent dissertation involved a study of differing perceptions of quality in a prepaid group practice.

BERNELL K. STONE, Ph.D. (M.I.T.), Assistant Professor of Finance

• Professor Stone is concerned with the use of quantitative methods in financial decision making. His immediate interests focus on cash management, investment analysis, risk measurement, and capital market theory. He is the author of a book on risk and asset selection in the context of market equilibrium. He has served as president of Codon Computer Utilities, Inc., and has been a consultant to a number of organizations.

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 is on the Board of Directors of the Ithaca Growth Fund and of the Student Agencies, Inc. He is president of Executive Investors Associates and serves as the administrator of the Charles E. Merrill Trust.

L. JOSEPH THOMAS, Ph.D. (Yale), Associate Professor of Production and Quantitative Analysis

• Professor Thomas specializes in the field of operations research. His teaching interests are in the areas of production management and quantitative analysis. His publications have dealt with inventory control, the relationship of production planning with pricing and advertising, and the effect of ruin considerations on capital structure. He has been involved in management education programs

for several companies. His current research interests involve mathematical models for business decisions.

ROBERT D. TOLLISON, Ph.D. (Virginia), Assistant Professor of Economics and Public Finance

• Professor Tollison's research and teaching interests lie in the fields of microeconomics, public finance, and industrial organization. His publications have dealt with such topics as draft deferment policy and the volunteer army proposal. He is currently engaged in research on a variety of problems in industrial organization and public finance. Professor Tollison will be on leave during the academic year 1972–73.

Edward H. VAN NESS, Ph.L. (College of St. Thomas), Visiting Professor of Health Planning

• Professor Van Ness is executive director of the New York State Health Planning Commission and executive secretary of the State Joint Council on Regional Medical Programs for Heart Disease, Cancer, Stroke, and Related Diseases. He is coeditor of the book, *Concepts and Issues in Administrative Behavior*. For six years he was a member of the governor's program policy staff responsible for health, mental health, and social welfare matters. He has been responsible for government executive development programs both at New York University and the University of Chicago.

KARL E. WEICK, Ph.D. (Ohio State), Professor of Psychology and Organizational Behavior

• Professor Weick, who specializes in the field of organizational behavior, is a social psychologist. His research interests include the social psychology of everyday life, cultural change, cognitive consistency, developmental processes in groups, and productivity. 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 associate editor of the journal, *Organizational Behavior and Human Performance*.

RONALD P. WILLETT, D.B.A. (Indiana), Visiting Professor of Marketing

• Professor Willett's interests span consumer and executive decision processes, marketing management, marketing systems, and social science research methodology including cross-national research. He has authored numerous articles in the areas of buyer behavior and marketing decision making and is currently engaged in a series of empirical field studies of consumer brand and store choice behavior. Professor Willett has both served as a consultant to industry and has directed several academic research projects sponsored by corporations, has been a Fulbright Senior Lecturer in Spain, and was chairman of marketing in the Graduate School of Business of Indiana University. THOMAS D. WILLETT, Ph.D. (Virginia), Associate Professor of Economics and Public Affairs

• Professor Willett's primary interests are in the areas of international finance and international monetary problems and political economy and public policy. He has taught at the University of Virginia, Harvard University, and the Fletcher School of Law and Diplomacy and has served as a consultant and a member of the senior staff of the Council of Economic Advisers. He is currently serving as senior advisor of the Deputy Assistant Secretary for Research, Office of International Affiairs, U.S. Treasury and as economics editor of *Public Policy*.

Associated Faculty

A number of faculty members in other schools and colleges at Cornell have interests closely allied to interests of the faculty of the Graduate School of Business and Public Administration. In the School of Industrial Engineering and Operations Research there are, for example, Professors Hamilton Emmons (inventory and scheduling theory), Sidney Saltzman (information processing systems and city and regional planning); and in the School of Civil and Environmental Engineering there are Professors Walter R. Lynn (environmental systems) and Howard M. Taylor, III (applied probability and stochastic processes). Close relationships also exist with faculty members in the Departments of Economics, Government, Psychology, and Sociology of the College of Arts and Sciences; the Department of Agricultural Economics in the College of Agriculture and Life Sciences; and the Department of City and Regional Planning of the College of Architecture, Art, and Planning. Through the courses that associated faculty teach and committees on which these members serve, diversity is given to the programs of the Graduate School of Business and Public Administration.

Emeritus Professors

- MELVIN G. DE CHAZEAU, Ph.D., Professor of Business Economics and Policy, Emeritus
- DONALD ENGLISH, M.B.A., Professor of Accounting, Emeritus
- Albert M. Hillhouse, J.D., Ph.D., Professor of Public Finance, Emeritus

ARTHUR E. NILSSON, Ph.D., Professor of Finance, Emeritus

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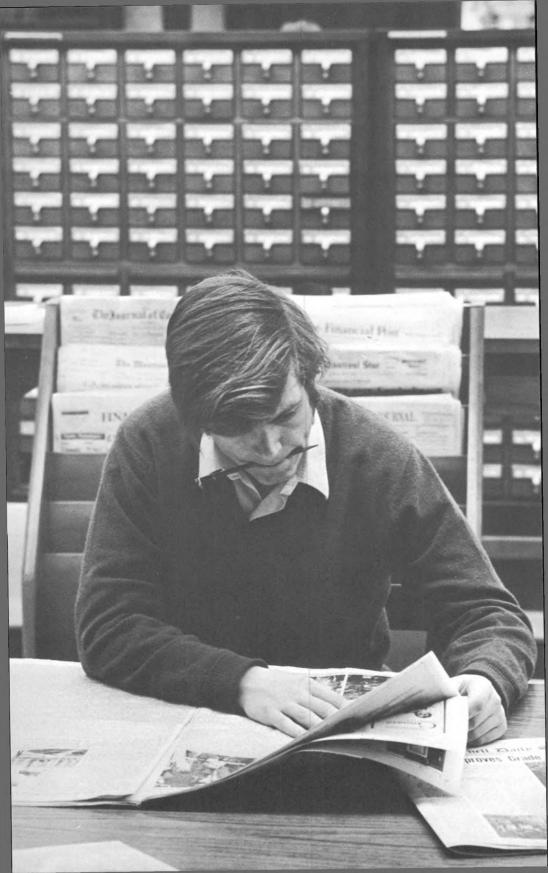
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* The Announcement of General Information is designed to give prospective students pertinent information about all aspects and academic units of the University.

Requests for the publications listed above should be addressed to

CORNELL UNIVERSITY ANNOUNCEMENTS

Edmund Ezra Day Hall Ithaca, New York 14850

(The writer should include his zip code.)