



Cornell
University

ANNOUNCEMENTS

Graduate School
Humanities

1968-69

Calendar, 1967-68

FALL TERM

1967-68

Registration, new students	Sept. 8
Registration, old students	Sept. 9
Fall term instruction begins, 7:30 A.M.	Sept. 11
Last day for filing statement-of-courses form and change of committee form and for new students to file nomination of committee form	Sept. 22
Last day for old students to take Admission to Candidacy Examinations in order to have them considered as of the beginning of the term	Oct. 11
Language examinations: French, German, and Russian	Oct. 28
Last day for change of course registration	Nov. 17
Thanksgiving recess: Instruction ends, 1:10 P.M.	Nov. 22
Instruction resumes, 7:30 A.M.	Nov. 27
Fall term classes end, 1:10 P.M.	Dec. 16
Christmas recess	
Last day for completing all requirements for January degrees	Dec. 27
Independent study period begins	Jan. 3
Final examinations begin	Jan. 8
Final examinations end	Jan. 16
Intersession begins	Jan. 17

SPRING TERM

Registration, new students	Jan. 26
Registration, old students	Jan. 27
Spring term instruction begins, 7:30 A.M.	Jan. 29
Last day for filing fellowship and scholarship applications for the following year	Feb. 1
Language examinations: French, German, and Russian	Feb. 3
Last day for filing statement-of-courses form and change of committee form and for new students to file nomination of committee form	Feb. 9
Last day for old students to take Admission to Candidacy Examinations to have them considered as of the beginning of the term	Mar. 1
Spring recess: Instruction suspended, 1:10 P.M.	Mar. 23
Instruction resumed, 7:30 A.M.	Apr. 1
Last day for change of course registration	Apr. 5
Language examinations: French, German, and Russian	Apr. 20
Last day for completing all requirements for June degrees	May 10
Spring term classes end, 1:10 P.M.	May 11
Independent study period begins	May 13
Final examinations begin	May 20
Final examinations end	May 23
Commencement	June 3

SUMMER

Summer Research period begins	May 29
Registration for Summer Session	June 17 (8-week)
	June 25 (6-week)
Last day for filing statement-of-courses form and change of committee form and for new students to file nomination of committee form	July 5
Language examinations: French, German, and Russian	Aug. 3
Summer Session ends	Aug. 11
Last day for completing all requirements for September degrees	Aug. 16
Summer Research period ends	Sept. 12

(Please see inside back cover for the 1968-69 Calendar.)

Cornell University

Graduate School
Humanities

1968-69

ADMINISTRATION

UNIVERSITY

James A. Perkins, President of the University
Dale R. Corson, University Provost
Mark Barlow, Jr., Vice President for Student Affairs
John E. Burton, Vice President — Business
Lewis H. Durland, University Treasurer
W. Keith Kennedy, Vice Provost
Franklin A. Long, Vice President for Research and Advanced Studies
E. Hugh Luckey, Vice President for Medical Affairs
Thomas W. Mackesey, Vice President for Planning
Paul L. McKeegan, Director of the Budget
Robert D. Miller, Dean of the University Faculty
Steven Muller, Vice President for Public Affairs
Arthur H. Peterson, University Controller
Robert L. Sproull, Vice President for Academic Affairs
Neal R. Stamp, Secretary of the Corporation and University Counsel

GRADUATE SCHOOL

W. Donald Cooke, B.S., M.S., Ph.D., Dean of the Graduate School
Paul R. Leurgans, B.A., M.S., Ph.D., Associate Dean of the Graduate School
Frank W. Young, B.A., M.A., Ph.D., Secretary of the Graduate Faculty

General Committee

Professor Ralph Bolgiano, Jr. (Member-at-Large), term expires 1969
Professor C. L. Comar (Member-at-Large), 1969
Professor Charles F. Hockett (Member-at-Large), 1967
Professor R. D. Miller (Member-at-Large), 1967
Professor Isaac Rabinowitz (Humanities), 1967
Professor S. Cushing Strout (Humanities), 1969
Professor Philip J. McCarthy (Social Sciences), 1967
Professor John M. Roberts (Social Sciences), 1969
Professor J. Thomas Reid (Biological Sciences), 1967
Professor Harry W. Seeley, Jr. (Biological Sciences), 1969
Professor Robert A. Plane (Physical Sciences), 1967
Professor E. L. Resler, Jr. (Physical Sciences), 1969

GRADUATE SCHOOL OF MEDICAL SCIENCES

1300 York Avenue
New York, New York 10021

John E. Deitrick, M.D., Dean of the Graduate School of Medical Sciences

Julian R. Rachele, B.A., M.A., Ph.D., Assistant Dean of the Graduate School of Medical Sciences

UNIVERSITY PROFESSORS-AT-LARGE

Professors-at-Large are distinguished nonresident members of the University Faculty. During short visits to the campus, of up to a month's duration, made at irregular intervals, they hold seminars, give public lectures, and consult informally with students and faculty.

Raymond Aron
Sir Eric Ashby
Daniel Cosío Villegas
Manfred Eigen
Gino Gorla

L. S. B. Leakey
Barbara McClintock
Sir Peter Medawar
Charles S. Singleton
Georg Henrik von Wright

CORNELL UNIVERSITY ANNOUNCEMENTS

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

Cornell University

GRADUATE EDUCATION AT CORNELL

Graduate education at Cornell is based on the principle that no objective of a university lies deeper in its tradition or springs higher in its aspiration than does the nurture of scholarship. The advancement of learning, the methods of learning, and the criticism of learning occupy the highest reaches of university life and work. Graduate education brings into fruitful contact the most distinguished scholars and the most advanced students, that learning may be shared and that wisdom may be at least glimpsed.

The Graduate School provides an environment within which scholarly capability is encouraged to emerge, thrive, and transmit itself. The School arranges a set of conditions congenial to the student who is prepared to profit from the availability of advanced courses of study; the opportunity for sustained reflection; the companionship of active, full-time fellow students; the most highly developed libraries, laboratories, and other facilities for research; the prospect of independent discovery or recovery, of evaluation or reevaluation; the daily presence of distinguished teachers; and the hope of attaining a firmly based structure of knowledge and a free and independent habit of judgment.

Freedom and independence are key qualities of scholarship, and graduate studies at Cornell are ordered so as to preserve them for both teacher and student. The Cornell principle is that scholars are begotten by other scholars, that judgments are formed by associating with the best judges, that learning lives in the unbroken succession of the learners and the learned, that genuine scholarship is always humane and rests ultimately on personal teaching and personal learning, that success in graduate studies must consist of satisfying the professor rather than a mute schedule of requirements. Graduate School standards are high, but they are maintained there not by the pronouncements of an office but rather by the men after whom such standards are themselves fashioned.

The Cornell graduate student selects not only the study he wishes to pursue, but also the scholar under whose tutelage he wishes to pursue it. The candidate himself, no one else, makes the choice. Some candidates when they apply for admission have in mind the man or men with

whom they wish to study. Those who do not are granted, under a temporary adviser, a semester in which to form an acquaintance and to come to a decision. The supervising professor is called the student's chairman. The chairman and his associate or associates, also chosen by the student, form the student's Special Committee. All such matters as the outlines of study, the observation of progress, the setting of general examinations, the conduct of the thesis, and other exercises leading to a graduate degree are determined within this small circle — the student and the professors he has selected to direct him. So successful is this arrangement and so strongly does Cornell believe in it, that the Special Committee enjoys extraordinary freedom and independence in conducting the student to his degree. The Graduate School sets no course requirement, no credit-hours requirement, no grade requirement. Within the broad agreements of the Graduate Faculty concerning residence, oral examinations, and thesis, the student will be recommended for his degree whenever his Special Committee judges him ready to receive it. When the Committee is satisfied, the requirements are.

The Cornell Graduate School has an enrollment of 3,300 students, and the Graduate Faculty consists of about 1,100 members. In contrast to many other graduate schools, approximately 98 percent of the students are full-time degree candidates, with the majority in programs leading to the Ph.D. degree.

ADMISSION

APPLICATIONS

To be considered for admission to the Graduate School an applicant must (1) hold a baccalaureate degree granted by a faculty or university of recognized standing or have completed studies equivalent to those required for a baccalaureate degree at Cornell, (2) have adequate preparation for graduate study in his chosen field of instruction, (3) have fluent command of the English language, and (4) present evidence of promise in advanced study and research. Students from United States colleges and universities should be in at least the top third of their graduating class.

Applications for admission should be requested from the Graduate School, Sage Graduate Center, Cornell University. Two letters of recommendation from the applicant's major instructors, official transcripts of record from all the institutions of higher learning attended, and, where required, the Graduate Record Examination or the Miller Analogies Test scores complete the application.

The applications from United States citizens and from foreign applicants who reside in the United States or Canada must be accompanied by a \$15 nonrefundable application fee. Foreign applicants residing elsewhere who have been accepted for admission must pay this fee before registration.

Foreign applicants whose native language is not English and who have not received their secondary school or university education in the English language must take the Test of English as a Foreign Language by arrangement with Educational Testing Service, Princeton, New Jersey 08540, U.S.A., or the Michigan English Language Test by arrangement with the English Language Institute, University of Michigan, Ann Arbor, Michigan 48104, U.S.A. The test scores must be reported directly by the testing organization to the Graduate School as part of the essential application information, and no final action on applications will be taken until the scores have been received. Both testing programs are available throughout the world. Information on times and places for administration of the tests may be obtained directly from the addresses given above. Since these tests are diagnostic, admission to those applicants whose scores indicate unsatisfactory command of English may be denied or may be made contingent upon evidence of improved command of English.

If English has been the medium of instruction in the secondary school or university, a statement to this effect signed by a responsible officer of a United States Embassy or Consulate or by an appropriate official of the educational institution involved should be sent to the Graduate School.

All applicants for admission and fellowship consideration are urged to take the Graduate Record Examination (GRE) Aptitude (Verbal and Quantitative) Tests of the Education Testing Service, and to have the scores sent to the Cornell Graduate School as part of their application materials. Information about the times and places of test administrations may be obtained directly from the Educational Testing Service, Princeton, New Jersey 08540. The Field listings, pages 47-117, should be consulted for Fields requiring the scores of both the Aptitude Test and the pertinent Advanced Test.

CATEGORIES OF ADMISSION

1. Degree Programs

It is expected that most applicants for admission will pursue a program for an advanced degree. Except under unusual circumstances, those who already hold an advanced degree are not permitted to apply for the same degree. Applicants may specify candidacy for the Master of Arts or Master of Science or one of the professional Masters' degrees listed on pages 118-121. However, since Cornell has a strong commitment to doctoral work, most students are encouraged to enroll in a doctoral program. In some fields, students registered in a doctoral program may be required to seek a Master's degree as an initial step in the program.

2. Provisional Candidacy

Under circumstances in which it is difficult to evaluate the academic background of qualified applicants, they may be admitted to *provisional* candidacy. Ordinarily only one semester of study in provisional candidacy is permitted, and the student who fails to qualify for candidacy at the end of that time may be requested to withdraw from the University.

3. Noncandidacy

When staff and facilities are available, the Graduate School will admit some applicants who do not intend to work toward an advanced degree at Cornell but who have special objectives for formal study or scholarly work at the graduate level. In order to be admitted for study in noncandidacy, the applicant must satisfy all the entrance requirements expected of degree candidates. Registration in noncandidacy is restricted to two semesters.

CHANGE OF STATUS

A student who wishes to change his status from nondegree candidacy to regular candidacy or from one degree or Field to another, or who, after receiving the Master's degree, wishes to undertake candidacy for the doctorate, must submit a request in writing to the Dean of the Graduate School asking for transfer to the new status. Reasons for the change in status should be given. Provisional candidacy is automatically reviewed at the end of each semester, and no letter is necessary in this instance.

DEGREE REQUIREMENTS

THE SPECIAL COMMITTEE

The general degree requirements of the Graduate School are kept at a minimum in order to give the student maximum flexibility in choosing a desirable program of studies. Since progress in graduate study depends so much on the individual student's situation, there are no course, grade, or credit requirements imposed by the Graduate School. The student's program is developed in conjunction with a Special Committee chosen by the student from the area of studies of interest and is designed to best fit the specific needs and desires of the individual student. Satisfactory progress toward the degree is also judged by the Special Committee rather than by any arbitrary standards imposed by the Graduate School.

The Special Committee under which a Master of Arts or a Master of

Science candidate carries on his work is composed of a chairman who represents the major subject, and one representative of an appropriate minor subject. The Special Committee of a doctoral student is composed of a chairman, representing the major subject, and two other members representing other areas of interest. The chairman of the Special Committee directs the student's thesis research. Some Fields of study require two minor subjects for doctoral programs while for others only one is needed, but all Ph.D. Special Committees have three members.

The selection of the Field and the major subject, as well as the chairman of the Special Committee, is made by the incoming student. It is the privilege of the graduate student to ask any member of the Graduate School Faculty who is in the Field of his major subject to serve as his chairman. The chairman in turn advises the student about minor subjects and faculty members who might be appropriate to represent them on his Special Committee. The choice of major and minor subjects and the formation of the Special Committee must be recorded in the Graduate School Office within two weeks of the beginning of the first term of residency. However, since the student may be uncertain of his aspirations at that time, he is encouraged to change the membership of his Special Committee as his aims become more definite.

In some of the larger Fields of the Graduate School the difficulty in making a wise selection of a Committee is so great that the Field Representative or other faculty member may serve temporarily as the chairman of the Special Committee while the student seeks a permanent chairman and committee to supervise his programs of study.

The members of the Special Committee decide upon the student's program of study and research and whether he is making satisfactory progress toward the degree. They conduct and report on oral examinations, and they approve the thesis. The Committee and the student constitute an independent working unit. All members of the Graduate School Faculty, however, are free to participate in the scheduled examinations and review the theses of candidates for degrees.

The organization of the Graduate School at Cornell is based on a concept of Fields of study which is independent of colleges and departments. It is thus possible for a graduate student to take courses in any division of the University and to choose major and minor subjects without regard to organizational lines.

EXAMINATIONS

The Special Committee conducts the examinations that are required for the degree. At the discretion of the Special Committee these examinations may be entirely oral or both oral and written. The following examinations are required:

For the Master's degree: a final examination, which under certain conditions may be combined with the Admission to (Ph.D.) Candidacy Examination.

10 DEGREE REQUIREMENTS

For the doctoral degrees: (1) A comprehensive Admission to Candidacy Examination for formal admission to doctoral candidacy. This examination may not be taken until two units of residence credit have been accumulated and is normally taken in the second or third year. Two terms of residence must be credited after this examination. (2) A Final Examination, which is primarily concerned with the doctoral dissertation.

In some Fields a qualifying examination is given at an early date to determine the student's fitness for undertaking advanced study and to enable the Special Committee to plan a program which will make him familiar with the requisite knowledge and techniques of his chosen field of study.

When the candidate has completed the thesis, he presents it to the Special Committee at the final thesis examination. This examination is oral and covers subject matter related to the thesis topic.

FOREIGN LANGUAGE REQUIREMENTS

Each Field of instruction has its own foreign language requirements which it considers most useful to the particular area of study. Any Special Committee may, at its discretion, require knowledge of foreign languages beyond the announced requirements.

Candidates required by Fields to demonstrate a reading ability in French, German, or Russian must pass the Graduate School Foreign Language Test given by the Educational Testing Service, Princeton N.J. 08540, and administered by the Graduate School. A charge is made to cover the cost of administering each test. As an alternative, candidates may pass the reading part of the CEEB college language test with a score satisfactory to the Division of Modern Languages. Students who take examinations in languages other than French, German or Russian, or in a speaking knowledge of any language, should arrange with the Graduate School Office for assignment to a suitable examiner. Arrangements to demonstrate a higher level of proficiency in a foreign language as required by some Fields may be made at the Graduate School Office.

A student may petition the Dean to transfer a language examination taken elsewhere to his record at Cornell.

Courses designed to aid graduate students in learning how to read French, German, and Russian are given by the Division of Modern Languages in cooperation with the Graduate School Faculty. There are two courses offered each term — one at the elementary and one at the intermediate level — in each of the languages. Anyone registering for them is expected to attend regularly throughout the term, take all examinations, and complete assigned work.

ELEMENTARY FRENCH, GERMAN, or RUSSIAN 151. Three hours. M W F (time to be announced).

INTERMEDIATE FRENCH, GERMAN, or RUSSIAN 152. Three hours. M W F (time to be announced).

THESIS

Candidates for the degrees of Master of Arts or Master of Science are required to submit a thesis in fulfillment of the requirements for the degree. In some fields a thesis is also required for professional Masters' degrees. Candidates for the doctoral degree must complete a thesis which constitutes an imaginative contribution to knowledge. The faculty requires publication of Ph.D. theses by abstract or microfilm.

RESIDENCE

The Graduate Faculty regards study in residence as essential. Although a person working off-campus may attain proficiency in a technique or even in a field of knowledge, he may fail in other ways to attain the breadth of knowledge necessary for scholarly work. In addition to contact with the libraries and physical facilities of the University, he needs the daily acquaintance, company, aid, and stimulus of others engaged in similar pursuits. He should form the habit of attending lectures, seminars, and meetings of groups in whose activities he takes interest.

Full-time study for one semester with satisfactory accomplishment constitutes one residence unit. The Graduate School Faculty requires that each candidate for a Master's degree earn two units of residence, and for the Ph.D. degree six units of residence. However, the time required to obtain the degree generally exceeds those minimum requirements.

A student must complete all the requirements for the Master's degree in four years and for a doctoral degree in seven years.

A student in a doctoral program may earn no more than two units for work done in Summer Research, Summer Session, and the Division of Extramural Courses. At least four of the six required units must be earned as a full-time student, earning three-quarters of a residence unit or more each term, and two of the last four units must be earned in successive terms of full-time study on the Cornell campus.

Transfer of Residence

Candidates for the Master's degree may not count study in other graduate schools as part of their residence. Candidates for the doctorate may be permitted to count study for the Master's degree as equivalent to two residence units; those who have received training of an exceptional quality and amount may petition for more. No commitment regarding this may be made until after the student has entered into residence and his Special Committee has had further opportunity to judge his accomplishments. The residence transferred must not exceed that which would have been earned under similar circumstances at Cornell. Credits secured during study as an undergraduate or as a special student, even

for work in courses designed primarily or wholly for graduate students, will not be allowed.

Summer Session

To receive residence credit through registration in the Summer Session, the candidate must register in both the Summer Session and the Graduate School and must file a statement of courses satisfactory to his Special Committee. The completion of eight or more hours of credit in the eight-week session, or a minimum of six hours in the six-week session, will count as one-half or two-fifths of a residence unit respectively, if approved in advance and reported as acceptable by the candidate's Special Committee.

Requirements for Masters' degrees may, upon approval of the appropriate graduate Field, be completed solely during the summer period if instruction in the chosen major and minor subjects is offered. Only two residence units for study in the Summer Session may be accepted in fulfillment of requirements for the doctorate. Upon recommendation by the Special Committee of a student and on approval by the Dean of the Graduate School, residence may be transferred for study done in one preceding Cornell Summer Session period if such study is attested to be an integral part of the graduate program subsequently undertaken.

SUMMER RESEARCH

To encourage students to continue their studies during the summer period, no tuition or fees are charged for summer research if the student has been registered during the previous academic year. Substantial funds are also available for summer fellowship and research assistantship support. A special summer fellowship program is also available for those students who have held teaching fellowship appointments during the previous academic year. Students have access to the regular services of the University Clinic and Hospital during the summer without charge.

Under certain conditions, students may also accumulate residence credit in the summer term.

Part-Time Studies

Essentially, all graduate students at Cornell are full-time students. In those cases where employment is necessary, students may hold positions requiring up to ten hours of work without reduction of residence credit. Teaching fellows and research assistants whose duties require up to twenty hours a week are able to obtain full residence credit.

The legislation with respect to eligibility of part-time employees for residence units is as follows.

EMPLOYMENT	RESIDENCE UNITS ALLOWABLE PER SEMESTER		
	<i>Contributory in the major field of study and on campus</i>	<i>Noncontributory but on campus</i>	<i>Off campus</i>
Total clock hrs. per week			
0-10 hours	1 unit	1 unit	1 unit
11-20 hours	1 unit	$\frac{3}{4}$ unit	$\frac{3}{4}$ unit
21-30 hours	$\frac{3}{4}$ unit	$\frac{1}{2}$ unit	(See paragraph below)

If the employment is more than twenty clock-hours per week and is off campus, or if it is more than thirty clock-hours per week under any circumstances, a maximum of two-fifths of a residence unit per semester may be earned through registration in the Division of Extramural Courses, but this will be permitted only on the basis of petition approved prior to the time that the work is undertaken. For the degree of Master of Arts or Master of Science a maximum of one unit, and for the degree of Ph.D. a maximum of two units of residence may be earned in this way.

Therefore, under the circumstances described above, degree candidates may accumulate residence units for course work completed through the Division of Extramural Courses. Instruction is offered in certain fields of study both on and off the campus. Fifteen credit hours are the equivalent of one residence unit, and six credit hours the equivalent of two-fifths of a residence unit—the smallest fraction that will be recorded by the Graduate School toward fulfillment of residence requirements. Detailed information concerning extramural courses and registration procedures may be obtained from the Division of Extramural Courses, B-20 Ives Hall.

FINANCIAL SUPPORT

Extensive financial support is available to Cornell graduate students. Approximately 3,000 of the 3,300 graduate students have financial support in the form of fellowships, teaching fellowships, and research assistantships.

Since the requirements of graduate study are so great, students are discouraged from trying to obtain financial support through employment outside their academic interests.

No special forms are available for financial aid. The applicant should check the type or types of appointment for which he wishes to be considered on the application for admission form.

TEACHING FELLOWSHIPS

The duties of a teaching fellow normally involve classroom and laboratory instruction of undergraduates and, as such, play a major role in the educational process and the academic atmosphere of the University. Since a large majority of Cornell's graduate students eventually seek a career in teaching, the experience gained from these appointments is an invaluable part of the student's development. In most Fields of study students are encouraged to spend some time in teaching, and in a few Fields the faculty believe the experience so important that they require it of all students in doctoral programs. An appointment as a teaching fellow is usually in the student's major field or in one that is closely related. The duties require from ten to twenty total clock-hours a week of the student's time, depending on the Field. A teaching fellow whose duties are in his major Field of interest and do not exceed twenty hours is eligible for full residence credit. The remuneration varies widely, but it is usually from \$1,900 to \$2,700 for an academic year and may be supplemented by a scholarship which covers tuition and fees. A special summer fellowship program is also available for teaching fellows. Because of possible problems in communication with undergraduates, applicants from non-English speaking countries are not normally appointed as teaching fellows in their first year at Cornell. Appointments are made by department chairmen. Applications for these positions should be made to the Field Representative of the Field of the major study chosen.

RESEARCH ASSISTANTS

The duties of a research assistant involve work on a research project. The work performed is frequently applicable to the student's thesis research and is under the direction of the chairman of his Special Committee. The student is required to spend twenty hours a week, but if the research is in the field of his major interest he is able to acquire full-time residence credit. In many Fields of study such appointments are not normally made to students in their first year of graduate study.

FELLOWSHIPS

A fellowship ordinarily is awarded in open competition to a full-time student who is a candidate for a higher degree. The award is made as a tax-exempt gift, and it covers not only tuition and fees but may also provide a substantial stipend for living expenses during tenure. A student who holds a fellowship is free to select his own research project, and his primary responsibility is to pursue his studies for his degree. The award of the fellowship does not obligate the holder to render services to the University, except that in certain fields some teaching

is required of all graduate students for the sake of the experience and training, nor is the holder of a fellowship committed in any way in respect to future employment. The holder of a fellowship may accept no other appointment or employment without permission of the Fellowship Board; however, teaching responsibilities will usually be approved as a routine matter if they contribute to the student's graduate program and do not exceed ten clock-hours of work per week.

Fellowships are awarded primarily on the basis of scholastic ability and promise of achievement as a graduate student.

The number of academic year fellowships awarded by the Graduate School is so extensive that it is impractical to present a listing. (See also Summer Fellowship Support, page 17.) Many other fellowships are offered to students majoring in certain Fields of study, and some of these are noted in the descriptions of the Fields.

A new program has been initiated at Cornell for students in the Humanities and in selected Fields of the Social Sciences (Anthropology, Economics, Government, Linguistics, Psychology, and Sociology). Its aim is to reduce the time required for a Ph.D. degree. This is to be accomplished through a greatly enlarged program of support, without any sacrifice in the academic standards or requirements for the degree. Incoming students in the Fields covered by the program will be guaranteed support for four full years, including the summers following the first academic year. In most cases, there will be fellowship support for three of the years, with increasing stipends accompanied by full tuition and fees. One year, or in a few cases, up to two years, of teaching fellowship will provide both support and valuable experience and training. Dependency allowances will be available. About 90 percent of those in the program will be given modest summer scholarships to enable them to continue their studies throughout the year.

Many private and federally supported fellowships are also administered by the Graduate School. National Science Foundation and National Aeronautics and Space Administration Traineeships are available, as well as National Defense Education Act (NDEA) Title IV Fellowships. NDEA Fellowships offer three years of support to doctoral students who are U.S. citizens and who intend to enter a teaching career. (Since completion of a Ph.D. program at Cornell normally requires four years, and because the program is aimed at prospective teachers, NDEA Fellows are normally expected to gain teaching experience and have support during one of the years as teaching fellows.)

The purpose of the NDEA Title VI (NDFL) Fellowship program is to provide encouragement to individuals taking advanced training in languages and in associated area studies designated as being of critical importance to the United States. For area studies, see pages 28-38. Applicants who are interested in NDFL Fellowship support must so indicate when requesting their application materials for admission. National Institute of Health Traineeships are available and are offered by Fields which have been awarded such grants.

Prospective graduate students should also consider applying for fellowships awarded on a national basis by the National Science Foundation, the Atomic Energy Commission, the Public Health Service, the Woodrow Wilson National Fellowship Foundation, and the Ford Foundation. The deadlines for these programs are usually in the fall for the following academic year. In some cases it is possible for winners of NSF and AEC awards and PHS Fellows to hold half-time appointments as teaching fellows for an additional stipend.

New York State provides several forms of financial support. The Herbert H. Lehman Fellowship program is open to applicants from all states whose interest is in social sciences or public or international affairs. The Fellowships are awarded on a competitive basis and may be used only in New York State institutions. Lehman Fellowships provide each recipient with \$4,000 for the first year of graduate study and \$5,000 for each subsequent year. New York State residents are eligible for Regents College Teaching Fellowships or Regents Fellowships for Doctoral Study in Arts, Science, and Engineering. Any of these must be applied for in the fall on forms obtained from the Regents Examination and Scholarship Center, New York State Education Department, Albany, New York 12224.

New York State also grants every resident who applies and is certified to be a full-time student a Scholar Incentive Payment which may be, for graduate students, from \$100 to \$300 per term in the first year, and from \$200 to \$400 per term thereafter, depending on required tuition and income. However, the Scholar Incentive Payment may not exceed the amount that is \$100 less than required tuition. Thus, in the state-supported divisions of Cornell University the minimum and maximum Scholar Incentive Payment is \$100 a term in any year.

Because all state educational aid is expressly for the purpose of covering educational costs, every winner of a Cornell fellowship or scholarship covering tuition who also wins a state grant, or who is eligible to apply for a Scholar Incentive Payment, will have his Cornell award reduced by at least the amount of the minimum Scholar Incentive Program award.

A space is provided on the admission application form where the student may indicate the type of support for which he wishes to be considered. No special fellowship application form is required.

As agreed upon by some of the members of the Council of Graduate Schools in the United States, the regular time for notification of award from Cornell of fellowships and scholarships for the succeeding academic years is April 1. *All fellowship and scholarship applications received by February 1 will be considered for April awards*, and each applicant approved for award will be notified not later than April 6 as to whether he has a fellowship or is named as an alternate. It is hoped that the awardees will notify the Graduate School no later than April 15 of their acceptance or rejection of the award. Failure to do this by April 22 will be considered a declination. Applications received after February 1 may be considered only if vacancies occur.

SUPPORT IN THE HUMANITIES

Recognizing that the availability of financial support for continuing graduate students in the area of the Humanities is less than in other areas, Cornell has made a particular effort to compensate for this inequity by a special Cornell-supported program. Students in doctoral programs in the Humanities area who enter with financial support from Cornell, or with nationally awarded fellowships, are guaranteed support in the form of an assistantship or a fellowship for a four-year period, provided they are making satisfactory progress toward the doctoral degree.

SUMMER FELLOWSHIP SUPPORT

The Graduate School Faculty believes that graduate education, in contrast to undergraduate programs, should be on a year-round basis to enable students to obtain their degrees in a reasonable period of time. The majority of Cornell Ph.D. students are, therefore, supported over the summer period through research assistantships and fellowships. Normally the summer period is devoted to informal study and research rather than to course work, and no tuition or fees are charged.

Two extensive summer fellowship programs based on financial need are noteworthy. One involves awards to those students who have been full-time teaching fellows. The other involves fellowship support to students who are in the final stages of their thesis preparation. It is expected that some 200 summer fellowships will be awarded for the summer of 1968 under these two programs. Another 1,300 students will be supported as research assistants, and 250 students will be on twelve-month fellowships.

RESIDENCE HALL ASSISTANTSHIPS

Assistantships in University residence halls are available for men and women graduate students in any academic field. They are most appropriate for graduate students who desire experience in working with undergraduate students and University staff while contributing financially to their own study.

In the women's area one-third of the fifteen assistantships available are reserved for graduate students in the field of Student Personnel Administration. Ten assistantships, offering living expenses and a yearly stipend, are available to graduate women in other disciplines. Particulars and application forms may be obtained by writing to the Office of the Dean of Students, 133 Day Hall.

In the men's housing area there are three types of positions, all requiring a personal interview. There are a number of counselor positions available to single undergraduate and graduate men. Each counselor is responsible for a floor containing fifty-five freshmen. Counselor positions

carry free room for the first year and a \$200 stipend in the second. The eight head resident positions are open to married graduate students without children. Each head resident is responsible for a dormitory of 250 men and five staff. The head resident lives in a two-room apartment and receives a \$700 stipend.

Applications should be addressed to the Office of the Dean of Students, 133 Day Hall. The deadline for application for positions in men's dormitories is February 1.

LOANS

Only graduate students duly registered in a degree-granting program are eligible for loans. This does not include provisional or noncandidate students.

Cornell utilizes university, state, and National Defense Loan programs. The total amount of loan recommended, regardless of source, is based upon the financial need of the student as analyzed by the University Committee on Financial Aid.

Applications are available at the Office of Scholarships and Financial Aid, 105 Day Hall. State loan applications may also be obtained at this office.

PART-TIME EMPLOYMENT

Additional opportunities for part-time work are often available in connection with departmental research projects or other activities. Applications for this type of work should be made directly to the department concerned. If a candidate is employed in research or other work closely allied to his academic interest, he may find such employment academically valuable.

Progress in candidacy is difficult when a student attempts to support himself wholly or partially by work unrelated to his studies. It usually is sounder economy to borrow from the Office of Scholarships and Financial Aid and keep employment to a minimum. However, the University maintains a part-time student employment service in that office.

EMPLOYMENT OPPORTUNITIES FOR WIVES OF GRADUATE STUDENTS

Cornell University offers many nonacademic positions for working wives through the Personnel Division, B-12 Ives Hall. Types of work include secretarial and clerical work, work for technicians in the various laboratories, library work, limited nursing positions, and some administrative positions. Applications may be made through the Personnel Division upon arrival on campus. Applicants for academic positions should apply to the specific departments in which they are interested.

In addition to the University positions, the Ithaca area offers opportunities for similar positions in small industrial plants, Ithaca College, the local hospital, and various businesses, as well as for teaching positions in the public school system and some professional positions in service agencies. Applicants should go to the New York State Employment Office for further information regarding these opportunities.

GENERAL INFORMATION

ACTIVITIES FOR GRADUATE STUDENTS

Cornell is in a small academic town in central New York State. It has the advantages of a small-town atmosphere but at the same time has many cultural aspects that rival those of any large city. A significant concert program brings internationally famous artists to Ithaca. Dramatic programs, talks by visiting lecturers, and art exhibitions fill the weekly calendar of the University and present such a wide choice of events that a student cannot possibly attend all in which he is interested.

There are places for graduate students in many extracurricular activities shared by undergraduates; among others are intramural sports, drama, Glee Club, Sage Chapel Choir, publications, music, and folk dancing. A Graduate Student Activities Committee is active in scheduling weekly social events. A Graduate Wives' Club has had a long tradition of activity for the wives of graduate students. Willard Straight Hall and the Sage Graduate Center provide facilities for graduate groups and aid in planning special functions for them.

Cornell United Religious Work (CURW) includes a range of activities for graduate students. Its offices are in Anabel Taylor Hall, which serves as a headquarters for chaplains who represent several denominations and who may be consulted by students.

Cornell's location in the Finger Lakes Region of New York State stimulates outdoor activity. Many swimming and boating facilities are available. In addition, Cornell operates a private eighteen-hole golf course; indoor and outdoor swimming pools; and indoor skating rink; tennis, handball, and squash courts; gymnasium; and riding stables, all of which are open to graduate students. A variety of ski resorts also operate near by.

Almost all Fields of study sponsor weekly seminars for their faculty and graduate students.

COUNSELING

The University maintains a variety of counseling services available to graduate students. A student's primary academic counselors are the members of his Special Committee.

Other counselors who are able to help in matters of various kinds will be found in the Office of the Dean of Students, the Office of Scholarships and Financial Aid, the International Student Office, the Gannett Medical Clinic, and the Sage Graduate Center.

INTERNATIONAL STUDENTS

Cornell has, since its founding, welcomed students from abroad. Currently 1,107 foreign students representing 84 countries are pursuing study in a variety of Fields.

In addition, each year over one hundred faculty members spend some time abroad in study and research, often in close association with foreign universities. This creates within the University community opportunities for scholars from other countries to meet and exchange ideas with members of the Cornell faculty, who often have first-hand knowledge of several countries and understand and appreciate a variety of cultures.

Special study programs within the Graduate School permit study in depth of particular areas such as Africa, Asia, Southeast Asia, Latin America, and the Near East. Students from those areas have an opportunity to contribute to such programs.

The Ithaca community is in a natural setting which allows for enjoyment of many recreational activities. In addition, varied cultural and intellectual activities are sponsored by the University. Tours of the community are conducted at the beginning of the fall semester. A group of Cornell faculty and Ithaca families maintain a Host Family Program, in which foreign students are invited to share in some aspects of American family life in the Ithaca community. With the University population a varied one, the community itself, although not large, tends to have a more cosmopolitan atmosphere than most other small cities, and the student can usually find an outlet for a wide variety of interests.

The University maintains an International Student Office at 142 Day Hall. Students from abroad are invited to consult the staff of that office on any questions they may have. The office works in close association with academic advisers and sponsors, and also with persons involved in a number of student and community programs in efforts to enrich the international and cultural life of Cornell. Students are asked to report to this office upon arriving in Ithaca.

HEALTH REQUIREMENTS ON ENTRANCE

The following health requirements for entering graduate students have been adopted by the Board of Trustees of Cornell University. Failure to fulfill these requirements may result in loss of privilege of registering the following term. The responsibility for fulfilling these requirements rests upon the student.

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 for more than three years, immunity will be considered to have lapsed and a certificate of revaccination must be submitted.

It is strongly recommended by the University Health Services that all graduate students have immunization against tetanus before entering the University. All graduate students may, however, obtain initial and all booster tetanus toxoid immunizations at the Gannett Clinic for a nominal charge.

HEALTH HISTORY. Students accepted for admission will be required to submit health histories on forms supplied by the University.

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 the General Fee. When a student who has been away from the university for more than a year wishes to re-enter, he must at his own expense, once more fulfill the chest x ray requirement, and he must also submit a new health history.

HEALTH SERVICES AND MEDICAL CARE

Health services and medical care for students are centered in two Cornell facilities: The Gannett Medical Clinic (outpatient department) and the Sage Hospital.

Students are entitled to unlimited visits at the Clinic. Appointments with individual doctors at the Clinic may be made by calling or coming in person. (An acutely ill student will be seen promptly whether he has an appointment or not.) Students are also entitled to laboratory and x ray examinations indicated for diagnosis and treatment, hospitalization in the Sage Hospital with medical care for a maximum of fourteen days each term, and emergency surgical care.

If a student requires medical attention when the Clinic is not open, an attending physician or emergency service is available at Sage Hospital. The cost of these services is covered in the General Fee.

On a voluntary basis, insurance is available to supplement the services provided by the General Fee. For further details see the *Announcement of General Information*. 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.

If a student prefers to consult a private physician rather than go to the Clinic, or to have the services of a private doctor while a patient in Sage Hospital, he must bear the cost of these services.

LIVING ARRANGEMENTS

DORMITORY ACCOMMODATIONS. The University has established Sage Hall as a graduate residential center. Its dormitory facilities accommodate approximately 100 men in the north side of the building and 105 women in the south side. The Graduate Center, which is available for use by all graduate students and faculty, also contains a cafeteria seating 200, study rooms, and lounges. In addition, Cascadilla Hall has been remodeled to accommodate approximately 160 single graduate men.

Applications for dormitory accommodations may be obtained any time after January 1 for the coming academic year by writing the Department of Housing and Dining Services, 223 Day Hall.

FAMILY ACCOMMODATIONS. The University, through the Department of Housing and Dining Services, has three apartment developments for married students and their families. They are Cornell Quarters, Pleasant Grove Apartments, and Hasbrouck Apartments, with total housing for about 400 families. All apartments are unfurnished. For further information and application, write the Department of Housing and Dining Services, Room 223, Day Hall.

OFF-CAMPUS HOUSING. Because it is required that all students live in Cornell-approved housing, an office listing off-campus housing facilities is maintained by the Department of Housing and Dining Services in Room 223, Edmund Ezra Day Hall. It functions as a bureau of information, maintaining files of voluntarily listed accommodations for use of students and staff members who call at the office. Because the list of available accommodations is constantly changing, it is not practical to mail listings, nor is it feasible to maintain a waiting list of persons seeking accommodations.

MOTOR VEHICLES

The University does not encourage student use of motor vehicles but recognizes that in certain cases there may be important reasons why a student needs a motor vehicle. University regulations apply to all types of motor vehicles, including automobiles, motorcycles, motor bikes, and motor scooters.

Every student who owns, maintains, or for his own benefit operates a motor vehicle in Tompkins County, during the time the University is in session, must register such vehicle with the Safety Division Office, even though the vehicle may be also registered by faculty, officers, or employees. All students must register motor vehicles within the prescribed time for University registration at the beginning of the fall term (*exception*: students who are not then subject to this rule but later become subject to it must register vehicles within five days after becoming so subject). Students entering the University for the spring semester or re-entering after a period of absence must register motor

vehicles with the Safety Division at the time of, or within the time for, general registration.

Every student who has a motor vehicle must comply with the following requirements: (1) the student must be legally qualified to operate a motor vehicle in New York State; (2) the vehicle must be registered in New York State or legally qualified to be operated on the highways of New York State; (3) the vehicle must be effectively insured against public liability for personal injury and property damage for the minimum of \$10,000 - \$20,000 - \$5,000, for the duration of such registration and while the vehicle is under the control of the registering student; (4) the registration fee covering the fall and spring terms, or any part thereof, is \$4 and is due and payable in the Treasurer's Office on the same date as tuition and other fees; in case of late registrants, the fee will be due within a week after such registration. A fine is levied if the vehicle is not registered within the specified time.

No student may park his motor vehicle on the campus from 8 A.M. to 5 P.M. Monday through Friday, or from 8 A.M. to 1 P.M. Saturdays. Certain areas are restricted twenty-four hours a day; such areas include "no parking" zones, dormitory parking areas, and areas listed as limited at all times to holders of specific permits.

Special area parking permits are issued only after careful consideration by the Safety Division Office. Extenuating circumstances (physical disabilities, etc.) are the basis for the issuance of these permits.

The student's registration in the University is held to constitute an agreement on his part that he will abide by all its rules and regulations with regard to traffic and parking or suffer the penalty prescribed for any violation of them.

Correspondence regarding motor vehicles should be addressed to the Board on Traffic Control, G-2 Barton Hall.

PLACEMENT

The University Placement Service, 122 Day Hall, assists Cornell men and women who are ready for positions in business, industry, government, and other institutions by supervising the assembling and presentation of personnel records and making arrangements for on- and off-campus interviews. Graduate students are advised to register with the office approximately a year before they will be available for employment.

The Educational Placement Service, 320 Wait Avenue, performs a similar function for those whose vocation is teaching. Many of the professional schools and colleges maintain separate placement offices for the special professions; their services are available to registered graduate students and alumni.

TUITION AND FEES

Tuition and fees* become due when the student registers. Any student who fails to pay his tuition, fees, and other indebtedness to the University at the Treasurer's Office within the prescribed period of grace will be dropped from the University unless the Treasurer has granted him an extension of time to complete payment. The Treasurer is permitted to grant such an extension when, in his judgment, the circumstances of a particular case warrant his doing so. For any such extension the student is charged a fee of \$5. A reinstatement fee of \$10 is assessed against any student who is permitted to continue or return to classes after being dropped from the University for default in payments. The assessment may be waived in any instance for reasons satisfactory to the Treasurer and the Registrar when such reasons are set forth in a written statement.

Students registering at any time during the last ten weeks of any term are required to pay tuition at the rate of 10 per cent of the regular tuition of the term for each week or fraction of a week between the day of registration and the last examination day of the term.

Tuition or fees may be changed by the Trustees at any time without previous notice.

FEES PAYABLE BY GRADUATE STUDENTS

Registration Deposit

A deposit of \$28 must be made by every applicant for admission after the applicant has received notice of acceptance, unless the candidate has previously matriculated as a student at Cornell University. This deposit is used at the time of first registration to pay the matriculation fee, chest x ray, and examination-book charge, and covers certain expenses incidental to graduation if the student receives a degree. The deposit will not be refunded to any candidate who withdraws his application after May 22 or after twenty days of his admission approval. This fee is *not* covered by university fellowships, scholarships, or assistantships.

Tuition

Tuition is \$200 a term for all students registered in the Graduate School whose major chairman is on the faculty of the statutory divisions† of the University. Those with major work in the School of Nutrition also pay \$200 a term. Tuition in the Field of Education is generally \$200 except in a few cases, where it is \$772.50. All students in other divisions

* All statements in this section are prepared by the Treasurer, who alone is authorized to interpret them.

† The statutory divisions are the Veterinary College, the Colleges of Agriculture and Home Economics, and the School of Industrial and Labor Relations.

must pay tuition of \$772.50 a term. Tuition is payable at the beginning of each term.

Upon recommendation by the appropriate college dean and by action of the Controller, for each appointment in a statutory school or college, waiver of tuition in the Graduate School may be made to a member of the teaching or scientific staff, whose major field of study is in a statutory school or college.

Assistants in statutory schools or colleges who are on twelve-month appointments and who are registered for Summer Research for credit in the Graduate School may be recommended for waiver of tuition during the summer period under the above limitations. This waiver of tuition does not apply if the student registers in the Summer Session or is not doing productive work for the department.

Any student who is to receive less than full residence credit because of his employment should apply for proration of tuition on forms procurable at the Graduate School Office. *Tuition is based on residence eligibility.* See pages 11, 13.

General Fee

A fee of \$275.00, payable at the beginning of each term, is required of each student registered in the Graduate School whose major chairman is on the faculty of one of the statutory divisions,* or on the faculty of the School of Nutrition, or (in most cases) of the School of Education. All others pay a fee of \$252.50. This General Fee contributes toward the services supplied by the libraries, Clinic and Hospital, and the student union in Willard Straight Hall, and pays a portion of the extra cost of laboratory courses and general administration.

A student who is regularly registered in the Graduate School for either one or both terms of the academic year and has paid the above fee is entitled to these services while in residence during the summer immediately following the academic year without payment of an additional General Fee. If such a student registers with the University during the summer, he is liable for payment of any tuition and other fees, and must present his ID card at the time of payment of these charges in order to claim exemption from payment of the General Fee.

A graduate student who returns to the University to present his thesis and to take the final examination for an advanced degree, all other work for that degree having been previously completed, must register as a "Candidate for Degree Only" and pay a fee of \$35.

Other Fees

THESIS FEE. Each doctoral candidate must pay \$30 at the time of depositing the approved thesis and abstract in final form. This fee

* The statutory divisions are the Veterinary College, the Colleges of Agriculture and Home Economics, and the School of Industrial and Labor Relations.

covers the cost of preparing a master microfilm of the entire thesis; of publishing the abstract in the bimonthly periodical, *Dissertation Abstracts*; of mailing the microfilm and abstract to the microfilm publisher; and of binding both copies of the thesis for deposit in the University Library.

LIMITED REFUNDS. Part of the tuition and General Fee will be refunded to students who officially withdraw or take a leave of absence during the first nine weeks of a term. A student arranges for a leave of absence or withdrawal at the Graduate School Office. Students who withdraw are charged tuition and the General Fee at the rate of 10 per cent for each week or fraction of a week from registration to the effective date of withdrawal. No charge is made if the student withdraws within six days of registration. No part of the registration or matriculation fee is refundable.

SUMMER SESSION. Graduate students who attend classes in the Summer Session must register both in the Graduate School and in the Summer Session; they must pay the tuition and fees listed in the *Announcement of the Summer Session*.

SUMMER RESEARCH. Students registered for Summer Research pay one half of the General Fee for a registration period of not more than eight weeks and the full fee for a registration period of over eight weeks unless they were regularly registered in the Graduate School during the previous academic year. For those students eligible for and desiring residence, a prorated tuition is charged in accordance with the fraction of a residence unit to be earned, based on the tuition in effect for the subsequent academic term.

IN ABSENTIA. A graduate student registered *in absentia* will pay a fee of \$35 each term.

SPECIAL RESOURCES FOR RESEARCH AND ADVANCED STUDY

The descriptions below are limited to major general facilities at the service of graduate students in any of a variety of fields of instruction. In addition, substantial collections and facilities, in many instances unique, have been assembled for the use of graduate students. Although the facilities cannot be described adequately in this Announcement, some of them are mentioned in the statements given under the Fields of Instruction on pages 47-117.

CORNELL UNIVERSITY LIBRARIES

The libraries are among the principal facilities in the University's program of graduate studies. The total number of volumes at Cornell is now over 3,000,000, and that figure increases by about 175,000 each

year. For the convenience of students and faculty, the holdings are organized into a controlled system of distinct libraries. Some of the libraries are large; some have limited holdings. Some are general, some selective. Each library, whether within one of the colleges or housed in a building of its own, is situated where its books and its facilities lie most easily available to those who use them most. The libraries, whatever their nature, have been developed over many years by scholarly librarians and professors with the view of achieving breadth and depth in the central libraries, utility and coherence in the specialized ones.

The University's libraries offer support for graduate studies at several levels. They provide basic readings in virtually all subjects, collateral studies for classroom and seminar instruction, and highly specialized materials for advanced students. An unusually rich collection of reference works, both modern and antiquarian, expedites both the daily study and dissertational research. Of journals and periodicals, about 35,000 titles are available, most of them in complete runs, some of them in multiple copies, all of them immediately available. Special departments are maintained for maps, microtexts, documents, newspapers and other such collections.

To most graduate students, Olin Library, designed primarily as a research library, becomes the most familiar. Olin Library, completed in 1961, offers every modern library facility for its readers. The building is completely air-conditioned, scientifically lighted, comfortably furnished, and organized for efficient operation. It provides easy access to the book stacks, convenient photocopying facilities, and a comfortable lounge area for graduate students. Congestion is reduced not only because of architectural design but also because undergraduates have their own open-stack library in a separate building. A graduate student whose work has advanced to the writing stage may apply for use of a carrel adjoining the book stacks in order to facilitate completion of his dissertation. Olin Library is open in term time from 8 A.M. to 11:30 P.M. weekdays and from 1 P.M. to 11:30 P.M. Sundays.

Within Olin are a number of special collections likely to be of particular interest to advanced students of the social sciences and the humanities. The Department of Rare Books houses several distinguished collections, among them books and manuscripts relating to Dante, Petrarch, Wordsworth, Joyce, Shaw, and other literary figures. The Noyes collection is rich in American historical documents, especially those pertaining to Lincoln and the Civil War. Students in the social sciences will also find extraordinarily interesting manuscripts and books in the collections of slavery and abolition, of witchcraft, of the French Revolution, and of the life and times of Lafayette. Long familiar to professional scholars are the Wason Collection on China and the Chinese, Japan, and Southeast Asia collections, and also the Old Icelandic Collection. The History of Science collections include the Adelman library of embryology and anatomy, and the library of the French scientist, Lavoisier. The collection of Regional History and Cornell University archives is a manuscript depository with total holdings of more than 14 million items. These manuscripts relate to all aspects of the economic, political, and social history of this region and the areas

historically connected with it. Here too are the documents and manuscripts relevant to the founding and development of Cornell University. In addition to the collections in Olin Library, many of the college and department libraries also contain materials unique in their respective fields. Curators and reference librarians in all the libraries are available for counsel concerning the availability and use of research materials.

The University libraries in aggregate consist of Olin Library, as mentioned, Uris Library for undergraduates, the Physical Sciences Library, the Mann Library of Agriculture and Home Economics, and the libraries of the following colleges and schools: Architecture and Fine Arts, Business and Public Administration, Engineering, Hotel Administration, Industrial and Labor Relations, Law, Medicine (in New York City), and Veterinary Medicine. Added to these are the libraries of academic divisions and departments, together with those of the Agricultural Experiment Station at Geneva, New York, and of the Cornell Aeronautical Laboratory at Buffalo.

INTERNATIONAL STUDIES PROGRAMS

Center for International Studies

The Center for International Studies has as its primary function the coordination and support of the international activities of Cornell University. In addition to its role as a link between the activities of the specialized programs, the Center endeavors to stimulate new research and development and to advise the University on contract commitments sponsored by government or private agencies. In addition, the Center brings to Cornell visiting faculty, postdoctoral research fellows, and distinguished academic and professional personnel in the area of international affairs. The Center for International Studies has no faculty, students, or curriculum of its own. Its research and other programs depend upon effective interaction with the faculty of the University's existing schools, colleges, and departments. The offices of the Center are located in Rand Hall.

The student interested in a particular foreign area or in particular international problems will often find that the faculty of his own major discipline includes specialists that provide appropriate instruction and academic guidance. For example, courses in the following fields, among others, are regularly offered under the relevant departments: comparative government, international relations, international law and organization, international and comparative labor relations, international economics and the economics of development, international agricultural development, international population problems, and foreign languages and literatures.

The student seeking specialized foreign area knowledge may focus on one of the following three major, broadly-based, interdisciplinary area programs: China Program, Latin American Studies, and South-east Asia Program. In addition to these major area programs, it is pos-

sible for the student to pursue an area interest in African Studies, South Asia Program, or Soviet Studies.

The continued growth of these programs has been accompanied by the creation of an outstandingly comprehensive infrastructure of staff, library, language facilities, and other necessary resources.

Further information about the Center may be obtained from the Director, 216 Rand Hall.

African Studies

ADVISORY FACULTY COMMITTEE ON AFRICAN STUDIES: William H. Friedland, Chairman; Eqbal Ahmad, Douglas Ashford, Harold Feldman, Milton Konvitz, Chandler Morse, Stephen Muller, Thomas Poleman, Victor Turner, Frederick Tom, Mary Wood.

Cornell University has substantial facilities for graduate study and research on Africa. Many members of the faculty in a variety of fields are qualified by research experience in Africa to provide instruction or guidance to students who wish to specialize in some aspect of African studies, who plan to work there, or who are interested in a general or comparative knowledge of the area. Instruction and training in general linguistics are available for students expecting to deal with tribal peoples, and special courses on particular African languages (e.g., Ibo, Yoruba) have been given in recent years. Courses are regularly offered on the cultures and social systems of Africa and on the problems of economic, political and social development of the area. The University libraries provide a good working collection of books, documents, maps, newspapers, and periodicals on Africa of sufficient scope to enable students and staff to carry on regional research. A representative group of African students is attracted to Cornell each year, most of whom are eager to discuss African life and problems with interested students from other areas.

Inquiries should be directed to Professor William H. Friedland, Chairman, Committee on African Studies, Ives Hall.

China Program

FACULTY: Knight Biggerstaff, Nicholas C. Bodman, Nai-ruenn Chen, Chuen-tang Chow, John W. Lewis, Ta-chung Liu, John McCoy, David Mzingo, Charles A. Peterson, Harold Shadick, Judith M. Triestman, Arthur P. Wolf, Martie W. Young.

Maurice Freedman, Professor of Anthropology at the University of London, will conduct a seminar in the fall semester.

The China Program provides comprehensive graduate-level training and sponsors a wide range of research. The faculty represent the following fields: anthropology, economics, government, history, history of art, linguistics and literature.

Graduate students in the program take a major in one of the fields listed above. They are expected at an early stage to attain sufficient mastery of the Chinese language to permit use of Chinese sources in their courses and seminars and in their research.

The focus of much of the research and teaching in the Program is the society, polity, economy, culture, and arts of modern and contemporary China. Students with this concentration are also expected to develop a general knowledge of traditional institutions and culture. Students majoring in history concentrate on medieval or modern China; no chronological limits apply to those in the history of art, linguistics, or literature.

Several China Program fellowships are offered each year to first-year graduate students. They ordinarily carry stipends of \$2,000 plus tuition and fees. Research assistantships are available from time to time. London-Cornell Studentships are open to advanced Ph.D. candidates in the social sciences and humanities who are in the China Program. They are tenable for study during an academic year at the London School of Economics and Political Science or at the School of Oriental and African Studies of the University of London. Stipends range up to \$3,000 plus air fares and tuition and fees.

London-Cornell Field Research Grants are open to Ph.D. candidates in the social sciences and humanities who are in the China Program. They are tenable for up to 22 months for the purpose of dissertation research. London-Cornell Field Research grantees may conduct their field work in any part of East Asia where Chinese communities or materials on modern and contemporary China are accessible. Stipends range up to \$12,000 for twenty-two months, including travel and research expenses.

National Defense Foreign Language fellowships and Foreign Area Training fellowships are tenable in the Program. Graduate students may also apply for other assistantships, fellowships, and scholarships offered by the University and by its departments.

Additional information on the Program and the various fellowships and awards may be obtained by writing to the Director, China Program, 103 Franklin Hall.

International Agricultural Development Program

Cornell University provides unusual scope and facilities for graduate-level study and research concerning development of the critical agricultural sector of newly developing nations. An integrated program of research and graduate training is available in the various biological, physical, and social sciences fields which are relevant to agricultural development. All fields of study in the New York State College of Agriculture at Cornell University have faculty members with intensive foreign experience and have students training for overseas work.

A student preparing for work in International Agricultural Develop-

ment majors in a specific Field. In addition to basic preparation in that Field, he will minor in the Field of International Agricultural Development. The student may follow courses which help him in applying his knowledge to the special conditions of newly developing nations, consult with experienced faculty members in regard to such application, and pursue a research project for his dissertation which is relevant to the special problems of newly developing countries. In much of this work the program in agriculture draws upon the strong international programs in other colleges of the University, including the area study programs and the varied offerings in modern languages.

Faculty experience in overseas work is continuously developed through work on College overseas programs, individual consulting assignments, and the ongoing research of faculty members and their students. The environment for the International Agricultural Development Program is further enhanced by more than 250 foreign graduate students majoring in the various Fields represented by the College of Agriculture.

Substantial expansion has recently taken place in the international program of the seven departments — agricultural economics, education, rural sociology, agronomy, animal science, plant breeding and plant pathology. In addition to many regular faculty members with extensive overseas experience, several members of these departments devote themselves full time to research and teaching in international agricultural development; they have built special programs of research and continuing contact with particular geographic areas. The departments have a number of assistantships and teaching fellowships designed to finance graduate students while they work closely with the teaching and research program in international agricultural development. Doctoral candidates in these departments who are interested in international agricultural development generally do field research in newly developing countries for their doctoral dissertations.

Similar expansion of international activities is under way in other subject matter areas of the College of Agriculture. At present, most departments in the College also have departmental assistantships and teaching fellowships which are open to outstanding students in those departments.

Additional information may be obtained by writing to Professor K. L. Turk, Director, International Agricultural Development Program, Roberts Hall.

International Legal Studies

The Cornell Law School offers a program of concentrated study in the international legal field. The full program is ordinarily pursued by LL.B. candidates in their second and third years of regular law study, but all courses in the field are open to graduate students in law. Some of these courses are offered by visiting faculty members who come to the Law School under its program for distinguished foreign professors. A number of foreign scholars and students also come to

Cornell for research and study in the comparative and international law fields. Other activities of the International Legal Studies Program have included faculty seminars in comparative law, summer conferences in public international law, and a program of speakers and seminars open to students. In addition, the Law School sponsors a small number of fellowships for foreign students to pursue graduate work in law.

For more detailed information, see the current *Announcement of the Law School*, the current *Annual Report of the Center for International Studies*, and the current issue of "International Studies at Cornell University—Courses of Instruction." Further information may be obtained by writing to Professor Robert A. Armstrong, Chairman, Graduate Study Committee, the Cornell Law School, or to the Director, Center for International Studies, 217 Rand Hall.

Latin American Program

FACULTY: Tom E. Davis, Director; Charles Ackerman, Frederick B. Agard, Solon Barraclough, Jerome S. Bernstein, Dalai Brenes, Frank Cancian, Martin Dominguez, Matthew Drosdoff, Charles L. Eastlack, Donald K. Freebairn, Rose K. Goldsen, Richard Graham, Eldon Kenworthy, Henry A. Landsberger, Thomas F. Lynch, Robert E. McDowell, James O. Morris, Thomas Poleman, Bernard Rosen, Donald F. Solá, J. Mayone Stycos, Terence S. Turner, William W. Whyte, Frank W. Young.

The Latin American Studies Program enables the graduate student to develop specialized competence in the history, culture, social organization, and language of Latin American countries. The student majoring in a relevant discipline can minor in Latin American Studies.

In addition to an interdisciplinary seminar, forty courses directly pertaining to Latin America are offered by the Departments of Agricultural Economics, Agronomy, Animal Science, Anthropology, Economics, Government, History, Housing and Design, Industrial and Labor Relations, Romance Studies, Rural Sociology, and Sociology. The courses constitute the basis for formulating programs leading to a graduate *minor* in Latin American Studies. Normally, five or six semester-long offerings satisfy the formal course requirements. In addition, the degree candidate minoring in Latin American Studies must exhibit proficiency in reading and speaking either Spanish or Portuguese.

Applications for scholarships, fellowships, or teaching fellowships should be made to the relevant departments. Ford Foundation support for the Program enables the University to award annually approximately ten fellowships providing an academic-year stipend of \$2,250 to supplement an award of tuition and fees. The holders of the fellowships are designated Ford Foundation Fellows in Latin American Studies. Students minoring in Latin American Studies also qualify for Title VI N.D.E.A. Modern Language fellowships. Application forms may be obtained from the Graduate School.

Summer research travel grants are available to selected graduate students through the Latin American Studies Program, and to undergraduate and graduate students through the Cornell-Brazil Project.

Support for thesis research in Latin America may be obtained from the Foreign Area Training Fellowship Program, the Social Science Research Council, Fulbright-Hays, the Doherty Foundation, the Organization of American States, and Cornell University.

Because of the considerable volume of research on Latin America currently being carried out by Cornell faculty members, students will normally be afforded the opportunity of participating in ongoing projects while in residence and will generally be expected to do field work in Latin America at some stage of their graduate training. Major research projects are under way in the fields of Andean community development, comparative economic development, fertility and population, descriptive linguistics, and urbanization.

Additional information may be obtained by writing to Professor Tom E. Davis, Director, Latin American Program, Rand Hall.

Near Eastern Studies

ADVISORY FACULTY COMMITTEE ON NEAR EASTERN STUDY: Isaac Rabinowitz, Chairman; J Milton Cowan, A. Henry Detweiler, Alfred E. Kahn.

Students wishing to relate the work of their major or minor subjects to Near Eastern area or language studies should seek advice or information from the Faculty Committee on Near Eastern Studies. In a number of fields, the University's resources for specialized graduate study and research on countries of the Near East are of considerable value. Members of the Committee can provide suggestions regarding relevant courses in various subjects, assistance in planning research on the Near East, and guidance in applying for area training or research fellowships. Inquiries should be addressed to Professor Isaac Rabinowitz, Chairman, Department of Semitic Languages and Literatures, 173 Goldwin Smith Hall.

South Asia Program

(Bhutan, Ceylon, India, Nepal, Pakistan, Sikkim)

STAFF: Gerald Kelley, Director; Messrs. Leonard P. Adams, Eqbal Ahmad, Douglas E. Ashford, Harold R. Capener, Arch T. Dotson, Gordon H. Fairbanks, Harold Feldman, James Gair, Michael Hugo-Brunt, Kenneth A. R. Kennedy, John W. Mellor, Stanley J. O'Connor, Morris E. Opler, Robert A. Polson.

The increasing importance of the peoples of the Indian subcontinent and of the role they play in world affairs enhances the need for providing opportunities in America for training and research in the field of Indic studies. The South Asia Program at Cornell, dealing primarily with India, Pakistan, Ceylon, and Nepal, is organized and equipped to

help meet this need. Since 1948 it has sponsored a series of research projects on India and Ceylon, and it has trained a distinguished group of younger American and South Asian scholars in South Asian area and language studies. The Program faculty includes members from agricultural economics, anthropology, government, history of art, child development and family relationships, business and public administration, rural sociology, industrial and labor relations, city and regional planning, and languages and linguistics. Sanskrit, Pali, Hindi, Urdu, Telugu, and Sinhalese are languages regularly offered at Cornell. Arrangements may be made for the intensive study of other South Asian languages at summer institutes held on different American university campuses each year.

Qualified graduate students interested in specializing in the study of South Asia minor in Asian Studies with concentration on South Asia, in South Asian art history, or in South Asian linguistics. Advanced degree requirements for this minor are roughly comparable in terms of South Asian materials to those for the Southeast Asia concentrations given below. The doctoral candidate must have a reading knowledge of Hindi or, depending upon the subarea of his specialization, some other important language of South Asia.

RESEARCH AND FIELD TRAINING

The doctoral dissertations of students in the South Asia Program are normally based on research done in India, Pakistan, Ceylon, or Nepal. Students' field research may benefit from advice and guidance in the field by a program staff member. At least one member of the faculty of the South Asia Program has been in South Asia for each of the last several years. Cornell is a charter member of the American Institute of Indian Studies, which was organized to facilitate study and research in India by American advanced students and by faculty specializing in various aspects of Indian civilization and contemporary affairs. The University also maintains close links with a number of research agencies, programs, and institutions of higher learning, such as the Deccan College Linguistic Program and the Department of Linguistics, Delhi University. Staff members of these institutions have provided valuable assistance to Cornell students working in India. There are opportunities for graduate students to become associated with Cornell-sponsored research in South Asia or to carry on independent research abroad. Every effort is made by the Program staff to aid qualified students to obtain financial support for a field training or research project in one of the countries of the area.

Research interests under the South Asia Program are focused largely on recent or contemporary developmental problems of the countries of the area — on changes taking place in the economic, political, social, religious, artistic, and intellectual life of the region. A long-term research project in progress in India is primarily concerned with the ramifying problems of introducing technological changes and the influence of such changes when adopted. For this research program, faculty and students in anthropology have carried on, since 1949, an

extended and varied series of rural and urban community studies in several different regions of India from the Deccan into the Himalayan foothills. A major related project, the Cornell International Agricultural Development Program, which is supported by Ford Foundation funds, is concerned with the development of the entire agricultural sector of the Indian economy. With Ford Foundation support, Cornell is assisting Delhi University to become a major center in the field of linguistics. At the same time, other studies in urban renewal and regional planning, public administration, the role of government in cultural change, and recent movements in the arts and in religions and ideologies are in progress under faculty direction. Cornell is also making a special study of the Sinhalese language and of linguistic problems of Ceylon, a nation so far much neglected by American scholars. Research is also under way on Oriya and Telugu, important regional languages of India. The new nations of South Asia present so many problems for study that the areas of inquiry open to students and staff members are limited only by availability of research means.

FELLOWSHIPS AND ASSISTANTSHIPS

Fellowship and assistantship awards are available to qualified graduate students minoring in Asian Studies with a concentration on South Asia. The South Asia Program fellowships are open to incoming graduate students with South Asia interests. Stipends range up to \$2,500 plus tuition and fees and should be applied for by writing to the Director, South Asia Program, 221 Morrill Hall. Students in the South Asia Program are also eligible for assistantships in their major discipline departments, for fellowships and scholarships offered by the Cornell Graduate School, for National Defense Foreign Language fellowships, and for Foreign Area Training fellowships. Additional information on financial aid may be obtained by writing to the Director, at the address given above.

Southeast Asia Program

FACULTY: Arch T. Dotson, John M. Echols, Frank H. Golay, Alexander B. Griswold, Robert B. Jones, Jr., George McT. Kahin, Stanley J. O'Connor, Robert A. Polson, Lauriston Sharp, James T. Siegel, John U. Wolff, O. W. Wolters.

The Southeast Asia Program possesses substantial facilities for study and research on the graduate level and provides exceptional opportunities for general or specialized work on all of Southeast Asia in various disciplines of the humanities, social sciences, and some natural sciences, as well as in interdisciplinary area seminars. Instruction in the major languages of the area is an integral part of the graduate training of the Southeast Asia Program. Much basic and pioneering research remains to be done in this area, and the Southeast Asia Program is organized and equipped to help meet such needs.

Special intensive instruction in Southeast Asian languages is avail-

able during summer sessions. Entering graduate students intending to study one of these languages are encouraged to begin such study during the summer preceding registration in the Graduate School. Inquiries should be made as early as possible to the Director of the Southeast Asia Program.

Southeast Asia Program fellowships are available on a competitive basis to graduate students. They carry stipends of up to \$3,200 plus tuition and fees, and are available only to qualified candidates for advanced degrees at Cornell. Competition for these awards is open to citizens of the United States or Canada, nationals of Southeast Asian countries, and, in exceptional cases, nationals of other countries.

The fellowships are available to applicants who are able to demonstrate a serious scholarly interest in Southeast Asian studies; who show the greatest promise of becoming qualified regional experts with specialization in a relevant discipline of the humanities, social sciences, or certain natural sciences; and who are admitted to the Cornell Graduate School for advanced work in such a discipline. Previous experience in Southeast Asia or in the study of that area is not necessarily required. It is important that the applicant be able to show that advanced work in a major subject offered at Cornell, combined with work in the Southeast Asia Program, will make his future professional activities more effective; this requirement is particularly important for a student in the natural sciences.

Fellowships are normally awarded for one academic year. If the student's work during the first year has been of high caliber, reappointment is sometimes possible. In such cases, formal reapplication is expected from the student. The primary purpose of these awards is to encourage graduate students to acquire a substantial knowledge of Southeast Asia while majoring in one of the discipline Fields of the Graduate School. Accordingly, they are usually offered only to students who take a minor in Asian Studies and participate fully in the Southeast Asia Program. The recipient of a fellowship may be asked to devote up to six hours a week under faculty supervision to work connected with the Program.

London-Cornell Studentships are available for advanced Ph.D. candidates in the social sciences and in the humanities who have already had at least one year of resident study in the Southeast Asia Program. These fellowships are tenable for study during an academic year at the School of Economics and Political Science or the School of Oriental and African Studies in the University of London. Stipends range up to \$3,000 plus air fares and tuition and fees. London-Cornell Field Research Grants are open to Southeast Asia Program Ph.D. candidates in the social sciences and humanities after they have had appropriate training at Cornell, or at Cornell and London. They are tenable for up to twenty-two months for the purpose of dissertation research. Recipients of London-Cornell Field Research Grants may conduct research in any part of Southeast Asia. Stipends range up to \$12,000 for twenty-two months including travel and research expenses.

Cornell-Philippines Field Research Fellowships are available, under a grant from the Rockefeller Foundation, for advanced graduate

students who plan to write dissertations in the social sciences or the humanities, based upon field research in the Philippines. Fellowship support is for ten to fifteen months in the Philippines and includes living costs, local transport, and roundtrip transportation from the United States for the graduate student and dependent wife or husband.

National Defense Foreign Language Fellowships, Title VI, are offered by the United States Office of Education for study during the academic year, the summer, or both. Application should be made to Sage Graduate Center, Cornell University. Information about Foreign Area Training fellowships, administered by the Social Science Research Council, may be obtained by writing to the Foreign Area Fellowships Program, 444 Madison Avenue, New York, New York 10022. Graduate students may also apply for other fellowships, teaching fellowships, assistantships, and scholarships offered by the University and its departments.

Additional information on the Program and the various fellowships and awards may be obtained by writing to the Director, Southeast Asia Program, 108 Franklin Hall.

Soviet Studies

COMMITTEE ON SOVIET STUDIES: George Gibian, Chairman; Urie Bronfenbrenner, M. Gardner Clark, Jack Fisher, Walter Galenson, Richard Leed, Walter Pintner, Myron Rush, George Staller.

OTHER FACULTY MEMBERS IN SOVIET STUDIES: Patricia Carden, Frederick Foos, Antonia Glasse, Martin Horwitz, Augusta Jaryc, Hugh Olmsted, Nicholas Troizkij, Marla Wykoff.

The University offers a number of courses and seminars on the Soviet Union as well as pre-1917 Russia. Instead of a separate area program, graduate students have a choice of majors and minors in the established Fields of the Graduate School. Some of the subjects focus on area specialization: Russian history, Russian literature, Slavic linguistics. Other subjects combine area specialization with a nonarea framework: comparative government, economic planning, regional planning, social psychology.

Graduate students pursuing Soviet Studies in any of these subjects are expected to attain proficiency in the Russian language either before entering the Graduate School or soon thereafter.

The University's academic activities related to Russia are coordinated by the Committee on Soviet Studies. The Committee also sponsors a colloquium for faculty members and graduate students in Soviet Studies. In the Soviet Studies Graduate Study in the John M. Olin Library, major reference works and key current periodicals from and about the U.S.S.R. are brought together.

The Committee on Soviet Studies selects a limited number of graduate students each year as research assistants. The Russian section of the Division of Modern Languages and the Department of Russian Literature also appoint several graduate students annually as teaching

fellows in the Russian language. For other teaching fellowships, fellowships and scholarships, students apply directly to the Graduate School or to the department concerned. N.D.E.A. Title IV and Title VI fellowships are available in various subjects.

FACULTY SPECIALIZATIONS

ECONOMICS: M. Gardner Clark, Walter Galenson, George J. Staller.

HISTORY: Walter M. Pintner.

LANGUAGES AND LINGUISTICS: Frederick Foos, Richard Leed, Mrs. Augusta Jaryc, Hugh Olmstead, Marla Wykoff.

LITERATURE: Miss Patricia Carden, George Gibian, Miss Antonia Glasse, Martin Horwitz, Hugh Olmstead.

POLITICAL SCIENCE: Myron Rush.

PSYCHOLOGY: Urie Bronfenbrenner.

REGIONAL AND CITY PLANNING: Jack C. Fisher.

Inquiries about fellowships and other aspects of Soviet Studies should be addressed to Professor George Gibian, Chairman, Committee on Soviet Studies, Goldwin Smith Hall.

OTHER PROGRAMS AND CENTERS

American Studies

COMMITTEE ON AMERICAN STUDIES: David B. Davis, Chairman; Stuart M. Brown, Jr., Douglas E. Dowd, Robert H. Elias, Andrew Hacker, Clinton Rossiter, S. Cushing Strout, Robin M. Williams, Jr.

Although there is no formal program leading to a degree in American Studies, candidates for the doctorate in English and History will find ample opportunity to do interdisciplinary work in conjunction with a major in the American area of their Field. There are members of the staff in both Fields who are professionally trained and currently active in the study of the interrelationships of American intellectual, literary, and social history, so that a student concentrating in American literature or American history may take advantage of the freedom permitted by Graduate School regulations and, in collaboration with his special committee, readily build an individual doctoral program that systematically embraces more than a single discipline. Inquiries concerning opportunities in this area should be addressed to Professor David B. Davis, Chairman, American Studies Committee, West Sibley Hall.

Brookhaven National Laboratory

Cornell is one of nine eastern universities participating in Associated Universities, Inc. (AUI). Operating under contract with the Atomic Energy Commission, this corporation has the responsibility for the

management of Brookhaven National Laboratory. The laboratory provides unusual research facilities for studies in biology, chemistry, applied mathematics, medicine, physics, high-energy particle physics, and reactor and nuclear engineering.

Graduate students may participate in research at Brookhaven by association with Cornell staff members who are engaged in research at the laboratory. Members of a variety of science departments at Cornell are currently involved in programs at Brookhaven. The laboratory also offers temporary summer appointments to a limited number of selected graduate and undergraduate students in science or engineering.

Center for Advancement of Education

The Center for Advancement of Education represents the commitment of the total University to educational research and development. Members of the Center are drawn from various academic units. Projects are carried out under the auspices of the Center; such projects may increase to reflect the interests of faculty members. At present, research programs in language development and literacy, in mathematics, and in science education are under way. In addition, a research program on the administration of higher education as well as on the undergraduate collegiate curriculum are being planned.

The Center provides predoctoral and postdoctoral training through research assistantships, training grants, and postdoctoral fellowships. For information write to the Director, Center for Advancement of Education, 320 Wait Avenue.

Center for Aerial Photographic Studies

Photographic interpretation has applications in agriculture, engineering, geology, and city and regional planning. The Center for Aerial Photographic Studies offers a broad program in various scientific fields for training personnel in aerial photographic interpretation. The objectives are, first, to train scientists who will be able to use aerial photographs for surveys and planning in fields where they are needed and second, through research to extend the use of aerial photographs into all fields which can be benefitted.

The Center comprises a staff of educators, scientists, and technicians experienced in research and the application of aerial photographs to their respective fields. The program consists of primary courses in interpretation of aerial photographs, map reproduction, photogrammetry, cartography and map projections, together with specialized study in a particular field of the candidate's choice, such as agricultural development, national resource explorations, city planning, or engineering project planning.

For more information, write to Professor Donald J. Belcher, Director, Center for Aerial Photographic Studies, Hollister Hall.

Center for Housing and Environmental Studies

The purposes of the Center for Housing and Environmental Studies are to aid and guide basic research in the field of man's shelter and environment, to facilitate graduate study, and to aid the flow of information among colleges and departments and between the University and sources of information off campus. A small central staff assists in the initiation and conduct of projects.

The facilities of the Center for Housing and Environmental Studies are available to faculty members and graduate students in all Fields. Through the Center, students who cut across traditional lines of research may draw upon the knowledge and experience of specialists in such various subject areas as design, materials, equipment, structural methods, environment, family living, economics and finance, government, and health. The Director of the Center is Professor Glenn H. Beyer, West Sibley Hall.

There are two divisions in the Center, one focusing on urban and the other on regional problems. The Division of Urban Studies is under the direction of Professor Barclay G. Jones, Associate Director of the Center, West Sibley Hall; and the Division of Regional Studies is under the direction of Professor Jack C. Fisher, Assistant Director of the Center, West Sibley Hall.

Center for Radiophysics and Space Research

The Center for Radiophysics and Space Research unites research and graduate education carried on by several academic departments in the space sciences. It furnishes administrative support and provides facilities for faculty members and graduate assistants who are engaged in space research activities, and it offers opportunity for graduate students to undertake thesis work leading to the degrees of Master of Science and Doctor of Philosophy. A student's major professor can be chosen from the following Fields in the Graduate School: Aerospace Engineering, Applied Physics, Astronomy and Space Sciences, Electrical Engineering, Physics.

Thesis research in the following areas is now possible:

(a) Astronomy and Astrophysics. Astronomical aspects of cosmic rays, gamma-radiation, x rays, neutrinos; cosmology; experimental studies and theory relating to the surface of the moon and the planets; processes in the interstellar gas; solar-system magnetohydrodynamics; stellar statistics; theory of stellar structure, stellar evolution, nuclear processes in stars.

(b) Atmospheric and Ionospheric Radio Investigations. Dynamics of the atmosphere; incoherent electron scattering; study of refraction, scattering, attenuation due to the inhomogeneous nature of the troposphere and ionosphere; theory and observation of propagation of radio waves in ionized media such as the ionosphere.

(c) Radar and Radio Astronomy. Distribution and classification of radio sources; radar investigations of the moon and planets; solar radio observations; studies of gaseous nebulae.

(d) Space Vehicle Instrumentation. Instrumentation relating to lunar exploration; magnetic field measurements; tenuous gas and particle flux measurements; infrared observations from rockets.

The facilities of the Center include the lunar surface and electronics laboratory on the Cornell campus, the radio astronomy and ionospheric laboratories close to Ithaca, and the Arecibo Ionospheric Observatory in Puerto Rico. At Arecibo an extremely sensitive radio telescope and an unusually powerful space radar are available for use by qualified graduate students. In addition, certain facilities of Sydney University, Australia, are available through the Cornell-Sydney University Astronomy Center (see below).

Cornell-Sydney University Astronomy Center

The Center is an inter-University organization designed to create a larger pool of facilities and skills for research in astronomy and related fields than would be separately available to either university. Graduate students can be interchanged between the two institutions whenever appropriate for the research work in which they are engaged. Both universities recognize research supervision extended by the sister university, and the time spent by a student on thesis work in the sister university can be accepted toward residence requirements with the proviso that the approval of the home research supervisor is given and also that the home university bylaws are not contravened.

The facilities available through the Center, in addition to those of Cornell's Center for Radiophysics and Space Research, are the one-mile by one-mile Mills Cross situated at Hoskinstown, New South Wales; the stellar intensity interferometer situated at Narrabri, New South Wales; the Criss-Cross, the Shain Cross, and Mills Cross situated at Fleurs, New South Wales; the Wills Plasma Physics Department, the Basser Computing Department, the Falkner Nuclear Department, and the facilities of the cosmic ray group at the University of Sydney. The Center includes H. Messel, R. Hanbury Brown, W. N. Christiansen, C. B. A. McCusker, and B. Y. Mills from the University of Sydney faculty.

Further information can be obtained from Professor T. Gold, Joint Director, Cornell-Sydney University Astronomy Center, Space Science Building.

Division of Biological Sciences

The Division of Biological Sciences was established in 1964 to bring together into a single administrative unit a number of investigators and teachers representing a broad spectrum of interests in basic biology. Its members hold appointments in one or more of four schools and colleges but serve the University as a whole through the Division. The

Division is responsible for all the undergraduate teaching of biology, including the establishment of requirements for the major in its various branches. It also has the primary responsibility for the promotion of research in basic biology, and its members engage in graduate teaching through participation in appropriate Fields in the Graduate School Faculty. At present the following subject areas are represented by separate sections of the Division: biochemistry and molecular biology; ecology and systematics; genetics, development, and physiology; microbiology; and neurobiology and behavior. A number of graduate fellowships, teaching fellowships, research assistantships, and traineeships are available through the Division. For further information, contact Dr. Robert Morison, 201 Roberts Hall.

Materials Science Center

The Materials Science Center (MSC) at Cornell is an interdisciplinary laboratory created to promote research and graduate student training in all phases of the science of materials. The subjects of study represented in the MSC program are applied physics, chemistry, electrical engineering, materials engineering, materials science, metallurgy, and physics.

The extent of the benefits a graduate student may derive from the MSC program depends on the actual research he pursues. If the student chooses to follow the more conventional course of becoming a specialist in one specific area, the MSC program could help him by providing new equipment, financial assistance through research assistantships, or, in some cases, the help of a technician to carry out routine measurements.

If the student wishes to follow a program of considerably more breadth than usual in his research training, the MSC program provides an additional advantage. Several central facilities have been set up where more specialized apparatus such as crystal-growing furnaces, high-pressure equipment, x ray and metallography equipment, electron microscopes, etc., are available to all MSC members and their students. In addition to the equipment, expert advice on its use and the interpretation of the results will be available. In these central facilities, it is expected that the student will come in contact with students from other disciplines, resulting in a mutually profitable interaction.

The office of the Director of the Materials Science Center, Professor Henri Sack, is in Room 627, Clark Hall.

Military Science, Naval Science, and Aerospace Studies

(ROTC, NROTC, and AFROTC)

The advanced course in military science (Army ROTC), naval science (Naval ROTC), and aerospace studies (Air Force ROTC) is open to

graduate students who have satisfactorily completed a basic course in ROTC or who enroll in a two-year ROTC program. Successful completion of the two-year advanced ROTC course will qualify a graduate student for appointment as a Second Lieutenant in the U.S. Army, Air Force, or Marine Corps Reserve; or Ensign, U. S. Naval Reserve; or as Second Lieutenant in the Regular Army or Air Force. Interested graduate students should consult the *Announcement of Officer Education* and apply to the Professor of Military Science, the Professor of Naval Science, or the Professor of Aerospace Studies (ROTC), Barton Hall.

Statistics Center

The methods of statistics find important applications in many diverse fields of research. It is therefore necessary that (1) subject matter specialists be able to obtain assistance in using or developing statistical theory, (2) students who intend to do research work in a particular field which makes extensive use of statistical methods receive adequate training in statistics, and (3) individuals be trained as statisticians.

The staff members of the various schools and colleges of Cornell University who are interested in the development and application of statistical methods are associated with the Cornell Statistics Center. A major responsibility of the Center is to provide a focal point to which individuals, projects, and departments may come to receive assistance and guidance with respect to the statistical aspects of research and training programs.

The Acting Director of the Center is Professor Philip J. McCarthy, Ives Hall.

Water Resources Center

The Center is an interdisciplinary organization serving the entire University at the graduate study and research level. Its purpose is to promote and coordinate a comprehensive program in water resources planning, development, and management in such areas as the sciences, engineering, agriculture, law, economics, government, regional planning, and public health.

Its responsibilities are to undertake water resources research in engineering, in the physical, biological, and social sciences, and in the humanities; to encourage and contribute to graduate studies in water resources; to coordinate research and training activities in areas concerned with water resources; to encourage new combinations of disciplines in research and training which can be brought to bear on water resources problems; to disseminate the results of research; and to develop and operate central facilities which may be needed to serve participants in research and training.

Correspondence concerning the Center should be directed to Professor L. B. Dworsky, Director, Water Resources Center, Hollister Hall.

Correspondence related to graduate study in the Field of Water Resources should be directed to the Field Representative, Professor C. D. Gates, Hollister Hall.

SPECIAL FACILITIES AND SERVICE ORGANIZATIONS

Cornell Aeronautical Laboratory

The Laboratory, a separate corporation wholly owned by Cornell University, is in Buffalo, New York. Applied and fundamental research in the aeronautical sciences and allied areas is conducted in this completely equipped laboratory under contracts mainly with government and industry. Close relationships, both research and educational, are maintained with the campus in Ithaca.

New York State Agricultural Experiment Station at Geneva

The New York State Agricultural Experiment Station was established in 1880 to promote agriculture through scientific investigations and experimentation. It is located at Geneva, fifty miles from Ithaca, and has been under the administration of Cornell University since 1923.

Professors on the Geneva staff are eligible to serve as members of the Special Committees of graduate students along with professors on the Ithaca campus of the University. Normally the graduate training provided at Geneva consists of research experience and supervision of the student's work on a thesis problem. The formal course work part of the student's training program is given on the Ithaca campus. Students who plan to do part of their graduate work at Geneva should correspond with their major advisers or with the Dean of the Graduate School concerning regulations as to residence, Special Committees, etc.

The Station is equipped to care for graduate students in certain specific lines of research, viz., bacteriology, chemistry, economic entomology, food technology, plant pathology, pomology, seed investigations, and vegetable crops. Ample facilities are available for graduate research under laboratory, greenhouse, pilot plant, insectary, orchard, and other field conditions.

Certain phases of the investigations now being conducted at the Station and other problems for which the facilities of the Station are suitable may be used as thesis problems by graduate students.

The Director is Professor D. W. Barton, who may be addressed at the New York State Agricultural Experiment Station, Geneva.

Office of Computer Services

The principal computing facility at Cornell is an IBM 360 Model 65 located at Langmuir Laboratory at the Cornell Research Park. The system is equipped for remote access of several kinds, and 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. 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 material, and work space. In addition to these high-speed terminals, teletypewriter terminals are available to individual projects that require interactive capability.

Two IBM 1800 computers that control various real-time laboratory devices are also linked directly to the 360/65. These machines provide graphical input-output capability and an analog-digital interface.

This computing system is busy but not saturated, and use by graduate students is encouraged.

The Office of Computer Services is responsible for the operation of this system and for the provision of consulting and programming assistance. The Office cooperates with the Department of Computer Science in providing courses in programming and computing techniques. Both organizations employ a number of graduate students on assistantships and part-time appointments for this work.

For further information write to the Office of Computer Services, Langmuir Laboratory.

Photo Science Studios

The University owns and operates the Photo Science Studios, which create or cooperate in the creation of photographic studies and visual aids of all kinds.

The extension services of the New York State Colleges, which form integral parts of the University, disseminate knowledge through an intensive program of publication, photography, and recording supervised by professional staffs. Materials produced by graduate students may find outlets through these channels.

University Press

Cornell University Press, founded by Andrew D. White in 1869, was the first university press in America and is among the leaders in number of volumes published annually. The Press publishes scholarly books on nearly every academic subject, serious nonfiction of general interest, and advanced or experimental textbooks for use in universities. The imprint of Comstock Publishing Associates, a division of the Press, is

placed on certain books in the biological sciences. The Press also publishes a distinguished paperbound series, Cornell Paperbacks.

Other Research Units

Some other research units allied with the University, either as wholly owned and operated divisions or as wholly or partially autonomous organizations with which the University has a working agreement, are the Sloan-Kettering Cancer Research Institute in New York City, through the Graduate School of Medical Sciences, and the Veterinary Virus Research Institute in Ithaca.

Cornell is also one of fourteen founding members of the University Corporation for Atmospheric Research which, under National Science Foundation support, operates the National Center for Atmospheric Research at Boulder, Colorado.

In addition, opportunities for formal study, field work, and independent research by Cornell graduate students are available in many institutions, laboratories, and libraries both in the United States and in other countries. For example, the Cornell-Harvard Archaeological Exploration at Sardis, Turkey, and the Museum of Northern Arizona at Flagstaff, Arizona, both provide opportunities for field research related to doctoral work of Cornell graduate students. Information on that kind of arrangement is available directly from the Field Representatives.

FIELDS OF INSTRUCTION

REPRESENTATIVES. Since instruction in the Graduate School is primarily individual, those interested in becoming students are encouraged to communicate with individual members of the faculty with whom they may want to study. Personal interviews in advance of formal application for admission are especially encouraged. For the benefit of those who are not acquainted with appropriate members in the Field or Fields of their interest, each Field has selected a representative, as director of graduate studies, to whom inquiries may be addressed.

ARCHITECTURE

Faculty: Ludlow D. Brown, Robert G. Calkins, A. Henry Detweiler, Raymond A. DiPasquale, Michael Hugo-Brunt, Kermit C. Parsons, John W. Reps, Colin Rowe, Francis W. Saul, Werner Seligman, John P. Shaw, Stuart W. Stein, J. Alan Wells.

Field Representative: Colin Rowe, 156 East Sibley Hall.

MAJOR SUBJECTS

Architectural History
Architectural Science
Urban Design

MINOR SUBJECTS

Architectural History
Architectural Science

The three programs in which graduate study in architecture may be pursued are Urban Design, Architectural Science, and Architectural History. Graduate study is also offered in the Fields of Art and City and Regional Planning. Every applicant for graduate study is expected to select and identify in advance the program he intends to follow.

Foreign students whose undergraduate training has been outside the United States are admitted to provisional candidacy during the first semester, during which their qualifications to continue in their selected programs will be evaluated. In most cases, they should plan to spend at least four terms in residence.

URBAN DESIGN. Students who have satisfactorily completed a five-year course in architecture at an approved institution, or its equivalent, may be admitted as candidates for the degree of Master of Architecture in the professional program of Urban Design.

Urban Design is concerned, by way of an integrated approach, with the solution in architectural terms of the developments proposed by city and regional planning. The program of study includes an interpretation of such course material from architecture and planning as will equip the student with an adequate conceptual framework for practice, and is particularly concerned with the three-dimensional definition of the urban environment in terms which give significance to the individual.

The program of study, cooperatively worked out between the faculties of Architecture and City and Regional Planning, permits a degree of special treatment for the individual student. Normally, four semesters of study are required, and the student should not anticipate completing his studies in less than this time, though in certain special circumstances the requirements for a degree may be completed within a three-semester period. It is possible in

individual cases, by specific arrangement in advance, to complete the requirements for both the Master of Architecture and Master of Regional Planning degrees in three years.

ARCHITECTURAL SCIENCE. Qualified students enrolled by the Graduate School in programs leading to the degree of Master of Science may elect Architectural Science as either a major or a minor subject, and those enrolled in programs leading to the degree of Doctor of Philosophy may elect it as a minor subject. Programs of study will be arranged to meet the needs of the individual student.

The objectives of the graduate program in Architectural Science are:

1. To afford an opportunity for students of architecture to expand their creative design potential by increasing their knowledge and understanding of the technologies in the building process.

2. To provide a framework within which students graduating in related technical disciplines (for example, civil, electrical, or mechanical engineering) can explore building science and technology related specifically to architecture. This type of training would prepare students with such background for joining the ranks of consultants who are well versed in the architectural implications of contemporary science.

Students with undergraduate degrees in architecture, architectural engineering, or the various branches of engineering are likely candidates for this program. The program as it is organized is extremely flexible and can be arranged to meet the specific needs and desires of the individual student and to build on his prior technical preparation and competence. For those students who are applying with a straight engineering background, exposure to architectural disciplines would be included in the program of study.

This graduate program in Architectural Science will be a new offering starting in the fall of 1967, and is an outgrowth of an existing program in Architectural Structures, which began at Cornell in 1962. Its development has been an attempt to broaden the scientific base of architectural education at the graduate specialty level. Eventually, the program will include work in acoustics, illumination, mechanical systems, materials technology, etc., but at present it will concentrate on structures, computer science, and construction planning.

Candidates for the Master of Science degree with a major in Architectural Science must satisfy the following requirements: (a) completion of the program of study prescribed by the student's Special Committee; (b) a minimum of two terms of residence; (c) presentation of a satisfactory thesis; and (d) passing of a final comprehensive examination.

Ordinarily more than two terms of residence will be required to complete the program of study, depending on the student's background and experience as they relate to his needs and interests. A portion of the student's program will consist of formal course work. Courses offered by the College of Architecture, Art, and Planning are shown below. In addition, a student may select courses offered elsewhere in the University, such as courses in civil engineering, engineering mechanics, mechanical engineering, electrical engineering, physics, computer science, mathematics, etc.

The students in the program will produce a publication documenting their research activities and projects. Back issues, published by students in the Architectural Structures program, are available to prospective applicants upon request.

Facilities include a well-equipped structural model laboratory and immediate access to the Cornell Computing Center (IBM 360). In addition, some "hands-on" use of an IBM 1130 Computing System will be available to students in the program.

ARCHITECTURAL HISTORY. Graduate work in Architectural History may be undertaken by students whose undergraduate programs emphasized history of art, architecture, or related subjects. Architectural history may be elected as either a major or a minor subject by students enrolled in the Graduate School. All applicants resident in the United States during the year preceding matriculation must submit scores of the Graduate Record Examination Aptitude Test with their transcripts and other credentials.

To complete the requirements for the degree of Master of Arts in architectural history, candidates must pass examinations in their major and minor subjects of study. Unless special conditions obtain, a reading knowledge of one approved foreign language must be demonstrated and a thesis submitted. To complete the requirements for the degree of Doctor of Philosophy with architectural history as their major subject, candidates must pass examinations in their major and two minor subjects. A reading knowledge of two approved foreign languages must be demonstrated and a dissertation submitted.

The graduate program in architectural history is concerned with methods of scholarship and research, as well as with the development of architecture and related arts from the earliest times to the present day. A special feature of the program is the opportunity for the student to prepare for the teaching of the history of architecture in the context of the professional school of design. Opportunities are usually available for students to take part in special activities, such as the Cornell-Harvard Archaeological Exploration of Sardis, Turkey. In cooperation with the Department of City and Regional Planning, coordinated programs are arranged to permit study of both the history of urban development and of planning for the appropriate use and conservation of historic buildings.

Close coordination is maintained with the Department of History of Art in the College of Arts and Sciences, enabling students to benefit from courses and special studies in the history of art and architecture offered there. Programs in the history of interiors and of housing are available in the Department of Housing and Design of the College of Home Economics. There is a cooperative program in archaeology involving several departments on the campus, and there are strong area programs with architectural potential, in particular the Southeast Asia Program and Slavic and Latin American Studies. The Fine Arts Library of 42,000 volumes, in Sibley Hall, the main building of the College of Architecture, Art, and Planning, provides resources for study and preparation of the thesis or dissertation. It is particularly strong in the areas of American architecture and of modern art and architecture. Additional materials on the history of architecture are available in the Olin Research Library and the Mann Library, described elsewhere in this Announcement.

Faculty Interests

Ludlow D. Brown: architectural structure, limit design, ultimate stress theories, strategy of prestress as applied to buildings.

Robert G. Calkins: medieval art and architecture, Burgundian illuminated manuscripts of the fourteenth and fifteenth centuries.

A. Henry Detweiler: ancient and medieval architecture, transition from the classic to the architecture of the Early Middle Ages.

Raymond A. DiPasquale: structural technology, computer applications in architecture, structural model analysis.

Michael Hugo-Brunt: history of architecture, landscape architecture, city

planning, development of colonial towns, development of Georgian London and maritime settlements.

Kermit C. Parsons: urban design, land use, institutional planning, history of collegiate architecture.

John W. Reps: planning administration, history of city planning in the United States and Europe, development of urban America, design character of American cities.

Colin Rowe: history of Renaissance and modern architecture, urban design, architectural criticism, contemporary European and American architecture.

Francis W. Saul: structural steel and reinforced concrete building design, structural plastics and blast-resistant design.

Werner Seligmann: urban design.

John P. Shaw: urban design.

Stuart W. Stein: urban design.

J. Alan Wells: urban design.

Courses

URBAN DESIGN

In addition to the basic core courses listed below, the student will also take a substantial number of courses in city and regional planning (see the *Announcement of the Graduate School: Social Sciences*). The student may also take courses in related areas such as architectural history, architectural science, the psychology of perception, sociology, government, etc. For illustrative curriculum see the *Announcement of the College of Architecture, Art, and Planning*.

190-191. PROBLEMS IN URBAN DESIGN

Throughout the year. Credit as assigned.

The basic first-year design course for graduate students in urban design. Instruction consists of individual criticism over the drafting board.

192-193. PROBLEMS IN URBAN DESIGN

Throughout the year. Credit as assigned.

Continuation of Architecture 190-191.

ARCHITECTURAL SCIENCE

221. ADVANCED STEEL BUILDING DESIGN

Fall term. Credit three hours. Prerequisites: Architecture 204 and permission of the instructor. Mr. Saul.

Design and investigation of advanced systems of steel building structure, including plastic design of continuous beams and rigid frames, and composite steel beam and concrete slab construction.

222. REINFORCED CONCRETE BUILDING SYSTEMS

Fall term. Credit three hours. Prerequisites: Architecture 204 and permission of the instructor. Mr. DiPasquale.

Review of methods and specifications for the design and construction of reinforced concrete building systems. Two-way framing systems. Precast concrete construction. Discussion of ultimate strength and yield line theories. Quality control of reinforced concrete. Exploration of new techniques in concrete construction. Selected topics.

223. BUILDING SUBSTRUCTURE

Spring term. Credit three hours. Prerequisites: Architecture 204 and permission of the instructor. Mr. Saul.

The principles of soil mechanics, subsurface exploration, and design of building foundations. Footings, piles, subgrade walls.

224. PRESTRESSED BUILDING STRUCTURES

Spring term. Credit three hours. Prerequisites: Architecture 204 and permission of the instructor. Mr. Brown.

The application of prestress as a fundamental strategy. Design of prestressed steel and concrete building elements.

225. STRUCTURES SEMINAR

Either term. Credit two hours. Prerequisite: Architecture 204. Registration limited to ten. Staff.

Contemporary structural systems, materials, and ideas discussed from a comparative and analytical point of view.

231-232. THE THEORY OF STRUCTURE IN ARCHITECTURE

Either term. Credit three hours. Permission of the instructor is required. Mr. DiPasquale.

Fundamental methods for the structural analysis of building frameworks: classical and approximate. Structural response and behavior of building systems. Three-dimensional frameworks, cable supported structures, complex systems. Architectural implications of the multi-story frame. Lateral load analysis. Introduction to model analysis. Selected topics including the critical review of the structural systems in notable buildings.

233. SURFACE STRUCTURES

Spring term. Credit three hours. Permission of the instructor is required. Mr. DiPasquale.

The qualitative and quantitative analysis and design of folded plate and thin shell architectural structures. The architectural implications and problems of curvilinear forms. Construction techniques. The potential of several materials for curved forms.

234. DESIGN FOR DYNAMIC LOADING

Fall term. Credit three hours. Prerequisites: Architecture 204 and 231. Mr. Saul.

The considerations involved in the design of building structures to resist earthquake, explosion, and other dynamic loads.

240. SPECIAL PROBLEMS IN ARCHITECTURAL SCIENCE

Either term. Registration and credit by arrangement. Graduate students only. Staff.

250. ULTIMATE STRENGTH THEORY

Fall term. Credit three hours. Prerequisites: Architecture 204 and permission of the instructor. Mr. Brown.

A survey of flexural theory beyond the elastic range and the principles of limit design relationships applied to continuous steel and reinforced concrete construction.

260. COMPUTER APPLICATIONS IN ARCHITECTURE

Fall term. Credit three hours. Prerequisite: Architecture 204. Mr. DiPasquale.

Designed to acquaint the student with the current uses and potentials of electronic computers in the architectural profession. No prior knowledge of computers is assumed. Topics will include: basic principles and logic of computing systems, computer programming (CUPL and FORTRAN), data processing, and computer graphics. Current applications such as PERT/COM, STRESS, COGO, linear programming, contour and perspective plotting, etc., will be demonstrated. Future applications will be explored in detail.

280. ARCHITECTURAL SCIENCE LABORATORY

Either term. Credit four to six hours. Open to graduate students only. Mr. DiPasquale and staff.

Projects, exercises, and research in the architectural sciences.

290. THESIS OR RESEARCH IN ARCHITECTURAL SCIENCE

Either term. Credit as arranged. Graduate students only. Staff.

804. THE PRACTICE OF ARCHITECTURAL SCIENCE

Spring term. Credit three hours. Open to graduate students only. Mr. DiPasquale and visiting lecturers.

A practically oriented course that deals with the everyday problems of providing professional services. Topics include: how to establish, organize, and manage a professional consulting practice; professional and public relations; business financing and procedures; and profit analysis. Case studies.

ARCHITECTURAL HISTORY

430. THE ANCIENT NEAR EAST

Credit three hours. Prerequisite: Architecture 400 or permission of the instructor.

Architecture of the oldest historic civilizations associated with Western tradition, with emphasis on Egypt and Mesopotamia.

431. THE CLASSICAL WORLD

Spring term. Credit three hours. Prerequisite: Architecture 400 or permission of the instructor. Mr. Detweiler.

Architecture of the ancient Mediterranean civilizations, with emphasis on Greece and Rome.

432. THE EARLY MIDDLE AGES

Fall term. Credit three hours. Prerequisite: Architecture 400 or permission of the instructor. Mr. Detweiler.

Christian architecture of the first millennium, with emphasis on the early Christian and Byzantine.

433. THE LATER MIDDLE AGES

Spring term. Credit three hours. Prerequisite: Architecture 400 or permission of the instructor. Mr. Calkins.

Medieval architecture in western Europe, with emphasis on the Romanesque and Gothic.

434. ISLAMIC ARCHITECTURE

Spring term. Credit three hours. Prerequisites: Architecture 400 and 401 or permission of the instructor. Mr. Detweiler.

435. ARCHITECTURE AND PLANNING IN THE FAR EAST

Fall term. Credit three hours. Prerequisite: Architecture 400 or permission of the instructor. Mr. Hugo-Brunt.

An introduction to the evolution of architecture and urbanization in India, China, Thailand, Cambodia, and Japan.

436. THE RENAISSANCE

Spring term. Credit three hours. Prerequisite: Architecture 401 or permission of the instructor. Mr. Rowe.

European architecture of the fifteenth and sixteenth centuries.

437. THE BAROQUE

Spring term. Credit three hours. Prerequisite: Architecture 401 or permission of the instructor.

European architecture of the seventeenth and eighteenth centuries.

438. AMERICAN ARCHITECTURE

Spring term. Credit three hours. Prerequisite: Architecture 401 or permission of the instructor. Mr. Jacobs.

Building in the United States from colonial times, with emphasis on the nineteenth and twentieth centuries.

439. MODERN EUROPEAN ARCHITECTURE

Fall term. Credit three hours. Prerequisite: Architecture 401 or permission of the instructor. Mr. Jacobs.

Nineteenth- and twentieth-century architecture of Europe.

450-451. HISTORICAL SEMINARS IN ARCHITECTURE

Throughout the year. Credit two hours a term. Permission of the instructor is required.

Qualified students will prepare papers based on historical evidence, discussing problems relating to design or architecture.

455. SPECIAL INVESTIGATIONS IN THE HISTORY OF ARCHITECTURE

Either term. Hours as assigned. Permission of the instructor is required.

460. INTRODUCTION TO ARCHITECTURAL ASPECTS OF ARCHAEOLOGICAL FIELD WORK

Fall term. Credit two hours. Mr. Detweiler.

For architects, archaeologists, and laymen. A presentation of architectural techniques used in archaeology.

465. DESIGN AND CONSERVATION

Fall term. Credit two hours. Messrs. Jacobs and Jones.

The rationale for and methods of utilizing existing cultural and aesthetic resources in the planning and design of regions and cities.

472. SEMINAR IN THE HISTORY OF EARLY MEDIEVAL ARCHITECTURE

Either term. Credit two hours. Mr. Detweiler.

474. GOTHIC ARCHITECTURE

Spring term. Prerequisite: consent of the instructor. Mr. Calkins.

54 ARCHITECTURE

478. SEMINAR IN THE HISTORY OF AMERICAN ARCHITECTURE

Fall term. Credit two hours. Mr. Jacobs.

Investigation, by means of readings, lectures, and reports, of historical problems in architecture of the nineteenth and twentieth centuries in the United States.

479. SEMINAR IN THE HISTORY OF MODERN ARCHITECTURE

Spring term. Credit two hours. Mr. Jacobs.

Investigation, by means of readings, lectures, and reports, of historical problems in architecture of the eighteenth, nineteenth, and twentieth centuries in Europe.

488-489. PROBLEMS IN MODERN ARCHITECTURE

Throughout the year. Credit one hour a term. Prerequisite: consent of the instructor. Mr. Rowe.

490. THESIS IN ARCHITECTURAL HISTORY

Either term. Credit as assigned.

Independent study by candidates for the Master's degree.

499. DISSERTATION IN ARCHITECTURAL HISTORY

Either term. Credit as assigned.

Independent research by candidates for the Ph.D. degree.

PLANNING 700. HISTORY OF CITY PLANNING

Fall term. Credit three or four hours. (Four hours credit required for graduate students in city planning.) Mr. Hugo-Brunt.

The history of the planning of communities from ancient times to the present.

PLANNING 702. SEMINAR IN THE HISTORY OF AMERICAN CITY PLANNING

Fall term. Credit two hours. Prerequisite: Architecture 700 or permission of the instructor. Mr. Reys.

PLANNING 705. INTRODUCTION TO THE HISTORY OF LANDSCAPE ARCHITECTURE AND DESIGN

Spring term. Credit three hours. Mr. Hugo-Brunt.

Classical landscape in the Mediterranean and the Middle East; the Islamic Byzantine tradition; medieval cityscape and the agrarian system; the Renaissance; landscape of gardens in Persia, India, China, Thailand, and Japan. The Victorians; landscape in North America; Colonial landscape; the twentieth century; horticulture and techniques; landscape in contemporary planning and architecture.

PLANNING 707. SEMINAR IN THE HISTORY OF COLONIAL CITY PLANNING

Spring term. Credit three hours. Mr. Hugo-Brunt.

Colonial city and regional planning in Southeast Asia, Africa, South America, and Canada.

PLANNING 709. INFORMAL STUDY IN THE HISTORY OF CITY PLANNING

Either term. Credit as assigned. Open to advanced students by permission. Mr. Hugo-Brunt or Mr. Reys.

ART

Faculty: Victor E. Colby, Norman D. Daly, Kenneth W. Evett, John A. Hartell, H. Peter Kahn, James O. Mahoney, Gillian Pederson-Krag, Jason Seley, Arnold Singer, Jack L. Squier.

Visiting Critics: Allan D'Arcangelo and Alfonso Ossorio.

Field Representative: James O. Mahoney, 109 Franklin Hall.

MAJOR AND MINOR SUBJECTS

Graphic Arts
Painting

Sculpture

Degrees offered in this field are the Master of Fine Arts and the Master of Arts in Teaching. The Field does not offer the degrees of Master of Arts and Doctor of Philosophy.

Graduate courses in the practice of painting, sculpture, graphic arts, and art education are offered in the Department of Art in the College of Architecture. (See also the *Announcement of the College of Architecture, Art, and Planning*.)

As major subjects, painting, sculpture, and graphic arts lead to the Master of Fine Arts degree. As minor subjects they may be elected by Master of Arts candidates in other Fields with the consent of the chairmen of their respective Special Committees and by arrangement with the Department of Art.

Master of Fine Arts

Students who hold Bachelors' degrees and have clearly demonstrated professional promise in art may be admitted as candidates for the M.F.A. degree in any one of three programs described below: painting, sculpture, or graphic arts.

The course of study requires four terms of residence and is intended for those who wish to complete their education as artists. Candidates for the M.F.A. degree must complete fifteen credit hours of courses in the history of art, taken either as graduate or undergraduate students. Graduate students in Art are eligible for courses in any area of study offered at the University; courses in writing, cinema, stagecraft, and music are available, as well as those in the usual academic subjects of the history of art, philosophy, anthropology, and the like. Students are required to take at least three hours of academic work outside the College of Architecture, Art, and Planning each term.

The faculty is composed of practicing artists who teach rather than teachers who practice art. The entire resident faculty and the visiting critics are available to give criticism to graduate students.

The buildings in which the programs are housed are open twenty-four hours a day; they are adjacent to the Fine Arts Library (42,000 volumes) and not far from the University's Andrew Dickson White Museum of Art.

PAINTING. The program in painting is intended for those who are competent to do independent work of high quality. At the end of his third term the candidate is required to present a one-man exhibition of work done while in residence. The principal effort of the fourth term is a thesis painting which is designed to demonstrate creative ability and technical proficiency. Graduate painting is under the direction of Professors D'Arcangelo, Evett, and Ossorio. Students work in separate studios in Franklin Hall, a five-story building occupied by the Department of Art.

SCULPTURE. The graduate student in sculpture will design his own work program leading to a one-man show at the end of the third semester. Graduate sculpture is under the direction of Professors Colby and Squier. The sculpture program has its own buildings, a 45- by 180-foot converted foundry with 14-foot ceilings. Complete gas and arc welding facilities; heavy-duty grinders, drill press, and band saw; and a variety of portable power tools are provided for the graduate students, as well as separate studios.

GRAPHIC ARTS. Graduate students in this program study the various graphic techniques, including relief, intaglio, lithography, and various photographic processes. Experiment and tradition, theory, history, and practice are part of the program, including the relation between image and typography, idea and communication. Graduate graphic arts is under the direction of Professors Singer and Kahn. A full range of graphic arts facilities is available in the program's quarters in Franklin Hall, including etching presses, lithographic presses, proof presses, and a type shop.

COURSES

390. GRADUATE PAINTING

Either term. Credit as assigned. May be repeated for credit.

The core studio course for the first three terms of graduate study in painting.

392. GRADUATE PRINTMAKING

Either term. Credit as assigned. May be repeated for credit.

The core studio course for the first three terms of graduate study in the graphic arts.

393. GRADUATE SCULPTURE

Either term. Credit as assigned. May be repeated for credit.

The core studio course for the first three terms of graduate study in sculpture.

396. GRADUATE THESIS

Either term. Credit as assigned.

For graduate students in their last term in the programs in painting, sculpture, and graphics.

398. SEMINAR IN ART CRITICISM

Either term. Credit two hours a term first year. Three terms required of Master of Fine Arts candidates. Third term, when term theme is written, carries four hours credit. May be repeated for credit. Prerequisite: permission of the instructor.

A study of critical opinions, historical and modern, and their relation to problems in the theory of art.

Master of Arts in Teaching

A limited number of students may be admitted, in cooperation with the School of Education, to a program leading to the degree of Master of Arts in Teaching, a degree which will prepare interested and qualified students for teaching in the secondary schools. The program requires a minimum of two

regular semesters and one summer of full-time study. Admission standards for these students are the same as those for the M.F.A. candidates above. It is under the direction of Professor Kahn.

COURSES

394. THE ARTIST AS TEACHER

Fall term. Credit as assigned.

The problems, methods, theories, and practices of teaching art in the secondary school. Emphasis on the special nature of the artistic process, major modern theories, and their application in the classroom. Study of the implications of learning and perception theories. At the same time, the student is actively engaged in studio work, continuing work in the area of his major interest, such as painting, sculpture, graphics, or another area in the arts.

395. TEACHING INTERNSHIP

Spring term. Credit as assigned.

Observation and supervised teaching of art in a secondary school.

THE CLASSICS

Faculty: Gordon H. Fairbanks, James Hutton, Donald Kagan, Gordon M. Kirkwood, Gordon M. Messing, Elizabeth Milburn, Pietro Pucci, Noel D. Robertson, Edward W. Spofford, Frederick O. Waage.

Field Representative: Pietro Pucci, 125 Goldwin Smith Hall.

MAJOR SUBJECTS

Ancient Philosophy
 Classical Archaeology
 Greek Language and Literature
 Latin Language and Literature
 Medieval and Renaissance Latin
 Literature

MINOR SUBJECTS

Ancient History
 Classic Rhetoric in Original or
 Translation
 Classics
 Indo-European Linguistics

Although it is not a requirement, it is recommended that prospective students submit Graduate Record Examination Aptitude Test scores when applying for admission.

Admission to graduate study in a subject included in the Field of Classics, except in archaeology, assumes a knowledge equivalent in general to that expected of a student who has pursued the subject concerned throughout four years of undergraduate study in a college of recognized standing.

At the end of the first semester, all candidates for the M.A. and the Ph.D. take a written test in reading Latin and Greek authors.

To qualify for the M.A. degree in Classics, the candidate with adequate undergraduate training is ordinarily expected to spend two semesters at Cornell University, attending the seminars for which he is prepared; to write a Master's thesis; and to pass a general oral examination. Within these two semesters, and as early as possible, he must also pass the Graduate School foreign language test in either French or German. The final examination for the M.A. degree may serve as the qualifying examination for the Ph.D. degree. The M.A. candidate chooses a major and a minor subject, and the two faculty

members representing these subjects constitute his Special Committee, the one representing the major subject being his principal adviser.

A candidate for the Ph.D. degree is expected to take a qualifying examination which will determine his fitness for undertaking advanced studies, to spend not less than two full years in course work taking seminars in Greek and Latin as well as in other special fields such as archaeology, palaeography, other literatures, and history which his program of study may require; to write a Ph.D. dissertation, and to take two other examinations—Admission to Candidacy Examination, and an examination on the doctoral dissertation and related subjects. The candidate for the Ph.D. degree chooses a Special Committee formed of three professors of the staff. This committee will advise him both in the choice of his courses and in his work for the dissertation. Ph.D. candidates are expected to be proficient in reading French and German before the completion of the dissertation. Course work for graduate students in the Field of Classics is conducted mainly in small seminars, the object of which is training in the methods, the principles, and the performance of independent research and criticism. As far as possible, therefore, the work is put into the hands of the students themselves. The seminars are conducted by different members of the department, so that the students have the experience of different critical approaches.

Special Interests of the Faculty

Gordon M. Kirkwood, Professor of Classics. Greek and Roman theater, Greek lyric poetry.

Gordon Fairbanks, Professor of Linguistics. Sanskrit and Indo-European comparative studies.

James Hutton, Kappa Alpha Professor of Classics. Greek anthology, Greek and Latin epic, Renaissance, humanism.

Donald Kagan, Associate Professor of History. Greek political thought.

Gordon M. Messing, Associate Professor of Classics. Classical and Indo-European linguistics.

Elizabeth Milburn, Assistant Professor of Classics. Classical archaeology with special fields of Mycenaean archaeology and Greek ceramics.

Pietro Pucci, Associate Professor of Classics. Text history, Greek drama.

Noel Robertson, Assistant Professor of Classics. Greek and Latin religion, Greek epic.

Edward W. Spofford, Assistant Professor of Classics. Latin literature, Elagie, epic poets.

Frederic O. Waage, Professor of History of Art. Numismatics and ceramics.

In related Fields the graduate students in the Field of Classics may follow the courses of:

Allan Bloom, Associate Professor of Government. Political theory.

James J. John, Professor of Palaeography and Mediaeval History. Latin palaeography.

Isaac Rabinowitz, Professor of Biblical and Hebrew Studies.

David Sachs, Associate Professor of Philosophy. Ancient philosophy.

Richard Sorabji, Assistant Professor of Philosophy. Ancient philosophy.

Abraham Udovitch, Assistant Professor of Arabic and Hebrew Studies.

ANCIENT PHILOSOPHY. The Department of Classics, in cooperation with the Department of Philosophy, offers a program leading to the Ph.D. in Classics with ancient philosophy as the major subject. The Department of

Philosophy offers a corresponding program to graduate students in philosophy. The aim of the program is to meet the demand for experts in ancient philosophy who have been trained in both philosophy and the Classics. Students entering the program in Classics will be asked to present evidence of promise in philosophy. Their course of study will include along with other work in Classics two courses in Plato (one in the Department of Classics, one in the Department of Philosophy), two courses in Aristotle (similarly divided), and at least two further courses in the Department of Philosophy. The Special Committee will include at least one member of the Department of Philosophy.

CLASSICAL ARCHAEOLOGY. Graduate students who choose archaeology as a major subject are advised to select Greek and Latin as minor subjects. Archaeology may also be chosen as a minor subject, complementing studies in the Classics. Previous training in archaeology, at either the undergraduate or graduate level, is not prerequisite.

Formal courses within the Department of Classics include introduction to Classical archaeology, pre-Classical Greece, and the archaeology of Classical Greece. Students may supplement these by courses in archaeology offered by other departments and by independent study undertaken in consultation with members of the Department of Classics. It is expected that graduate students interested in archaeology will from time to time have the opportunity to participate in excavations during the summer.

Lecture Courses

GREEK

301. HERODOTUS AND SOPHOCLES

Fall term. Credit four hours. Prerequisite: Greek 203. T Th S 10:10. Mr. Pucci.

302. THUCYDIDES AND THE GREEK OPERATORS

Spring term. Credit four hours. Prerequisite: Greek 203. M W F 12:20. Mr. Kirkwood.

305. AESCHYLUS, ARISTOPHANES, LYRIC POETS

Fall term. Credit four hours. Prerequisite: Greek 302. T Th S 9:05. Mr. Pucci.

306. PHILOSOPHICAL WRITERS

Spring term. Credit four hours. Prerequisite: Greek 302. T Th S 10:10.

408. GREEK EPIC: HOMER AND HESIOD

Spring term. Credit four hours. M W F 11:15. Mr. Robertson.

LATIN

315. LUCRETIUS' *DE RERUM NATURA* AND CICERO'S PHILOSOPHICAL WORKS

Fall term. Credit four hours. Prerequisite: Latin 206.

316. VIRGIL'S *AENEID*

Spring term. Credit four hours. Prerequisite: Latin 315 or the equivalent.

317. TACITUS AND SENECA

Fall term. Credit four hours. Prerequisite: Latin 206. M W F 11:15.

318. ELEGIAC POETS, PETRONIUS, APULEIUS

Spring term. Credit four hours. Prerequisite: Latin 206. M W F 11:15. Mr. Spofford.

321-322. LATIN COMPOSITION: ADVANCED COURSE

Throughout the year. Credit one hour a term. F 2:30. Mr. Messing.

369. MEDIEVAL LATIN LITERATURE

Spring term. Credit four hours. Prerequisite: three years of high school Latin or the equivalent.

415. SILVER AGE LITERATURE

Fall term. Credit four hours. Prerequisite: two terms of Latin at the 300 level. M W F 9:05.

Selections from Juvenal, Martial, Pliny the Younger, Quintilian.

416. THE WORKS OF HORACE

Spring term. Credit four hours. Prerequisite: two terms of Latin at the 300 level. Mr. Pucci.

CLASSICAL LINGUISTICS

421-422. HISTORICAL GRAMMAR OF GREEK AND LATIN

Throughout the year. Credit four hours a term. Hours to be arranged. Mr. Messing.

Fall term: phonology. Spring term: morphology and syntax. The linguistic analysis of Greek and Latin sounds and forms and their historical development. The course will thus offer the student an insight into the methods of comparative linguistics as applied to Greek and Latin.

ARCHAEOLOGY

220. INTRODUCTION TO CLASSICAL ARCHAEOLOGY

Spring term. Credit three hours. M W F 9:05. Miss Milburn.

Survey of the history of classical archaeology; study of select ancient Greek sites with emphasis upon archaeological aims, methods, contributions, and problems.

309-310. ADVANCED GREEK COMPOSITION

Throughout the year. Credit one hour a term. Prerequisite: Greek 209-210 or the equivalent.

319. PRECLASSICAL GREECE

Fall term. Credit four hours. T Th S 11:15. Miss Milburn.

Aegean archaeology from the Neolithic period to the eighth century B.C.

320. ARCHAEOLOGY OF CLASSICAL GREECE

Spring term. Credit four hours. T Th S 11:15. Miss Milburn.

Study of select monuments of ancient Greece from the eighth century to the Hellenistic period.

321-322. LATIN COMPOSITION

Advanced course. Credit one hour a term. F 2:30. Mr. Messing.

423. CERAMICS AND THE TECHNIQUES OF EXCAVATION

Fall term. Credit four hours. Prerequisite: consent of the instructor. T 1:25. Mr. Waage.

Pottery specimens will be studied to provide some experience in one of the basic prerequisites of archaeological excavation — the identification of types of pottery. Reports on the use of ceramics and other materials for dating and on the technique of conducting excavations.

HISTORY 432. GREEK HISTORY, 500-336 B.C.**HISTORY 434. HELLENISTIC AGE****HISTORY OF ART 322. ARTS OF THE ROMAN EMPIRE**

Spring term. Credit four hours. M W F 9:05. Mr. Waage.

INDO-EUROPEAN LINGUISTICS 531-532. ELEMENTARY SANSKRIT

Throughout the year in alternate years. Credit three hours a term. Hours to be arranged.

PHILOSOPHY 403. PLATO AND ARISTOTLE

Spring term. Credit four hours. Open to philosophy majors and graduate students, and others by consent of the instructor. T Th S 11:15. Discussion sections to be arranged. Mr. Sorabji.

Seminars

571. PINDAR

Fall term. Th 3:35-5:30. Mr. Kirkwood.

572. EURIPIDES

Spring term. Th 3:35-5:30. Mr. Pucci.

581. VIRGIL

Fall term. Credit four hours. M 3:35-5:30. Mr. Hutton.

582. ELEGIAC POETS

Spring term. Credit four hours. M 3:35-5:30. Mr. Spofford.

576. PLATO'S THEAETUS

Fall term. Credit three hours. T 3:35-5:30. Mr. Sachs.

HISTORY 631-632. SEMINAR IN ANCIENT HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Kagan.

HISTORY 639-640. SEMINAR IN LATIN PALEOGRAPHY

Throughout the year. Credit four hours a term. First term prerequisite to the second. Hours to be arranged. Mr. John.

Fellowships and Financial Aid

Several departmental awards are available to incoming students in the Field of Classics:

The Florence May Smith Fellowships, with a stipend of \$2,000 plus tuition and fees, are granted especially to students in the Field of Classics.

Two Classical Scholarships carrying tuition and fees are available.

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Several N.D.E.A. Fellowships are granted to Cornell incoming students in the Field of Classics.

The income of the Charles Edwin Bennett Fund for Research in the Classical Languages is used each year in the way best suited to promote the object for which the fund was established.

CORNELL STUDIES IN CLASSICAL PHILOLOGY. In 1887 the following paragraph appeared as the Introduction to this series: "It is proposed to publish, in connection with the Classical work of Cornell University, such papers, by instructors or students, as may be thought to have an interest for workers in Classical philology elsewhere. These papers will appear at indeterminate intervals."

Since 1887, thirty-five volumes have appeared; at present all out-of-print volumes are being reprinted. The series has always taken a broad view of Classical philology and has included grammatical, historical, and archaeological studies, as well as studies in Classical literature and thought.

Today the series continues to publish scholarly works by members of the Department; doctoral dissertations of an appropriate nature are eligible for inclusion.

OTHER FACILITIES. Olin Library, a new and modern library, has a very large collection of books and periodicals in the Field of Classics. Facilities for graduate students include carrels in the stacks of the Library itself and a seminar room reserved for students in Classics and ancient history in which the principal reference works and current periodicals are kept.

Seminars are held in the Library, in a room suitably equipped and conveniently located.

COMPARATIVE LITERATURE

Faculty: M. H. Abrams (English), Robert M. Adams (English), Eric A. Blackall (German), Dalai Brenes (Spanish), Jean-Jacques Demorest (French), Herbert Dieckmann (French and Comparative Literature), Ephim G. Fogel (English), John Freccero (Italian), George Gibian (Russian), David I. Grossvogel (French), O. J. Matthijs Jolles (German), Robert E. Kaske (English), Gordon M. Kirkwood (Classics), Edward P. Morris (French), Burton Pike (German and Comparative Literature), Pietro Pucci (Classics), Isaac Rabinowitz (Hebrew), Edgar Rosenberg (English), Karl-Ludwig Selig (Spanish), Harold Shadick (Chinese).

Visitors: Alexander Gelley, Hebrew University (Comparative Literature), Hans-Jost Frey, University of Zurich (German and French).

Field Representative: Burton Pike, 244. Goldwin Smith Hall.

MAJOR AND MINOR SUBJECT

Comparative Literature

The graduate program in the Field of Comparative Literature is limited to about twenty-five students. The applicant must be mature enough to cross departmental lines and map out a field of study that combines his interests in a meaningful way. At the time of application, he should be prepared to study three literatures (they can include English) in the original language. The Field requires scores of the Graduate Record Examination (both aptitude and advanced tests) though in special circumstances this requirement may be waived. The Examination must be taken no later than December.

No Master of Arts Degree is offered in Comparative Literature. Candidates are admitted directly to the Ph.D. program, but are frequently advised to take a Master's degree in the literature which interests them most and constitutes their major field. The candidate's two minor subjects must involve national literatures other than that chosen as the major; English and American literature cannot be counted as separate literatures for this purpose. Standards of historical coverage and of critical discrimination in the major are equal to those expected from a Ph.D. in that Field. In the two minors, historical coverage is limited to a period (for example, Middle Ages, Renaissance, Romantic) or to a genre (drama, novel, poetry, and literary criticism and theory). Under normal circumstances, students can complete course and examination requirements in three years of study and the Ph.D. degree in four years.

The graduate program in Comparative Literature allows specialization in almost every major area from medieval studies to literary criticism and theory. Under a unique arrangement, students can spend a year in Europe under the supervision of a member of the Department and receive full graduate credit. Cornell fellowships can be applied to this graduate year abroad.

Courses

332. HUMANISM AND THE RENAISSANCE

Spring term. Credit four hours. M W F 10:10. Mr. Hutton.

Readings in translation from Petrarch, Erasmus, Ariosto, Rabelais, Tasso, Montaigne, and others, designed to bring out typical ideas and attitudes of the Renaissance period. Attention will be given to such topics as fifteenth-century humanism, neo-Latin literature, Ciceronianism, Renaissance Platonism, theories of poetry, the influence of the Counter-Reformation.

401. PRINCIPLES OF LITERARY CRITICISM

Fall term. Credit four hours. M 2:30 or W 2:30.

Theories of Greek and Roman criticism.

402. THE ENLIGHTENMENT IN GERMANY, FRANCE AND ENGLAND

Spring term. Credit four hours. M W F 11:15. Mr. Dieckmann.

404. GREEK AND ROMAN DRAMA

Spring term. Credit four hours. T Th S 10:10. Mr. Kirkwood.

A study, by lecture and discussion, of the evolution of forms and meanings in ancient tragedy and comedy as exemplified by the works of Aeschylus, Sophocles, Euripides, Aristophanes, Menander, Plautus, Terence, and Seneca. Representative plays are read in translation. Consideration is given also to the origins of tragedy and comedy, their connection with myth and ritual and with other literary forms, and to the ancient theater and its stage.

407. VARIATIONS ON A LITERARY THEME

Fall term. Credit four hours. M W 11:15. Mr. R. Adams.

409. POST-SYMBOLIST POETRY

Fall term. Credit four hours. M W F 10:10. Mr. Frey.

A study of the poetry of Hopkins and Rilke.

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411. MODERN GERMAN LITERATURE

Spring term. Credit four hours. M W F 11:15. Mr. Pike.

An intensive study of major works of Rilke, Mann, and Kafka, to be read in English translation.

414. MODERN ITALIAN LITERATURE

Spring term. Credit four hours. M 2:30. Mr. Biasin.

A thematic study of such authors as Verga, Svevo, Pirandello, Tomasi di Lampedusa, Basani, Pavese, and Moravia. Readings, lectures, and discussion in English.

416. MYTH AND LITERATURE

Spring term. Credit four hours. Enrollment limited to thirty-five upperclassmen and graduate students. M W F 9:05. Mrs. Siegel.

An examination of theories of myth as well as writers who treat myth as a form of literature. Emphasis will be on the relevance of myth to literature, with some reference to criticism. Texts will include works of Frazer, Jung, Campbell, Harrison, and Eliade.

501-502. TOPICS IN COMPARATIVE LITERATURE

Throughout the year. Credit four hours a term. Th 2-4. Mr. Gelley.

Fall term: The theme of Narcissus in nineteenth-century literature. Spring term: topic to be announced.

506. STUDIES IN RENAISSANCE MYTHOGRAPHY

Spring term. Credit four hours. Permission of the instructor required. T 4-6. Mr. Selig. Not offered in 1967-68.

Critical analysis of major Renaissance treatises on mythography, with special reference to their relationship to emblem literature, certain aspects of iconography, and the treatment of some mythological themes in selected literary texts.

520. EIGHTEENTH-CENTURY AESTHETICS

Spring term. Credit four hours. T 2:30-4:25. Mr. Dieckmann.

Topic to be announced.

526. EUROPEAN ROMANTICISM

Spring term. Credit four hours. Mr. Frey.

Novallis, Leopardi, Keats.

ENGLISH 404. PROBLEMS IN THE RENAISSANCE

Spring term. Credit four hours. M W F 9:05. Mr. Robert Adams.

ENGLISH 515. STUDIES IN RENAISSANCE LITERATURE

GERMAN 537. TWENTIETH-CENTURY GERMAN LITERATURE

Fall term. Credit four hours. T 1:25-3:20. Mr. Pike.

Topic: Thomas Mann.

HISTORY OF ART 446. LITERARY SOURCES IN THE ITALIAN RENAISSANCE

Spring term. Credit four hours. Mr. Selig.

ENGLISH LANGUAGE AND LITERATURE

Faculty: M. H. Abrams, Barry B. Adams, Robert M. Adams, Judith H. Anderson, Douglas N. Archibald, Evelyn Barish, Jonathan P. Bishop, Jean F. Blackall, Sanford Budick, Anthony Caputi, Michael J. Colacurcio, J. M. Cowan, Vincent A. De Luca, Donald D. Eddy, Robert H. Elias, Scott B. Elledge, Francis G. Fike, Daniel H. Finlay, Ephim G. Fogel, Kenneth C. Frederick, Paul Gottschalk, Baxter Hathaway, George H. Healey, Judith S. Herz, Charles F. Hockett, Robert E. Kaske, Michael W. Kaufman, John W. Marchand, Carol L. Marks, Dan E. McCall, James R. McConkey, H. Scott McMillin, Dorothy M. Mermin, Francis W. Mineka, Arthur M. Mizener, David Novarr, Stephen M. Parrish, Edgar Rosenberg, William M. Sale, Jr., W. David Shaw, Michael Shinagel, Walter J. Slatoff, S. Cushing Strout.

Field Representative: Anthony Caputi, 235 Goldwin Smith Hall.

MAJOR AND MINOR SUBJECTS

American Literature	The Nineteenth Century
Creative Writing*	Old and Middle English
Dramatic Literature	Prose Fiction
English and American Literature	The Restoration and Eighteenth Century
English Linguistics†	The Twentieth Century
English Poetry	
The English Renaissance to 1660	

ADMISSION REQUIREMENTS. An applicant for graduate study in English is required to have completed an acceptable undergraduate degree and to submit a dossier of materials testifying to his record. These materials—the same as those required and processed by the Graduate School—consist of a completed application, including a statement of professional goals, undergraduate and, if appropriate, graduate transcripts and two letters of recommendation by persons capable of evaluating the applicant's professional promise. Additionally, the Department of English requires scores of the Graduate Record Examination (aptitude and advanced tests), though in special circumstances this requirement may be waived. Applicants should plan to take this Examination by mid-January (preferably in November) so that their scores will be available in time.

Applicants may apply for admission to either the Master's or the doctoral programs, depending on their needs and intentions. Those who have completed a graduate degree will normally apply for the doctoral program. Those who have had no prior graduate study may apply for direct admission to the doctoral program with the expectation that a few with superior qualifications will be admitted directly. Others will be admitted as candidates for the Master's degree and reconsidered during the second term of their work in residence for admission to the doctoral program.

LANGUAGE REQUIREMENTS. The graduate student's work in English is structured to allow a wide range of choice within a framework of requirements designed to insure a superior level of professional competence. Highly important to the development of ancillary skills and knowledges are the language requirements. Students in the Master's program are required to demonstrate proficiency in French, German, Greek, Italian, or Latin; those failing to demonstrate proficiency during the first semester of residence will be required to complete two residence units after passing the proficiency

* Cannot be the major for the Ph.D.

† Minor only.

examination, unless an exception is made by the Field. Students in the doctoral program are required to demonstrate proficiency in French and German, either one of which must be passed before the qualifying examination may be scheduled and both of which must be completed before the Admission to Candidacy Examination may be scheduled. In addition, doctoral students must have a knowledge of Old English, both the language and the literature, and it is recommended that students in the Middle Ages and the Renaissance have a knowledge of Latin and Italian.

Requirements Pertinent to Major and Minor Subjects

Since the student's work in English studies is intended to prepare him for teaching and research, the program is in the first instance designed to lead to a command of the Field. Apart from Master's degree students who major in creative writing, both Master's degree and beginning doctoral students are required to major in English and American literature. But the student, in consultation with the members of his Special Committee, may use this major in a variety of ways: to work in areas in which his preparation is weak, to concentrate on areas of special interest, or, what is normal for doctoral students, to prepare for the qualifying examination, which is a comprehensive examination in the major subject. While Master's degree candidates are not expected to specialize, doctoral students who have passed the qualifying examination are required to choose two, or if they wish, three areas of special interest. Typically, at this point they drop English and American Literature as a major subject and substitute for it the subject of their primary interest. One might, for example, choose the nineteenth century as a major subject and prose fiction as a minor, or, if two minors were desired, prose fiction and the twentieth century. The second minor, in fact, could center in another literature, Classics, history, philosophy, linguistics, or theatre arts, and students in special programs, such as American Studies, can elect both minors from outside Fields. Doctoral students are examined in these special areas on the Admission to Candidacy Examination.

Under the guidance of a Special Committee, the student plans a program calculated to develop literary sophistication and mature scholarship. Since the enrollment in English is limited to about ninety students, with a first-year class of about thirty, no student has difficulty in forming a Special Committee to meet his needs. During his first year in residence, each student plans to complete eight one-term courses, at least four of them numbered 500 or above. For a Master's degree candidate who is not moved into Ph.D. candidacy in the spring term of his first year, or whose Special Committee feels he should write a Master's thesis, one of these courses will be a thesis course, with the chairman of his Special Committee in charge; the Master's thesis of a candidate majoring in creative writing will consist of original fiction or poetry. Candidates for the Master's degree who expect to complete their work entirely in summer sessions may take two courses in each of their first four summers and then in the fifth summer register for the thesis course. All doctoral candidates will take the course in Research Methods and Materials and will complete at least one seminar numbered 600 or above; otherwise, the Field imposes no specific course requirements beyond the first year of study. Doctoral candidates who have received their Masters' degrees elsewhere will be excused from the courses in Old English and Research Methods and Materials only if they satisfy the Field Representative that they have already completed equivalent work.

In addition to the regular M.A. and Ph.D. programs, the Field recently instituted a Master of Fine Arts in Creative Writing, a program requiring two years of work in residence and emphasizing training in workshops. Like the regular M.A., it can be used either as a terminal degree or as an alternative track in the Ph.D. program.

RESEARCH AND STUDY OPPORTUNITIES. Graduate work at Cornell offers the opportunity for study in a distinguished academic community with extensive resources. The books and manuscripts held by the John M. Olin Research Library, completed in 1961, place it among the top seven university libraries in the United States; its special collections range from Dante and Petrarch collections unique in this country to a splendid and comprehensive Wordsworth collection and one of the great Joyce collections of the world. Among the staff normally available for the direction of graduate studies are the following (the listing of areas of interest and instructors is illustrative, not exhaustive):

Anglo-Saxon and Medieval Studies: Robert E. Kaske.

The Renaissance: Baxter Hathaway, Ephim G. Fogel, Barry B. Adams, Judith H. Anderson, Daniel Finlay, Michael Kaufman.

The Seventeenth Century: Robert M. Adams, David Novarr, Carol L. Marks.

The Eighteenth Century: William M. Sale, Jr., Scott B. Elledge, Donald D. Eddy, Michael Shinagel, Douglas Archibald, Sanford Budick.

The Romantic Period: M. H. Abrams, Stephen M. Parrish.

The Victorian Period: Francis E. Mineka, Jonathan P. Bishop, Francis G. Fike, W. David Shaw.

The Twentieth Century: Arthur Mizener.

American Literature: Robert H. Elias, S. Cushing Strout, Walter J. Slatoff, Jean F. Blackall, Michael J. Colacurcio, Dan McCall.

The Novel: James R. McConkey, Edgar Rosenberg, Kenneth C. Frederick.

The Drama: Anthony Caputi, H. Scott McMillin.

Students interested in choosing a second minor can draw, of course, upon the faculties of related Fields.

FINANCIAL AID. Applicants in English can apply for fellowship support by checking the proper box on the graduate application, but those wishing to apply for teaching fellowships should write additionally to the Chairman of the Department by March 1. Currently, virtually all students are being supported through the model four-year program by way of some combination of teaching and fellowship support.

Inquiries about graduate work should be directed to the Field Representative.

Graduate Courses

All course listings are subject to change, and in any given year some courses may not be offered. Those courses numbered 600 and above are seminars with a limited enrollment.

500. INTRODUCTION TO ADVANCED RESEARCH

Spring term. Credit four hours. For candidates for the Ph.D. degree. Mr. Novarr.

A study of methods and materials relevant to the solution of problems in scholarly and critical interpretation.

501. READINGS IN OLD ENGLISH

Fall term. Credit four hours. Mr. Farrell.

Elements of Old English grammar and readings in the shorter literary texts.

502. BEOWULF

Spring term. Credit four hours. Prerequisite: English 501. Mr. Hill.

A reading of the poem in Old English and discussion of the literary problems which it presents.

503. MIDDLE ENGLISH

Fall term. Credit four hours. Mr. Kaske.

Reading and critical analysis of major works, excluding Chaucer and the drama.

504. CHAUCER

Spring term. Credit four hours. Mr. Kaske.

Reading and critical analysis, with emphasis on *Troilus and Canterbury Tales*.

505. GRAMMATICAL ANALYSIS

Fall term. Credit four hours. Mr. Hathaway.

506. PHILOLOGICAL PROBLEMS IN THE STUDY OF ENGLISH LITERATURE

Spring term. Credit four hours. Mr. Farrell.

An examination of major developments in the English language from Middle English to the present and a consideration of the problems which these changes present in the reading of literary texts.

507. THEORY OF PROSE

Fall term. Credit four hours. Mr. Elledge.

509. MEDIEVAL DRAMA

Spring term. Credit four hours. Mr. Barry Adams.

513. ELIZABETHAN AND JACOBAN DRAMA

Fall term. Credit four hours. Mr. Barry Adams.

Studies in the dramatic works of Shakespeare's contemporaries and immediate predecessors.

515. STUDIES IN RENAISSANCE LITERATURE

Fall term. Credit four hours. Mr. Robert Adams.

Renaissance texts having a relation to Ovid's *Metamorphoses*.

517. EPIC AND ALLEGORY IN THE ENGLISH TRADITION

Fall term. Credit four hours. Miss Anderson.

520. JONSON AND DRYDEN

Spring term. Credit four hours. Mr. Novarr.

529. CLIMATES OF OPINION IN AMERICAN CULTURE

Fall term. Credit four hours. Mr. Strout.

Studies in Puritanism, the Enlightenment, and Romanticism as intellectual movements and literary contexts.

534. THE NEW ENGLAND MIND, 1620-1860

Spring term. Credit four hours. Mr. Colacurcio.

Religious idealism in the literature of Puritan and post-Puritan America. The emphasis in 1967-68 will be on Edwards and Emerson.

537. STUDIES IN AMERICAN LITERATURE

Fall term. Credit four hours. Mr. Elias.

542. EIGHTEENTH-CENTURY LITERATURE

Spring term. Credit four hours. Mr. Eddy.

In 1967-68 the emphasis will be on the writings of Alexander Pope.

549-550. CREATIVE WRITING

Throughout the year. Credit four hours a term. Fall term, Mr. McConkey. Spring term, Mr. Hathaway.

561. DRAMATIC LITERATURE: TRAGEDY

Fall term. Credit four hours. Mr. Caputi.

A study of the history of tragic expression in drama, using representative plays by Sophocles, Shakespeare, Racine, and selected contemporary authors.

571. ROMANTIC POETRY

Fall term. Credit four hours.

Poetry and criticism of the major poets, with emphasis on the longer works.

575. VICTORIAN PROSE

Fall term. Credit four hours. Mr. Mineka.

Major emphasis upon writers of nonfictional prose, but with some attention to the novel.

576. VICTORIAN POETRY

Spring term. Credit four hours. Mr. Mineka.

Major emphasis upon Tennyson, Browning, and Arnold, but with some study of other Victorian poets.

580. STUDIES IN ENGLISH FICTION: CONRAD

Spring term. Credit four hours. Mr. Slatoff.

584. FORMS OF THE NOVEL: HENRY JAMES

Spring term. Credit four hours. Mrs. Blackall.

591. TWENTIETH-CENTURY LITERATURE: YEATS

Fall term. Credit four hours. Mr. Archibald.

Exploration of Yeats's dialogue with history and his encounters with earlier imaginations (Blake, Shelley, Swift, Burke). Emphasis on the poetry and on questions about literary influence.

597. LITERARY CRITICISM

Fall term. Credit four hours. Mr. Shaw.

The application of literary theories to the criticism of poetry. Topic for 1967-68: the Victorian and modern age.

598. MASTER'S ESSAY

Spring term. Credit four hours. Members of the Department.

608. STUDIES IN MEDIEVAL LITERATURE

Spring term. Credit four hours. Mr. Kaske.

Advanced research in English (and other) medieval literature.

616. STUDIES IN THE SIXTEENTH CENTURY: SIR PHILIP SIDNEY

Spring term. Credit four hours. Mr. Fogel.

An examination of the literary achievement of Sidney, as poet and writer of fiction, with particular reference to the two versions of the *Arcadia* and the theories embodied in *The Defence of Poesie*.

617. STUDIES IN THE SEVENTEENTH CENTURY

Fall term. Credit four hours. Mr. Novarr.

The poetry and prose of John Donne. An intensive examination of the scholarly and critical work pertinent to an understanding of Donne and of the late Renaissance.

622. MILTON

Spring term. Credit four hours. Mr. Elledge.

Milton's English poems and selected prose.

639. AMERICAN POETRY

Fall term. Credit four hours. Mr. Elias.

A study of Wallace Stevens: his relation to the 1920's, his development, selected critical and textual problems.

662. SHAKESPEARE

Spring term. Credit four hours. Mr. McMillin.

A close study of *King Lear*, involving textual, theatrical, and critical approaches. The play will be read in the context of Shakespearean drama from 1603 to 1611.

6.2. WORDSWORTH

Spring term. Credit four hours. Mr. Parrish.

Critical and textual studies based upon the Dove Cottage manuscript archive.

673. THE ROMANTIC PERIOD

Fall term. Credit four hours. Mr. Abrams.

681. HENRY JAMES: THE MAJOR PHASE

Fall term. Credit four hours. Mr. Mizener.

The work of James's last period, from about 1900.

684. STUDIES IN AMERICAN FICTION

Spring term. Credit four hours. Mr. Slatoff.

In 1967-68, the course will concentrate on the novels of William Faulkner.

GERMAN

Faculty: Vilhjálmur T. Bjarnar, Eric A. Blackall, Joseph B. Dallett, Herbert Deinert, Eleonore Frey, O. J. Matthijs Jolles, Herbert L. Kufner, Pardee Lowe, Jr., James W. Marchand, Adolf Muschg, Burton E. Pike, Joseph R. Puryear.

Recent Visiting Professors: Marianne U. Cowan (City College, City University

of New York), Else M. Fleissner (Wells College), Dennis H. Green (Cambridge University), Elizabeth M. Wilkinson (University College, London), Frans van Coetsem (Universities of Louvain and Leiden).

Field Representative: Joseph B. Dallett, 178 Goldwin Smith Hall.

MAJOR SUBJECTS

German Literature
Germanic Linguistics

MINOR SUBJECTS

German Literature
Germanic Linguistics
Old Norse

ADMISSION REQUIREMENTS. The normal requirement for admission is a good background in German literature and a reasonable fluency in the German language; some acquaintance with Middle High German and a reading knowledge of a foreign language other than German are also highly desirable. Applicants must submit their scores on the Graduate Record Examination Aptitude test, though in special circumstances this requirement may be waived. For scores to be available by the time applications for fellowships are reviewed, the Examination must be taken no later than December.

Both M.A. and Ph.D. degrees are granted in German. The Field normally prefers to admit students who intend to remain at Cornell for the doctorate. Those who wish to acquire the Master's degree for teaching at the secondary-school level will be encouraged to apply to Cornell's Master of Arts in Teaching program rather than to the Field's M.A. program.

LANGUAGE REQUIREMENTS. For the M.A.: proficiency in German, as determined by the entrance examination in German administered by the Department of German Literature.

For the Ph.D.: besides proficiency in German, proficiency in French (required of all students majoring in German Literature) or in Russian.

FIELD REQUIREMENTS FOR THE VARIOUS COMPREHENSIVE AND THESIS EXAMINATIONS. Three examinations are required of Ph.D. students in German: (1) the qualifying examination, usually given at the end of the first year to assess the student's capacity for Ph.D. work; (2) the Admission to Candidacy Examination, a comprehensive examination usually taken in the third year when the student has completed virtually all other requirements for his degree except the dissertation; and (3) the Final Examination (oral) on the candidate's thesis. Students who successfully complete the Admission to Candidacy Examination receive the M.A. degree at that time (unless they already hold this degree). For further details see the *Guide for Graduate Students in German at Cornell University*, available from the Chairman of the Department of German Literature.

Description of the Field

In the Field of German the student may concentrate in either linguistics or literature. Each area serves as a minor when the other is the major, so that a basis is established for a broad scholarly competence in the Field as a whole. Besides completing the requirements for his major and minor (see above), the student is expected to devote a significant part of his work to courses of his own free choice. He can, for example, avail himself of the wide offerings at Cornell in European medieval literature and philology, including Old Norse; another approach would be an interdepartmental program in the eighteenth century (also a period in which the offerings at Cornell are unusually attractive); an interest in comparative literature, history, music,

philosophy, general linguistics, anthropology, or mathematics can similarly be developed within the student's program in German. The doctoral program, in literature as well as linguistics, normally takes four years—two years of full-time study, one year (usually the second) combining apprentice teaching with study, and a final year reserved for the completion of the Ph.D. thesis. Apprentice teaching of literature is an essential part of the program for all students. Provision can be made in the third year for study abroad, if that seems desirable. Course requirements for the Master's degree can usually be completed within one year. A Master's thesis is required only if the degree is to be a terminal one.

GERMAN LITERATURE. In consultation with his Special Committee the student works out a plan of study that, building on his knowledge of particular authors, genres, and movements, aims at familiarizing him with the whole development of German literature and giving him a first-hand acquaintance with selected major texts from the Middle High German period to the present. At the same time, the student chooses for special emphasis one of three partially overlapping periods: German literature before 1700, German literature from 1500–1832, or German literature from 1750 on. Through course work and private directed study the student also seeks to deepen his understanding of literary criticism and of the techniques and goals of scholarly research. His program culminates in the writing of the Ph.D. dissertation. For a description of the minor in Germanic linguistics for those majoring in German literature, see the *Guide for Graduate Students in German at Cornell University*.

The special interests of the staff in the area of literature are as follows: medieval literature and philology: Professors Blackall, Lowe, Marchand, and Puryear; the late Middle Ages through the seventeenth century: Professor Dallett; the seventeenth century: Professors Deinert and Frey; the eighteenth century, the Classical Age: Professors Blackall and Jolles; romanticism and realism: Professors Blackall, Deinert, Frey, and Muschg; twentieth-century literature: Professors Deinert, Muschg, and Pike; literary criticism and its theory: Professors Jolles and Marchand.

GERMANIC LINGUISTICS. The student's program should aim at ensuring his familiarity with the basic tools of research in linguistics and philology (including descriptive techniques and a good grasp of the principles of historical linguistics) and at providing him with a thorough knowledge of the structure of modern German, the contrastive analysis of German and English, the history of the German language, four of the older Germanic languages, and comparative Germanic linguistics. Reading courses are available for many aspects of study, along with seminars investigating such special topics as comparative Germanic cultures and Germanic codicology and palaeography. The faculty's wide range of scholarly concerns in the Field of Germanic linguistics and philology—extending chronologically from Gothic to modern German dialects—ensures that in writing his dissertation the student can count on interested guidance, whatever the subject of his investigation. For a description of the minor in German literature for those majoring in Germanic linguistics, see the *Guide for Graduate Students in German at Cornell University*.

The special interests of the staff are as follows: Professors Bjarnar, Lowe, and Marchand: Old Norse. Professors Marchand and Puryear: Gothic, Old High German, Old Saxon, Middle High German, Early New High German. Professors Kufner and Lowe: history of the German language, modern German grammar. Professor Kufner: German dialects, applied linguistics, pedagogy.

Professor Marchand: comparative culture, codicology and palaeography, computer-aided analysis of the older Germanic languages.

OLD NORSE. The opportunities for studying Old Norse at Cornell are exceptional. The University is especially favored with a collection of Old Norse materials (the Old Icelandic Collection) that is probably the most important of its kind in the world, and with a curator, Vilhjálmur Bjarnar, who is both a librarian and an Old Norse scholar. Two other faculty members, Professors Lowe and Marchand, have particular interest in the field.

Library Facilities

The excellent opportunities for original research in the Field of German are suggested by the fact that the Cornell library ranks among the seven leading university libraries in this country. The John M. Olin Research Library has rich holdings in the area of German, including a comprehensive representation of the relevant series and periodicals. Among its rarities are contemporary editions of many sixteenth-, seventeenth-, and eighteenth-century German authors, as well as numerous incunabula from German presses, and the Old Icelandic Collection mentioned above.

Accredited Study in Europe

Advanced students wishing to do research, or to supplement their training, at a European university for credit at Cornell may spend up to one year abroad; fellowship money awarded through the Graduate School may be used for this purpose.

Special Fellowships

Cornell has an enviable fellowship program under which virtually all doctoral students receive full support for four years and four summers (in one of these years, in the Field of German, the support is in the form of a teaching fellowship). Incoming students can qualify for Cornell fellowships, foundation awards, and for NDEA Title IV Fellowships (see page 15). Among the special opportunities for advanced graduate study abroad are the Schurman Fellowship (available annually to a Cornell student in any field for work at the University of Heidelberg), the *Dankstipendium* given every year to a Cornell student by the German Federal Republic for a year's study in any field in West Germany, and the German Academic Exchange Service (DAAD) Fellowship which is similarly made available annually to Cornell students. While these special awards are not restricted to those in the Field of German, it is they who often stand to profit the most from graduate study in the German Federal Republic.

Graduate Courses

401. HISTORY OF THE GERMAN LANGUAGE I

Fall term in alternate years. Credit four hours. Prerequisites: German 204 or consent of the instructor, and Linguistics 201 taken previously or concurrently. M W F 11:15. Mr. Kufner.

The relation of German to English and other Indo-European languages.

402. HISTORY OF THE GERMAN LANGUAGE II

Spring term in alternate years. Credit four hours. Prerequisite: German 401 or consent of the instructor. M W F 11:15. Mr. Lowe.

The development of the German language, i.e., its phonology, morphology, syntax, and lexicon up to about the year 1500.

403. LINGUISTIC STRUCTURE OF GERMAN

Fall term. Credit four hours. Prerequisites: German 204 or consent of the instructor, and Linguistics 201 taken previously or concurrently. M W F 10:10. Mr. Kufner.

A descriptive analysis of present-day German, with emphasis on its phonetics, phonemics, morphology, and syntax.

404. GERMAN FOR TEACHERS

Spring term. Credit four hours. Prerequisite: German 403. M W F 10:10. Mr. Kufner.

Methods of teaching the language based on a contrastive study of the structures of English and German. Extensive outside reading, reports on textbooks, discussion of various teaching aids and realia. Required for provisional New York State teacher certification.

405. INTRODUCTION TO MIDDLE HIGH GERMAN

Fall term. Credit four hours. Prerequisite: consent of the instructor. M W F 11:15. Mr. Puryear.

Intended for students with no previous knowledge of Middle High German; will begin with study of the Middle High German language and then proceed to the reading of selected texts.

406. MIDDLE HIGH GERMAN LITERATURE

Spring term. Credit four hours. Prerequisite: German 405. M W F 11:15. Mr. Puryear.

The main authors and literary trends of the Middle High German period will be discussed in connection with the reading of extensive selections from the works of the great epic and lyric poets between 1190 and 1290.

[408. TOPICS IN EARLIER GERMAN LITERATURE: 1300-1700]

Spring term only. Credit four hours. Prerequisite: consent of the instructor. T Th S 11:15. Mr. Dallett. Not offered in 1967-68.

410. TOPICS IN CLASSICISM AND ROMANTICISM

Spring term only. Credit four hours. Prerequisite: consent of the instructor. T Th 11:15. Mrs. Frey.

Topic: Heinrich von Kleist.

413-414. TOPICS IN MODERN GERMAN LITERATURE

Credit four hours a term. Prerequisite: consent of the instructor. Fall term topic: Gottfried Keller and C. F. Meyer. Th 11:15-1:10. Spring term topic: most recent German literature. T Th 12:20. Mr. Muschg.

415. BIBLIOGRAPHY AND METHODS

Fall term. Credit four hours. Prerequisite: consent of the instructor. M W F 3:35. Mr. Marchand.

500. SPRECH- UND SCHREIBÜBUNGEN

Throughout the year. No credit. Hours to be arranged. Required of all graduate students in German studies unless they are exempted from the course on the basis of an examination. Fall term: Staff. Spring term: Mrs. Frey.

[501. INTRODUCTION TO GERMANISTIC LINGUISTICS]

Fall term in alternate years. Credit four hours. W 1:25. Mr. Puryear. Not offered in 1967-68.

[502. GOTHIC]

Spring term in alternate years. Credit four hours. W 1:25. Mr. Puryear. Not offered in 1967-68.

503. OLD SAXON

Fall term in alternate years. Credit four hours. Hours to be arranged. Mr. Puryear.

504. OLD HIGH GERMAN

Spring term in alternate years. Credit four hours. Hours to be arranged. Mr. Puryear.

509. OLD NORSE I

Fall term. Credit four hours. Hours to be arranged. Mr. Bjarnar.

510: OLD NORSE II

Spring term. Credit four hours. Hours to be arranged. Mr. Bjarnar.

511. SAGAS

Fall term. Credit four hours. Prerequisite: German 510 or consent of the instructor. Hours to be arranged. Mr. Lowe.

512. EDDAS

Spring term. Credit four hours. Prerequisite: German 510 or consent of the instructor. Hours to be arranged. Mr. Lowe.

[513. SEMINAR IN OLD NORSE LANGUAGE AND LITERATURE]

Fall term. Credit four hours. Hours to be arranged. Mr. Lowe. Not offered in 1967-68.

[514. SKALDIC POETRY]

Spring term. Credit four hours. Hours to be arranged. Mr. Lowe. Not offered in 1967-68.

[521. MIDDLE HIGH GERMAN LITERATURE I]

Fall term. Credit four hours. Prerequisite: German 406 or consent of the instructor. Not offered in 1967-68.

522. MIDDLE HIGH GERMAN LITERATURE II

Spring term. Credit four hours. Prerequisite: German 406 or consent of the instructor. M 1:25-3:20. Mr. Marchand.

Topic: The Quadrivium: its influence on Middle High German literature with special reference to Gottfried von Strassburg.

523. GERMAN LITERATURE OF THE LATE MIDDLE AGES

Fall term. Credit four hours. M 1:25-3:20. Mr. Dallett.

Topic: German mysticism. A study of mystical theory and practice in Germany from the thirteenth through the fifteenth century as reflected in original German texts and German translations of works by Mechthild von Magdeburg, Meister Eckehart, Johannes Tauler, Heinrich Seuse, and Nikolaus von Kues.

526. SIXTEENTH-CENTURY GERMAN LITERATURE

Spring term. Credit four hours. W 1:25-3:20. Mr. Dallett.

Topic: Sixteenth-century German drama and its backgrounds.

527. SEVENTEENTH-CENTURY GERMAN LITERATURE

Fall term. Credit four hours. W 1:25-3:20. Mrs. Frey.

Topic: Lyric poetry of the Baroque period.

530. EIGHTEENTH-CENTURY LITERATURE OTHER THAN GOETHE

Spring term. Credit four hours. T 1:25-3:20. Mr. Jolles.

Topic: Schiller und der Sturm und Drang.

531. GOETHE

Fall term. Credit four hours. Th 1:25-3:20. Mr. Blackall.

Topic: Goethe's experimental fiction. The course will concentrate on *Die Wahlverwandtschaften*, the *Novelle*, *Wilhelm Meisters Wanderjahre*, and *Dichtung und Wahrheit*.

534. GERMAN ROMANTICISM

Spring term. Credit four hours. Th 1:25-3:20. Mr. Blackall.

Topic: The later romantics. The course will concentrate on four writers: Arnim, Brentano, Eichendorff, and Hoffmann.

[535. NINETEENTH-CENTURY GERMAN LITERATURE]

Fall term. Credit four hours. Mr. Deinert. Not offered in 1967-68.

537. TWENTIETH-CENTURY GERMAN LITERATURE

Fall term. Credit four hours. T 1:25-3:20. Mr. Pike.

Topic: Thomas Mann.

[540. HISTORY AND METHODS OF MODERN GERMAN LITERARY CRITICISM]

Spring term. Credit four hours. Mr. Jolles. Not offered in 1967-68.

COMP. LIT. 402. THE ENLIGHTENMENT IN GERMANY, FRANCE, AND ENGLAND

COMP. LIT. 409. POST-SYMBOLIST POETRY

COMP. LIT. 411. MODERN GERMAN LITERATURE

COMP. LIT. 520. EIGHTEENTH-CENTURY AESTHETICS

COMP. LIT. 526. EUROPEAN ROMANTICISM

LING. 541-542. COMPARATIVE GERMANIC LINGUISTICS

Seminars for Graduate Students

These seminars are intended for graduate students who are beyond the first year of their graduate study. Each seminar will deal with a specific topic in more detail than is possible in the graduate courses. The topics of the seminars will vary from year to year.

[601. GERMAN DIALECTOLOGY]

Fall term. Credit four hours. Hours to be arranged. Mr. Kufner. Not offered in 1967-68.

[611. GERMANIC PALEOGRAPHY AND CODICOLOGY]

Fall term. Credit four hours. Hours to be arranged. Mr. Marchand. Not offered in 1967-68.

[612. COMPARATIVE GERMANIC CULTURES]

Spring term. Credit four hours. Hours to be arranged. Mr. Marchand. Not offered in 1967-68.

651. SEMINAR IN GERMANIC LINGUISTICS I

Fall term. Credit four hours. Hours to be arranged. Mr. Puryear.

652. SEMINAR IN GERMANIC LINGUISTICS II

Spring term. Credit four hours. Hours to be arranged. Mr. Puryear.

653-654. SEMINAR IN GERMAN LITERATURE

Throughout the year. Credit four hours a term. Hours to be arranged. Staff.

HISTORY

Faculty: Knight Biggerstaff, John F. Boshier, David B. Davis, Edward W. Fox, Paul W. Gates, Richard Graham, Henry Guerlac, James J. John, Donald Kagan, Michael Kammen, John R. Kirkland, Helmut G. Koenigsberger, Walter F. LaFeber, Frederick G. Marcham, Charles A. Peterson, Walter M. Pintner, Richard Polenberg, Joel H. Silbey, James M. Smith, Brian Tierney, Mack Walker, L. Pearce Williams, Oliver W. Wolters.

Field Representative: Donald Kagan, 316 W. Sibley Hall.

MAJOR AND MINOR SUBJECTS

American History	Medieval Chinese History
Ancient History	Medieval History
Early Modern European History	Modern Chinese History
English History	Modern European History
History of Science	Russian History
Latin American History	Southeast Asian History

All applicants for admission to graduate study in the Field of History must include the scores of the Graduate Record Examination Aptitude Test with their other credentials.

Each major subject area of study within the department formulates its own foreign language requirement.

Candidates majoring in the Field of History may take minors in other history subjects or in other Fields of the Graduate School.

For available fellowships, see pages 14-17. Prospective students interested in applying for teaching fellowships, of which a number are available to students who have already completed at least one year of graduate study, should write directly to the chairman, Department of History, West Sibley Hall.

Graduate Courses

335. MEDIEVAL CULTURE, 400-1150

Spring term. Credit four hours. Prerequisites: History 303-304 or consent of the instructor. T Th 1:25. Mr. John.

336. MEDIEVAL CULTURE, 1150-1300

Spring term. Credit four hours. Prerequisites: History 303-304 or consent of the instructor. T Th S 12:20. Mr. Tierney.

341-342. EUROPE IN THE AGE OF THE RENAISSANCE, REFORMATION, AND COUNTER-REFORMATION

Throughout the year. Credit four hours a term. Prerequisite: six hours in European history or consent of the instructor. T Th S 11:15. Mr. Koenigsberger.

347. ENGLISH CONSTITUTIONAL HISTORY I: TO 1485

Fall term. Credit four hours. Prerequisite: History 303-304, History 307, or consent of the instructor. T Th S 12:20. Mr. Tierney.

348. ENGLISH CONSTITUTIONAL HISTORY II: SINCE 1485

Spring term. Credit four hours a term. Prerequisites: History 307-308, History 347, or consent of the instructor. T Th S 9:05. Mr. Marcham.

351. EUROPE IN THE NINETEENTH CENTURY

Fall term. Credit four hours. Prerequisite: History 106 or consent of the instructor. W F 1:25. Mr. Fox.

352. EUROPE IN THE TWENTIETH CENTURY

Spring term. Credit four hours. Prerequisite: History 106 or 351, or consent of the instructor. W F 1:25. Mr. Fox.

356. HISTORY OF MODERN GERMANY

Spring term. Credit four hours. Prerequisite: six hours in European history. T Th S 10:10. Mr. Walker.

369-370. SCIENCE SINCE 1850

Throughout the year. Credit four hours a term. Prerequisite: either an intense interest in the history of modern science (see the instructor) or two years of college science. History 369 is not prerequisite to 370. Hours to be arranged. Mr. Williams.

371. COLONIZATION FROM ANTIQUITY UNTIL THE EIGHTEENTH CENTURY

Fall term. Credit four hours. M W F 9:05. Mr. Kammen.

372. THE COLONIAL PERIOD OF AMERICAN HISTORY, 1607-1763

Spring term. Credit four hours. M W F 9:05. Mr. Kammen.

376-377-378. AMERICAN CULTURAL AND INTELLECTUAL HISTORY

Credit four hours a term. The three terms form a sequence but each may be taken independently and without prerequisite. M W F 10:10. Mr. Davis.

History 376 covers the period to 1820; History 377 covers the period 1820-1890; History 378 covers the period 1890 to the present.

379-380. RECENT AMERICAN HISTORY, 1890 TO THE PRESENT

Throughout the year. Credit four hours a term. T Th S 12:20. Mr. Polenberg.

431. THE ROMAN REPUBLIC, 133-30 B.C.

Fall term. Credit four hours. Prerequisite: History 302 or consent of the instructor. M W 1:25. Mr. Kagan.

432. GREEK HISTORY, 500-336 B.C.

Spring term. Credit four hours. Prerequisite: History 301 or consent of the instructor. M W 1:25. Mr. Kagan.

433. THE ROMAN EMPIRE, 30 B.C.-A.D. 180

Fall term. Credit four hours. Prerequisite: History 302 or consent of the instructor. M W 1:25. Mr. Kagan.

434. HELLENISTIC AGE

Spring term. Credit four hours. Prerequisites: History 301-302 or consent of the instructor. M W 1:25. Mr. Kagan.

437. CHURCH AND STATE DURING THE MIDDLE AGES

Fall term. Credit four hours. Prerequisites: History 303-304 or consent of the instructor. T Th S 12:20. Mr. Tierney.

438. FRANCE IN THE HIGH MIDDLE AGES

Spring term. Credit four hours. Prerequisites: History 303-304 or consent of the instructor. T Th S 12:20. Mr. Tierney.

442. THE SPANISH MONARCHY AND THE REVOLT OF THE NETHERLANDS

Spring term. Credit four hours. Prerequisites: six hours of European history and consent of the instructor. T Th S 9:05. Mr. Koenigsberger.

444. THE CENTURY OF ENLIGHTENMENT

Spring term. Credit four hours. A reading knowledge of French is required. Prerequisite: six hours in European history. M W F 10:10. Mr. Guerlac.

445. SOURCES OF EIGHTEENTH-CENTURY FRENCH HISTORY

Fall term. Credit four hours. Prerequisites: a reading knowledge of French and permission of the instructor. Th 2:30. Mr. Guerlac.

446. THE OLD REGIME IN FRANCE, 1660-1789

Spring term. Credit four hours. Prerequisites: a reading knowledge of French and six hours of European history. M W F 10:10. Mr. Guerlac.

450. HISTORY OF ENGLAND IN THE NINETEENTH AND TWENTIETH CENTURIES

Spring term. Credit four hours. Prerequisites: History 307-308 or consent of the instructor. T Th S 9:05. Mr. Marcham.

457. THE PROBLEMS OF GOVERNMENT IN THE ANCIENT REGIME

Fall term. Credit four hours. Prerequisites: History 343-344 or consent of the instructor. T Th S 12:20. Mr. Boshier.

461. ECONOMIC AND SOCIAL HISTORY OF RUSSIA

Fall term. Credit four hours. Prerequisites: History 309-310, or permission of the instructor. M 1:25-2:15, W 1:25-3:20. Mr. Pintner.

462. HISTORY OF RUSSIAN FOREIGN RELATIONS FROM THE FIFTEENTH CENTURY

Spring term. Credit four hours. Prerequisites: History 309-310 or permission of the instructor. M 1:25-2:15, W 1:25-3:20. Mr. Pintner.

467. INTELLECTUAL CURRENTS OF THE SEVENTEENTH CENTURY

Spring term. Credit four hours. Prerequisites: History 311-312 or consent of the instructor. Hours to be arranged. Mr. Guerlac.

473-474. AMERICAN HISTORY, 1763-1820

Throughout the year. Credit four hours a term. M W F 1:25. Mr. Smith.

481-482. AMERICAN HISTORY: HISTORY OF THE WEST

Throughout the year. Credit four hours a term. The first term is not prerequisite to the second. M W F 12:20. Mr. Gates.

487. MEXICO IN THE TWENTIETH CENTURY

Fall term. Credit four hours. Prerequisites: History 319-320 or consent of the instructor. M W F 11:15. Mr. Graham.

488. BRAZIL SINCE INDEPENDENCE

Spring term. Credit four hours. Prerequisites: History 319-320 or consent of the instructor. M W F 11:15. Mr. Graham.

492. CHINESE HISTORY: T'ANG AND SUNG PERIODS

Spring term. Credit four hours. Prerequisite: History 323 or consent of the instructor. T Th 1:25-3:20. Mr. Peterson.

495. SOUTHEAST ASIAN HISTORY TO THE FOURTEENTH CENTURY

Fall term. Credit four hours. T Th S 11:15. Mr. Wolters.

496. SOUTHEAST ASIAN HISTORY FROM THE FIFTEENTH CENTURY

Spring term. Credit four hours. Prerequisite: History 495 or consent of the instructor. T Th S 11:15. Mr. Wolters.

551. EVOLUTION OF THE FRENCH REPUBLIC

Spring term. Credit four hours. Prerequisite: consent of the instructor. A reading knowledge of French is required. T Th 3:35. Mr. Fox.

553. THE EUROPEAN REVOLUTION, 1789-1848

Fall term. Credit four hours. Prerequisite: consent of the instructor. A reading knowledge of French is required. T Th 3:35. Mr. Fox.

554. THE MODERNIZATION OF EUROPE

Spring term. Credit four hours. Prerequisite: consent of the instructor. Mr. Fox.

Graduate Seminars

501. INTRODUCTION TO HISTORICAL THEORY AND PRACTICE

Fall term. Credit four hours. Required of all entering graduate students in history (exemption may be granted by the instructor to students who have already completed a satisfactory equivalent). T Th 3:35. Mr. John.

Problems of historical thought, research, and writing as illustrated by historians representative of various cultures, periods and schools. Intensive supervision in the preparation of a term paper.

508. POLITICS AND THE SOCIETY IN COLONIAL AMERICA

Spring term. Credit four hours. Hours to be arranged. Mr. Kammen.

A topical seminar with emphasis upon the process of political socialization, factionalism, the development of party, and protest movements in relationship to social structure.

511-512. SUPERVISED READING

Throughout the year. Credit four hours a term. Hours to be arranged. Staff.

591. CHINESE HISTORIOGRAPHY

Fall term. Credit four hours. Prerequisite: consent of the instructor. Hours to be arranged. Mr. Peterson.

593-594. MODERNIZATION OF CHINA

Throughout the year. Credit four hours a term. Prerequisite: History 324 with a grade of B or better, or permission of the instructor. 591 prerequisite to 592. Conducted as a seminar. M 3:35-5:30. Mr. Biggerstaff.

Topical study of the impact of Western civilization upon traditional China and of the changes in China during the first half of the twentieth century.

631-632. SEMINAR IN ANCIENT HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Kagan.

635-636. SEMINAR IN MEDIEVAL HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. John.

637-638. SEMINAR IN MEDIEVAL HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Tierney.

639-640. SEMINAR IN LATIN PALEOGRAPHY

Throughout the year. Credit four hours a term. First term prerequisite to the second. Hours to be arranged. Mr. John.

641-642. SEMINAR IN EUROPEAN HISTORY DURING THE ERA OF THE RENAISSANCE AND REFORMATION

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Koenigsberger.

647-648. SEMINAR IN TUDOR AND STUART HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Marcham.

649-650. SEMINAR ON THE FRENCH REVOLUTION

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Boshier.

82 HISTORY

651-652. SEMINAR IN MODERN EUROPEAN HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Fox.

657-658. SEMINAR IN MODERN GERMAN HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Walker.

661-662. SEMINAR IN RUSSIAN HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Pintner.

665-666. SEMINAR IN THE HISTORY OF EARLY MODERN SCIENCE

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Guerlac.

667-668. SEMINAR IN THE HISTORY OF SCIENCE DURING THE NINETEENTH AND TWENTIETH CENTURIES

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Williams.

671-672. SEMINAR IN EARLY AMERICAN HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Smith.

673-674. SEMINAR IN AMERICAN POLITICAL HISTORY AND THE ANTE-BELLUM PERIOD

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Silbey.

675-676. SEMINAR IN AMERICAN CULTURAL AND INTELLECTUAL HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Davis.

679-680. SEMINAR IN THE HISTORY OF THE AMERICAN WEST

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Gates.

683-684. SEMINAR IN THE HISTORY OF AMERICAN FOREIGN RELATIONS

Throughout the year. Credit four hours a term. Hours to be arranged. Mr. LaFeber.

685-686. SEMINAR IN RECENT AMERICAN HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Polenberg.

687-688. SEMINAR IN LATIN AMERICAN HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Graham.

691-692. SEMINAR IN MODERN CHINESE HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Biggerstaff.

695-696. SEMINAR IN SOUTHEAST ASIAN HISTORY

One or two terms. Credit four hours a term. Hours to be arranged. Mr. Wolters.

HISTORY OF ART AND ARCHAEOLOGY

Faculty: Theodore M. Brown, Robert G. Calkins, William C. Lipke, Stanley J. O'Connor, Albert S. Roe, Frederick O. Waage, Martie W. Young.

Visiting Professor: Alexander B. Griswold.

Field Representative: Robert Calkins, 32 Goldwin Smith Hall.

MAJOR SUBJECTS

American Art
Ancient Art and Archaeology
Modern Art
Oriental Art
Renaissance and Baroque Art

MINOR SUBJECTS

American Art
Ancient Art and Archaeology
Medieval Art
Modern Art
Oriental Art
Renaissance and Baroque Art

ADMISSION REQUIREMENTS. An undergraduate major in the history of art is, of course, recommended; however, students who have completed with distinction majors in related fields of the humanities such as literature, philosophy, history, etc., and have had some basic course work in the history of art, should feel encouraged to apply. In certain cases some additional advanced undergraduate course work may be recommended for first-year students to round out their previous experience.

LANGUAGE REQUIREMENTS. All students before admission will be expected to present evidence of proficiency in French, German, Italian, or some other foreign language appropriate to the applicant's intended program. Those intending to proceed to candidacy for the Ph.D. should be prepared to meet requirements in a second language preferably not later than the end of the third term of residence; in any case this requirement must be satisfied prior to being admitted to the Admission to Candidacy Examination. The second language will be recommended by the student's Special Committee as being most applicable to his particular program; normally two closely related languages (e.g., French and Italian) will not fulfill the second language requirement. It cannot be overemphasized how essential proficiency in languages is to advanced study in this Field.

EXAMINATIONS. The Examination for the doctoral degree comprehensive Admission to Candidacy will be both written and oral and will test extensive knowledge of the material, bibliography, and scholarship of the major and two minor subjects. The dissertation and the oral Final Examination on the dissertation must be preceded by at least two terms of residence normally related to preparation of the thesis. For those seeking a Master of Arts degree as a terminal degree, there will be an examination, both oral and written, to test general knowledge of basic areas of the discipline and more substantial and detailed familiarity with the areas of the major and minor. This examination will ordinarily come at the end of the third or fourth term of residence.

Students from other Fields who choose a minor in the History of Art and Archaeology will be assigned course work as appropriate; they will also be expected to pass an oral and written examination in the general area of the minor.

RESEARCH AND STUDY OPPORTUNITIES. For beginning graduate students a program of regular course work will be set up by the student's Special Committee; in each course additional individual work will be assigned.

More advanced graduate students will pursue independent study under faculty direction.

Major study facilities are provided by the collections of Olin Library, which contain resources of primary material for this Field, and of the Fine Arts Library in Sibley Hall, which provides a constantly expanding collection of holdings in art and architectural history totaling at the present time approximately 42,000 volumes. The Andrew Dickson White Museum of Art has in its permanent collection significant study material, especially in the areas of graphic arts, American art, and the art of the Far East. A program of special exhibitions is provided and a number of major exhibitions are organized annually. Opportunities are available for graduate students to gain experience in the operations of the Museum and to assist with problems of installation, catalog preparation, etc. In addition to having occasional opportunities to visit the major collections in New York City, the graduate student in Ithaca is within reasonable distance of such important institutions as the Albright Art Gallery in Buffalo, the Memorial Art Gallery in Rochester, and the Munson-Williams-Proctor Institute in Utica. The Department of the History of Art is the repository of a study collection of photographs of works of art and of a rapidly expanding collection of some 50,000 slides, which is especially strong in the areas of American, modern, and Oriental art.

In certain areas a balanced graduate program will normally entail work in various other Fields and in related Area Programs. In the history of architecture there is a joint program with the College of Architecture, Art, and Planning. An interdepartmental program is available in archaeology, and a pamphlet describing the various offerings will be sent on request. The Asian Studies Program also issues a publication with a full description of the facilities in the various areas of Far Eastern studies. A study Archive of Chinese Art is being developed within the Department of the History of Art. Students working in the area of Southeast Asian art will be able to attend a short but intensive seminar to be conducted each summer by Mr. Alexander Griswold at the Breezewood Foundation near Baltimore, Maryland, which houses an outstanding study collection of Siamese art. Other related fields, such as history, philosophy, literature, etc., provide the opportunity for strong minor programs in connection with many areas of the history of art.

The areas of specialization of the members of the graduate faculty are as follows: American art: Mr. Roe, Mr. Lipke; ancient art and archaeology: Mr. Waage, Mr. Turnure; medieval art and architecture: Mr. Calkins; modern art: Mr. Roe, Mr. Lipke; nineteenth-century art and modern architecture: Mr. Brown; Oriental art: Mr. Young (Chinese and Japanese art), Mr. O'Connor, and Mr. Griswold (art of Southeast Asia and India); Renaissance and Baroque art: Mr. Roe, Mr. Turnure.

FINANCIAL AID. The Department is able to award two teaching fellowships and a graduate assistantship. Several Kress Foundation Fellowships are also available. The Franklin and Gretel Goldring Memorial Fellowship provides summer travel support for several advanced students. The Field is among those which participate in the NDEA Title IV Program. For further information on opportunities for financial aid, see pages 14-17.

Courses

411. TECHNIQUES AND MATERIALS: PAINTING

Fall term. Credit four hours. Prerequisites: at least four courses in the history of art and consent of the department chairman. For majors and other advanced students. Limited to fifteen students. T 1:25-3:25. Mr. Kahn.

Deals with technical aspects of painting in the historical context. Included are studies of traditional media employed by the old masters, conservation techniques, and laboratory exercises. Conducted as a seminar with lectures, discussions, museum study, projects, and reports.

412. TECHNIQUES AND MATERIALS: GRAPHICS

Spring term. Credit four hours. Prerequisites: at least four courses in the history of art and consent of the department chairman. For majors and other advanced students. Limited to fifteen students. M 1:25-3:25. Mr. Kahn.

Deals with the various techniques involved in the graphic media throughout its history, with special emphasis on the relationships of form, expression, and technique. Conducted as a seminar, with lectures, discussions, technical and museum studies, and reports.

421. NUMISMATICS

Fall term. Credit four hours. Prerequisite: consent of the instructor. Mr. Waage.

423. CERAMICS AND THE TECHNIQUES OF EXCAVATION

Fall term. Credit four hours. Prerequisite: consent of the instructor. T 1:25. Mr. Waage.

Pottery specimens are studied to provide some experience in one of the basic prerequisites of archaeological excavation—the identification of types of pottery. Reports on the use of ceramics and other materials for dating and on the technique of conducting excavations.

431. PROBLEMS IN LATE MEDIEVAL ART

Fall term. Credit four hours. Prerequisite: History of Art 331 or consent of the instructor. M 1:25-3:25. Mr. Calkins.

Topic for 1967-68: Northern European painting in the first quarter of the fifteenth century. Conducted as a seminar, with lectures, discussions, and reports.

446. LITERARY SOURCES IN THE ITALIAN RENAISSANCE

Spring term. Credit four hours. Th 1:25-3:25. Mr. Selig.

An examination of a selected number of texts from the field of *Kunstliteratur* (Alberti, Leonardo, Vasari, among others), and consideration of their importance to the history of art and literary criticism with special attention to the critical terminology used. The texts will be read in English. Conducted as a seminar, with lectures, discussion, and reports.

448. PROBLEMS IN SIXTEENTH-CENTURY ART

Spring term. Credit four hours. Prerequisite: consent of the instructor. Th 1:25-3:25. Mr. Roe.

454. STUDIES IN SEVENTEENTH-CENTURY ART

Spring term. Credit four hours. Prerequisites: History of Art 202 or the equivalent and consent of the instructor. Th 1:25-3:25. Mr. Turnure.

463. PROBLEMS IN TWENTIETH-CENTURY ART

Fall term. Credit four hours. Prerequisites: History of Art 363 or 376 and consent of the instructors. Th 1:25-3:25. Mr. Lipke and Mrs. Benson.

Topic for 1967-68: Contemporary Philosophies of Art and Art Criticism. An investigation of recent critical writings on the visual arts with the emphasis on the function of criticism, contemporary philosophies of art, and aesthetic

inquiry. Conducted as a seminar, with lectures, discussion, field work, and reports.

464. PROBLEMS IN TWENTIETH-CENTURY ART

Spring term. Credit four hours. Prerequisites: History of Art 363 or 376 and consent of the instructors. Th 1:25-3:25. Mrs. Benson and Mr. Lipke.

Topic for 1967-68: Intermedia in the Visual Arts. A study of new media in the visual arts since 1945 and their interrelationships, with consideration of relevant trends in the cinema, happenings, and environmental painting and sculpture. Conducted as a seminar with lectures, discussions, and reports.

472. PROBLEMS IN AMERICAN ART

Spring term. Credit four hours. Prerequisites: History of Art 375 and consent of the instructor. W 1:25-3:25. Mr. Roe.

484. PROBLEMS IN CHINESE ART

Spring term. Credit four hours. Prerequisites: History of Art 383 and consent of the instructor. W 1:25-3:25. Mr. Young.

486. STUDIES IN CHINESE PAINTING

Spring term. Credit four hours. Prerequisites: History of Art 383 and consent of the instructor. W 1:25-3:25. Mr. Young.

Topic for 1967-68: Chinese Painting and Abstract Art. A comparative examination of the principles behind abstraction and conventions in Chinese paintings of the seventeenth and eighteenth centuries, and twentieth-century Western art. Conducted as a seminar with discussions, museum study, and reports.

488. SOUTHEAST ASIAN ART AND ARCHAEOLOGY

Fall term. Credit four hours. Prerequisite: consent of the instructor. W 1:25-3:25. Mr. O'Connor.

Topic for 1967-68: Southeast Asia in the Pre-Colonial Period. Studies of selected monuments and art traditions before the advent of Western influence in the region. Conducted as a seminar, with lectures, readings, discussions, and reports.

ARCH. 474. GOTHIC ARCHITECTURE

Spring term. Prerequisite: consent of the instructor. Hours to be arranged. Mr. Calkins.

ARCH. 479. PROBLEMS IN THE HISTORY OF MODERN ARCHITECTURE

Spring term. Credit four hours. Hours to be arranged. Mr. Brown.

Investigation, by means of readings, lectures, and reports, of historical problems in architecture of the eighteenth, nineteenth, and twentieth centuries in Europe.

MEDIEVAL STUDIES

Faculty: Barry B. Adams, Vilhjálmur T. Bjarnar, Robert G. Calkins, Alice M. Colby, Robert T. Farrell, Frederick A. Foos, John Freccero, Robert A. Hall, Jr., Thomas D. Hill, James Hutton, Alfred L. Ivry, James J. John, Robert E. Kaske, Norman Kretzmann, Pardee Lowe, Jr., James W. Marchand, Hugh Olmstead, Joseph Puryear, Isaac Rabinowitz, Felix Reichmann, Karl-Ludwig Selig, Brian Tierney.

Field Representative: James W. Marchand, 227 Morrill Hall.

MAJOR AND MINOR SUBJECTS

Medieval History

Medieval Literature: English,
German, Latin, Norse, Romance

Medieval Philology: Germanic,

Romance, Slavic
Medieval Philosophy

The aim of this Field is to allow the student to concentrate more fully upon medieval studies, and to supplement his major interest with a greater number of courses in related disciplines than is possible within the programs of other Fields which include some medieval studies as part of their province.

Though certain requirements are absolute (e.g., a reading knowledge of Latin, and a course in palaeography and research methods), emphasis will be on the formulation of individual programs to fit the interests and needs of particular students, and on the meaningful combination of mutually relevant disciplines.

LANGUAGE REQUIREMENTS. For the M.A., a mastery of Latin and one other medieval language; for the Ph.D., a mastery of several medieval languages including Latin.

Courses

For complete information on the following courses, consult the offerings in Classics, English, German, Romance Studies, History, History of Art and Archaeology, Philosophy, Slavic Studies, and Semitic Studies.

ARABIC

317. ISLAMIC TEXTS IN ARABIC. Mr. Ivry.

318. ARABIC GEOGRAPHERS AND HISTORIANS. Mr. Ivry.

CLASSICS

369. MEDIEVAL LATIN LITERATURE. Mr. Caplan.

COMPARATIVE LITERATURE

327-328. MEDIEVAL LITERATURE. Mr. Hill, Mr. Freccero.

ENGLISH

306. THE EARLIEST ENGLISH LITERATURE. Mr. Hill.

365. CHAUCER. Mr. Kaske.

501. READINGS IN OLD ENGLISH. Mr. Farrell.

502. BEOWULF. Mr. Hill.

503. MIDDLE ENGLISH. Mr. Kaske.

88 MEDIEVAL STUDIES

504. CHAUCER. Mr. Kaske.

506. PHILOLOGICAL PROBLEMS IN THE STUDY OF ENGLISH LITERATURE. Mr. Farrell.

509. MEDIEVAL DRAMA. Mr. Adams.

608. STUDIES IN MEDIEVAL LITERATURE. Mr. Kaske.

FRENCH

447-448. MEDIEVAL LITERATURE. Miss Colby.

539. INTRODUCTION TO FRENCH PHILOLOGY. Miss Colby.

548. GRADUATE SEMINAR IN MEDIEVAL LITERATURE. Miss Colby.

GERMAN

405. INTRODUCTION TO MIDDLE HIGH GERMAN. Mr. Puryear.

406. MIDDLE HIGH GERMAN LITERATURE. Mr. Puryear.

502. GOTHIC. Mr. Puryear.

503. OLD SAXON. Mr. Puryear.

504. OLD HIGH GERMAN. Mr. Puryear.

509-510. OLD NORSE. Mr. Bjarnar.

511. SAGAS. Mr. Lowe.

512. EDDAS. Mr. Lowe.

521. MIDDLE HIGH GERMAN LITERATURE I.

522. MIDDLE HIGH GERMAN LITERATURE II. Mr. Marchand.

523. GERMAN POETRY OF THE LATE MIDDLE AGES. Mr. Dallett.

HEBREW

305. POST-BIBLICAL HEBREW PROSE. Mr. Ivry.

ITALIAN

345-346. DANTE. Mr. Freccero.

433. OLD ITALIAN TEXTS. Mr. Hall.

546. SPECIAL TOPICS IN THE DIVINE COMEDY. Mr. Freccero.

LINGUISTICS

443-444. COMPARATIVE ROMANCE LINGUISTICS. Mr. Hall.

541-542. COMPARATIVE GERMANIC LINGUISTICS. Mr. Marchand.

composition. The Master's degree in theory of music may either be terminal or lead to doctoral studies in musical composition or musicology.

Applicants for admission are asked to submit scores for the Graduate Record Examination Aptitude Test. All applicants also must take a test of musical proficiency, including sight singing, melodic and harmonic dictation, score reading, and sight reading at the piano. Sample copies of this test and further information may be obtained from the Office of the Music Department.

Minimum language requirements for the M.A. and the Ph.D. in musicology are a reading knowledge of French and German; for the M.A. in theory or composition and for the A.Mus.D., a reading knowledge of French or German. These requirements may be satisfied by one of the following procedures: a) undergraduate Qualification in the Division of Modern Languages by the CEEB Examination, or course work and the CEEB Examination; or b) passing of the ETS Graduate Foreign Language Test, followed by a Cornell-administered reading test. All students in the Field of Music need to continue to develop a more intimate knowledge of the required languages (and others); upon recommendation of their Special Committee, they may be asked to show such knowledge by formal or informal examinations. Applicants who are admitted with deficiencies either in language proficiency or in basic musicianship (as determined by the Music Proficiency Test) must make up these deficiencies within their first year of resident study at Cornell.

A student is admitted to doctoral candidacy after he has passed the Admission to Candidacy Examination administered by his Special Committee. The passing of this examination certifies that the student is eligible to present a thesis to the Graduate School Faculty. The examination may not be taken until two units of residence credit have been accumulated, and a minimum of two units of residence credit is required after passing this examination before the Final Examination on the thesis can be scheduled. In those cases in which the Master's degree candidate has fulfilled all the prerequisites for the examination for admission to doctoral candidacy, the final examination for the Master's degree may be combined with the Admission to Candidacy Examination.

Compositions of student composers are performed by members of the Music Faculty, including David Montagu, violinist, and Barbara Troxell, soprano, by ensembles conducted by Professors Husa, Sokol, and others, and by occasional visitors.

The Music Library, a part of the University Library system, is housed in the Department of Music. It has an excellent collection of the standard research tools, including collected editions, *Denkmäler*, and periodicals. The Music Library's holdings consist of 40,000 books and scores and 13,000 records. Particularly noteworthy are the collections of opera scores from all periods, scores and records of music from the contemporary period, and a large microfilm collection of Renaissance sources, both theoretical and musical.

Donald J. Grout, the opera historian, heads the faculty in musicology. Both he and William W. Austin, the author of *Music in the Twentieth Century*, work closely with the students whose studies are mainly historical. John Kirkpatrick, pianist and adviser for the Ives Collection at Yale University, specializes in the music of Charles Ives. Robert Palmer and Karel Husa are in charge of students in theory and composition. The former is also a pianist with wide-ranging interests in music of all periods, and the latter is an active conductor both in the United States and abroad. John Hsu, cellist and gambist, in addition to performing, is actively engaged in editing the largely unknown solo gamba repertoire of seventeenth- and eighteenth-century France. Choral activities are under the direction of Thomas A. Sokol, who specializes in vocal music of the Spanish Renaissance. The Music Librarian,

Harold E. Samuel, editor of the journal of the Music Library Association, *Notes*, teaches bibliography and works in early seventeenth-century German music. William C. Holmes is particularly interested in opera of the Italian Baroque.

Courses

381-382. HISTORY OF MUSIC I

Throughout the year. Credit four hours a term. First term prerequisite to second. M 1:25-3:20, W 1:25. Mr. Holmes.

History of musical styles from the Middle Ages to Beethoven. Intensive study of musical scores, readings from theoretical sources (in translation), and written reports.

451. ADVANCED COUNTERPOINT AND ANALYSIS: EIGHTEENTH CENTURY

Fall term. Credit four hours. M W 12:20 and Th 2:30. Mr. Palmer.

Advanced problems of contrapuntal writing in three voices. An introduction to invertible counterpoint and fugal writing. Representative works employing the fugal principle will be analyzed with particular attention to those of Bach.

[453. ADVANCED COUNTERPOINT AND ANALYSIS: SIXTEENTH CENTURY]

Fall term. Credit four hours. Mr. Palmer. Not offered in 1968-69.

455. ORCHESTRATION

Fall term. Credit four hours. Hours to be arranged. Mr. Husa.

A study of the instruments of the orchestra and their use in representative works from 1700 to the present. Scoring for various instrumental groups including large orchestra. Students will occasionally attend rehearsals of the Cornell musical organizations and ensembles.

457-458. COMPOSITION (PROSEMINAR)

Credit four hours a term. May be entered either term. Hours to be arranged. Mr. Husa.

Problems of writing in the smaller forms and in various media. Class discussion and performance, with analysis of contemporary works. The basic techniques of composition and their extensions in the twentieth century will be related to individual ability and needs. Students will be required to attend the Friday afternoon reading sessions of student compositions and occasionally to attend rehearsals of the Cornell musical organizations and ensembles.

481. HISTORY OF MUSIC II

Fall term. Credit four hours. Prerequisite: Music 382. M 1:25-3:20 and individual conferences. Mr. Grout.

History of musical styles from the time of Beethoven to the present.

482. MUSICOLOGY (PROSEMINAR)

Spring term. Credit four hours. Prerequisite: Music 481. M 1:25-3:20. Mr. Grout.

Principles of research. Introduction to notation, with exercises in transcription from sources and preparation of performing editions.

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555. ANALYSIS

Fall term. Credit four hours. T 9:05-11, Th 9:05. Mr. Palmer.

An introduction to the systematic analysis of musical structure, melody, and harmony. Emphasis on the Viennese classic composers and Bach, with some consideration of later music.

557-558. SEMINAR IN COMPOSITION

Throughout the year. Credit four hours a term. W 1:25-3:20. Mr. Palmer.

Intended to make the student acquainted with compositional practices in contemporary styles and to develop his creative abilities.

580. INTRODUCTION TO CONTEMPORARY MUSIC

Spring term. Credit two hours. T 9:05. Mr. Palmer.

Approaches to the analysis of short works of representative composers, with emphasis on only one or two techniques in each composition.

581-582. INTRODUCTION TO BIBLIOGRAPHY AND RESEARCH

Throughout the year. Credit four hours a term. Prerequisites: a reading knowledge of French and German and an elementary knowledge of music theory and general music history. M 1:25-3:20. Mr. Samuel.

The basic materials and techniques of musicological research.

[585-586. DEBUSSY TO BOULEZ]

Throughout the year. Credit four hours a term. Prerequisites: Music 580 and 582 or equivalent. Mr. Austin. Not offered in 1968-69.

680. CONTEMPORARY MUSIC (SEMINAR)

Spring term. Credit two hours. Prerequisite: Music 580. T 1:25. Mr. Palmer.

Detailed analysis of a limited number of larger works representative of main trends in twentieth-century music. Different works are chosen each year.

681-682. MUSICOLOGY (SEMINAR)

Throughout the year. Credit four hours a term. M 9:05-11. Mr. Grout.

683-684. PALAEOGRAPHY

Throughout the year. Credit four hours a term. Prerequisite: reading knowledge of French and German. Reading knowledge of Latin is desirable. Th 1:25-3:20. Mr. Holmes.

Studies in the history of musical notation and theory from the tenth to the sixteenth centuries. Transcriptions and performance from original notation.

[685-686. HISTORY OF OPERA (SEMINAR)]

Throughout the year. Credit four hours a term. Mr. Grout. Not offered in 1967-68, 1968-69.

PHILOSOPHY

Faculty: Max Black, Stuart M. Brown, Jr., John V. Canfield, Keith S. Donnellan, Arthur Fine, Bruce C. Goldberg, Norman Kretzmann, David B. Lyons, Norman Malcolm, Nelson C. Pike, David Sachs, Sydney S. Shoemaker, Richard R. K. Sorabji, Michael Stocker.

Professor-at-Large: Georg Henrik von Wright, University of Helsinki.

Field Representative: David B. Lyons, 321 Goldwin Smith Hall.

MAJOR SUBJECTS

Aesthetics
 Epistemology
 Ethics
 History of Philosophy
 Logic
 Metaphysics
 Philosophy of Religion
 Philosophy of Science

MINOR SUBJECTS

Aesthetics
 Epistemology
 Ethics
 History of Philosophy
 Logic
 Metaphysics
 Philosophy
 Philosophy of Religion
 Philosophy of Science
 Political Philosophy

THE SAGE SCHOOL. The Susan Linn Sage School of Philosophy, which comprises the Field of Philosophy in the Graduate School, was founded through the generosity of Henry W. Sage, who endowed the Susan Linn Sage Professorship and gave in addition \$200,000 to provide permanently for instruction and research in philosophy.

There are at present twelve faculty members engaged in full-time instruction and two in part-time instruction. The total number of graduate students in residence is presently fixed at thirty-one. Thus graduate students are provided with unusual opportunities for discussion and personal contact with faculty members.

The faculty of the Sage School manages and edits *The Philosophical Review*, one of the best-known philosophical journals.

ADMISSION REQUIREMENTS. The instruction offered to graduate students presupposes such undergraduate courses in the subject as would be taken by a student in the College of Arts and Sciences of Cornell University who had elected philosophy as a major subject. Those who have not had equivalent preparation are expected to make up their deficiencies outside the work required for an advanced degree.

The aim of the Field in graduate work is to devote its resources primarily to the instruction of students who expect to proceed to the Ph.D. with a major in philosophy. It is not the normal policy of the Field to accept as graduate students those who have no intention of pursuing academic work beyond the M.A. degree. However, the Field will be prepared to accept as M.A. candidates those students who expect to continue advanced studies later, either in philosophy or in some other field, and those who, while not expecting to pursue graduate work beyond the M.A., nevertheless give satisfactory evidence of a serious interest in philosophy.

THE CURRICULUM. The Field of Philosophy provides opportunity for advanced study to two classes of graduate students: those whose major interest is in some branch of philosophy; and those whose chief branch of research is in allied fields but who desire to supplement this with a minor in philosophy.

1. A student whose major interest is in philosophy is required (a) to gain a general knowledge of the whole subject including its history, and (b) to select some aspect or subdivision of it for intensive study and research.

2. A student having a major interest in literature or the arts, in history or social studies, or in mathematics or a branch of experimental science is permitted to choose a minor in philosophy with such emphasis as best suits his needs. For such a student the School endeavors to outline a plan of philosophical study (in courses or directed reading) which will form a natural supplement to his field of research.

A doctoral candidate is normally in residence for four years. During the first two he takes a total of twelve courses or seminars at the rate of three per semester; this period is also devoted to preparation for the Admission to Candidacy Examination. During the second two years he writes his thesis.

The three members of the candidate's Special Committee advise him in his choice of courses, are consulted when he writes his thesis, and are included among his examiners. New graduate students choose their Special Committees in consultation with the Field Representative, but candidates for the Ph.D. are required to reconstitute their Committees before beginning systematic work on their theses.

The meetings of the Philosophy Discussion Club are among the outstanding features of the graduate program at Cornell. Membership is limited to graduate students and faculty members in the Field of Philosophy, undergraduate Honors candidates, and others by invitation. Every fortnight the Club meets to hear a paper from one of its members or a visiting scholar. The papers are short, and ample time is provided for discussion. A number of distinguished philosophers visit the Club every year.

LANGUAGE REQUIREMENTS. For the M.A. degree: proficiency in French or German immediately upon admission.

For the Ph.D. degree: proficiency in two languages chosen from among French, German, Greek, Latin, or Russian, including at least one modern language (i.e., not Greek or Latin). Languages other than the five mentioned may be used only upon special permission of the Field. A student not satisfying both language requirements upon admission must give evidence to his Special Committee that he is actively preparing for the examinations in question. A student who has not satisfied both language requirements by the end of his second semester in residence must register for course work in the languages still outstanding. The oral defense of the Ph.D. thesis may not be scheduled until after both language requirements are satisfied.

EXAMINATIONS. (1) If there is doubt whether a student should continue study for the Ph.D. after his first semester, he will be given an examination early in the second semester, based on the written work done in his first semester and on any other materials he wishes taken into account. The same criterion is used to determine whether terminal M.A. candidates shall proceed to the writing of an M.A. essay.

(2) The Admission to Candidacy Examination will consist of four written parts and an oral part, to be completed by the end of the second year of study. These include: (a) a two and one-half hour examination in logic, which may be taken in either the first or the second spring semester; (b) a four-hour examination in ethics and the history of ethics, to be taken in the second fall semester; (c) a four-hour examination in the history of philosophy, excluding the history of ethics, to be taken in the second spring semester; (d) a four-hour examination on philosophical problems, excluding problems in ethics, to be taken in the second spring semester; (e) an oral review of the written parts, to be taken at the end of the second spring semester.

(3) The Final Examination will be an oral examination on the candidate's thesis and related topics, given after the thesis has been approved by the candidate's Special Committee. Two units of residence credit (normally two semesters) are required after passing the Admission to Candidacy Examination before the Final Examination may be scheduled.

Terminal M.A. candidates write an essay of 6,000-10,000 words, on a subject chosen in consultation with the candidate's Special Committee. They are given an oral examination on this essay and related subjects.

Special Areas of Research

- Max Black: philosophy of mathematics, philosophy of science, semantics, philosophy of logic.
- Stuart M. Brown, Jr.: political theory.
- John V. Canfield: philosophy of the social sciences, epistemology.
- Keith S. Donnellan: metaphysics, epistemology, philosophy of language.
- Arthur Fine: advanced logic, philosophy of science.
- Bruce C. Goldberg: history of philosophy, philosophy of mind, philosophy of language.
- Norman Kretzmann: medieval philosophy and logic, ancient philosophy and logic, history of semantics.
- David B. Lyons: moral, political, and legal philosophy.
- Norman Malcolm: epistemology, philosophy of mind, history of philosophy, metaphysics.
- Nelson C. Pike: philosophy of religion, history of philosophy.
- David Sachs: ancient philosophy, philosophy of mind, philosophy of literature, aesthetics.
- Sydney S. Shoemaker: metaphysics, philosophy of mind, history of philosophy.
- Richard R. K. Sorabji: ancient philosophy, ancient science.
- Michael Stocker: moral, political, and legal philosophy.
- Georg Henrik von Wright: philosophy of science, modal logic, moral philosophy.

FINANCIAL AID: Financial support for the full four-year residence period is available for new students. The Field of Philosophy requires teaching experience for all graduate students as a condition for the award of the Ph.D. This training shall be limited to two or three of the student's eight semesters in residence, and is done usually within the second or third years. Teaching fellows devote a maximum of fifteen hours per week to their work, which normally includes leading discussion sections of undergraduate courses and the grading of papers.

Courses Open to Graduate Students

Courses numbered 500 or above are conducted as graduate seminars. Topics are listed below for seminars offered in 1967-1968; the topic under each heading is likely to vary from year to year.

551. PHILOSOPHY OF RELIGION

Mr. Pike. The attributes of God.

576. ANCIENT PHILOSOPHY

Mr. Sachs. The *Theaetetus* and related dialogues.

580. MEDIEVAL PHILOSOPHY

Mr. Kretzmann. Ockham's logic and metaphysics.

585. ETHICS AND VALUE THEORY

Mr. Lyons. Rights.

587. AESTHETICS

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588. METAPHYSICS

Mr. Goldberg (Mr. Shoemaker in alternate years.) Materialism.

589. METAPHYSICS

Mr. Donnellan.

594. THEORY OF KNOWLEDGE

Mr. Malcolm. Wittgenstein's *Zettel*.

595. SEMANTICS AND LOGIC

Mr. Black. The philosophy of linguistics.

597. THE PHILOSOPHY OF SCIENCE

Mr. Fine. Topic to be announced.

Courses numbered 400-499 are open both to graduate students and to seniors majoring in philosophy. These are usually of seminar size but meet several times each week. Topics are listed below for 400-level courses offered in 1967-1968; the topic under each heading is likely to vary from year to year.

403. PLATO AND ARISTOTLE

Mr. Sorabji. Aristotle as scientist and philosopher.

412. DEDUCTIVE LOGIC

Mr. Fine. (Mr. Donnellan in alternate years.)

413. DEDUCTIVE LOGIC

Messrs. Black and Fine.

414. PHILOSOPHY OF LOGIC

Messrs. Black, Donnellan, and Fine.

415. PROBLEMS IN PHILOSOPHY OF LANGUAGE

Mr. Goldberg.

416. METAPHYSICS

Messrs. Malcolm and Shoemaker.

417. THEORY OF KNOWLEDGE

Mr. Malcolm. Memory and historical knowledge.

425. CONTEMPORARY ETHICAL THEORY

Mr. Stocker. Value and obligation.

427. PROBLEMS IN PHILOSOPHY OF SCIENCE

Mr. Canfield. The concept of the self in recent psychological and social theory.

433. PROBLEMS IN ETHICS AND PHILOSOPHY OF MIND

Mr. Sachs. Moral feelings.

Courses numbered 300-399 are primarily for undergraduates. The Depart-

ment decides each year which 300-level courses should be open to graduate students. The following 300-level courses have been open to graduate students in recent years:

302. MODERN PHILOSOPHY II

Messrs. Pike and Shoemaker. British Empiricists.

303. MEDIEVAL PHILOSOPHY

Mr. Kretzmann.

304. ANCIENT PHILOSOPHY AND SCIENCE

Mr. Sorabji.

307. KANT

Mr. Goldberg.

314. INTRODUCTION TO PHILOSOPHY OF MATHEMATICS

Mr. Black.

325. ETHICAL THEORY

Mr. Sturgeon.

327. INTRODUCTION TO PHILOSOPHY OF SCIENCE

Mr. Fine.

333. PHILOSOPHY OF PSYCHOLOGY

Mr. Malcolm.

RELATED COURSES IN OTHER DEPARTMENTS

CLASSICS: Seminars on Plato, Aristotle, Lucretius, and Cicero.

HISTORY 369-370. SCIENCE SINCE 1850

HISTORY 466. ORIGINS OF MODERN SCIENCE: THE CHEMICAL REVOLUTION

HISTORY 665-666. SEMINAR IN THE HISTORY OF EARLY MODERN SCIENCE

HISTORY 667-668. SEMINAR IN THE STUDY OF SCIENCE DURING THE NINETEENTH AND TWENTIETH CENTURIES

LING. 513-514. TRANSFORMATIONAL ANALYSIS

MATH. 481-482. LOGIC

MATH. 681-682. SEMINAR IN LOGIC

MATH. 683. THEORY OF MODELS

SEMITIC LANG. 461. ARABIC PHILOSOPHERS

Joint Program in Ancient Philosophy with the Field of Classics

The object of the joint program is to meet the demand for scholars of ancient philosophy who are competent in both philosophy and Classics. Participants may specialize in one discipline or the other, but it is intended they shall become competent in both. They will be required to take courses in both Fields and their Special Committees will be composed of faculty members from both. At present there are four scholars of ancient philosophy in the program: Gordon M. Messing in Classics; Norman Kretzmann, David Sachs, and Richard Sorabji in philosophy.

When ancient philosophy is taken as a major subject, the course requirements are as follows: (a) two courses on Plato (one in Classics, one in philosophy), (b) two courses on Aristotle (similarly divided), (c) two additional courses in the Department of Classics, (d) two additional courses in the Department of Philosophy, (e) four remaining courses determined by consultation with the student's Special Committee. Thus a basic core of courses will be in Plato and Aristotle. There are several ancient philosophy courses available which can be taken in partial fulfillment of requirements (c), (d) and (e).

Participants either should have had three years of Greek on admission, or should pass a sight-reading test in Greek after one semester. The Department of Classics provides instruction in Greek at various levels. For those who have had none, an accelerated course will be available in the Summer Session.

ROMANCE STUDIES

Faculty: Frederick B. Agard, Claire Asselin, Cesáreo Bandera-Gómez, L. J. Benoit, Jerome Bernstein, Gian-Paolo Biasin, Dalai Brenes, Alice M. Colby, Jean-Jacques Demorest, Herbert Dieckmann, Charles L. Eastlack, John Freccero, David I. Grossvogel, Robert A. Hall, Jr., John Kronik, A. G. Lozano, Edward P. Morris, Jean Parrish, Mario D. Saltarelli, Karl-Ludwig Selig, Alain Sez nec, Donald F. Solá.

Visiting Associate Professor: Hans-Jost Frey, University of Zürich.

Visiting Assistant Professor: Terrence C. Cave, University of Warwick.

Field Representative: Karl-Ludwig Selig, Goldwin Smith Hall.

MAJOR AND MINOR SUBJECTS

French Linguistics
French Literature
Italian Linguistics
Italian Literature

Romance Linguistics
Spanish Linguistics
Spanish Literature

The Field requires applicants to submit scores of the Graduate Record Examination (both aptitude and advanced tests). For scores to be available by the time applications for fellowships and scholarships are reviewed, the examination must be taken *no later than December*.

In the Field of Romance Studies the student may concentrate either in linguistics or in literature.

Language Requirement

The Field requires that the M.A. candidate pass a reading examination in French and the doctoral candidate pass reading examinations in both French and German. In certain cases Russian may be substituted for German. The doctoral candidate in the Field will be expected to pass one of these examinations upon entrance. The Field further requires that both M.A. and Ph.D. candidates pass a Latin literature examination at respective and stated levels. The student also has the option of taking a one-semester course at either the 100- or 200-level in Latin literature, depending on the degree sought. The graduate student in Romance literature must further take a one-semester course in the history of his major language or satisfy the chairman of his Special Committee that he has had the equivalent course elsewhere. All language requirements must be met before the candidate presents himself for the Admission to Candidacy Examination.

Field Requirements

ROMANCE LINGUISTICS. In Romance linguistics, the student is given training in four types of study and research: (1) general principles of linguistic analysis; (2) the description of the structure of the Romance language of his major interest; (3) the external and internal history of that language; and (4) the genetic and typological relationships of the Romance family of languages. Special emphasis is laid on the relation between linguistic history and cultural factors (literary, political, and social). A concomitant aim of this area is to afford instruction and practice in the application of linguistics to the teaching of one or more Romance languages.

Candidates in Romance linguistics may choose as their major subject either the linguistics (descriptive and historical) of a specific Romance language or the comparative study of the Romance languages. Such candidates will normally have, as one of their minor subjects, the literature of the language in which their major interest lies. A prior knowledge of Latin is desirable; a candidate without prior knowledge of Latin will be expected to acquire a working acquaintance with its linguistic structure and history. Each candidate's program will be determined in individual consultation with his Special Committee.

ROMANCE LITERATURE. (French Literature, Italian Literature, and Spanish Literature). Graduate studies in Romance literature are designed to train students as scholars and as teachers of language and literature. The Field expects its candidates to acquire a certain fund of knowledge and certain skills. Under the heading of knowledge may well be included: direct knowledge of literary texts; literary history; intellectual history; philology; social and political history; biography; and linguistic theory. The most important skills are the critical understanding of texts, the explication of texts, annotating and editing of texts, and identifying and developing critical and scholarly problems.

Students will be expected to teach at least one full year either in the Division of Modern Languages or in the Department of Romance Studies. Their teaching will be closely supervised and will form an integral part of the doctoral program. Ordinarily, students will not teach during their first year of residence.

Applicants who have had no prior graduate study may apply for direct admission to the doctoral program. Those with superior records and qualifications may be admitted directly; others may be admitted for the

Master's program if their intent is clearly to go on to the doctorate. Later admission to the doctoral program can be assured by a distinguished record at the Master's level. Those who wish to acquire the Master's degree for teaching at the secondary school level will be encouraged to apply to Cornell's Master of Arts in Teaching program rather than to the Field's Master of Arts program.

There are relatively few requirements imposed by the Graduate School or by the Field. As a Master's candidate, the student will usually spend his time broadening his interests; as a Ph.D. candidate he will spend more time studying a given area in depth. It is hoped that the choice of the minor will be either a second Romance literature (French, Spanish, or Italian) or the history of the major language.

Graduate students are expected to meet certain standards at specified points in their training. Incoming students in French Literature will take both a written examination and an oral interview in their major language. The oral interview will be based on the reading list sent at the beginning of the summer preceding entrance. The written examination will determine the student's ability to write French, and most entering students will find it advisable to do at least one year's course work in that language.

Candidates for the Master's degree are expected to take five one-semester courses in their major and three in their minor. They will also take a course in the history of the language of their major. By the end of their third term of residence, students will be expected to demonstrate proficiency in the major language and in Latin. This requirement may be satisfied by examination or by a stylistics course, and a course in Latin. All first-year students will attend the proseminar in literary studies (credit four hours per semester).

A Master's thesis or essay will be written in the language of the major, except in cases where the major language is also the native language.

Candidates for the Ph.D. are expected to choose one major and one minor. They will be expected to take eight one-semester courses in their major, and a minor will be chosen from a related Romance language or literature and be studied in some depth. If the student and the chairman of his Special Committee agree, the doctoral candidate may elect two minors, in which case the first minor will be in a related Romance language or literature and one may be chosen outside the Field. The course program will be chosen in consultation with the candidate's Special Committee.

Further particulars will be found in the *Procedural Guide for Graduate Students in Romance Literature*, furnished upon request.

Faculty Specializations

Cornell's Field of Romance Studies is particularly strong in Romance linguistics, in French literature of the eighteenth century, in Dante studies, and in Spanish literature of the medieval period and the Golden Age. The following are specialties of the faculty:

Frederick B. Agard: Spanish and Italian linguistics.

Claire Asselin: French linguistics.

Cesàreo Bandera-Gómez: medieval Spanish literature.

L. J. Benoit: French linguistics.

Jerome Bernstein: Latin American studies, the modern Spanish novel.

Gian-Paolo Biasin: nineteenth- and twentieth-century Italian literature.

Dalai Brenes: The Spanish Golden Age.

Alice M. Colby: medieval French literature.

Jean-Jacques Demorest: seventeenth- and nineteenth-century literature.
 Herbert Dieckmann: Diderot, eighteenth-century European novel.
 Charles L. Eastlack: Portuguese linguistics.
 John Freccero: Dante, medieval Italian literature.
 David I. Grossvogel: twentieth-century French literature.
 Robert A. Hall, Jr.: Italian and French linguistics.
 John Kronik: nineteenth- and twentieth-century Spanish literature.
 A. G. Lozano: Spanish linguistics.
 Edward P. Morris: sixteenth-century French literature.
 Jean Parrish: eighteenth-century French literature.
 Mario D. Saltarelli: Spanish linguistics.
 Karl-Ludwig Selig: Golden Age and medieval Spanish literature.
 Alain Sez nec: seventeenth-century literature.
 Donald F. Solá: Spanish linguistics.

The Field strongly encourages research in related areas of study, e.g., Comparative Literature, Medieval Studies (Professors Kaske, Kretzmann, John, Marchand, and Tierney), as well as with the distinguished specialists in the eighteenth century (Professors Abrams, Blackall, Guerlac, and Jolles).

Courses

Not all courses will be offered in any given year. Students should check with the department as to additional offerings, times, places, etc.

LINGUISTICS 441-442. HISTORY OF THE ROMANCE LANGUAGES

Throughout the year in alternate years. Credit four hours a term. T Th 2:30-4. Mr. Agard.

LINGUISTICS 443-444. COMPARATIVE ROMANCE LINGUISTICS

Throughout the year in alternate years. Credit four hours a term. T Th 1:25-3:00. Mr. Hall.

LINGUISTICS 445. PROBLEMS AND METHODS IN ROMANCE LINGUISTICS

Fall term every third year. Credit four hours. M W F 9:05. Mr. Hall.

LINGUISTICS 446. ROMANCE DIALECTOLOGY

Spring term every third year. Credit four hours. M W F 9:05. Mr. Hall.

LINGUISTICS 449. AREAL TOPICS IN ROMANCE LINGUISTICS

Fall term every third year. Credit four hours. Course may be repeated. Hours to be arranged.

FRENCH

401-402. HISTORY OF THE FRENCH LANGUAGE

Throughout the year in alternate years. Credit four hours a term. Prerequisites: Qualification in French, and Linguistics 201. M W F 11:15. Mr. Benoit.

403. LINGUISTIC STRUCTURE OF FRENCH

Fall term. Credit four hours. Prerequisites: Qualification in French, and Linguistics 201. M W F 3:35. Miss Asselin.

A descriptive analysis of present-day French, with emphasis on its phonetics, phonemics, morphology, and syntax. Required of students seeking certification by New York State.

404. FRENCH FOR TEACHERS

Spring term. Credit four hours. Prerequisite: Qualification in French. Hours to be arranged. Mr. Benoit and Mrs. Gordon.

Survey of current teaching methods, preparation of teaching materials, selection and use of textbooks and realia, further study of phonetics, syntax, and culture as needed. Required of students seeking certification by New York State.

429. STYLISTICS

Fall term. Credit four hours. Primarily for graduate students. Limited to ten students. Prerequisite: placement at the departmental French language examination. T Th S 11:15. Mr. Seznec.

French 429 will normally be taken by all entering graduate students in French, with the exception of those exempted on the basis of the departmental examination, and those who, not being prepared to undertake work at the level of French 429, will be asked first to take French 303 or 304. French 429 is prerequisite to French 430. French 429 presupposes competence in the handling of French vocabulary, syntax, and idiom. The purpose is to teach historical subjects. Review of advanced grammar; translations from and into literary French; lexical, stylistic, and methodological study of selected French critical works; literary *explication de textes*; study of French versification; analysis of literary topics, and composition of outlines. Short daily or weekly papers. Conducted in French.

430. STYLISTICS

Spring term. Credit four hours. M W F 10:10. Mr. Béreaud.

For description see French 429.

439-440. HONORS COURSE IN FRENCH

Throughout the year. Credit four hours a term. May be entered in the second term. Up to four terms of credit may be allowed after consultation with the Director of the Honors Course. Hours to be arranged. Mr. Seznec and staff.

447-448. MEDIEVAL LITERATURE

Throughout the year. Credit four hours. Prerequisites: two terms of 300-level French literature courses or consent of the instructor. May be entered either term. Fall term: M W F 9:05. Spring term: F 2:30-4:25 plus one hour to be arranged for students entering in the spring term without previous training in Old French. Miss Colby.

Translation of Old French texts into English and Modern French. The first term deals with the epic; the second term with the romance. Facility in reading Old French and appreciation of these two major genres are the primary goals of this course, but some attention will be given to other important genres.

450. TOPICS IN RENAISSANCE AND LITERATURE: HUMANISTS AND REFORMERS

Spring term. Credit four hours. Mr. Cave.

Studies in the sixteenth-century revolutions in French prose, French thought, and French society. Readings in the vernacular writings of such

figures as Lefèvre d'Étaples, Budé, Bonaventure des Périers, Calvin, Amyot, Henri Estienne, Etienne Pasquier, Olivier de Serres, Jean Bodin; Philological treatises; translation of Plutarch and Scripture; arts of poesy, husbandry, and ventry; calls to faith; ideal republics. Occasional excursions into such authors as Rico della Mirandola, Erasmus, Thomas More, Luther. Readings in French history. Conducted in French.

466. SEVENTEENTH-CENTURY POETRY

Spring term. Credit four hours. Prerequisites: French 201-202 and consent of the instructor. T Th S 9:05. Mr. Seznec.

Major poets of the first half of the century: Malherbe, Régnier, Théophile, and Saint-Amant. New attitudes and positions, Baroque, Précieux, and official poetry. Renewals and contrasts; Racine and LaFontaine.

479. TOPICS IN THE LITERATURE OF THE ENLIGHTENMENT: VOLTAIRE, DIDEROT, ROUSSEAU

Fall term. Credit four hours. W 1:25. Mr. Dieckmann.

496. MODERN LITERATURE: CLAUDEL

Spring term. Credit four hours. W 1:25. Mr. Dieckmann.

Poetry and drama.

539. INTRODUCTION TO FRENCH PHILOLOGY

Fall term. Credit four hours. Required of all graduate students in French literature. Th 4:30-6:25. Miss Colby.

A study of the phonological, morphological, syntactical, and etymological developments which most frequently create problems for the student of literature.

548. MEDIEVAL SEMINAR: CHRETIEN DE TROYES

Spring term. Credit four hours. Th 4:30-6:25. Miss Colby.

Close examination of Chrétien's *Perceval* followed by exploration of some of the differences between the *Perceval* and the work of its continuators.

553. RENAISSANCE SEMINAR: MONTAIGNE AND HIS INFLUENCE

Fall term. Credit four hours. T 2:30-4:25. Mr. Dieckmann.

A study of selected essays dealing with the theme of the *Condition Humaine*: comparison with the treatment of this theme by later authors.

554. GALLO-ROMANCE DIALECTOLOGY

Spring term in alternate years. Credit four hours. Prerequisites: Linguistics 431-432, or 433-434, or consent of the instructor. T Th 2:30.

555. HISTORICAL PHONOLOGY OF FRENCH

Fall term in alternate years. Credit four hours. Prerequisite: Linguistics 201 or consent of the instructor. T Th 2:30.

The detailed study of sound changes from Latin to French, with attention to intermediate stages.

558. LINGUISTIC STRUCTURES OF OLD AND MIDDLE FRENCH

Spring term in alternate years. Credit four hours. Prerequisite: French 403 or consent of the instructor. T Th 2:30.

An attempt at synchronic linguistic analysis of the French of approximately A.D. 1100 and 1600.

563. SEVENTEENTH-CENTURY SEMINAR: PASCAL

Fall term. Credit four hours. M 1:25-3:20. Mr. Demorest.

A thorough reading of Pascal's nonscientific works aimed at a definition of his singular position in relation to twentieth-century ethics and criticism. Seminar conducted in French.

570. EIGHTEENTH-CENTURY SEMINAR: MARIVAUD

Spring term. Credit four hours. Th 1:25-3:20. Mrs. Parrish.

Topic: Marivaux, novelist and dramatist. A close study of the early novels and of selected plays. Problems to be considered: Marivaux's use of language, Marivaux as a transitional figure, and as an example of eighteenth-century existential thought.

574. EIGHTEENTH-CENTURY AESTHETICS

Spring term. Credit four hours. T 2:30-4:25. Mr. Dieckmann.

See Comparative Literature 520.

588. NINETEENTH-CENTURY SEMINAR: FLAUBERT

Spring term. Credit four hours. Mr. Demorest.

The two versions of the *Education Sentimentale* as forerunners of the contemporary novel. Students are expected to know thoroughly beforehand: *Madame Bovary* and *Les Trois Contes*. Seminar conducted in French.

597. GRADUATE SEMINAR IN TWENTIETH-CENTURY LITERATURE

Fall term. Credit four hours. M 2:30-4:25. Mr. Grossvogel.

Proust: A study of the major themes, techniques, and implications of *A la recherche du temps perdu*, as well as a review of the critical corpus concerned with that work.

599. SEMINAR IN VALERY

Fall term. Credit four hours. Th 2:30-4:25. Mr. Frey.

The prose and poetry of Valéry.

600. SEMINAR IN FRENCH LINGUISTICS

Offered in accordance with student needs. Credit four hours a term. Hours to be arranged. Mr. Hall.

629. INTRODUCTION TO LITERARY STUDIES

Fall term. Credit four hours. M W 2:30. Required of all first-year graduate students in Romance Studies. Mr. Selig.

639-640. SPECIAL TOPICS IN FRENCH LITERATURE

Throughout the year. Credit four hours a term. Hours to be arranged. Staff.

ITALIAN

431. STRUCTURE OF ITALIAN

Fall term in alternate years. Credit four hours. Prerequisite: Qualification in Italian. M W F 9:05. Mr. Hall.

432. ITALIAN DIALECTOLOGY

Spring term in alternate years. Credit four hours. M W F 9:05. Mr. Hall.

433. OLD ITALIAN TEXTS

Fall term in alternate years. Credit four hours. Prerequisite: consent of the instructor. M W F 9:05. Mr. Hall.

434. HISTORY OF THE ITALIAN LANGUAGE

Spring term in alternate years. Credit four hours. Prerequisites: Qualification in Italian, and Linguistics 201. M W F 9:05. Mr. Hall.

488. THE LATE NINETEENTH-CENTURY NOVEL

Spring term. Credit four hours. Prerequisite: consent of the instructor. W 2:30-4:30. Mr. Biasin.

Giovanni Verga and Verismo.

546. SPECIAL TOPICS IN THE DIVINE COMEDY

Spring term. Credit four hours. W 4:30-6:30. Mr. Freccero.

Topic to be announced.

549. BIBLICAL ALLEGORY AND THE STRUCTURE OF THE NOVEL

Throughout the year. Credit four hours. Mr. Freccero.

An attempt to trace the origins of the "novel of the self" to its sources within the tradition of biblical exegesis of the Middle Ages. Particular attention will be directed toward the writings of Augustine, Gregory the Great, Dante, Petrarch, and Chaucer. A student will be expected to apply the principles of interpretation established by the seminar to medieval or Renaissance authors of his choice, according to the student's interest and competence.

596. EUGENIO MONTALE

Spring term. Credit four hours. Prerequisite: consent of the instructor. T 11:15-1:10. Mr. Biasin.

A seminar on the poet's complete work. Readings, lectures, discussions in Italian.

600. SEMINAR IN ITALIAN LINGUISTICS

Offered in accordance with student needs. Credit four hours. Mr. Hall.

629. INTRODUCTION TO LITERARY STUDIES

Fall term. Credit four hours. M W 2:30.

Required of all first-year graduate students in Romance Studies. Mr. Selig.

639-640. SPECIAL TOPICS IN ITALIAN LITERATURE

Throughout the year. Credit four hours. Hours to be arranged. Staff.

SPANISH**401-402. HISTORY OF THE SPANISH LANGUAGE**

Throughout the year in alternate years. Credit four hours a term. Prerequisites: Qualification in Spanish, and Linguistics 201. M W F 2:30. Mr. Lozano or Mr. Saltarelli or Mr. Solá.

403. THE GRAMMATICAL STRUCTURE OF SPANISH

Fall term. Credit four hours. Prerequisites: Qualification in Spanish, and Linguistics 201. M W F 2:30. Mr. Solá.

Descriptive analysis of the morphological and syntactical structure of present-day standard Spanish.

404. SPANISH FOR TEACHERS

Spring term. Credit four hours. Prerequisites: Qualification in Spanish, and Linguistics 201. M W F 2:30. Mr. Lozano.

A course in methodology and applied linguistics for prospective teachers of the Spanish language. A survey of current attitudes, methods, materials, and techniques. The application of descriptive linguistics to the organization of lesson material, illustrated mainly through the contrastive study of Spanish and English phonology. Required for provisional New York State teacher certification.

419-420. SPECIAL TOPICS IN HISPANIC LITERATURE

Fall and spring terms. Credit four hours. Hours to be arranged. Staff.

Intensive study of specific topics in Hispanic literature.

429-430. HONORS WORK IN HISPANIC LITERATURE

Throughout the year. May be entered in the second term. Credit four hours. Prerequisite: consent of the instructor. Hours to be arranged. Staff.

440. MEDIEVAL LITERATURE

Spring term. Credit four hours. Prerequisite: 300-level Spanish literature course or consent of the instructor. M W F 3:35. Mr. Bandera.

Critical literary analysis of major epic and non-epic works of the Spanish Medieval Period.

455. SIXTEENTH-CENTURY SPANISH POETRY

Fall term. Credit four hours. M W F 1:25. Prerequisite: one 300-level course or consent of the instructor. Mr. Selig.

Intensive analysis of selected poetry by Boscán, Garcilaso, Fray Luis de León, and others.

457-458. CERVANTES

Throughout the year. Credit four hours a term. Prerequisite: a 300-level Spanish literature course or consent of the instructor. May be entered the second term. Hours to be arranged. First meeting in Room 288 at 4:30 P.M. on the first day of instruction. Mr. Brenes.

Fall term: *Don Quijote*, Part I; and the *Novelas*. Spring term: *Don Quijote*, Part II; *Persiles*; and dramatic works. Class conducted in Spanish.

466. SEVENTEENTH-CENTURY SPANISH POETRY

Spring term. Credit four hours. Prerequisite: one 300-level course or consent of the instructor. M W F 1:25. Mr. Selig.

Intensive analysis of selected poetry by Lope de Vega, Quevedo, and Góngora.

489. SPANISH AMERICAN LITERATURE TO 1888

Fall term. Credit four hours. Prerequisite: a 300-level Spanish literature course or consent of the instructor. M W F 12:20. Mr. Bernstein.

Reading and class discussion of significant Spanish American works of prose and poetry from the Colonial Period and the nineteenth century.

587. GRADUATE SEMINAR IN MODERN SPANISH LITERATURE

Fall term. Credit four hours. W 3:35-5:15. Mr. Kronik.

Topic: Galdós as a novelist.

590. GRADUATE SEMINAR IN SPANISH AMERICAN LITERATURE

Spring term. Credit four hours. T 3:35-5:15. Mr. Bernstein.

Topic: Borges and Mallea. Reading of the principal collections of short stories, the major novels of Mallea, and certain nonfiction works of both authors.

600. SEMINAR IN IBERO-ROMANCE LINGUISTICS

Offered in accordance with student needs. Credit four hours. Hours to be arranged. Mr. Agard or Mr. Solá.

629. INTRODUCTION TO LITERARY STUDIES

Fall term. Credit four hours. Required of all first-year graduate students in Romance Studies. M W 2:30. Mr. Selig.

639-640. SPECIAL TOPICS IN HISPANIC LITERATURE

Throughout the year. Credit four hours a term. For graduate students. Hours to be arranged. Staff.

SEMITIC STUDIES

Faculty: Calum Carmichael, Alfred L. Ivry, Isaac Rabinowitz, Dwight W. Young.

Field Representative: Isaac Rabinowitz, 173 Goldwin Smith Hall.

MAJOR AND MINOR SUBJECTS

Arabic	Hebrew
Aramaic	Islamic Studies
Biblical Studies	

Candidates for advanced degrees in any subject included in the Field of Semitic Studies will be expected to have had at least three years of undergraduate study of one Semitic language, or the equivalent, prior to admission to the Graduate School.

Candidates for the Ph.D. whose major subject is biblical studies will be required to demonstrate ability to control the scriptural texts both in their original languages and in those of the chief ancient versions: Hebrew, Aramaic, Greek, Latin, and Syriac.

Candidates for the Ph.D. whose major subject is Islamic studies will be required to demonstrate proficiency in either Hebrew, Greek, or Persian, in addition to Arabic.

Language requirements for the Master's degree: proficiency in French, German, Russian, Italian, Greek, or Latin, to be demonstrated at least one term before the degree is awarded.

Graduate work in the Field of Semitic Studies is designed, through seminars and other means, to train the student for independent, critical scholarship and teaching in this field. Master of Arts and Ph.D. candidates will be encouraged to complement their studies with work in some associated field, e.g., Classics, Comparative Literature, History, and Philosophy.

More detailed information about graduate programs in Semitic Studies may be obtained by writing to the Field Representative.

Courses

HEBREW AND ARAMAIC

101-102. ELEMENTARY CLASSICAL HEBREW

Throughout the year. Credit three hours a term. The first term is prerequisite to the second term.

201. CLASSICAL HEBREW PROSE

Fall term. Credit three hours. Prerequisite: Hebrew 102 or consent of the instructor.

Selected prose narratives of the Hebrew Old Testament.

204. POST-BIBLICAL HEBREW PROSE (1)

Spring term. Credit three hours. Prerequisites: Hebrew 201, or three units of college entrance Hebrew and the consent of the instructor.

Rapid reading of narrative texts in rabbinic, medieval, and modern Hebrew.

302. CLASSICAL HEBREW POETRY

Spring term. Credit four hours. Prerequisite: Hebrew 201 or consent of the instructor.

Reading and interpretation of texts selected from the Psalter and the Prophets.

305. POST-BIBLICAL HEBREW PROSE (2)

Fall term. Credit four hours. Prerequisites: Hebrew 204, or four units of college entrance Hebrew and consent of the instructor.

Readings in the Mishnah, in medieval theological and philosophical texts, and in the modern essay.

306. POST-BIBLICAL HEBREW POETRY

Spring term. Credit four hours. Prerequisite: Hebrew 305.

411. MISHNAH AND TOSEPHTA

Fall term. Credit four hours. Prerequisite: Hebrew 305 or consent of the instructor.

421. MIDRASH

Fall term. Credit four hours. Prerequisite: Hebrew 305 or consent of the instructor.

423. TALMUD

Fall term. Credit four hours. Prerequisites: Hebrew 305 and Aramaic 452, or consent of the instructor.

432. MEDIEVAL HEBREW LITERATURE

Spring term. Credit four hours. Prerequisite: Hebrew 305 or consent of the instructor.

Study of a group of texts illustrative of several of the main genres of medieval Hebrew literature: Biblical exegesis, liturgical poetry, ethics, philosophy, mysticism, science, etc.

441. MODERN HEBREW LITERATURE

Fall term. Credit four hours. Open to qualified graduate students.

The development of modern Hebrew letters, both fiction and nonfiction, traced in selected works of the best writers from "Mendele" (S. J. Abramowitz, 1836-1917) and "'Ahad Ha-'Am" (Asher Ginsberg, 1856-1927) to the present.

451. ARAMAIC

Fall term. Credit four hours. Prerequisite: Hebrew 201, Arabic 208, or consent of the instructor.

452. TALMUDIC ARAMAIC

Spring term. Credit four hours. Prerequisite: Hebrew 305 or consent of the instructor.

Accidence and syntax of Galilean and of Babylonian Talmudic Aramaic.

471-472. SEMINAR

Throughout the year. Credit four hours a term. For qualified graduate students.

401. INDEPENDENT STUDY

Either term. Credit two hours. For qualified students. Staff.

402. INDEPENDENT STUDY

Either term. Credit four hours. For qualified students. Staff.

ARABIC

105-106. ELEMENTARY LITERARY ARABIC

Throughout the year. Credit three hours a term. The first term is prerequisite to the second term.

207-208. INTERMEDIATE LITERARY ARABIC

Throughout the year. Credit three hours a term. Prerequisite: Arabic 106 or consent of the instructor.

Rapid reading of selected texts in the main genres of Arabic literature.

317. ISLAMIC TEXTS IN ARABIC

Fall term. Credit four hours. Prerequisite: Arabic 208 or consent of the instructor.

318. ARABIC GEOGRAPHERS AND HISTORIANS

Spring term. Credit four hours. Prerequisite: Arabic 208 or consent of the instructor.

461. ARABIC PHILOSOPHERS

Fall term. Credit four hours. Prerequisite: Arabic 317 or 318, or consent of the instructor.

462. MEDIEVAL ARABIC *BELLES LETTERS* ('ADAB)

Spring term. Credit four hours. Prerequisite: Arabic 317 or 318, or consent of the instructor.

481. MODERN ARABIC LITERATURE

Fall term. Credit four hours. Prerequisite: Arabic 318, or consent of the instructor.

110 SLAVIC STUDIES

482. ARABIC POETRY

Spring term. Credit four hours. Prerequisite: Arabic 318, 462, or consent of the instructor.

491-492. SEMINAR

Throughout the year. Credit four hours a term. For qualified graduate students.

405. INDEPENDENT STUDY

Either term. Credit two hours. For qualified students. Staff.

406. INDEPENDENT STUDY

Either term. Credit four hours. For qualified students. Staff.

OTHER COURSES

COMP. LIT. 301. THE LITERATURE OF THE OLD TESTAMENT

Fall term. Credit four hours. M W F 9:05. Mr. Rabinowitz.

Readings, in translation, from books of the Old Testament composed during the pre-Exilic period of Israel's history (to c. 520 B.C.). The various genres of classical Hebrew literature, and the ancient Israelite ideas and institutions essential to comprehension of the texts will be studied.

COMP. LIT. 302. THE LITERATURE OF POST-EXILIC ISRAEL

Spring term. Credit four hours. M W F 9:05. Mr. Rabinowitz.

Readings, in translation, from the later books of the Old Testament, the apocryphal literature, and the Qumran (Dead Sea) Scrolls. An introduction to the thought of the culture which produced both normative Judaism and early Christianity.

SLAVIC STUDIES

Faculty: Patricia Carden, Frederick Foos, George Gibian, Antonia Glasse, Martin Horwitz, Richard L. Leed, Hugh Olmsted.

Field Representative: Richard L. Leed, 131 Morrill Hall.

MAJOR AND MINOR SUBJECTS

Russian Literature

Slavic Linguistics

ADMISSION REQUIREMENTS. There are no special requirements for admission to the Field of Slavic Studies other than the general requirements for admission to the Graduate School. It is recommended, though not required, that applicants submit scores from the Graduate Record Examination.

LANGUAGE REQUIREMENTS. Candidates for the M.A. degree are required to demonstrate a reading knowledge of either French or German. Candidates for the Ph.D. degree are required to demonstrate a reading knowledge of both French and German, one of which must be at higher level of proficiency.

EXAMINATIONS. Three examinations are required of Ph.D. students in Slavic Studies: (1) the qualifying examination, given at the end of the first year. The purpose of this examination is to assess the student's ca-

capacity for Ph.D. work and to enable the members of the student's special committee to assist the student in planning his future work on the basis of his strengths and weaknesses as exhibited in the examination. (2) The Admission to Candidacy Examination, a comprehensive examination usually taken in the third year. (3) The Final Examination. This examination is primarily concerned with the subject matter of the student's dissertation.

Students for the M.A. degree normally take an examination at the end of their second semester of study. If, on the basis of this examination, it is determined that no further course work is required, the student will be awarded the M.A. degree upon submission of a Master's Essay.

The student who enters with a good background in the Russian language and in his major subject (Russian literature or Slavic linguistics) can obtain the M.A. in one year and the Ph.D. in three years after the B.A. The student who enters without such a background will normally take two years for the M.A. and four years for the Ph.D. after the B.A. It is not necessary to obtain the M.A. degree in order to pursue a Ph.D. degree.

SPECIALIZATION WITHIN THE FIELD OF SLAVIC STUDIES. There are two subjects within the field which may be chosen either as a major or a minor subject: Russian literature and Slavic linguistics. If a student should choose either of these subjects as a major, he may choose the other for a minor, or he may choose minor subjects from other fields in the University, e.g., other literatures, linguistics, history, government, economics, psychology, mathematics, computer science, philosophy, etc.

The scope of the Slavic Studies program can be seen from the listings of faculty specializations and courses, although these listings do not exhaust the possibilities.

FACULTY AND SPECIALIZATIONS. Professors Patricia Carden (twentieth-century prose, Isaac Babel), Frederick Foos (comparative Slavic linguistics, South Slavic linguistics, Slovenian), George Gibian (nineteenth-century literature, Tolstoy, Dostoevsky, contemporary literature), Antonia Glasse (early Russian literature, Russian stylistics), Martin Horwitz (symbolism, Andrey Bely, Sholokhov), Richard Leed (historical Slavic linguistics, Russian dialectology, intonation), Hugh Olmsted (Old Russian literature, Russian descriptive linguistics, Old Bulgarian).

Courses

(This list excludes Russian language courses, which range from elementary to advanced, including special reading courses.)

RUSSIAN 314. INTELLECTUAL BACKGROUND OF RUSSIAN LITERATURE, 1750-1900

Spring term. Credit four hours. Hours to be arranged. Miss Carden.

Emphasis on intellectual figures and literary criticism. Gogol and Tolstoy as publicists and reporters. Belinsky, Dobrolyubov, Chernyshevsky, Apollon Grigoriev, Annenkov, Aksakov, Kozma Prutkov, Rozanov. Dostoevsky as journalist. Literary groups and magazines. Most of the reading will be in English, but reading knowledge of Russian is strongly recommended.

RUSSIAN 331. RUSSIAN POETRY

Fall term. Credit four hours. Prerequisites: Russian 202 and consent of the instructor. T Th 2:30 and one hour to be arranged. Mr. Gibian.

RUSSIAN 332. RUSSIAN THEATER AND DRAMA

Fall term. Credit four hours. Prerequisites: Russian 202 and consent of the instructor.

RUSSIAN 334. THE RUSSIAN SHORT STORY

Spring term. Credit four hours. T Th 2:30 and one hour to be arranged. Prerequisites: Russian 202 and consent of the instructor. Miss Carden.

Gogol, Turgenyev, Chekhov, and others.

RUSSIAN 401-402. HISTORY OF THE RUSSIAN LANGUAGE

Throughout the year in alternate years. Credit four hours a term. Prerequisites: Qualification in Russian, and Linguistics 201-202. M W F 2:30. Mr. Foos.

RUSSIAN 403. LINGUISTIC STRUCTURE OF RUSSIAN

Fall term in alternate years. Credit four hours. Prerequisites: Qualification in Russian, and Linguistics 201 or 301. M W F 2:30. Mr. Leed.

A descriptive study and analysis of Russian linguistic structure. Russian phonetics, phonemics, morphology, and syntax.

RUSSIAN 404. RUSSIAN FOR TEACHERS

Spring term in alternate years. Credit four hours. Prerequisites: Qualification in Russian, Linguistics 201 or 301, and Russian 403. M W F 2:30. Mr. Leed.

RUSSIAN 421. SUPERVISED READING AND RESEARCH

Either term. Variable credit. By permission of the department.

RUSSIAN 431. RUSSIAN PROSE FICTION

Fall term. Credit four hours. Prerequisites: Russian 332 or 334 or the equivalent, and consent of the instructor. T Th 2:30 and one hour to be arranged. Miss Carden.

Longer works by Tolstoy, Dostoevsky, and others.

RUSSIAN 432. PUSHKIN

Spring term. Credit four hours. Prerequisite: consent of the instructor. T Th 1:25, and one hour to be arranged. Mr. Gibian.

RUSSIAN 435. GOGOL

Fall term. Credit four hours. Prerequisites: Russian 332 or 334 or the equivalent, and consent of the instructor. M W F 10:10. Mr. Horwitz.

Careful study of Gogol's literary works and his *Selections from Correspondence with Friends*; some treatment of the development of Russian prose of his time.

RUSSIAN 493. HONORS ESSAY TUTORIAL

Either term. Credit four hours.

RUSSIAN 501. OLD BULGARIAN

Fall term in alternate years. Credit four hours. Hours to be arranged. Mr. Olmsted.

RUSSIAN 502. OLD RUSSIAN

Spring term in alternate years. Credit four hours. Hours to be arranged. Mr. Leed.

RUSSIAN 517-518. RUSSIAN STYLISTICS

Throughout the year. Credit four hours a term. Hours to be arranged. Miss Glasse.

Literary uses of the Russian language. Close examination of texts from various periods and genres. Practical exercises.

RUSSIAN 520. STUDIES IN RUSSIAN POETRY

Spring term. Credit four hours. Hours to be arranged.

Topic varies from year to year. Class conducted in Russian.

RUSSIAN 521. RUSSIAN LITERATURE FROM THE BEGINNINGS TO 1700

Spring term. Credit four hours. Reading knowledge of Russian required. M W F 2:30.

Old Russian literature, with attention to the development of the Russian literary language.

RUSSIAN 522. EIGHTEENTH-CENTURY LITERATURE

Spring term. Credit four hours. Prerequisite: Russian 521 or consent of the instructor. M W F 2:30. Miss Glasse.

RUSSIAN 523. EARLY NINETEENTH-CENTURY LITERATURE

Fall term. Credit four hours. Conducted partly in Russian. Hours to be arranged. Miss Glasse.

RUSSIAN 531. PROSE WRITERS, 1890-1917

Fall term. Credit four hours. M W F 2:30. Mr. Horwitz.

RUSSIAN 534. STUDIES IN THE PROSE OF ANDREI BELY

Fall term. Credit four hours. M W 1:25 and one hour to be arranged. Mr. Horwitz.

A study of Bely's major prose in relation to selected works of the period.

RUSSIAN 600. SEMINAR IN SLAVIC LINGUISTICS

Offered in accordance with student needs. Credit four hours. Hours to be arranged. Mr. Foos, Mr. Leed, or Mr. Olmsted.

RUSSIAN 601. INTRODUCTION TO GRADUATE STUDY

Fall term. Credit four hours. Hours to be arranged. Staff.

Required of all first-year graduate students majoring in Russian literature. Bibliography, methods of literary analysis, stylistics, topics in scholarship.

RUSSIAN 611. SEMINAR IN RUSSIAN DIALECT GEOGRAPHY

Fall term. Credit four hours. Prerequisite: consent of the instructor. Hours to be arranged. Mr. Leed.

RUSSIAN 671. SEMINAR IN TWENTIETH-CENTURY RUSSIAN LITERATURE

Fall term. Credit four hours. Hours to be arranged. May be taken repeatedly. Miss Carden.

Topic to be announced.

RUSSIAN 672. SEMINAR IN NINETEENTH-CENTURY RUSSIAN LITERATURE

Spring term. Credit four hours. Hours to be arranged. Topic varies from year to year. May be taken repeatedly. Mr. Gibian.

Topic to be announced.

COMP. LIT. 367. THE RUSSIAN NOVEL

In translation. Fall term. Credit four hours. T Th S 9:05. Mr. Gibian.
Works by Turgenev, Dostoevsky, and Tolstoy.

COMP. LIT. 368. SOVIET LITERATURE

In translation. Spring term. Credit four hours. M W F 10:10. Mr. Horwitz.
An introduction to selected works of Russian literature, from 1917 to date, examined as social and historical documents and as works of art.

CZECH 221-222. ELEMENTARY COURSE

Throughout the year. Offered according to demand. Credit three hours a term. Prerequisites: Qualification in Russian and consent of the instructor. Hours to be arranged. Mr. Leed.

LINGUISTICS 561-562. COMPARATIVE SLAVIC LINGUISTICS

Throughout the year in alternate years. Credit four hours a term. Prerequisite: consent of the instructor. Hours to be arranged. Mr. Foos.

SERBO-CROATIAN 221-222. ELEMENTARY COURSE

Throughout the year. Offered according to demand. Credit three hours a term. Prerequisite: Qualification in Russian and consent of the instructor. Hours to be arranged. Mr. Foos.

THEATRE ARTS

Faculty: H. Darkes Albright, Gordon Beck, Vincent M. Bevilacqua, Marvin A. Carlson, James H. Clancy, Lewin A. Goff, Bert O. States.

Field Representative: H. Darkes Albright, 107 Lincoln Hall.

MAJOR SUBJECTS

Cinema Studies (M.A. only)

Drama and the Theatre

Dramatic Production (M.A. only)

MINOR SUBJECTS

Cinema

Dramatic Production

ADMISSION REQUIREMENTS. Candidates are selected on the basis of undergraduate achievement, letters of recommendation, and Graduate Record Examination Aptitude Test scores. If these scores are to be available by the time applications for fellowships and scholarships are received, the examination must be taken by December.

LANGUAGE REQUIREMENTS. There is no M.A. language requirement, although students planning to work for a Ph.D. are encouraged to attain proficiency in one foreign language before gaining the M.A. The language requirement for the Ph.D. degree is proficiency in two foreign languages. Students may choose no more than one language from any of these four groups: (1) Russian; (2) Dutch, German; (3) French, Italian, Spanish, Portuguese; and (4) Arabic, Chinese, Hindi, Indonesian, Japanese.

EXAMINATIONS. A final examination is required for the M.A. degree, which under certain conditions may be combined with the qualifying examination for the Ph.D. Three examinations are required for the Ph.D. degree: (1) a qualifying examination to determine the applicant's fitness for undertaking advanced studies and to aid his Special Committee in planning his program. This examination should be taken in the first term of Ph.D.

residence. (2) The Examination for Admission to Candidacy given not earlier than the last month of the third term of Ph.D. residence, and at least two residence units before the thesis examination. (3) Final Examination on thesis and related material.

RESEARCH AND STUDY OPPORTUNITIES. The present program in Theatre Arts is primarily academic in orientation. Its chief aim is to develop competent investigators, teachers, and directors for the educational theatre, though some of its graduates are professionally employed. The staff now plans to parallel this academic program, beginning in 1968, with one primarily professional in orientation.

Ordinarily, residence at the University during at least three academic years will be necessary for the doctorate; and in some cases either degree may require more than minimum periods of residence.

The Field of Theatre Arts offers opportunity for graduate study and research in many phases of the discipline, including dramatic literature; history, criticism, and aesthetics of the theatre; cinema studies; playwriting; and most aspects of dramatic production. Members of the staff are especially qualified to direct research in the subjects listed, but research need not be limited specifically to these subjects. The research interests of the staff are broad; in general, they may be summarized as follows: H. Darkes Albright, acting, theatre history, and aesthetics; Gordon Beck, cinema studies, theatre history; Vincent M. Bevilacqua, history of rhetorical theory, British public address; Marvin A. Carlson, dramatic literature, theatre history; James H. Clancy, directing, dramatic literature, theatre aesthetics; Lewin A. Goff, acting and directing, international theatre; Bert O. States, playwriting, dramatic structure.

Courses

SPEECH

302. PERSUASION

Fall term. Credit four hours. Prerequisite: Speech and Drama (Theatre Arts) 103, 105, or 201. M W F 9:05. Mr. Bevilacqua.

Advanced study of the speech designed to affect attitudes and beliefs and to induce action. Study of the theories of persuasion with special attention to the logic, language, and structure of audience-centered persuasive discourse. Practice in the composition and delivery of persuasive speeches related to varied purposes, audiences, and propositions.

412. BRITISH PUBLIC ADDRESS

Spring term. Credit four hours. M W F 12:20. Mr. Bevilacqua.

Analytic study of parliamentary and public speeches reflecting the evolution of British rhetorical practice. Speeches to be studied will relate to such movements as the American and French revolutions, Indian reform, parliamentary reform, free trade, imperialism, and World War II. Representative of the orators considered are: Cromwell, Chatham, Burke, Cobden, Gladstone, and Churchill.

501-502. SEMINAR IN RHETORICAL THEORY

Throughout the year. Credit four hours a term. M 2-4:25. Mr. Bevilacqua.

In the first term consideration will be given to theories of rhetorical practice; in the second term, to applications of rhetorical theory in the criticism of public address.

DRAMA

375. THE HISTORY OF THE MOTION PICTURE

Fall term. Credit four hours. T Th 11:15. Laboratory, T 2-4:25. Mr. Beck.

An introduction to the history and art of the film: its characteristic problems, devices, and development. Representative motion pictures, from *The Great Train Robbery* and Griffith's *The Birth of a Nation* or *Intolerance* to contemporary films of significance, will be studied. Lectures, discussions, and reports.

376. THE DOCUMENTARY AND EXPERIMENTAL FILM

Spring term. Credit four hours. T Th 11:15. Laboratory, T 2-4:25. Mr. Beck.

An examination of the nonfiction film and the experimental film. Attention is given to the film maker as artist, informant, propagandist, and recorder. Representative examples of film essays, American and foreign, will be studied. Lectures, demonstrations, discussions, and reports.

381. STAGECRAFT

Fall term. Credit four hours. No prerequisite, but previous study of acting or play production recommended. M W 12:20. Laboratory, T 2-4:25. Miss Gibson.

The theory and practice of stage production and design; theatre structure and equipment, problems and practice in scene construction and painting, elements of lighting. Lectures, demonstrations, research reports.

382. STAGE LIGHTING AND DESIGN

Spring term. Credit four hours. Prerequisite: Speech and Drama (Theatre Arts) 381 or consent of the instructor. M W 12:20. Laboratory, T 2-4:25. Miss Gibson.

A consideration of the history, theory, and practice of lighting and design in the pictorial elements of dramatic production. Lectures, demonstrations, and special projects.

383-384. THEATRE PRACTICE

Throughout the year; may be entered either term. Credit two hours a term. Primarily for majors in drama but open only by consent of the instructors to other students who have taken or who are taking Speech and Drama (Theatre Arts) 104, 110, 283, or 285. Hours to be arranged. Miss Gibson and the staff of the University Theatre.

Planning and execution of projects in the productions of the University Theatre.

385. ADVANCED DIRECTING

Spring term. Credit four hours. Prerequisite: Speech and Drama (Theatre Arts) 285 or consent of instructor. M 2-4:25. Mr. Clancy.

Readings, reports, and exercises; assignments in the direction and production of plays in the Studio program.

386. ADVANCED ACTING

Spring term. Credit four hours. Prerequisite: Speech and Drama (Theatre Arts) 285 or consent of instructor. M 2-4:25. Mr. Goff.

Varied projects in acting and group rehearsal, correlated with public presentations; individual drills, pantomimes, and reading exercises.

388. PLAYWRITING

Fall term. Credit four hours. Previous study in play production recommended. W 2-4:25. Mr. States.

A consideration of the art and craft of writing for the theatre; practice through the composition and testing of one-act plays.

393. HISTORY OF THE THEATRE I

Fall term. Credit four hours. M W F 10:10. Mr. Beck.

A survey of the characteristics of primitive theatre, and of theatrical styles and production modes in Classic Greece, Rome, China, and India, medieval Europe, and Renaissance England and Spain. Readings, lectures, and reports.

394. HISTORY OF THE THEATRE II

Spring term. Credit four hours. M W F 10:10. Mr. Carlson.

A survey of theatrical styles and production modes in Europe and the Orient since 1642. Among the areas considered will be Renaissance France; the English Restoration; the eighteenth and nineteenth centuries in England, France, Germany, and Japan; and the modern international stage. Readings, lectures, and reports.

396. AMERICAN DRAMA AND THEATRE

Spring term. Credit four hours. T Th S 11:15. Mr. Robertson.

A study of the American theatre and of representative American plays from the colonial period to the present, with emphasis on the drama as an expression of the national life and culture.

[491. SEMINAR IN THEATRE HISTORY]

Not offered in 1967-68.

[493. SEMINAR IN THE FILM]

Not offered in 1967-68.

495. THEATRE AESTHETICS

Fall term. Credit four hours. Prerequisites: Speech and Drama (Theatre Arts) 285 plus two 300-level or 400-level courses in drama. W 2-4:25. Mr. Albright.

The chief theories of dramatic production in relation to aesthetic principles.

[497. THEATRE CRITICISM]

Not offered in 1967-68.

595. SEMINAR IN THEATRE AESTHETICS

Fall term. Credit four hours. Prerequisite: Speech and Drama (Theatre Arts) 495 or consent of the instructor. T 1:25-3:20 plus an hour to be arranged. Mr. Clancy.

Selected topics in theatre aesthetics.

[597. SEMINAR IN THEATRE CRITICISM]

Not offered in 1967-68.

690. THESES AND SPECIAL PROBLEMS IN THEATRE ARTS

Either term. Credit and hours to be arranged. Messrs. Albright, Beck, Carlson, Clancy, Goff, and States.

Open to graduate candidates working on theses and to other graduates prepared for independent study of special topics in drama and theatre.

ADVANCED PROFESSIONAL DEGREES

Advanced professional degrees are designed as preparation and training for a special profession.* The admissions, requirements, and curricula for such degrees, as approved by the Graduate Faculty, are announced by the faculty of a professional school or college, which, for this purpose, acts as a Division of the Graduate Faculty. Degrees are awarded upon recommendation of the Division to the Graduate Faculty. Detailed information regarding admission or academic requirements for any professional degree is included in the Announcement of the separate school or college in which the degree is offered. Inquiries addressed to the Graduate School will be forwarded to the proper official. The professional degrees listed below are approved by the Graduate Faculty.

ARCHITECTURE, FINE ARTS, REGIONAL PLANNING

The following three degrees are administered by the Division of Architecture and Fine Arts of the Graduate School. Inquiries should be addressed to the listed professor.

For more detailed information on these degrees, as well as those in architectural structures, architectural history, and art, see also the *Announcement of the Graduate School: Social Sciences*.

MASTER OF ARCHITECTURE (M.Arch.). Training in urban design. Only graduates of a five-year professional program in architecture or graduates of a program in city planning or landscape architecture are admitted as candidates. (Professor Colin Rowe.)

MASTER OF FINE ARTS (M.F.A.). Advanced training in the practice of painting, sculpture, or graphic arts. (Professor James O. Mahoney.)

MASTER OF REGIONAL PLANNING (M.R.P.). Training for a professional career in the field of city planning or regional planning. (Professor Kermit C. Parsons.)

EDUCATION

Two professional degrees are administered by the Field of Education of the Graduate School. The programs leading to each of the degrees in-

* The following are advanced degrees which are also first degrees of a school or college and therefore are not subject to the jurisdiction of the Graduate Faculty. For information regarding them, address the school or college indicated.

Bachelor of Laws	Law School
Master of Engineering (Aerospace)	Graduate School of Aerospace Engineering
Master of Business Administration	}
Master of Public Administration	
Doctor of Medicine	Medical College, New York City
Doctor of Veterinary Medicine	Veterinary College

clude courses, seminars, projects, and investigations which will develop the student's ability to perform acceptably the professional duties required of the several types of educational specialization.

MASTER OF ARTS IN TEACHING (M.A. in T.). This program is designed for and limited to those preparing for teaching in elementary and secondary schools. The student and his Special Committee will select those courses and seminars in his teaching specialty and in Education which are deemed most appropriate for developing competence as a teacher. The student will be required to demonstrate his or her teaching skill in a supervised field experience. Completion of a twelve-month program, or two and two-fifths residence units is required.

DOCTOR OF EDUCATION (Ed.D.). The program for this degree is designed to prepare the candidate within a broad cultural context for positions of professional leadership in education. The program of studies must include advanced work in each of the following: educational psychology, history or philosophy of education, educational measurement and statistics, and research in education. At least fifteen hours of credit must be earned in courses other than those in professional education. A minimum of sixty-five credit hours beyond the Bachelor's degree is required, of which thirty-five hours should be completed beyond the Master's degree or its equivalent. A candidate is required to complete a minimum of five residence units beyond the Bachelor's degree and a year of directed field experience.

Professional Teaching

MASTER OF SCIENCE FOR TEACHERS (M.S.T.). This is a co-ordinated program of training in the biological and physical sciences for prospective and practicing teachers. Each degree candidate must satisfy a broad core program in mathematics and science and complete advanced work in his selected Field of study. This degree is administered by the Division of Professional Teaching of the Graduate School. Detailed information may be obtained from the Graduate School Office, Sage Graduate Center.

ENGINEERING

The degree of Master of Engineering is administered by the Engineering Division of the Graduate School. Specially oriented graduate programs of study are in the areas of agricultural, chemical, civil, electrical, industrial, materials, mechanical, and nuclear engineering, and in engineering physics. The following titles designate the Professional Masters' degrees offered in engineering: Master of Engineering (Agricultural), Master of Engineering (Chemical), Master of Engineering (Civil), Master of Engineering (Electrical), Master of Engineering (Engineering Physics), Master of Engineering (Industrial), Master of Engineering (Materials), Master of Engineering (Mechanical), Master of Engineering (Nuclear).

The Graduate School of Aerospace Engineering administers the Master of Engineering (Aerospace) degree program.

The general requirements for the degrees listed above are:

1. A minimum of thirty credit hours of advanced technical course work in the specific field or in related subjects.
2. A minimum of three credit hours (included in the above) of engineering design experience involving individual effort and formal report.
3. A minimum grade point average of 2.5 and a minimum final grade of C minus for all courses counting toward the degree.

There are no residence requirements, although all course work must, in general, be completed under Cornell University staff instruction. The degree requirements must normally be completed within a period of four calendar years.

Graduates of Cornell University who hold Bachelor of Engineering degrees may be granted up to fifteen hours credit for advanced courses taken during their fifth undergraduate year, provided they enter the Master of Engineering program not later than the fall term following the sixth anniversary of their receiving the Bachelor of Engineering degree.

The *Announcement of the College of Engineering* should be consulted for further details on the professional Masters' programs in the various fields.

INDUSTRIAL AND LABOR RELATIONS

MASTER OF INDUSTRIAL AND LABOR RELATIONS (M.I.L.R.).

The program leading to this degree provides a basic course of graduate study for those with professional interests in industrial and labor relations and further provides limited opportunities for specialized professional study where broad competence has been established. This degree is administered by the Division of Industrial and Labor Relations of the Graduate School. More information may be obtained by writing to the School of Industrial and Labor Relations, Ives Hall.

LAW

The following two degrees are administered by the Division of Law of the Graduate School. The *Announcement of the Law School* should be consulted for a complete description of the program and requirements.

MASTER OF LAWS (LL.M.). This degree is intended primarily for the student who desires to increase his knowledge of the law by working in a specialized field.

DOCTOR OF THE SCIENCE OF LAW (J.S.D.). This degree is intended primarily for the student who desires to become a proficient scholar by original investigation into the functions, administration, history, and progress of law.

MUSIC

DOCTOR OF MUSICAL ARTS (A.Mus.D.). This degree is appropriate for mature composers who seek further professional training as well as knowledge of the other arts and humanities, both to enrich their creative perspectives and to prepare them for the teaching of composition and theory at the university level. It is administered by the Department of Music, acting as a Division of the Graduate School for this purpose.

NUTRITIONAL AND FOOD SCIENCE

The following two degrees are administered by the Division of Nutrition of the Graduate School. More information may be obtained by writing to the Graduate School of Nutrition, Savage Hall.

MASTER OF NUTRITIONAL SCIENCE (M.N.S.). This program emphasizes fundamental study in the basic sciences that can lead to specialization in such areas as nutritional biochemistry, public health, nutrition, human and clinical nutrition, and international nutrition. In addition, for candidates interested in the biological sciences, the program serves as a valuable preliminary for more advanced graduate study.

MASTER OF FOOD SCIENCE (M.F.S.). The fundamental sciences, chemistry, biochemistry, and bacteriology, that are involved in food processing and utilization, are emphasized. Electives are available to meet individual needs in engineering, economics, marketing, business administration, and international programs. The specialized training serves as a preparation for technical work as related to the food industry or for more advanced graduate study.

VETERINARY MEDICINE

DOCTOR OF SCIENCE IN VETERINARY MEDICINE (D.Sc. in V.M.). This degree is characterized by a professional rather than a general research objective, and it is designed especially for experienced persons in the basic and clinical sciences who need more specific, advanced, scientific, and professional knowledge in order to equip themselves for careers in teaching and research. This degree is administered by the Division of Veterinary Medicine of the Graduate School.

The University expects that all graduate students at Cornell University shall, at all times, act with a mature and morally responsible attitude, recognizing the basic rules of society and the common rights of others.

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