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Trinity College Bulletin, 1969-1970 (Graduate Studies)

Trinity College

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Trinity College
HARTFORD CONNECTICUT

Trinity College Bulletin

Graduate Studies

1969-1970



Calendar

CHRISTMAS TERM – 1969

Sept. 3, Wednesday	Graduate Advisers' Pre-registration Sessions, 7:00 to 9:30 P.M., Washington Room, Mather Hall
Sept. 8, Monday	Christmas Term begins
Nov. 21, Friday	Vacation week begins
Dec. 1, Monday	Classes resume
Dec. 19, Friday*	Christmas Term ends

TRINITY TERM – 1970

Jan. 26, Monday	Trinity Term begins
Jan. 30, Friday	Final day for submittal of application to receive Master's degree
March 13, Friday	Final day for submittal of requests for comprehensive examination
March 27, Friday	Spring vacation begins
April 13, Monday	Classes resume
May 1, Friday	Final day for submittal of theses
May 15, Friday*	Trinity Term ends
May 31, Sunday	One Hundred and Forty-fourth Commencement

Graduate classes are in session during the undergraduate open periods, week of October 13 and week of February 23.

*Final examinations in courses requiring them will be administered at the final class meeting of each term.

Applications for Master's degree candidacy are acted upon twice annually: during the first two weeks of November and again during the first two weeks of April.

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August 1969

Graduate Studies 1969-1970

Graduate Studies at Trinity College

THE Trinity College program of graduate studies provides for the further scholarly development of talented men and women who wish to engage in a program of part-time graduate study.

Courses in the program lead to the degrees of Master of Arts and Master of Science. Men and women who hold the Bachelor's degree may enroll in graduate courses for which they are qualified even though they do not matriculate for the Master's degree.

As a result of its experience since 1927 with part-time graduate study, Trinity has concluded that the following conditions enable graduate students to progress toward a Master's degree which will represent superior accomplishment: *first*, a limited enrollment of students who are capable, mature, highly motivated; *second*, a Faculty of scholar-teachers; *third*, courses which meet for the longest possible time consistent with the efficient use of the student's necessarily limited time; *fourth*, small classes which meet at the college; *fifth*, excellent library facilities; *sixth*, encouragement of independent research; *seventh*, careful counseling of students to undertake in any semester no more courses than they can complete to the best of their ability.

STUDENTS

Men and women who hold the Bachelor's degree may enroll in graduate courses for which they are qualified even though they do not matriculate for the Master's degree. Such persons should consult with the Office of Graduate Studies or the appropriate departmental graduate adviser before registering. They must ordinarily provide a transcript of their undergraduate record at the time of registration.

No student who is employed on a full-time basis, whether or not a candidate for the Master's degree, may in his first term of study at Trinity register for more than one course. In subsequent semesters a limit of two courses is imposed. This rule was established to protect students who might undertake more work than they can accomplish successfully. Students will find that each course requires a large amount of reading at home or in the library, and almost all courses will include the preparation of a term paper or report. The Office of Graduate Studies is empowered to adjust these restrictions for students employed less than full-time.

Undergraduates matriculated for the Bachelor's degree at Trinity who are entering their junior or senior year and whose records have been outstanding will be permitted to enroll in certain graduate-level courses, indicated by an asterisk (*). To enroll in these courses an eligible student must have the prior approval of his adviser, of the instructor of the course, and of the Office of Graduate Studies. Undergraduates who are admitted to these courses are expected to complete the same requirements that apply for graduate students.

CANDIDACY FOR THE MASTER'S DEGREE

Trinity grants the Master's degree in chemistry, economics, education, English, French, government, history, Latin literature and classical civilization, mathematics, philosophy, physics, and Spanish. Graduate courses in several of these areas are offered in the Trinity Summer Term as well as the regular college year.

Students who expect to work toward a Master's degree and students who are seriously considering study toward this degree are urged to apply as early as possible for matriculation as candidates for the degree. There are two advantages to application prior to, or soon after beginning, graduate study: 1. if the application is not approved the student will be spared the cost of tuition for courses which will not be credited toward a degree; 2. if the application is approved the student can be properly advised on a program of study. All candidates will be expected to complete a minimum of six courses after admission to candidacy.

Applicants are expected to hold a Bachelor's degree from an accredited college. Recent graduates should have earned an average of B (80) in all undergraduate courses and should show greater proficiency in their field of specialization. Less emphasis is placed on the undergraduate standing of applicants whose undergraduate study was completed several years ago, but the professional experience and in-

terests of such applicants will be carefully weighed. All applicants should have a considerable background in the liberal arts and all should have attained facility in the use of English.

Transcripts of all college work must accompany the application form, a copy of which can be obtained from the Office of Graduate Studies. In certain cases applicants may also be asked to submit the results of the Graduate Record Examination or other supporting data. An interview at the Office of Graduate Studies or with the appropriate departmental adviser may be required after all materials pertinent to application have been assembled.

Applications which are completed by April 1 will be considered prior to May 1. Applications completed by November 1 will be considered prior to December 1.

DEGREE REQUIREMENTS

A course, identified by a single number (501 for example), carries three or four semester hours of credit. In those cases identified by a hyphenated number (651-652 for example), the unit of study carries six or eight semester hours of credit.

To receive the Master's degree the candidate must complete a minimum of ten courses at the graduate level with satisfactory grades (*see Graduate Grades*). The candidate must demonstrate proficiency in whatever language, if any, his major department specifies. Under certain conditions as many as two courses (six semester hours) from another graduate school will be credited toward the requirements for the Master's degree at Trinity.

It is implicit in the conferral of any earned degree that study toward that degree has assumed an important position in the student's life. Consistent with this implication is the imposition of a time limit within which the requirements for a degree must be completed. At Trinity College the requirements for the Master's degree must be completed within six years from the beginning of study toward the degree. The time limit will be specified in each letter of approval of candidacy. Students who fail to complete the requirements within the designated time may apply for readmission. This second application must be accompanied by a letter which will include a detailed explanation for the failure to complete the requirements within six years. Readmission will not necessarily be granted and, if granted, will normally include a requirement that no more than half of the credit previously earned be applied toward the Master's degree.

TRANSFER CREDIT

Under certain conditions Trinity will accept credit up to a maximum of six semester hours (two courses) of graduate work completed at other accredited institutions: grades received in such courses must meet the minimum standard for graduate study at Trinity ("B-" or higher); and such courses must be considered equivalent to Trinity offerings.

Candidates desiring transfer credit should: 1) submit to the Graduate Office in writing a full course description; 2) provide a written request for transfer credit to the Office of Graduate Studies, preferably in advance of actual registration in the course to be transferred; 3) arrange to have an official transcript of their record sent to the Graduate Office.

THE THESIS AND COMPREHENSIVES

A thesis is required of all candidates in chemistry, economics, English, government, history, and philosophy, and of some candidates in education. Normally, the thesis is the final project undertaken for completion of degree requirements. When a student has chosen a tentative topic or a particular field of study in which he would like to do his thesis research, he is assigned to a thesis adviser by the chairman of his department. (The chairman may, if he deems it necessary, require of the student evidence of his ability to do scholarly writing before assigning him to an adviser or before forwarding notice of the acceptance of the plan and outline of the thesis project.) After the student has met with his adviser and submitted to him a satisfactory plan and outline for his project, the adviser and the department chairman will indicate their approval by signing the Thesis Approval form entitling the student to register with the Graduate Office for course 651-652 of that department. Course credit for the thesis (six semester hours) will be awarded upon its final approval by the adviser and a second reader designated by the chairman of the major department or the Office of Graduate Studies. The thesis, in final form, must be submitted not later than May 1 of the year in which the candidate expects to receive his degree.

A student undertaking to write a thesis should obtain from the Graduate Office a copy of the "Instructions Regarding the Preparation and Submission of Masters' Theses at Trinity College" and should consult his department chairman to learn of the particular procedures which his department requires.

The College and the departments expect that normally a student will complete his thesis in the same year in which he registers for it. A student who fails to

complete the thesis within this period (twelve months from the date of registration), and whose time limit for completion of the degree requirements has not yet expired, must register each year until his thesis is completed as a "Visiting Scholar." He shall pay the registration fee and a research fee of \$100 each year.

If the major department specifies that the candidate will take a comprehensive examination in lieu of a thesis the candidate must submit in writing to the Graduate Office by March 13 a request for the examination. The examination will be scheduled at the convenience of the department in April or May. Comprehensive examinations are scheduled during the Summer Term in the Department of Classics and in early fall and late spring in the Department of Modern Languages. If the student fails the examination, a second and final examination may be requested for administration not earlier than six months nor later than one year after the initial examination. A grade but no credit is awarded for the comprehensive examination.

By January 30 prior to the Commencement at which the student expects to receive his degree, he must file an application for conferral of the degree. A form for this purpose will be provided by the Graduate Office on request.

SIXTH YEAR FOR TEACHERS

Programs of study fitted to individual needs are available to teachers who have earned the Bachelor's and Master's degrees. Each program will be planned in conference by the graduate student and the Office of Graduate Studies, and certification of satisfactory performance will be furnished at the conclusion of study to whatever authorities the student designates.

GRADUATE GRADES

At the conclusion of each course and comprehensive examination each graduate student will receive a grade from this scale:

Distinction – High Pass – Pass – Low Pass – Failure

Theses will be graded with one of the following:

Honors – Pass – Fail

Although equivalence of grades between graduate and undergraduate courses is difficult to define, it is generally agreed among colleges that graduate students will be expected to attain a higher level of achievement than would be expected

of undergraduates. Frequently this expectation is expressed in a requirement that graduate credit will be awarded only for courses in which a grade of B or higher is earned. The faculty of Trinity College regards two passing grades (A and B, for example) as inadequate differentiation of the quality of acceptable achievement for graduate students. Therefore, the restricted range of achievement for which graduate credit is awarded has been divided into three. It should be understood that the grades of Distinction, High Pass, and Pass are NOT equivalent to A, B, and C, but represent a finer division of the A and B range.

Whenever a candidate for the Master's degree has received a total of two grades of Low Pass and/or Failure in his major field of study, or three such grades regardless of field, his eligibility for further study will be terminated. No more than one grade of Low Pass will be credited toward the requirements for the Master's degree.

Graduate students who are not approved candidates for the Master's degree, will be ineligible for candidacy for the Master's degree if they receive two grades lower than Pass regardless of field.

NON-CREDIT ATTENDANCE

Persons who do not wish to receive credit for specific courses may, with permission of the Office of Graduate Studies, register as auditors. They will receive no credit and no grade, but a record of their attendance will be made. They need not always fulfill the prerequisites of the course and are not required to take examinations. The charge will be the same as if the course were taken for credit.

Graduate students who have been accepted as candidates for the Master's degree at Trinity College and who have completed or are currently enrolled in two courses at the graduate level will be allowed to audit without charge a total of two courses. This privilege is without time limit; the courses may be audited prior to or after the completion of the degree requirements. In each case, however, permission to take a "Graduate Audit" must be obtained from the Office of Graduate Studies.

WITHDRAWAL

Registration for a course is a commitment to complete the course. Request for withdrawal and reasons for the request must be included in a letter addressed to the Office of Graduate Studies. Withdrawal is not accomplished by failure to

attend classes or by notification to the instructor. Students contemplating withdrawal should, if possible, continue their attendance until a reply to their request is received. Unauthorized withdrawal will result in a grade of failure in the course.

No graduate student will be permitted to withdraw from a course after the twelfth week of that course.

COSTS

Tuition charges are determined on the basis of the number of courses for which the student enrolls. Graduate students should note the statement pertaining to them under the heading, *Non-Credit Attendance*.

TUITION CHARGES

The tuition charge is \$150 per course for both undergraduate and graduate students, with the exception of the thesis (651-652), for which the charge is \$300.

In addition to tuition charges each student must pay a registration fee of five dollars per term. This fee is not refundable. Full payment of all costs must accompany registration for each semester.

Only in cases of withdrawal made necessary by such unexpected causes as sickness or call to military service will refunds of tuition be made. Such refunds will be made in accordance with this schedule: three-fourths tuition for withdrawal during the first and second week of classes; one-half during the third week; no refund in any case after that.

Financial Assistance

Graduate students seeking financial assistance should direct all inquiries to the Office of Graduate Studies and make formal application for fellowships or loans on the appropriate forms issued by that office.

Financial assistance is available only to those graduate students who are approved candidates for the Master's degree and is usually granted to those students

who have completed a minimum of two courses at Trinity. Preference is given to secondary school teachers and financial need is the primary consideration in making awards.

Trinity Graduate Fellowships

A limited number of fellowships entitling recipients to exemption of part of tuition costs is available.

Mitchell B. Stock Scholarship

This scholarship is awarded to a secondary school teacher who has shown unusual academic promise in pursuit of the Master's degree at Trinity.

Guaranteed Insured Loan Program

Attention is called to the existence of various state educational loan plans established under the Higher Education Act of 1965. For residents of Connecticut, loans up to \$1,500 per year are available for graduate study. The United States Government will subsidize the interest payments if the adjusted family income is \$15,000 or less and the student is enrolled on at least a "half-time basis." Information on state loan programs is available from the Director of Financial Aid at Trinity.

VETERANS

Students admitted to Trinity who intend to study under Public Law 89-358 should, upon admission to Trinity, communicate with their local Veterans' Administration Office, requesting an application for a program of education under this law.

THE TRINITY COLLEGE LIBRARY

Graduate study is possible only where there is a fine library. Trinity's collection of more than 475,000 volumes and 100,000 pamphlets, housed in a modern structure

embodying the latest in library construction theory and method, provides exceptional opportunities for graduate study. The library adds approximately 8,000 volumes per year and subscribes to over 1,500 periodicals.

Seminar classes often meet in the library's seminar rooms, close by the volumes they utilize. The Reference Librarian provides assistance in the use of the library in connection with term papers and theses.

PLACEMENT OFFICE

Graduate students may make use of the Placement Office for information about careers. During the regular academic year this office arranges to have representatives from graduate schools, business, and industry visit the College. The Director of Placement also serves as liaison for bursary employment and for part-time, off-campus employment.

REGULATIONS

Absences. Students are expected to attend all class meetings; they are not "entitled" to any absences. Excessive absences will be sufficient cause for required withdrawal. An absence from an announced examination may be excused only for sickness certified by a doctor or emergencies by the Office of Graduate Studies.

Parking. Students attending classes meeting in Williams Memorial, Seabury Hall, or Goodwin must park in the lots adjacent to either Jarvis Hall or the Chapel. Those with classes meeting in the Library or McCook Center must park in either the lot next to the Field House or the New Britain Avenue lot. Students who park on Summit Street do so at their own risk.

Inclement Weather. It is always a problem to notify students that a class will or will not meet during inclement weather. During the 1969-70 academic year this procedure will be followed: Each instructor will use his discretion regarding the meeting of his class when poor weather conditions prevail or are predicted. He will provide the members of his class with a telephone number at which he can be reached between five and six P.M. prior to the scheduled meeting of the class at seven P.M. to convey his decision. For this information students should NOT call the College switchboard or the Graduate Office. In extraordinary cases when it is necessary to cancel all classes, this information will be announced over WTIC.

CORRESPONDENCE AND OFFICE HOURS

All requests for admission, registration, and current standing should be addressed to Mrs. Carole M. Lawson, Executive Secretary, Graduate and Summer Studies, (ext. 321 or 317). Requests for transcripts and other information about students who are not active degree candidates should be obtained from the Office of the Registrar (ext. 317). Other correspondence may be addressed to Dr. C. Freeman Sleeper, Associate Dean for Academic Affairs.

THE TRINITY COLLEGE GRADUATE STUDENT ASSOCIATION

In the fall of 1968 a group of graduate students studying at Trinity formed an association for the purpose of promoting social, cultural, and civic activities among the graduate community. The Association welcomes as members graduate students currently enrolled at Trinity, as well as graduate alumni, and encourages their active participation in its 1969-1970 program of activities.

REGISTRATION

Christmas Term

Registration by mail opens with the publication of this catalog.

Students may also register in person at the Graduate Office, Monday through Friday, from 9:00 A.M. to 5:00 P.M.

Students wishing to meet with advisers September 3 may register following their consultation (see reverse side of registration cards).

For courses which have not reached their limit of enrollment, registration will be accepted as late as the end of the first week of classes. In addition to the regular daily hours the Graduate Office will be open by appointment from 6:30 to 7:30 P.M., Monday through Thursday, of the first week of classes.

Full payment of tuition and registration fee must accompany each registration - including vouchers issued by employers.

Trinity Term

Registration by mail opens December 1.

Students may also register in person at the Graduate Office, Monday through Friday, from 9:00 A.M. to 5:00 P.M.

There will be no adviser session prior to the Trinity Term. Students should consult with their advisers during the preceding term.

For courses which have not reached their limit of enrollment, registration will be accepted as late as the end of the first week of classes. In addition to the regular daily hours the Graduate Office will be open by appointment from 6:30 P.M. to 7:30 P.M., Monday through Thursday, of the first week of classes.

Full payment of tuition and registration fee must accompany each registration – including vouchers issued by employers.

Students are urged to register early as enrollment in most courses is limited. Students are registered in courses in the order in which registrations are received. Approved Master's degree candidates will be given preference on enrollment in graduate courses.

HOURS

Graduate Office

The graduate office is open daily, except Saturday and Sunday, from 9:00 A.M. until 5:00 P.M. Appointments may be arranged early in the evening on Mondays and Tuesdays.

Classes

Unless otherwise noted in the description, each course will meet once each week and carry three semester hours of credit.

Classes which meet during the week, Monday through Thursday, will be held in the evening from 7:00 to 10:00 P.M., or from 5:00 to 6:15 P.M., 7:00 to 8:15 P.M. or 8:30 to 9:15 P.M. if scheduled for two meetings per week.

Trinity College Library

Monday through Saturday, 8:30 A.M. to 12:00 midnight

Sunday, 2:00 P.M. to 12:00 midnight

During vacation periods the library will post a special schedule of hours.

Mather Hall

Bookstore – 6:30 P.M. to 7:30 P.M. on the first four evenings of classes in each term.

Monday and Thursday, 8:30 A.M. to 3:00 P.M.

Tuesday, Wednesday and Friday, 8:30 A.M. to 4:00 P.M.

Saturday, 8:30 A.M. to noon.

Cave – Monday through Thursday, 7:30 A.M. to 11:00 P.M. Friday 7:30 A.M. to 10:00 P.M.

Saturday – 8:00 A.M. to 9:00 P.M.

Sunday – 10:00 A.M. to 8:00 P.M.

Lounges – Daily, 7:00 A.M. to 1:00 A.M.

McCook Library

Open specifically for graduate students Monday through Thursday evenings from 6:00 P.M. to 10:00 P.M.

Austin Arts Center

Monday through Friday, 9:00 A.M. to 12:00 midnight

Saturday – 1:00 P.M. to 5:00 P.M.

Sunday – 1:00 P.M. to 5:00 P.M. and 7:00 P.M. to 12:00 midnight

Courses of Instruction

Christmas Term — September to December

Trinity Term — January to May

CHEMISTRY

Chairman and Graduate Adviser:

PROFESSOR ROBERT H. SMELLIE

A two-year, full-time program in chemistry leading to the Master of Science degree is offered by Trinity College. It involves course work and an advanced research project leading to a thesis of a character suitable for publication. A reading knowledge of German is required for the Master of Science degree. The Department has a limited number of graduate assistantships open to Master's degree candidates.

Graduation from an accredited college with a major in chemistry is required for admission to this program. Courses taken must include at least one year of general chemistry (with qualitative analysis included as a separate course) and one year each of quantitative analysis, organic, and physical chemistry. Two years each of college mathematics (calculus) and college physics are also required.

Students interested in this program should consult the chairman of the Chemistry Department.

There are no evening graduate courses in chemistry.

ECONOMICS

Chairman: Professor Richard Scheuch

Graduate Adviser: Professor Randall W. Tucker

The Master of Arts program in economics is designed for two categories of students: for men and women in business, education, and government who view the Master's degree as a terminal degree, the program provides an analytical approach to a variety of contemporary economic problems; for students who plan to pursue study beyond the MA degree, the program offers rigorous training in the fundamentals of the discipline. Students who are candidates for admission to the Master's program in economics are expected to have completed substantial undergraduate work in

economics. However, students with outstanding undergraduate records and only minimal work in economics have been admitted to the program.

All persons who desire to major in economics, or who merely desire to register in Economics 501, must demonstrate competence to undertake study at this level by passing a qualifying examination. Those who achieve a grade of Distinction in this examination will be exempted from taking Economics 501. Those who are not qualified to enroll in Economics 501 should enroll in Economics 500, which is designed for students who need to refresh their understanding of basic economics, or who have had little or no undergraduate training in economics.

Economics 501 and 512 are required of all students admitted to candidacy after September 1, 1969.

Economics 501 is a prerequisite to all other courses in the Department except Economics 561, *Statistics for Economics* and Economics 572, *Managerial Accounting*. Students with a strong background in economics may, with the approval of the Department, substitute for two of the required ten courses in economics two courses in a related field. Every Master's candidate must include among his ten courses Economics 651-652, *Thesis*.

Courses in the Economics Program

- | | |
|--|--------------------------------------|
| 500. Economic Principles and Problems | 551. International Economics |
| 501. Microeconomic Theory | 552. International Economic Problems |
| 504. Mathematical Economics | 554. Economic Development |
| 511. Money and Banking | 561. Statistics for Economics |
| 512. Macroeconomic Theory | 572. Managerial Accounting |
| 521. Economic History of Western Europe | 575. Comparative Economic Systems |
| 522. Economic History of the United States | 581. Government and Industry |
| 531. Labor Economics | 585. Corporation Finance |
| 532. Union-Management Relations | 591. History of Economic Thought |
| 541. Public Finance | 651-652. Thesis |
| 542. Fiscal Policy | |

Christmas Term – September to December

ECONOMICS 500. Economic Principles and Problems – Monday. The study of some basic economic principles pertaining to the operation of the pricing system, income distribution, national income analysis, monetary and fiscal policy, and international trade. Using these principles inquiry will be made into the government's role in the economy, the problems of industrial combinations, the question of agricultural surpluses,

and the function of labor unions.

This course may be taken for graduate credit but will not be credited toward the requirements for the Master's degree in economics. It is designed for those who have not previously studied economics and for those who wish to refresh their understanding of basic economics.

Seabury 16 – Mr. Egan.

16 / Courses of Instruction

ECONOMICS 501. Microeconomic Theory – Monday. A study of resource allocation and product distribution in a market system. Market behavior is analyzed in terms of the determinants of demand, the supply conditions of productive services, the logic of the productive process, and the institutional structure of markets. The purpose of the course, required of all students majoring in economics, is to provide rigorous training in fundamental analytical techniques.

All students wishing to enroll in Economics 501 must demonstrate a competence to undertake study in economics at the graduate level by passing a qualifying test. Those who receive a grade of Distinction on this test will be exempted from Economics 501. Those not qualified to enroll in Economics 501 should enroll in Economics 500. The qualifying examination will be held on Saturday, September 6 at 2:00 P.M., in Williams 301.

McCook 303 – Mr. Wadbrook.

ECONOMICS 531. Labor Economics – Tuesday. A study of the problems of wage earners in industrial societies with particular

reference to the United States. Topics will include: labor force analysis; wage determination in theory and practice; employment and manpower policies; economic impact of the union; hours and wages legislation; and social security legislation. Prerequisite: Economics 501 or the equivalent.

Williams 301 – Mr. Scheuch.

ECONOMICS 581. Government and Industry – Monday. An examination of the role of government regulation in a free enterprise system. The general criteria for public policy regarding resource allocation and income distribution are developed, and a critical evaluation of anti-trust, public utility, agricultural, and other policies relating to industrial organization is undertaken. Prerequisite: Economics 501 or the equivalent.

Williams 301 – Mr. Curran.

ECONOMICS 651-652. Thesis. – Conference hours by appointment. Six semester hours. Investigation and report of an original research project. See *Degree Requirements*.

Mr. Scheuch and Staff.

Trinity Term – January to May

ECONOMICS 512. Macroeconomic Theory – Monday. Neo-Keynesian economic statics; basic models of real economic growth with full employment; basic models of economic growth with full employment within a monetary system. Required of all majors. Prerequisite: Economics 501 or the equivalent.

McCook 213 – Mr. Garston.

ECONOMICS 554. Economic Develop-

ment – Monday. The analysis of past and present experience of economies in various stages of development. Will emphasize alternative policies designed to increase and restructure the productive potential of a society. Ends and means will be considered in the light of economic theory, institutional problems and differing economic philosophies. Prerequisite: Economics 501 or the equivalent.

McCook 303 – Mr. Wadbrook.

ECONOMICS 561(2). *Statistics for Economics – Thursday.* Nature and importance of statistics; collection and sources of data; tabular and graphic presentation of data; ratios; fundamentals of index number construction; the frequency distribution; measures of central tendency and of variability; theory of the normal curve; sampling theory; time series analysis; simple linear correlation; contemporary developments in statistical theory. A course designed for those who have had no previous work in statistics.

Williams 301 – Mr. Tucker.

ECONOMICS 585(2). *Corporation Finance – Tuesday.* The development of the business unit; corporate organization and control; capital budgeting; cost of capital; corporation securities; the securities markets; valuation; expansion and reorganization. Prerequisite: Economics 501 or the equivalent.

Williams 301 – Mr. Curran.

ECONOMICS 651–652. *Thesis.* – Conference hours by appointment. Six semester hours. Investigation and report of an original research project. See *Degree Requirements*.

Mr. Scheuch and Staff.

EDUCATION

Chairman and Graduate Adviser:

PROFESSOR ALEXANDER A. MACKIMMIE, JR.

Graduate study in education is broadly conceived by the Department as providing course offerings of value and interest for (a) elementary and secondary school teachers in service, (b) prospective secondary school teachers, (c) individuals in other occupations whose work is educational in character, and (d) those persons, not professionally concerned with education, who desire to achieve a better understanding of the problems currently facing public and independent schools.

The Department has held the number of highly specialized courses to a minimum. It believes that an understanding of the history, philosophy, and psychology of education is fundamental to the formulation of sound judgments on the specific issues in education today. Many of the courses are pertinent to education at all levels of instruction in both public and independent schools. In addition, the Department recommends that the student give consideration to the course offerings of the other departments, many of which are of interest to students majoring in education.

Candidates for the Master of Arts degree with a major in education must complete at least five courses within the Department. The candidate will be advised to select the remainder of the degree program from courses which will serve the best interests of the individual, provided the courses selected meet with the prior approval of the Department. Either a thesis (Education 651–652) or its equivalent in course credits plus a Comprehensive Examination is required for the degree. All candidates are also required to take Education 600: *Problems in Education*.

Trinity is approved for the preparation of teachers of academic subjects in public junior and senior high schools in Connecticut. The certification program will also meet the requirements of most other states. Students desiring to prepare for secondary certification must be approved as candidates for the Master's degree (in education or another subject). Those interested should consult the Department concerning the details of the state requirements.

Teachers accepted for a planned course of study leading to certification under the provisions of the State Department of Education's special Temporary Emergency Permit program are required to enroll in Education 491-492: *Student Teaching*. Students in this category will be involved in all the basic activities and phases of the practice teaching experience, including supervision by the Department of Education staff members and attendance at the seminar sessions. However, because they are not taking over the classes of a faculty member of the school in which they are serving, ordinarily the students will not be under the direction of a critic teacher. Graduate credit is not given for Education 491-492.

In order to enable some candidates for the master's degree in education to strengthen limited subject-matter areas in which they are, or may be, employed to teach and thereby to improve their professional competence, the Department of Education, in collaboration with certain academic departments of the College, may recommend a program of studies whereby the teacher-candidate may include a maximum of two courses in undergraduate work for graduate credit. It is understood that this possibility will be approved only when there is a clear and specific need to meet prerequisites for advanced study available only by first taking certain undergraduate courses, as is often the case with the sequence of courses in the sciences and mathematics. The two courses approved under this proposal will normally include junior and senior level courses offered in any term of the College (fall, spring or the summer sessions). Under no circumstances will credit be transferable from courses taken in fulfillment of the requirements for the bachelor's degree at Trinity College or elsewhere, nor will permission be granted to transfer undergraduate credit to the student's graduate record for courses taken at any institution other than Trinity College.

Courses in the Education Program

Courses in education are available in both the summer and winter terms. To enable candidates studying in the summers only to complete the requirements for the Master's degree in a minimum of three summers, courses will be available on an alternating basis. The complete list of courses is as follows:

- 501. History of Education
- 502. Philosophies of Education
- 503. Developmental Psychology
- 504. Differential Psychology
- 507. School and Society
- 521. Secondary School Teaching
- 522. Secondary School Administration
- 524. Secondary School Curriculum

- 541. Educational Measurement and Evaluation
- 543. Principles of Guidance
- 570. School Law
- 600. Problems in Education
- 601. Seminar: Research in Education
- 602. Seminar: Various Topics
- 651-652. Thesis

Christmas Term – September to December

EDUCATION 491-492. Student Teaching. May not be taken for graduate credit. Six semester hours of undergraduate credit. A laboratory course of supervised observation and teaching experience in cooperating secondary schools in the Capital Area. The course also includes a series of seminar sessions. The student should be able to spend a full day at the secondary school for a period of at least nine weeks and must ordinarily observe or teach approximately 140 school periods. Prerequisites: approval as a candidate for the Master's degree and completion of six semester hours of study in education at Trinity College including Education 521. Enrollment is limited and permission of the Chairman of the Department and of the instructor are required. Additional fee: ten dollars.

McCook 225 – Mr. Skirm and Staff.

***EDUCATION 501. History of Education – Tuesday.** A study of the basic ideas, institutions, and practices of contemporary education in the light of their historical development from the earliest times to the present. The student will be required to read selected primary sources – chiefly from the classics of educational literature – in order to assist him in interpreting and reconstructing the history of educational thought.

McCook 225 – Mr. Morris.

***EDUCATION 503. Developmental Psychology – Monday.** A study of human behavior in terms of process, with an examination of representative theories of development as to both their underlying assumptions and their implications for educational practice. Attention will be centered on normal human development throughout the life span, and physical, mental, and emotional growth will be treated as parts of total maturational patterns.

McCook 225 – Mr. Decker.

***EDUCATION 521. Secondary School Teaching – Wednesday.** A study of secondary education in America, with emphasis upon current aims, curriculum patterns, and teaching methods and materials. Each student will be encouraged to pursue particular interests within his areas of academic specialization; for the student preparing to teach, course requirements will be pointed toward his professional practice.

McCook 225 – Mr. Mackimmie.

EDUCATION 602A. Seminar: Comparative Education – Thursday. A comparative study of the structure, aims, and function of contemporary systems of education, including an analysis of the historical and socio-cultural factors leading to their present forms. Certain representative systems will be emphasized, specifically: England, France, Germany, Italy, Russia, India, and

Japan. The educational problems facing other nations of the world will be stressed for comparative purposes. Attention will be given throughout to the methodology employed by scholars in the field. Prerequisite: 501, *History of Education*, or permission of the instructor.

McCook 225 – Mr. Morris.

Trinity Term – January to May

EDUCATION 491-492. Student Teaching. May not be taken for graduate credit. Six semester hours of undergraduate credit. A laboratory course of supervised observation and teaching experience in cooperating secondary schools in the Capital Area. The course also includes a series of seminar sessions. The student should be able to spend a full day at the secondary school for a period of at least nine weeks and must ordinarily observe or teach approximately 140 school periods. Prerequisites: approval as a candidate for the Master's degree and completion of six semester hours of study in education at Trinity College including Education 521. Enrollment is limited and permission of the Chairman of the Department and of the instructor are required. Additional fee: ten dollars.

McCook 225 – Mr. Skirm and Staff.

***EDUCATION 502. Philosophies of Education – Tuesday.** An advanced course that will treat systematically and historically of the vital issues that are involved in any general theory of education. Major philosophies of education will be studied comparatively by student participation on panels reviewing each of the principal positions; neo-scholasticism, rational humanism, idealism, naturalistic realism, experimentalism, and existentialism. Toward the end of the course the student will be requested to construct for

EDUCATION 651-652. Thesis – Conference hours by appointment. Six semester hours. The preparation of a comprehensive paper representing an original solution to a clearly-defined, significant educational problem. Prerequisite: Education 601: *Research in Education*. See *Degree Requirements*.

Mr. Mackimmie and Staff.

himself a philosophy of education adequate for the evaluation of his subsequent professional practice.

McCook 225 – Mr. Morris.

***EDUCATION 504. Differential Psychology – Monday.** A study of quantitative data concerning individual, group, and trait differences, and the validity and reliability of those measuring instruments through which the data are secured.

McCook 225 – Mr. Decker.

EDUCATION 522. Secondary School Organization and Administration – Thursday. A study of principles underlying current school practices in organization and administration and an identification of persistent problems, particularly as they involve the teacher and the pupil.

McCook 225 – Mr. Skirm.

EDUCATION 543 (2). Principles of Guidance – Wednesday. A broad inquiry into the meaning, purpose, and scope of guidance, particularly as it finds expression in schools and other community agencies. Attention will be given to teacher counseling in the classroom, to significant interdisciplinary and inter-agency problems, and to professional issues in contemporary guidance practice.

McCook 225 – Mr. Decker.

EDUCATION 602B. Seminar: Urban Education – *Wednesday*. A confrontation with the ghetto as a social and educational problem. A look at the Negro response, a critical review of the response made thus far by the Establishment, and a consideration of the current proposals to improve urban schools.

McCook 213 – Visiting Instructor.

EDUCATION 651-652. Thesis – Conference hours by appointment. Six semester hours. The preparation of a comprehensive paper representing an original solution to a clearly-defined, significant educational problem. Prerequisite: Education 601: *Research in Education*. See *Degree Requirements*.

Mr. Mackimmie and Staff.

ENGLISH

Chairman and Graduate Adviser:

PROFESSOR J. BARD McNULTY

Graduate courses in English at Trinity are designed for persons with a solid background of study in English who have a professional or personal interest in pursuing advanced work under guidance, probably proceeding to the M.A. degree and beyond. Although the majority of students are usually teachers of English in secondary schools, the program welcomes all interested and qualified persons no matter what their occupations. Each course emphasizes depth of subject matter, accuracy of scholarly research, and range of critical understanding.

A student is expected to have completed an undergraduate major in English, or its equivalent in English courses, to the extent of 24 hours or credits exclusive of freshman English, speech, or journalism. Students applying for candidacy for the degree of Master of Arts with a major in English should meet the above requirements with a grade average of at least B or 80. Also, all students beginning graduate courses in English at Trinity for the first time, regardless of whether or not they intend to apply eventually for degree candidacy, must have their academic credentials reviewed by the Graduate Office prior to registration; an average of at least B is usually required. Candidates for degrees in other fields who have had 15 hours of English may be admitted to English courses by permission of the Chairman.

Candidates are required to take a total of ten courses, of which eight must be in the Department. Outside the Department, candidates may take any graduate course in history, linguistics, philosophy, religion, and ancient or modern foreign language or literature.

The Department of English offers two alternative sequences of courses leading to the M.A. in English, as follows:

Sequence I. Courses:

1. English 593. *English Language and Linguistics*

2. English 579. *Literary Criticism*
3. English 591. *Studies in Ideas: The Study of English*
4. A Period Course (553, 557, 559, 561, 562, 563, 575, 576)
5. A Genre Course (571, 573, 574, 577, 581)
6. A Course in a Major Writer (553, 558, 581 [Major writer] Note: The course taken to satisfy this requirement may not duplicate one taken to satisfy the requirements under 4. and 5., above.)
7. Elective
8. Elective
9. Thesis
10. Thesis (continued)

Sequence II. Courses:

1. English 593. *English Language and Linguistics*
2. English 579. *Literary Criticism*
3. English 591. *Studies in Ideas: The Study of English*
4. A Period Course (553, 557, 559, 561, 562, 563, 575, 576)
5. A Genre Course (571, 573, 574, 577, 581)
6. A Course in a Major Writer (553, 558, 581 [Major writer] Note: The course taken to satisfy this requirement may not duplicate one taken to satisfy the requirements under 4. and 5. above.)
7. Elective (See 10., below.)
8. Elective (See 10., below.)
9. Elective (See 10., below.)
10. Three papers related to 7, 8, and 9, above.

Courses 7, 8, and 9 may be taken consecutively or concurrently. For each of the three, the student is to write an extended paper *in addition* to the papers regularly assigned in the course. These three extra papers are to be related to a general topic which the student is to propose, and which the Department is to approve *before* the student may elect courses 7, 8, and 9. (Example: A student might elect to take courses in *Chaucer*, *narrative poetry*, and *satire*, with three papers on the general topic of "Chaucer's Use of Satire in Narrative Poetry," written under the guidance of a member of the Department. The task of organizing such a program is to be upon the student; his ability to organize will, in fact, be the preliminary test of his qualifications for taking this sequence.) After successful completion of the three papers, the student will receive a total of 3 semester hour credits, which will constitute full credit for Course No. 10.

Summer Program in English

The program for subsequent summer terms will usually include the following course areas:

Every summer

- | | |
|-------------------------|---------------------|
| 1. Linguistics | 4. Studies in Ideas |
| 2. Advanced Composition | 5. Thesis |
| 3. Literary Criticism | |

1970

Genre: Poetry
Genre: Drama
Genre: Satire
Period: Renaissance
Period: Modern
Period: American
Writer: Shakespeare

1971

Genre: Fiction
Genre: Epic
Period: Medieval
Period: Neo-Classical
Period: Modern
Period: American
Writer: Milton

1972

Genre: Drama
Genre: Poetry
Period: Renaissance
Period: 19th Century
Period: Modern
Period: American
Writer: Modern

Courses in the English Program

501. Advanced Literary Writing
553. Studies in Chaucer
557. Studies in the Renaissance
558. Milton
559. Studies in Neo-Classicism
561. Studies in Romanticism
562. Studies in Victorian Literature
563. Studies in Contemporary Literature
571. Studies in Drama

- 573, 574. Studies in Fiction
575, 576. Studies in American Literature
577. Studies in Poetry
579. Studies in Criticism
581. Shakespeare
591. Studies in Ideas
593. Studies in English Language and Linguistics
651-652. Thesis

Christmas Term – September to December

ENGLISH 501. Advanced Expository Writing – *Tuesday*. The study and practice of expository writing in its several forms, together with advanced study of language, rhetoric, logic, and expression. For elementary and secondary school teachers and others.

Seabury 16 – Mr. Risdon.

ENGLISH 562. Studies in Victorian Literature: Poetry and Prose, ca. 1830-1860 – *Thursday*. The major poets – Tennyson, Browning, Arnold – and writers of non-fictional prose – Carlyle, Mill, Newman, Ruskin – viewed both comparatively and in their historical context; an attempt to define the ethos, controlling values, and problems of

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these writers as Victorian "sages"; an evaluation of their achievement in the light of later literary developments, notably that of the Pre-Raphaelites and the art-for-art's-sake movement.

Seabury 19 – Mr. Olsen.

ENGLISH 575. Seminar: Edgar Allan Poe – Monday. A detailed study of the fiction, poetry, and literary criticism of Edgar Allan Poe. This study will include a consideration of Poe's biography, his intellectual milieu, and his significance for his own and our time. As a writer Poe will be viewed from several angles: as an ironist, satirist, humorist, and hoaxer; as a negative romanticist in the "great dark tradition;" as a master of the psychological and Gothic thriller; as a cosmic speculator and pioneer in science fiction; as the father of the detective story; as a symbolist poet; and as the "tomahawk" critic whose high standards of textualist criticism pointed to the New Criticism of the Twentieth Century.

McCook 204 – Mr. Benton.

Trinity Term – January to May

ENGLISH 559. Studies in Renaissance Literary History – Wednesday. The rise of modern fiction and poetry (exclusive of drama) in sixteenth-century England. Special emphasis on the Elizabethan lyric, the works of Spenser, and the poems of Shakespeare. Reports on cultural backgrounds and a term paper.

Seabury 16 – Mr. Stabenau.

ENGLISH 574. Studies in Fiction: The Nineteenth Century Novel – Tuesday. A selective study of major novels and major concepts of the British novel in the nineteenth century, as viewed in their historical context.

Seabury 19 – Mr. Olsen.

ENGLISH 591. Studies in Ideas: The Study of English – Wednesday. For students who are teachers or prospective teachers of English, this course will attempt to clarify the principles and practices of studying and teaching English in school and college. Not a methods course, it will explore the theory and practice of English language study, of composition, and of literary criticism, primarily for the educational benefit of the student-teacher himself, but with some attention to the possibilities and problems of teaching language, writing, and literature in school and college.

Goodwin Lounge – Mr. P. Smith.

ENGLISH 651–652. Thesis – Conference hours by appointment. Six semester hours. A project involving scholarly research, critical thinking, and formal writing. Proposals for theses must be submitted by October 1 for assignment of an adviser. The course must be completed during the academic year in which it is begun. See *Degree Requirements* and separate English Department statement.

Mr. McNulty and Staff.

ENGLISH 575 (2). Seminar: Thackeray, Eliot, James – Thursday. Problems in the definition of Realism in the late Victorian novel, assuming that such realism is a specifically historical, aesthetic, philosophical and social phenomenon. Some exploration of its connections with major literary achievements in this century, and of its implications for teaching standard works by these authors at the secondary school and early college levels. Frequent reports and demonstrations.

McCook 303 – Mr. Wheatley.

ENGLISH 579. Studies in Literary Criticism – Monday. A general view of the scope, theory, principles, and practice of literary criticism, including a consideration of in-

trinsic and extrinsic approaches and a study of the specific techniques of formalist, biographical, psychological, sociological, ideological, and mythological criticism.

Seabury 16 – Mr. Benton.

ENGLISH 651-652. Thesis – Conference hours by appointment. Six semester hours. A

project involving scholarly research, critical thinking, and formal writing. Proposals for theses must be submitted by October 1 for assignment of an adviser. The course must be completed during the academic year in which it is begun. See *Degree Requirements* and separate English Department statement. Mr. McNulty and Staff.

GOVERNMENT

Acting Chairman: ASSOCIATE PROFESSOR CLYDE D. MCKEE, JR.

Graduate Adviser: PROFESSOR REX C. NEAVERSON

The program leading to a Master of Arts degree in Government has been designed to meet the needs both of persons with a general interest in political science and also of persons currently engaged in public service. Over the years the program has therefore attracted candidates from such fields as education, law, religion, and the civil service. Candidates for the degree should normally hold a bachelor's degree in one of the social sciences or in history. However, a candidate who majored in another area as an undergraduate may be considered. The Department passes upon the eligibility of all applicants.

Candidates for the Master of Arts degree in government are required to complete a total of ten courses, of which eight must be in the Department, including Government 651-652 *Thesis*. Courses taken in related areas, normally history, economics, or philosophy, must be approved by the Department Chairman or Graduate Adviser.

New students ordinarily are required to take Government 501: *Introduction to Political Science* as the first course in their program of study. This course is offered in the Christmas Term each year. Those who enter as students in the Trinity Term will be permitted to start their study with another government course provided they have the approval of the Department Chairman or Graduate Adviser and provided also that they take Government 501 as the second course in their program.

New students will be formally accepted as candidates for the Master's degree after satisfactory completion of Government 501 or its equivalent, subject to the approval of the Department Chairman or Graduate Adviser.

Students who have an adequate undergraduate background in government or who have other satisfactory qualifications may ask permission to omit Government 501.

Students who do not intend to become candidates for the Master's degree in government but who wish to take courses offered by the Department may do so without completing Government 501 provided they have the permission and approval of the Department Chairman or Graduate Adviser.

Degree candidates should inform the Graduate Adviser in writing of the probable area of thesis topic not later than upon completion of their third course in the Department.

Courses in the Government Program

- | | |
|---|---|
| 501. Introduction to Political Science | 517. Government and Politics of Latin America |
| 502. American National Government | 521. International Politics |
| 504. American Political Thought | 522. International Law |
| 508. Totalitarian Government and Politics | 523. International Organization |
| 509. Congress and the Legislative Process | 532. Comparative Politics |
| 511. Public Administration | 533. Political Ideology |
| 512. Metropolitan Government | 580. Government and Politics of Asia |
| 513. American Political Parties | 621. Independent Study |
| 514. American Constitutional Law | 651-652. Thesis |
| 515. American Foreign Policy | |

Christmas Term – September to December

GOVERNMENT 501. Introduction to Political Science – Monday. A general introduction to the study of political science, its scope and methods. The course will be organized as follows: 1. The history and development of western political theory and its influence on the growth of constitutional government; 2. The impact of the French and industrial revolutions on political theory and a brief introduction to some contemporary political ideas; 3. The major types of governmental organization: an introduction to comparative government and the application of concepts and techniques of political analysis to modern political systems; 4. Analysis of contemporary tensions and conflicts on the international scene. Completion of this course with a satisfactory grade is a prerequisite for admission to candidacy for the degree of Master of Arts in government. See regulations above.

Seabury 17 – Mr. Neaverson.

GOVERNMENT 508. Totalitarian Government and Politics – Monday. The meaning and characteristics of totalitarianism. The role of ideology and social theory in the formulation of policy. Chief emphasis on the political and social institutions of post-Stalin Soviet Russia. Minor attention to Nazi Germany, Fascist Italy, and to selected aspects of other totalitarian systems.

Seabury 14 – Mr. Cobbledick.

GOVERNMENT 511. Public Administration – Wednesday. The development and practice of modern public administration. The administrative process is examined with special reference to the following factors: organizational structure and socio-cultural environment; theories of formal and informal organization; group behavior.

Seminar Room #1 2d Floor, Library – Mr. McKee.

GOVERNMENT 621. Independent Study – Individual research on a selected topic under the guidance of a department member. Permission granted to specially qualified candidates only. Not a substitute for the thesis course. May be taken once only.
Staff.

GOVERNMENT 651-652. Thesis – Conference hours by appointment. Six semester hours. Investigation and report of an original research project. See *Degree Requirements*.
Staff.

Trinity Term – January to May

GOVERNMENT 504. American Political Thought – Wednesday. The main currents of American political thought from the Colonial Period to the present time. Reading is mostly from original sources.
Seabury 46 – Mr. Hendel.

Pakistan, and Indonesia. Special attention will be paid to current problems as they develop, and to topics of particular interest to the members of the class.

Seabury 17 – Mr. Jai Singh.

GOVERNMENT 517 (2). Government and Politics of Latin America – Thursday. Political development, modernization, and social change in Latin America. Particular attention is given to the organization and functioning of government.
Seabury Hall 17 – Mr. Gastmann.

GOVERNMENT 621 (2). Independent Study – Individual research on a selected topic under the guidance of a department member. Permission granted to specially qualified candidates only. Not a substitute for the thesis course. May be taken once only.
Staff.

GOVERNMENT 580. Government and Politics of Asia – Monday. An examination of the political institutions and problems of the principal countries of Asia, with particular emphasis on contemporary domestic and foreign policies of China, Japan, India,

GOVERNMENT 651-652. Thesis – Conference hours by appointment. Six semester hours. Investigation and report of an original research project. See *Degree Requirements*.
Staff.

HISTORY

Chairman: PROFESSOR GEORGE B. COOPER

Graduate Adviser: ASSOCIATE PROFESSOR GLENN WEAVER

The Master's degree with a major in history is designed to follow an undergraduate concentration in history. Undergraduate preparation may include survey courses in ancient, European and American history. Candidates must complete at

the graduate level a minimum of ten courses, at least eight of which must be in history, including History 651-652: *Thesis*. Students with extensive preparation in history may be permitted by their adviser to elect two courses in another department. The thesis is the final project of all candidates. A reading knowledge of one foreign language is required.

Summer Program in History

Courses in history are available both during the Summer Term and the regular academic year. Candidates may complete their course requirements (exclusive of the Thesis) toward the Master's degree in a minimum of two summers. A selection of history courses representing the following periods and areas will be available each summer: ancient history, Medieval history, European history, and American history.

Courses in the History Program

- | | |
|---|--|
| 505. Greece, 594 to 338 B.C. | 550. New England |
| 506. Greece, 338 to 200 B.C. | 551. The Colonial Period in American History |
| 507. The Roman Republic | 552. United States: The Formative Years |
| 508. The Roman Empire | 553. Civil War and Reconstruction |
| 511. The Middle Ages | 561, 562. United States as a World Power |
| 512. The Byzantine Empire and Islam | 563. United States: Reconstruction to 1910 |
| 515. Renaissance and Reformation | 564. America in the Twentieth Century |
| 517. Europe 1760-1870 | 571. Latin America |
| 518. Expansion of Europe | 577. Modern Canada |
| 521, 522. European Diplomatic History | 580. Far East |
| 525, 526. England | 581. China |
| 527. Twentieth Century Britain | 585, 586. India |
| 531, 532. France | 590, 591. Africa |
| 535, 536. Germany | 601, 602. Seminars: Various topics |
| 537. Studies in 19th and 20th Century European Intellectual History | 651 - 652. Thesis |
| 538. Italy | |
| 541, 542. Russia | |

Christmas Term - September to December

HISTORY 506. Greece 338-200 B.C. - *Monday*. A history of Greece and the Near East from the conquest of Greece by Macedonia with especial study of the source material on Alexander the Great and on the Hellenization of the East.

Seabury 34 - Mr. Davis.

HISTORY 526-England 1714-1901 - *Wednesday*. A study of Georgian and Victorian England with especial emphasis on the sources of power of the eighteenth-century governing class, the Industrial Revolution, the Empire, nineteenth-century middle class culture.

Seabury 34 - Mr. Cooper.

HISTORY 553(2). The Civil War and Reconstruction – *Wednesday*. A combined lecture-discussion course based on non-military topics: slavery and the shape of southern society; the abolitionists, the breakdown of the American party system, interpretations of the causes of the Civil War, the politics of the Union and the Confederacy, the Negro and Reconstruction.

Seabury 4 – Mr. Spencer.

HISTORY 585. Ideas and Institutions of India – *Monday*. The major features of South Asian civilization and culture from the present to remotest antiquity.

Seabury 19 – Mr. Ferguson.

HISTORY 651-652. Thesis – Six semester hours. Investigation and essay on an original research topic. Registration for this course must be accompanied by written permission from the Chairman of the Department.

Mr. Cooper and Staff.

Trinity Term – January to May

HISTORY 515(2). Europe in the Period of Renaissance and Reformation – *Wednesday*. The religious, political, economic, and cultural development of Europe from the fourteenth century to the seventeenth century. Topics for study will include: the Renaissance and Reformation as periods of history, the relationship of the Renaissance and Reformation, Renaissance humanism, politics and diplomacy, the Church on the eve of the Reformation, the religious movements in England and Europe, the Catholic Reformation, and European politics in the seventeenth century.

Seabury 4 – Mr. Painter.

HISTORY 581. China in Revolution – *Tuesday*. A study of various aspects of the revolution in 19th and 20th century China. Among major topics considered: "nature" of the Chinese revolution; reaction and reform in the 19th century; nationalism and the birth of Republican China; the CCP and KMT; the revolution in the People's Republic of China.

Seabury 4 – Mr. Oxnam.

HISTORY 586. Ideas and Institutions of India – *Monday*. A continuation of History 585.

Seabury 19 – Mr. Ferguson.

HISTORY 551. The Colonial Period in American History – *Thursday*. A social and cultural history emphasizing intellectual religious, economic, and other non-political developments.

Seabury 4 – Mr. Weaver.

HISTORY 651-652. Thesis. Six semester hours. Investigation and report of an original research topic. Registration for this course must be accompanied by written permission of the Chairman of the Department.

Mr. Cooper and Staff.

ITALIAN

The courses in Italian literature in translation are designed particularly for students of history and of English literature. They are made available as a part of the activity of the Cesare Barbieri Center of Italian Studies.

Italian Courses Available in Other Years or in Summer Term

551. Italian Renaissance Literature
553 and 554. Dante - *The Divine Comedy*

560. The Contemporary Italian Novel

LATIN LITERATURE AND CLASSICAL CIVILIZATION

Chairman and Graduate Adviser: PROFESSOR JOHN C. WILLIAMS

The program leading to the Master of Arts degree in Latin literature and Classical Civilization is especially designed for secondary school teachers of Latin. However, any person who is qualified and interested in doing advanced study in Latin and Classical Civilization would find the program appropriate.

To be eligible as a candidate in this program an applicant must meet the general requirements for acceptance as a candidate for the Master's degree and show evidence of possessing sufficient competency in Latin to undertake study of the subject at the graduate level.

A candidate for the Master of Arts degree must complete a total of ten courses (30 semester hours). A minimum of five courses involving analytical and interpretive reading of Latin authors in the original must be included in a candidate's program of study. These courses are to be selected from the curriculum unit entitled *Studies in Latin Literature*.

In addition, all degree candidates are required to complete successfully Latin 601-602: *History of Latin Literature*. This six semester hour course should be taken at the end of a student's program of study.

The balance of a candidate's program, three courses, may include additional study in Latin literature, Greek, Greek and Roman history, classical civilization, or linguistics.

Each candidate is required to pass a Comprehensive Examination. Under special circumstances and with permission of the Department Chairman, particularly well-qualified students will be permitted to substitute a thesis for the Comprehensive Examination. All candidates, however, must pass the sight translation section of the examination.

The Comprehensive Examination will be administered once each year in mid-August. Candidates planning to take the examination must notify the Office of Graduate Studies in writing two weeks prior to the date of the test. Each student should include in his letter the two special authors he has selected for the second portion of the examination.

It is recommended that candidates plan not to enroll in courses during the session of the Summer Term in which the Comprehensive Examination is to be taken. They will, however, be permitted to take one course at this time – with permission of the Department Chairman.

The courses in Latin and Classical Civilization are offered in the Summer Term only. However, candidates may take courses in Greek and Roman history and linguistics in the Christmas or Trinity Terms whenever they are available. In subsequent summers the courses available each year will probably include the following areas:

1. Greek
2. Courses in history and classical civilization
3. A wide selection of courses in Latin literature

Courses in the Classics Program

Studies in Latin Literature

- | | |
|--|----------------------------|
| 501. Plautus and Terence | 509. Lucretius |
| 502. Catullus and Horace | 510. The Roman Love Elegy |
| 503. Cicero | 511. Roman Satire |
| 504. Livy | 512. Ovid |
| 505. Vergil: the <i>Aeneid</i> , Books I–VI | 513. Tacitus |
| 506. Vergil: the <i>Aeneid</i> , Books VII–XII | 514. Medieval Latin |
| 507. Vergil: <i>Eclogues</i> and <i>Georgics</i> | 521, 522. Special Readings |
| 508. Caesar and Sallust | |

Required Seminar

- 601–602. History of Latin Literature

Greek

- | | |
|---------------------------|-----------------------------|
| 101–102. Elementary Greek | 202. Homer |
| 201. Greek Prose | 301, 302. Advanced Readings |

Classical Civilization

- | | |
|------------------------|---------------------|
| 501. Greek Archaeology | 503. Special Topics |
| 502. Roman Archaeology | |

MATHEMATICS

Chairman and Graduate Adviser:

PROFESSOR WALTER J. KLIMCZAK

The Department of Mathematics offers a graduate program in mathematics which leads to the degree of Master of Science. It is designed for those who wish to supplement their training in mathematics and broaden their mathematical background.

The degree of Master of Science in mathematics is conferred upon students who have received a bachelor's degree with an undergraduate concentration in mathematics and have successfully completed ten graduate courses in mathematics, or eight in mathematics and two in physics. The mathematics courses shall include either Mathematics 501 and 502 (*Introduction to Analysis I, II*) or Mathematics 503 and 504 (*Theory of Functions of a Real Variable I, II*), and three courses from the following six courses: Mathematics 507, 508 (*Theory of Functions of a Complex Variable, I, II*), Mathematics 517 (*Topology*), Mathematics 518 (*Introduction to Algebraic Topology*), Mathematics 519 (*Modern Algebra*), Mathematics 520 (*Linear Algebra*).

Students who have not taken a course in advanced calculus will normally be required to take Mathematics 500, which is recommended for students in mathematics.

Candidates should note that they will not receive credit toward the Master of Science degree in mathematics for Mathematics 500 or 500A or 500B. A thesis is not required.

Before electing either Mathematics 501 or Mathematics 503, students must request the permission of the Graduate Adviser, preferably at the Graduate Advisers' Pre-registration Session on the evening of September 3.

Courses in the Mathematics Program

- | | |
|--|---|
| 500. Advanced Calculus | 514. Mathematical Logic |
| 500A. Advanced Calculus I | 517. Topology |
| 500B. Advanced Calculus II | 518. Introduction to Algebraic Topology |
| 501, 502. Introduction to Analysis | 519. Modern Algebra |
| 503, 504. Theory of Functions of a
Real Variable | 520. Linear Algebra |
| 505. Theory of Probability | 521. Vector Analysis |
| 506. Mathematical Statistics | 522. Vector and Tensor Analysis |
| 507, 508. Theory of Functions of a
Complex Variable | 523. Foundations of Mathematics |
| 510. Introduction to Numerical Analysis | 525, 526. Topics from Analysis |
| 511, 512. Advanced Numerical Analysis | 601. Introduction to Functional Analysis |
| | 603. Functional Analysis and Applied
Mathematics |

Christmas Term – September to December

MATHEMATICS 500 (1). Advanced Calculus – *Tuesday and Thursday, 7:00–8:15.* The purpose of this course is to provide a sound background necessary for graduate study in mathematics. (Compare with Mathematics 500A.) The emphasis is on the understanding of the basic concepts of the calculus. Among the topics considered are the basis of the real number system, limits, continuity, differentiation, integration, and infinite series. Prerequisite: differential and integral calculus, or permission of the instructor. This course may be taken for graduate credit but will not be credited toward the requirements for the Master's degree with a major in mathematics.

McCook 311 – Mr. Seitelman.

MATHEMATICS 500A(1). Advanced Calculus I – *Tuesday and Thursday, 7:00–8:15.* This course is designed primarily for students in the physical sciences. Its purpose is to present topics of mathematics which are of common importance in various fields of applications. Among those included are infinite series, power series, solutions of differential equations, introduction to Laplace transform. Fourier series and dynamic programming. Prerequisite: differential and integral calculus or permission of the instructor. This course may be taken for graduate credit but will not be credited toward the requirements for the Master's degree with a major in mathematics.

McCook 307 – Mr. Bennett.

***MATHEMATICS 501.** Introduction to Analysis I – *Monday and Wednesday, 7:00–8:15.* An introductory course in the fundamental concepts of abstract analysis. Elements of logic and set theory, the real and complex number systems, fields, limits of complex sequences, infinite series and products. Prerequisite: Permission of Graduate Adviser.

McCook 311 – Mr. Anderson.

***MATHEMATICS 503.** Theory of Functions of a Real Variable I – *Monday and Wednesday, 7:00–8:15.* Elementary general topology and functional analysis, differential calculus in Banach spaces. Prerequisite: Permission of Graduate Adviser.

McCook 307 – Mr. Whittlesey.

MATHEMATICS 507. Theory of Functions of a Complex Variable I – *Monday and Wednesday, 7:00–8:15.* A rigorous treatment of the theory of functions of a single complex variable. The algebra of complex numbers, analytic functions, complex integration, Cauchy integral theorem and formulas, power series. Prerequisite: Mathematics 502 or its equivalent.

McCook 309 – Mr. Boyer.

***MATHEMATICS 517(2).** Topology – *Tuesday and Thursday, 7:00–8:15.* Sets and functions, metric spaces and metrizable, topological spaces and their maps, compactness, separation, connectedness. Prerequisite: Mathematics 500 or its equivalent.

McCook 305 – Mr. Mattson.

MATHEMATICS 520(1). Introduction to Linear Algebra – *Tuesday and Thursday, 7:00–8:15.* Vector spaces, finite- and infinite-dimensional. Linear transformations and their matrix representations. Prerequisite: Mathematics 500: Advanced Calculus.

McCook 309 – Mr. Whittlesey.

***MATHEMATICS 523.** Foundations of Mathematics – *Monday and Wednesday 7:00–8:15.* A critical analysis of some of the fundamental concepts of mathematics. Mathematical induction. Peano's postulates for the natural numbers. The Frege-Russell definition of number. Construction of the system of complex numbers. Transfinite arithmetic philosophies of mathematics. Prerequisite: Mathematics 500 or its equivalent.

McCook 305 – Mr. Poliferno.

Trinity Term – January to May

MATHEMATICS 500B(2). Advanced Calculus II – *Tuesday and Thursday, 7:00–8:15.* This course is a continuation of Mathematics 500A, but can be taken independently of Mathematics 500A. Among the topics considered are vector analysis, higher dimensional calculus, solutions of partial differential equations, introduction to analytic functions of a complex variable, Cauchy integral theorem and formulas. Prerequisite: differential and integral calculus or permission of the instructor. This course may be taken for graduate credit but will not be credited toward the requirements for the Master's degree with a major in mathematics.

McCook 307 – Mr. Bennett.

***MATHEMATICS 502.** Introduction to Analysis II – *Monday and Wednesday, 7:00–8:15.* Further topics in abstract analysis. The topology of metric spaces, introduction to analytic functions. Prerequisite: Mathematics 501.

McCook 311 – Mr. Anderson.

***MATHEMATICS 504.** Theory of Functions of a Real Variable II – *Monday and Wednesday, 7:00–8:15.* Integral calculus in Banach spaces. Abstract measures. Differential forms and Stokes' theorem. Prerequisite: Mathematics 503.

McCook 307 – Mr. Whittlesey.

MATHEMATICS 508. Theory of Functions of a Complex Variable II – *Monday and Wednesday, 7:00–8:15.* The expansion of analytic functions in series, poles, essential singularities, contour integration, the calculus of residues, analytic continuation, conformal mapping, entire functions. Prerequisite: Mathematics 507.

McCook 309 – Mr. Boyer.

***MATHEMATICS 510.** Introduction to Numerical Analysis – *Tuesday and Thursday,*

7:00–8:15. An introduction to the methods of numerical analysis. Among the topics discussed will be round-off error, interpolation, solution of systems of nonlinear equations, numerical integration, matrix inversion, and the numerical solution of ordinary differential equations. The theoretical basis of these methods will be stressed. It is assumed that the student is familiar with matrix methods. Prerequisite: Mathematics 500 or its equivalent.

McCook 311 – Mr. Seitelman.

***MATHEMATICS 514.** Mathematical Logic – *Monday and Wednesday, 7:00–8:15.* An introductory course in the fundamental concepts of mathematical logic, with emphasis on the formal properties of logical systems. Prerequisite: Mathematics 500 or its equivalent.

McCook 305 – Mr. Poliferno.

***MATHEMATICS 518.** Introduction to Algebraic Topology – *Tuesday and Thursday, 7:00–8:15.* Simplicial and singular complexes, their homology and cohomology groups. Homotopy groups. Prerequisite: Mathematics 517 or permission of the instructor.

McCook 309 – Mr. Whittlesey.

***MATHEMATICS 519 (2).** Modern Algebra – *Tuesday and Thursday, 7:00–8:15.* Topics selected from the following: Groups: subgroups and normal subgroups, factor groups, the homomorphism theorems, permutation groups and Cayley's theorem, Jordan-Hölder theorem and chain conditions, Sylow theorems. Rings: integral domains, principal ideal rings, division rings, prime factorization. Fields: finite fields, polynomial rings, algebraic extensions, splitting fields. Prerequisite: Mathematics 500 or its equivalent.

McCook 305 – Mr. Mattson.

MODERN LANGUAGES

Chairman and Graduate Adviser:

PROFESSOR GUSTAVE W. ANDRIAN

The program leading to the Master of Arts degree in French or in Spanish is designed to provide the candidate with a good knowledge of French or Spanish literature and literary analysis, and an understanding of the culture and civilization of the nation concerned. Although designed especially for secondary school teachers or prospective teachers of French or Spanish, the program is appropriate for any person who is qualified and interested in doing advanced study.

To be eligible as a candidate for the Master of Arts degree in either French or Spanish, an applicant must meet the general requirements for acceptance as a candidate for the Master's degree and show evidence of possessing sufficient competence in French or in Spanish (usually the equivalent of a college major) to undertake study of the subject at the graduate level. All courses, with but few exceptions, are conducted in the language.

Programs of study in French and Spanish are planned on an individual basis but candidates are normally required to take a total of ten courses (30 semester hours) and pass a Comprehensive Examination. Of the total of ten courses, one must be in civilization and culture and one in applied linguistics. A literature course may be substituted for linguistics or civilization when similar work has previously been taken. Students may elect, with permission of the Department Chairman, to substitute a thesis in lieu of two courses in literature and the Comprehensive Examination.

Comprehensive Examinations in French and Spanish literature are held about the first of October and of May. Each examination consists of a written section, approximately four hours in length, and of a shorter oral test. Students planning to take the examination should notify the Associate Dean of the College and the adviser in writing no later than one month prior to the test date.

Although the program is designed primarily for summer study, the Department offers at least one course in French and one course in Spanish for graduate credit in each semester of the regular academic year. It is, therefore, possible to complete the requirements for the Master's degree in a minimum of one academic year and two summers.

Courses in the Modern Languages Program

French

- 501. Linguistics
- * 502. Advanced Conversation and Syntax
- 503, 504. Civilization and Culture
- 505. Masterpieces of French Literature
- 507, 508. Studies in French Classicism
- 509, 510. Studies in the Eighteenth Century
- 511. Studies in Romanticism
- 512. Studies in Realism and Naturalism
- 513, 514. Studies in Lyric Poetry

- 515, 516. Studies in Drama
- 517, 518. Studies in Fiction
- 519. Proust and Gide
- 520. Existentialism
- 521. Renaissance Prose
- 522. Renaissance Poetry
- 523. Literary Criticism
- 525. Study in Stylistics
- 528. Studies in the Short Story
- 530. The Literature of Negritude

Spanish

- 501. Linguistics
- * 502. Advanced Conversation and Syntax
- 503, 504. Civilization and Culture
- 505. Masterpieces of Spanish Literature
- 506. Cervantes
- 507, 508. Studies in the *Siglo de Oro*
- 509, 510. Studies in the Nineteenth Century
- 511. The Generation of '98
- 513, 514. Studies in the Twentieth Century
- 515, 516. Studies in Spanish American Literature

- 517. Masterpieces of Spanish American Literature
- 518. The Spanish American Novel
- 519. Medieval Spanish Literature
- 521. Studies in Sixteenth Century Humanism
- 525. Studies in the Short Story
- 527. Studies in the Drama
- 528. Colonial Spanish Literature

* This course does not carry graduate credit.

Christmas Term – September to December

FRENCH 509. The Eighteenth Century – Wednesday. A study of the French Enlightenment as reflected in the major literary and philosophical works of Voltaire and Diderot.
McCook 213 – Mr. Leavitt.

***FRENCH 512 (1). The Realist and Naturalist Novel – Thursday.** A study and analysis of realism and naturalism in France in the nineteenth century as exemplified by selected novels of Stendhal, Balzac, Flaubert, and Zola. Lectures, discussions, reports, and papers.

McCook Center 213 – Mr. Pretina.

SPANISH 504. Methods of Literary Criticism and Research – Thursday. A study of the methods and approaches to literary criticism, analysis, and research as specifically applied to Hispanic literature. Short papers and reports.

McCook 204 – Mr. Kerson.

SPANISH 513. Post-Civil War Novel and Drama – Tuesday. A study of the principal novels of Cela, Delibes, Goytisolo, Ana Maria Matute, and others, and the drama of Buero Vallejo.

McCook 213 – Mr. Andrian.

Trinity Term – January to May

FRENCH 528. Studies in the Short Story – *Thursday*.

McCook 213 – Instructor to be announced.

FRENCH 530. The Literature of Negritude: Novel, Short Story, and Poetry – *Wednesday*.

Seabury 49 – Mr. Waterman.

SPANISH 528. Colonial Spanish Literature – *Thursday*. A study of selected works of the *Historiadores de Indias* and poets of America from the period of discovery to the end of the 18th century. Part of the course will be dedicated to the cultural history of Spanish America. Included are Hernán Cortés, Bernal Díaz del Castillo, Bartolomé de las Casas, the Inca Garcilaso de la Vega, Alonso de

Ercilla, Bernardo de Balbuena, and Sor Juana Inés de la Cruz.

McCook 204 – Mr. Kerson.

GERMAN 502. History of the German Language – *Tuesday*. A study of the development of the German language from its beginnings to modern times, with reading of some texts from the Old High German, Middle High German, and Early Modern German Periods.

McCook 204 – Mr. Hook.

GERMAN 504. Masterpieces of German Literature – *Wednesday*. Study of selected major German literary works, with reports and discussion in German, and collateral readings.

McCook 204 – Mr. Hansen.

PHILOSOPHY

Chairman: PROFESSOR BLANCHARD W. MEANS

Graduate Adviser: ASSISTANT PROFESSOR DREW HYLAND

Trinity's degree program in philosophy is planned, not necessarily as preparation for professional work in philosophy, but primarily to provide an opportunity for mature students to investigate the fundamental thinking of mankind. Previous undergraduate study of philosophy is not required. To qualify for the Master's degree the student must complete ten courses, eight of which must be in philosophy, including Philosophy 651–652: *Thesis*. No specific course or sequence of courses is required, but candidates are encouraged to seek the counsel of the Department Chairman or Graduate Adviser in planning their program of study. Registration in courses from other departments which are to be applied toward the degree requirements in philosophy must be approved in advance by the Department.

Courses in the Philosophy Program

- 501. Philosophy of Science
- 502. Advanced Logic
- 503. Philosophy of Religion
- 504. Philosophy of State
- 505. Philosophy of History
- 506. Philosophy of Art
- 507. History of Philosophy I
- 508. History of Philosophy II
- 509. Special Studies in Philosophy
- 510. Special Studies in Philosophy
- 511. Seminar – Various Topics
- 512. Seminar – Various Topics
- 651–2 Thesis

Christmas Term – September to December

PHILOSOPHY 521. Philosophy of Law – *Wednesday*. A philosophical analysis of such problems as the nature of the law, the character of legal reasoning, and the relations between law and morality. Permission of the instructor.

McCook 303 – Mr. Newman.

PHILOSOPHY 541. Plato – *Tuesday*. The seminar will be devoted to a detailed interpretation of Plato's *Charmides* and *Sym-*

posium. Students will be expected to study and write on other dialogues on their own. Permission of the instructor.

McCook 303 – Mr. Hyland.

PHILOSOPHY 651–652. Thesis – Conference hours by appointment. Intensive inquiry into a special area of philosophy under the direction of a member of the Department. See *Degree Requirements*.

Mr. Means and Staff.

Trinity Term – January to May

PHILOSOPHY 542. Hume and Kant – *Monday*. A careful reading from historical and critical points of view of Hume's *Treatise on Human Nature* and Kant's *Critique of Pure Reason*. Permission of the instructor.

Seabury 39 – Mr. Brown.

PHILOSOPHY 543. Aristotle – *Tuesday*. The seminar will be devoted to a detailed interpretation of Aristotle's *De Anima*. This

will require extensive research into related works, especially *Metaphysics* and *Physics*. Permission of the instructor.

McCook 303 – Mr. Hyland.

PHILOSOPHY 651–652. Thesis – Conference hours by appointment. Intensive inquiry into a special area of philosophy under the direction of a member of the Department. See *Degree Requirements*.

Mr. Means and Staff.

PHYSICS

Acting Chairman and Graduate Adviser:

PROFESSOR ROBERT LINDSAY

The program in physics leading to the Master of Science degree is designed for engineers, mathematicians, physicists in industry, and others who desire further training in mathematical physics and knowledge of recent developments in the atomic and sub-atomic fields.

The physics courses are planned to follow an undergraduate concentration in physics and mathematics. Ten courses are required for the Master's degree. A thesis is not required. A student may take, for credit, no more than two courses from the group: Physics 500; Mathematics 500, 500A and 500B. Although no one particular set of courses is specified, students are required to take Physics 501, 502, two courses from the group: Physics 503, 504, 511, 512, 513, 514 and at least two additional courses in physics beyond Physics 500. Remaining courses must be in physics or mathematics. Students who apply for candidacy for the Master's degree in physics will be reviewed by the Graduate Committee only after they have completed one course in physics at Trinity beyond Physics 500. Students who are planning to become degree candidates are normally expected to begin their course work with Physics 501. In order to be admitted to this course all students are required to pass a qualifying examination administered by the department. This test will be administered on Thursday evening, September 4, 1969 at 7:00 P.M. in Room 102, McCook Center. The examination will include general principles of physics and their mathematical formulation. Suggested references for review are: Sears and Zemansky, *University Physics*, and F. W. Constant, *Theoretical Physics*. Students who do not pass the qualifying examination will be required to complete Physics 500 before taking 501. Students who receive a grade of Distinction on this examination and are extremely well prepared in theoretical physics will be considered by the department for exemption from the Physics 501, 502 requirements. Such students will be required to take at least six courses in physics beyond 502. Students who are uncertain as to whether they have qualitatively satisfied the prerequisites of a course should discuss their academic preparation with members of the Physics Department, preferably at the Graduate Advisers' Session.

Through a cooperative arrangement with the Hartford Graduate Center of The Rensselaer Polytechnic Institute it will be possible for graduate students in physics at Trinity this year to take certain graduate physics courses at RPI Hartford Center which are exempt from the rule of transfer credit. These courses are listed under physics course offerings but are designated by their RPI numbers. A student who is interested in taking any of these courses should contact the Physics Graduate Adviser for information on registration procedure.

Courses in the Physics Program

500. Fundamental Principles of Physics
 501, 502. Classical Mechanics
 503, 504. Electricity and Magnetism
 505. Mathematical Physics
 507. Electromagnetic Theory of Light
 508. Statistical Mechanics

511, 512. Modern Physics
 513, 514. Quantum Mechanics
 519, 520. Solid State Physics
 601, 602. Research
 RPI H 16.31, H 16.32. Modern Physics

Christmas Term – September to December

PHYSICS 501. Classical Mechanics I – Tuesday and Thursday, 7:00–8:15. The concepts of mass, force and energy, Lagrange's equations, and the central force problem. Emphasis is placed on the fundamental hypotheses of the physical theory and their expression in various mathematical forms. Prerequisite: at least two courses in physics and two in mathematics, including a course in mechanics. All students desiring to enroll in Physics 501 will be required to pass successfully a qualifying examination. This test will be administered on Thursday evening September 4, 1969, at 7:00 P.M. in Room 102, McCook Center. The examination will include general principles of physics and their mathematical formulation. Suggested references for review are: Sears and Zeman-sky, *University Physics*, and F. W. Constant, *Theoretical Physics*. Students who do not pass the qualifying examination will be required to complete Physics 500 and Mathematics 500A and/or 500B before taking Physics 501. Those who receive a grade of Distinction in this test will be exempted from taking Physics 501, 502.

McCook 102 – Mr. Lamb.

***PHYSICS 503. Electricity and Magnetism I – Monday and Wednesday, 7:15–8:55.** Electrostatic, magnetostatics, time-varying electromagnetic fields and Maxwell's equa-

tions, plane electromagnetic waves, wave guides and resonant cavities, multipole radiation. Four semester hours credit. Prerequisite: Physics 501, 502, or an equivalent course in mechanics.

McCook 102 – Mr. Lary.

***PHYSICS 519. Solid State Physics I – Monday and Wednesday, 5:00–6:15.** A general introductory course in the properties of solids. Topics include crystal structure, types of bonding, mechanical properties, thermal properties, dielectrics, free electron and band theories, and semiconductors. Prerequisites: Physics 501, 502 or an equivalent course in theoretical physics and at least one semester of atomic physics.

McCook 106 – Mr. Witt.

RPI PHYSICS H 16.31. Modern Physics I – Monday and Wednesday, 5:15–6:30. Wave mechanics; Schroedinger equation and its solution for hydrogen; particle current density; angular momentum and magnetic moment of atoms with arbitrary quantum numbers; Zeeman effect, Pauli rule; relativistic Hamiltonian; Klein-Gordon equation; Dirac equation; electron diffraction, reflection, transmission and refraction.

RPI Hartford Center–Mr. Schwarz.

Trinity Term – January to May

PHYSICS 500. Fundamental Principles of Physics – Monday and Wednesday, 5:00–6:15. The course is designed to help prepare those who wish to take graduate courses in physics but who have not completed an undergraduate major in physics. The mathematical formulation of the fundamental prin-

ciples of physics will be reviewed with special emphasis on mechanics and electromagnetism. Familiarity with the calculus, differential equations and vector notation will be developed through the analysis and solution of theoretical problems.

McCook 102 – Mr. Schmutge.

***PHYSICS 502. Classical Mechanics II** – Tuesday and Thursday, 7:00–8:15. A continuation of Physics 501. Dynamics of rigid bodies, special relativity, Hamilton's equations, and small oscillations. Prerequisite: Physics 501.

McCook 102 – Mr. Lamb.

***PHYSICS 504. Electricity and Magnetism II** – Monday and Wednesday, 7:15–8:55. Special theory of relativity, relativistic-particle dynamics, collisions between charged particles, radiation from accelerated charges, multipole fields, radiative reaction, magneto-hydrodynamics and plasmas. Four semester hours credit. Prerequisite: Physics 503.

McCook 102 – Mr. Lary.

***PHYSICS 520. Solid State Physics II** – Monday and Wednesday, 5:00–6:15. A continuation of Physics 519 with emphasis

on the following topics: magnetic properties including resonance and masers; the Fermi surface in metals and methods for gauging it; superconductivity including the thermodynamics of superconductors; the London equations and introduction to the Bardeen-Cooper-Schrieffer theory. Prerequisites: Physics 519 or an equivalent introductory course in solid state physics.

McCook 106 – Mr. Witt.

RPI PHYSICS H 16.32. Modern Physics II – Monday and Wednesday, 5:15–6:30. Operational calculus of particle properties; system of many particles; matrix presentation of quantum theory. Perturbation calculus for nondegenerated and degenerated systems. Stark effect; magnetic effects; Hilbert space; simultaneous measurement of several properties; angular momentum (orbital and spin).

RPI Hartford Center – Mr. Schwarz.

Masters Degrees

Conferred at the Commencement

June 1, 1969

Rosemary Adams	B.A., 1966, University of Colorado	M.A.
Henry Emil Agostinelli	B.S., 1962, University of Hartford	M.A.
Edward Francis Ahern	B.A., 1961, Georgetown University	M.A.
Charles Christian Alexander	B.A., 1957, Williams College, M.A.T., 1959, Harvard University	M.A.
Peter Ashbrook Amram	B.A., 1965, Brown University	M.A.
Joseph Aloysius Auth	B.S., 1966, Boston College	M.S.
Abel Francisco Barrientos	B.A., 1966, American International College	M.A.
Matilde Bolton	1956, University of Havana	M.A.

42 / Courses of Instruction

David Roy Brown	B.A., 1967, Dartmouth College	M.A.
Philip Sewall Brown, Jr.	B.A., 1961, Wesleyan University, M.S., 1963, Massachusetts Institute of Technology	M.S.
Edith Prassl Bucchi	B.A., 1964, College of New Rochelle	M.A.
Ronald John Burr	B.S., 1965, Iowa State University	M.S.
Julius Louis Castagno	B.S., 1949, University of Connecticut	M.A.
Suellen Castiglioni	B.A., 1965, Albertus Magnus College	M.A.
Eric John Chapman	B.A., 1964, Hobart College	M.A.
Michael Roland Chase	B.A., 1964, Providence College	M.A.
Farnham Fisher Collins	B.A., 1957, Princeton University	M.A.
Johanna Babiarz Conant	B.A., 1962, Bates College	M.A.
Michael Joseph Custy	B.A., 1964, Saint Bernard Seminary and College, B.A., 1966, University of Louvain	M.A.
Richard Miles Davis	B.A., 1963, Boston University	M.A.
Lucy Dayton Deephouse	B.A., 1953, Smith College	M.S.
Lorena Delphine Dutelle	B.A., 1961, Trinity College (Vermont)	M.A.
Elsa Brown Enders	B.A., 1964, Hunter College	M.A.
Robert Cyril Fahey	B.S., 1964, Eastern Connecticut State College	M.A.
Virginia Stiles Fahey	B.S., 1962, Eastern Connecticut State College	M.A.
Michael Norman Flinn	B.A., 1959, Passionist Monastic Seminary, M.A., 1963, St. Michael's Passionist Monastery	M.A.
Bruce Travis Fox	B.A., 1960, Bates College	M.A.
Kathleen Ann Gallagher	B.A., 1965, Albertus Magnus College	M.A.
Adelle Leeder Gersten	B.A., 1957, Smith College	M.A.
Ronald Gerard Giguère	B.A., 1960, Assumption College	M.A.
Jolene Bleich Goldenthal	B.A., 1943, Smith College	M.A.
Milton M. Green, Jr.	B.A., 1957, Ohio Wesleyan University	M.A.
Peter Thomas Grossi, Jr.	B.A., 1969, Trinity College	M.A.
Joan McCance Grover	B.A., 1958, Douglas College, Rutgers University	M.A.
Peter John Harder	B.A., 1967, Quinnipiac College	M.A.
Claudia Gardner Hepner	B.A., 1957, College of William and Mary	M.A.
Joseph Gustaf Hersant	B.A., 1964, University of Connecticut	M.A.
Richard Lee Hilliard	B.A., 1956, Bates College	M.A.
Albert James Holmes	B.A., 1952, Trinity College	M.A.
Salvatore Robert Italia	B.A., 1961, Trinity College	M.A.
Mark Andrew Johnson	B.S., 1966, Trinity College	M.A.
Joan Ouimette Juke	B.A., 1965, American International College	M.A.
Bruce Edward Kinchen	B.S., 1965, Louisiana State University	M.S.
Nicholas Van Houten Kip	B.A., 1964, Princeton University	M.A.
Ranney Allen Klenke	B.S., 1958, Michigan State University	M.A.
John Herbert Lander	B.A., 1955, Yale University	M.A.
Florence Levine	B.A., 1946, Brooklyn College	M.A.
Frances Therese Libbey	B.S., 1956, Lowell Technological Institute	M.A.
Henry Arthur Lindert	B.S., 1966, Trinity College	M.A.
Beatrice Claire Longo	B.A., 1965, University of Connecticut	M.A.
Edgar Benjamin Loring	B.A., 1962, Union College	M.A.
Anita Przybylo Madzik	B.A., 1963, Jackson College, Tufts University	M.A.
Edgar Ernst Maroney	B.S., 1966, New Haven College	M.A.

Carl Joseph Marottolo	B.A., 1967, Quinnipiac College	M.A.
Tom Alan Martin	B.S., 1963, Stevens Institute of Technology	M.S.
Margaret Mary McGovern	B.A., 1962, Saint Joseph College	M.A.
Thomas Benjamin McKean	B.A., 1963, University of Connecticut	M.A.
Sandra Anne McQuilton	B.A., 1964, Albertus Magnus College	M.A.
John Patrick McWilliams	B.S., 1966, University of Louisville	M.S.
Constance Kelley Mellen	B.A., 1951, Connecticut College	M.A.
Seth Freeman Mendell	B.A., 1956, Rollins College	M.A.
Joseph John Moran	B.A., 1964, Amherst College	M.A.
James McKee O'Loughlin	B.A., 1964, Providence College	M.A.
Edward Taylor Parrack, Jr.	B.A., 1969, Trinity College	M.A.
Estelle Pollack	B.S., 1962, Central Connecticut State College	M.A.
James Gerhardt Puls	B.A., 1963, University of California	M.S.
Dan Joseph Radecki	B.S., 1966, Washington State University	M.S.
Jean Carol Richardson	B.S.Ed., 1960, Westfield State College	M.A.
Carol Ann Robbins	B.S., 1966, University of Missouri	M.A.
Fred Ervin Robbins	B.S., 1964, Northwest Missouri State College	M.S.
Joseph Lincoln Roberts, III	B.A., 1963, Tulane University	M.A.
Richard Lee Roberts	B.S.E.E., 1962, Tri-State College	M.S.
John Scott Rodgers	B.A., 1962, Trinity College	M.A.
Leonard Julius Rodriguez	B.S., 1966, Georgia Institute of Technology	M.S.
William Bernard Ryan, Jr.	B.A., 1962, Trinity College	M.A.
Lois Ann Saman	B.S., 1966, University of Bridgeport	M.A.
Lloyd Dayton Schlitzer	B.S., 1963, Iowa State University	M.S.
Walter David Scholsky	B.S., 1964, Central Connecticut State College	M.A.
Marilyn Joyce Schwedel	B.S.Ed., 1964, Temple University	M.A.
Peter John Sheehan	B.A., 1965, Williams College	M.A.
Barbara Ann Sherako	B.S., 1957, Central Connecticut State College	M.A.
Anthony Harry Shookus	B.S., 1963, University of Utah	M.A.
Roderick Henry Silva	B.A., 1960, Brown University, M.Ed., 1963, Boston State College	M.A.
Kathryn Sladek Smith	B.A., 1966, Cornell University	M.A.
Shirley Bauer Spaeth	B.A., 1945, University of Illinois	M.A.
Wilma Kelley Speed	B.A., 1941, University of Iowa	M.A.
Elizabeth Esten Stevenson	B.A., 1935, Vassar College, Ph.D., 1939, Yale University	M.A.
James Kenichi Sugahara	B.S., 1961, University of Richmond	M.S.
William Nicholas Tedesco	B.A., 1967, University of Hartford	M.A.
James Edward Tetro	B.S., 1964, Trinity College	M.A.
John William Trumble	B.A., 1964, University of Connecticut	M.A.
Mary Elizabeth Tunnell	B.S., 1964, University of Missouri	M.S.
Mary Loretta Welch	B.A., 1953, Saint Joseph College	M.A.
Geoffrey Wilbraham	B.A., 1949, University of Manchester (England)	M.A.
Abraham Aaron Willen	B.S., 1936, New York University	M.A.
Margaret Merkley Withey	B.A., 1950, Russell Sage College	M.A.
William David Wolfson	B.S.E.E., 1962, Polytechnic Institute of Brooklyn	M.S.
Vernon Louis Wood	B.S., 1947, Tufts University	M.A.
David Cary Wright	B.S., 1964, University of Miami	M.S.

Faculty and Administration

THEODORE D. LOCKWOOD, PH.D.

ROBERT W. FULLER, PH.D.

C. FREEMAN SLEEPER, PH.D.

GERALD R. MARSHALL, B.A.

CAROLE M. LAWSON, B.S.

President

Dean of the Faculty and College Professor

Associate Dean for Academic Affairs

Assistant Dean of Faculty and Registrar

Executive Secretary,

Graduate and Summer Studies

GEORGE A. ANDERSON, PH.D.

GUSTAVE W. ANDRIAN, PH.D.

JOHN H. BENNETT, PH.D.

RICHARD P. BENTON, PH.D.

EUGENE J. BOYER, M.A.

W. MILLER BROWN, B.A.

JAMES R. COBBLEDICK, PH.D.

F. WOODBRIDGE CONSTANT, PH.D.

GEORGE B. COOPER, PH.D.

WARD S. CURRAN, PH.D.

EUGENE W. DAVIS, PH.D.

MARTIN G. DECKER, ED.D.

FRANCIS J. EGAN, M.A.

DONALD B. ENGLEY, M.A.

HENRY FERGUSON, PH.D.

NEIL H. GARSTON, A.B.

ALBERT L. GASTMANN, PH.D.

CARL V. HANSEN, PH.D.

SAMUEL HENDEL, PH.D.

DONALD D. HOOK, PH.D.

DREW A. HYLAND, PH.D.

ARNOLD L. KERSON, PH.D.

WALTER J. KLIMCZAK, PH.D.

GEORGE L. LAMB, JR., PH.D.

EDMUND C. LARY, PH.D.

WALTER D. LEAVITT, PH.D.

Assistant Professor of Mathematics

Professor of Modern Languages

Lecturer in Mathematics

Associate Professor of English

Instructor in Mathematics

Instructor in Philosophy

Assistant Professor of Government

Jarvis Professor of Physics

Northam Professor of History

Associate Professor of Economics

Professor of History

Assistant Professor of Education

Instructor in Economics

Librarian and College Professor

Lecturer in History

Instructor in Economics

Associate Professor of Government

Associate Professor of Modern Languages

Visiting Professor of Government

Associate Professor of Modern Languages

Assistant Professor of Philosophy

Associate Professor of Modern Languages

Seabury Professor of Mathematics

and Natural Philosophy

Lecturer in Physics

Lecturer in Physics

Associate Professor of Modern Languages

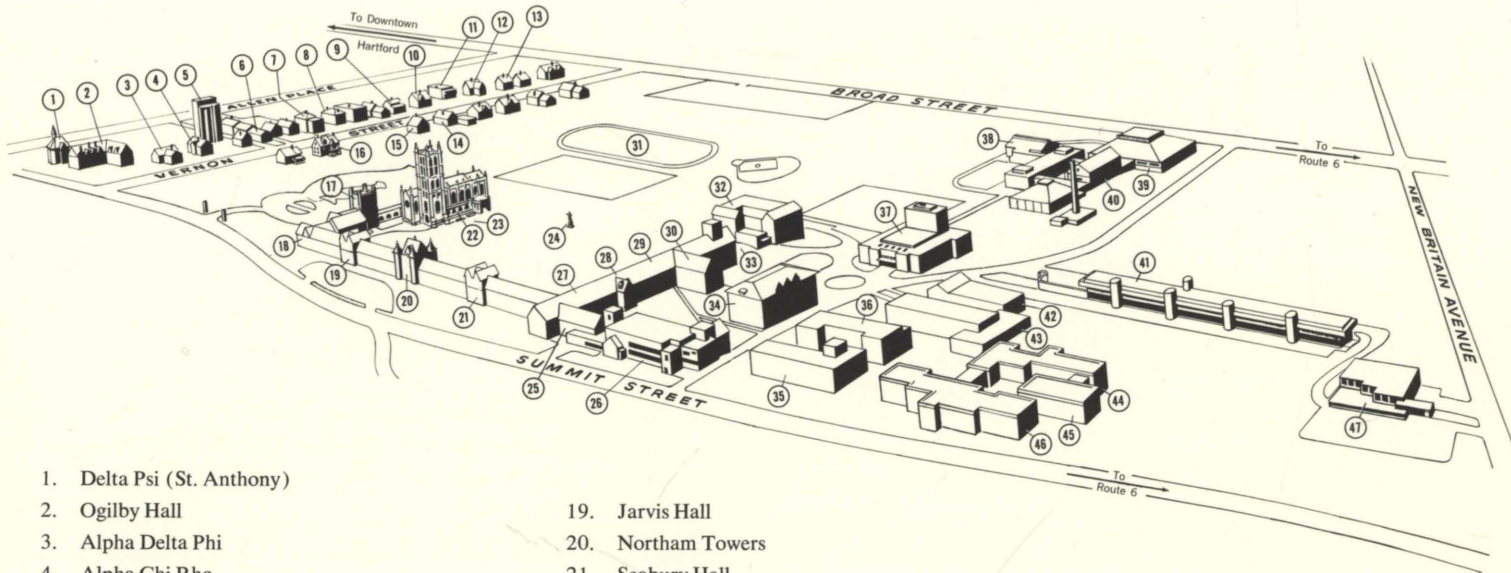
ROBERT LINDSAY, PH.D.
 ALEXANDER A. MACKIMMIE, JR., M.A.
 DON A. MATTSON, PH.D.
 CLYDE D. MCKEE, JR., PH.D.
 J. BARD McNULTY, PH.D.
 BLANCHARD W. MEANS, PH.D.
 RICHARD K. MORRIS, PH.D.
 REX C. NEAVERSON, PH.D.

CHARLES S. NEWMAN, M.A.
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 ROBERT B. OXNAM, PH.D.
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 PAUL SMITH, PH.D.
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 HEINRICH H. STABENAU, M.A.
 RANDALL W. TUCKER, M.B.A.
 WILLIAM P. WADBROOK, M.A.L.D.
 ROBERT P. WATERMAN, PH.D.
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 JAMES WHEATLEY, PH.D.
 E. FINLAY WHITTLESEY, PH.D.
 GERALD L. WITT, PH.D.

Professor of Physics
Professor of Education
Assistant Professor of Mathematics
Associate Professor of Government
James J. Goodwin Professor of English
Brownell Professor of Philosophy
Professor of Education
Secretary of the Faculty and
Professor of Government
Instructor in Philosophy
Assistant Professor of English
Assistant Professor of History
Assistant Professor of History
Associate Professor of Mathematics
Assistant Professor of Modern Languages
Associate Professor of English
G. Fox and Company Professor of Economics
Assistant Professor of Physics
Lecturer in Mathematics
Lecturer in Government
Lecturer in Education
Scovill Professor of Chemistry
Associate Professor of English
Instructor in History
Instructor in English
Associate Professor of Economics
Assistant Professor of Economics
Associate Professor of Modern Languages
Associate Professor of History
Associate Professor of English
Professor of Mathematics
Assistant Professor of Physics

Map of Trinity College

Hartford, Connecticut



1. Delta Psi (St. Anthony)
2. Ogilby Hall
3. Alpha Delta Phi
4. Alpha Chi Rho
5. High Rise Dormitory
6. North Campus Dormitory
7. Delta Kappa Epsilon
8. Pi Kappa Alpha
9. The Black House
10. Sigma Nu
11. Theta Xi
12. Phi Kappa Psi
13. Delta Phi
14. Alumni and Public Information Offices
15. Psi Upsilon
16. The President's House
17. Downes Memorial Clock Tower
18. Williams Memorial (Administrative Offices)

19. Jarvis Hall
20. Northam Towers
21. Seabury Hall
22. The College Chapel
23. Funston Garden
24. Bishop Brownell Statue
25. Hamlin Hall
26. Mather Hall (Student Center)
27. Cook Dormitory
28. Woodward Dormitory
29. Goodwin Dormitory
30. Clement Chemistry Building (Kriebble Auditorium)
31. Jessee Field
32. The Library
33. Funston Court
34. Boardman Hall

35. Elton Hall
36. Jones Hall
37. Austin Arts Center (Goodwin Theatre)
38. George M. Ferris Athletic Center
39. Memorial Field House
40. Trowbridge Memorial Pool
41. Albert C. Jacobs Life Sciences Center
42. Hallden Engineering Laboratory
43. McCook Math-Physics Center
44. Jackson (B) Dormitory
45. Smith (C) Dormitory
46. Wheaton (A) Dormitory
47. Buildings and Grounds