DePaul is... 

"Let us love God, my brethren, but let us love him with all our strength and in the sweat of our brow."

St. Vincent de Paul
college of liberal arts and sciences
school of education
graduate bulletin
1981-82

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chicago, illinois 60604
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# 1981-82 academic calendar for graduate students

## Autumn Quarter
- **September 3** TH In-Person Registration for the Autumn Quarter.
- **September 7** M Labor Day.
- **September 16** W Autumn Quarter Begins.
- **October 9** F Late Registration for the Autumn Quarter.
- **October 12** M Course Changes.
- **October 19** M St. Vincent dePaul Day.
- **November 9** M No Classes.
- **November 25-28** M-Sat Thanksgiving Holidays.
- **Nov. 30-Dec. 5** M-Sat Final Date for Filing for February Convocation.
- **December 5** Sat Final Examinations for the Autumn Quarter.
- **December 5** Sat Autumn Quarter Ends.

## Winter Quarter
- **November 9-20** M-F Mail Registration for the Winter Quarter.
- **December 8** T In-Person Registration for the Winter Quarter.
- **January 4** M Winter Quarter Begins.
- **January 11** M Late Registration for the Winter Quarter.
- **January 25** M Course Changes.
- **February 7** Sun Final Date for Submitted Grade Changes and Examination Scores to Graduate School for February Convocation.
- **February 12** F Final Date for Submitting Theses and Dissertations to Graduate School for February Convocation.
- **February 22** M Last Date to Apply for Pass/Fail or Change to Auditor Status.
- **March 10-16** W-T Final Examinations for the Winter Quarter.
- **March 16** T Winter Quarter Ends.
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<td>February 15-26</td>
<td>M-F Mail Registration for the Spring Quarter</td>
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<td>March 18</td>
<td>TH In-Person Registration for the Spring Quarter</td>
</tr>
<tr>
<td>March 29</td>
<td>M Spring Quarter Begins</td>
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<tr>
<td></td>
<td>M Late Registration for the Spring Quarter, Course Changes</td>
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<tr>
<td>April 9-11</td>
<td>F-Sun Easter Holidays.</td>
</tr>
<tr>
<td>April 19</td>
<td>M Last Date to Apply for Pass/Fail Option or to Change to Auditor Status.</td>
</tr>
<tr>
<td>May 3</td>
<td>M Final Date for Submitted Grade Changes and Examination Scores to Graduate School for June Convocation</td>
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<tr>
<td>May 17</td>
<td>M Final Date for Submitting Theses and Dissertations to Graduate School for June Convocation, Last Date to Withdraw from Class.</td>
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<tr>
<td>May 31</td>
<td>M Memorial Day, No Classes.</td>
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<tr>
<td>June 7-12</td>
<td>M-Sat Final Examinations for the Spring Quarter</td>
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<tr>
<td>June 12</td>
<td>Sat Spring Quarter Ends.</td>
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<tr>
<td>June 13</td>
<td>Sun Convocation.</td>
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DePaul is... ...Leadership.

"It is a good thing to induce others to exercise charity. To do so, is to practice all virtues at once."

St. Vincent de Paul
administrative officers and graduate council

president's letter
board of trustees
executive administration
graduate council
Dear Graduate Student,

A warm welcome to the Graduate School of DePaul University!

This Bulletin is your guide through the program of studies you have chosen. It is also a guide through the policies and regulations designed with an eye to both your needs as a graduate student and the integrity of your graduate degree.

There is another message I would like to convey. As a Catholic and Vincentian institution, DePaul stands for religious personalism. You as a person are deeply respected for your God-given dignity. We ask our faculty and staff to accord you this respect on all occasions.

We invite you to make full use of the resources the University offers graduate students, especially those that outside of the class sessions enrich your academic and personal life, for example, faculty advisement, libraries, laboratories, career planning and placement, and spiritual counseling.

You are following thousands of men and women who in their graduate studies at DePaul have found the meaning of scholarship, the paths to career advancements, and the challenge of mind-expanding experiences. May your own studies be successful in all these ways.

Sincerely,

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Vice President for Academic Affairs and
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Dean, Graduate School and
Chairman of the Graduate Council
Dean, School of Music
Dean, College of Commerce
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Department of Chemistry
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Department of Psychology
Department of Nursing

Department of Physics
Department of Computer Science
Department of Biological Sciences
Interdisciplinary Studies
Department of Marketing
Department of Finance
Department of Philosophy
Department of English
School of Accountancy
Administration Studies Center
Department of Mathematical Sciences
Department of History
Department of Management
Department of Religious Studies
Department of Economics
DePaul is... Vincentian.

"A heart really on fire and animated with the virtue of charity makes its ardour felt...."

St. Vincent de Paul
graduate school

philosophy

accreditations

structure

locations

libraries

services
philosophy

DePaul University, founded on Judaic-Christian principles, continues to assert the relevance of these principles through higher education to modern man and woman. The University expresses these principles especially by placing on the heritage of St. Vincent de Paul, individual perfection manifested through purposeful involvement with other persons, communities and institutions.

The Graduate School assumes as its direct educational task to foster in its students those traditions of scholarliness central to advanced studies and research. The programs for the master's and doctoral degrees are designed to develop in graduate students a broad and deep knowledge of their chosen discipline, the research methodology of the discipline and the development of those competencies necessary for their personal advancement in their scholarly, professional or creative careers.

Through the steady flow of its graduates into the community, the Graduate School strives to assist contemporary society meet its need for educated individuals willing to be of service to others.

accreditations

DePaul University is accredited by:

The North Central Association of Colleges and Secondary Schools
The National Council for Accreditation of Teacher Education
The National Association of Schools of Music
The National League for Nursing
The American Chemical Society
The Association of American Law Schools
The American Association of Collegiate Schools of Business

DePaul University is on the approved list of:

The American Bar Association
The State Approval Agency for Veterans Training
The Illinois State Department of Education
DePaul University is a member of:

The Council of Graduate Schools in the United States
structure

The Graduate School, DePaul University, includes the following academic units:

- Liberal Arts and Sciences
- Education
- Business
- Drama
- Music
- Administration Studies Center.

This Bulletin describes in detail the various master's and doctoral programs offered in the Liberal Arts and Sciences, and Education. Each of the other academic units publishes its own separate bulletin.

college of liberal arts and sciences

The College of Liberal Arts and Sciences offers programs leading to the Master of Arts and/or the Master of Science degrees in sixteen different departments. In addition to these master's programs, the College offers three doctoral programs: Biological Sciences, Philosophy and Psychology.

Application for admission and additional information may be obtained directly from the Graduate School Office, Room 1603, Frank J. Lewis Center, 25 East Jackson Boulevard, Chicago, Illinois 60604. The office is open from 9:00 a.m. to 5:00 p.m. Monday through Friday. The telephone number is (312) 321-7870.

school of education

The School of Education offers programs leading to the Master of Arts and/or Master of Education degrees in Teacher Education (Business Education), Human Development (Human Services and Counseling, and Reading and Learning Disabilities), and Educational Policy Studies and Services.

Teacher preparation programs at DePaul University were initially accredited by the Illinois Office of Education in 1963. All programs were fully approved by the State Superintendent and the State Teacher Certification Board in November 1975. Furthermore, each program is accredited by the National Council for Accreditation of Teacher Education. Each program may lead to official certification by the Chicago Board of Education after the student has passed the Board's examinations.

The School of Education maintains a Graduate Program Office in Room 182, Schmitt Academic Center, 2323 North Seminary, Chicago, Illinois 60614. The telephone number is (312) 321-8126.
School of Business
The Graduate School of Business offers programs leading to the Master of Business Administration (MBA), Master of Science in Accounting (MSA), Master of Science in Taxation (MST), and Master of Accountancy (MACC).

Application for admission and additional information may be obtained directly from the Graduate School of Business Office, Room 1204, 25 East Jackson Boulevard, Chicago, Illinois 60604, or by calling (312) 321-7810.

DePaul/Goodman School of Drama
The graduate program of study, leading to the degree of Master of Fine Arts, provides both theoretical and practical work in the student's chosen area of specialization. Areas of specialization include acting, costume design, scene design, light design, and directing.

Application for admission and additional information may be obtained directly from the Goodman School of Drama, 804 West Belden Avenue, Chicago, Illinois 60614, or by calling (312) 321-8374.

School of Music
The graduate program of courses and research in Music leads to the degree of Master of Music. The advanced programs are offered in applied music (performance), composition, and music education.

Application for admission and additional information may be obtained directly from the School of Music, 804 West Belden Avenue, Chicago, Illinois 60614, or by calling (312) 321-7761.

Administration Studies Center
The Administration Studies Center offers advanced educational programs for professionals in social and public services, leading to the Master of Science in Management of Public Service and the Master of Science in Management of Rehabilitation Services. Areas of specialization in the Management of Public Service include health care, personnel, policy, law enforcement, public service, community organization, quantitative methods, systems analysis, and financial administration and joint law and public service.

Application for admission and additional information may be obtained directly from the Administration Studies Center, 28 East Jackson Boulevard, Chicago, Illinois 60604, or by calling (312) 321-7845.
locations

DePaul University has two major locations: the Lincoln Park Campus (LPC) and the Downtown Center (LC).

Lincoln Park Campus, located approximately four miles north of the Chicago Loop, on the near north side of the city, is bounded by Fullerton, Webster, Racine and Halsted Avenues. The campus is easily accessible by public transportation.

Located here are the academic buildings and libraries for the Liberal Arts and Sciences, Education, Music, and Goodman School of Drama; the residential, social and athletic buildings for students; the residences for clerical faculty, and the Church of St. Vincent de Paul.

The Downtown Center includes the Frank J. Lewis Center (LC), The Comerford J. O'Malley Place, the Administration Building and the 28 East Jackson Boulevard Building. These buildings are located on the corner of Jackson Boulevard and Wabash Avenue in the Chicago Loop.

In addition to the Graduate School Office, the buildings contain the offices of the general administration, the College of Law, the College of Commerce, and the School for New Learning, as well as classrooms, library, theater, bookstore and chapel.
libraries

The DePaul University Libraries are divided into three different units: the Lincoln Park Campus Library, the Lewis Center Library, and the Law Library. The combined collection consists of over 420,000 volumes, 3,300 periodical titles as well as media such as filmstrips, cassettes, films, microforms, videotapes, and a music-record library. Library handbooks, describing the various services and the physical arrangement of the libraries and explaining library rules and regulations, are available throughout the library system.

library computer system

The Libraries of DePaul University have their circulation records in computerized form and have 23 terminals in operation for an on-line circulation system. The Library Computer System (LCS) allows DePaul’s libraries at Lewis Center, Lincoln Park, and the Law Library to have on-line access to each other’s collections. In addition, DePaul’s students now have computer access to the library collections of sixteen other Illinois colleges and universities including the University of Illinois at Urbana-Champaign and at Chicago Circle.

The DePaul libraries belong to other cooperative groups including the Center for Research Libraries, the Chicago Academic Library Council, the Library of International Relations, and the Illinois Library Information Network, thus making vast resources in the Chicago and Midwest available to graduate students.

CRT terminals and printers give an on-line hook up with the huge database of CCC, Inc. and subject computer searches from a number of data bases (including services in computerized form). A daily shuttle allows students to request a book from the other campus library with 24 hour delivery service of DePaul materials.

lewis center library

The Lewis Center Library’s collection contains over 125,000 volumes and 787 periodical subscriptions. It supports many of the undergraduate and graduate programs of the University and has special strength in business holdings. The reference department on the second floor houses the current periodicals, abstracts and indexes, as well as the reference collection. Services provided by the reference staff include interlibrary loans, reference assistance and subject computer searches. The lower level of the Lewis Center contains the Media Center and the bound periodical collection. General circulating books and reserve materials are located on the third floor.
Lincoln Park Library serves students in the College of Liberal Arts and Sciences, the School of Education, the School of Music and the Goodman School of Drama, as well as some graduate departments of the University. There are over 180,000 volumes presently in the collection. The periodicals collection includes over 1,400 current subscriptions. The Media Center consists of the art slide collection, the Education Resource Center, the music record collection, the listening room and all other audio-visual services of the campus.

special collections

The Department of Special Collections is located on the Lincoln Park Campus. Special Collections include a facsimile of the Book of Kells, a Dickens Collection, including many editions of the works of Charles Dickens, memorabilia, posters, photographs and extra-illustrated volumes of Dickens; an extensive Napoleonic Collection, a Horace collection; a Sports Collection; and various rare books, including ten incunabula.
services
alumni association
Upon graduation, all students become members of the Alumni Association. The activities and services of the Association, varied and many, are designed to meet the professional and social needs of DePaul graduates. Communication with the Alumni Office on changes of address, marital status, etc., will assure continual notification on current university activities. For more information, contact the Alumni Relations Office, Lewis Center Room 550, 23 East Jackson Boulevard, Chicago, Illinois 60604 or call (312) 321-8587.
campus ministry
Campus Ministry is committed to the ongoing process of clarifying the God-given dignity and potentiality for the growth and development of the human person. Listening to your life experiences, hopes, dreams, fears, and questions, Campus Ministry can support you in your education at DePaul. Offices on the Lincoln Park Campus are located on the second floor of the Harold L. Stuart Center, as well as on the second floor of Francis A. McGaw Hall, and at the Lewis Center, Room 1617. Daily Mass and Sunday Mass are offered on both campuses. For information call 321-7986 or 321-7859.
career planning and placement
The University has two offices offering career planning and placement services to students and graduates of the Graduate School. Those seeking either counsel and/or leads regarding part-time or full-time employment in business or government should apply to the Office of Career Planning and Placement in Room 1716 of the Lewis Center. Those who wish counsel and/or employment in teaching and other positions in education should apply to the Teacher Placement Office in Room 182 of the Schmitt Academic Center, Lincoln Park Campus.
To assist students in making career decisions, the following services are available: (1) career seminars, (2) career libraries (on both campuses) containing hundreds of publications describing careers, organizations, industries, and projections of the demand for college graduates by types of careers, (3) individual counsel, and (4) interpretation of vocational interest inventories.
To assist graduating students in obtaining career employment, the following services are available: (1) group workshops for guidance in job search techniques, (2) instruction on how to prepare personal resumes and letters of application, (3) "mock" interviews and instruction by university staff in preparation for actual interviews, (4) on-campus interviews with prospective employers, and (5) daily listing of job leads.
community mental health center

The DePaul University Community Mental Health Center is an agency funded by the Illinois Department of Mental Health and DePaul University. In addition to its services to the community and to DePaul students, it is also a training facility, providing practicum experience for graduate students, both in psychology and social work.

To qualify for service, a student must be currently enrolled in the University full-time, part-time or evening. Program focus is on behavioral, emotional or adjustment problems, rather than tutorial or learning difficulties. Confidentiality is a high priority and no information is released to any individual without client consent.

The Mental Health Center is located on the third floor of the Peter F. Byrne Hall, Lincoln Park Campus. For further information, call 321-7860, and ask for the intake worker or Frank A. Dinello, Ph.D., Director.

health insurance

Accident and health group insurance is offered on a voluntary basis to graduate students. The application forms may be secured from the offices of the Student Health Service on the Lincoln Park Campus or in the Lewis Center.

housing

Lincoln Park Campus

Student housing at DePaul University offers a total environment for learning. The residence halls combine the convenience of pleasant surroundings with the stimulating atmosphere of an urban university community. Located on the Lincoln Park Campus, the residence halls are a convenient ten minutes by public transportation from the Chicago Loop and the Downtown Center. All residence halls are staffed with resident advisors (RA's) who are available to assist resident students.

A limited number of spaces are reserved in the Francis X. McCabe Hall, Lincoln Park Campus, for graduate and law students. McCabe Hall is an apartment building with furnished studios, one- and two-bedroom apartments. Each apartment has its own kitchen facilities, laundry facilities are available on each floor. Out-of-state residents are given priority. The Housing Office operates an off-campus referral service to assist students in locating housing in the Lincoln Park area.

Graduate students are strongly encouraged to apply for housing as early as possible. For additional information please write or call:

Housing Office
DePaul University
2312 North Clifton
Chicago, Illinois 60614
(312) 321-8020

recreation

Alumni Hall houses a swimming pool and a gymnasium. Hours are scheduled for student and faculty use throughout the academic year. Monthly scheduling may be obtained through the Athletic Department.
DePaul is... Catholic.

"...Maintain yourself in such great joy, that there may be an abundance for yourself and a sufficiency for others."

St. Vincent de Paul
graduate academic policies and procedures

degree programs: general policies
admission classifications
admission procedures
registration procedures
grades, credits, and course policies
graduation procedures
degree programs: general policies

master's programs

For the master's degree, all programs involve at least one or more of the following: 1) Credit Hours, 2) Degree Candidacy, 3) Language/Research Tool, 4) Thesis, 5) Paper on Approved Topic, 6) Integrating Critique or Examination, 7) Final Examination, and 8) Program Time Limitation.

- **Credit Hours**
  For the master's degree, most programs for graduate students require forty-eight quarter hours. When the program includes a thesis, up to a maximum of eight quarter hours of registration in Thesis Research will be counted as credit toward the degree.

Specific degree requirements are listed in the departmental and program sections of this Bulletin.

- **Degree Candidacy**
  Admission to candidacy implies the faculty is satisfied that the master's candidate is competent knowledgeable both as to the breadth and the depth in his or her area of specialization and versatile in the use of any required research tools.

  The Dean of the Graduate School, upon the written recommendation of the department or program director, will issue to each master's candidate a certification to authenticate admission to candidacy.

- **Language/Research Tool**
  A department or program director, with the approval of the Graduate Council, can require language/research tool requirements as the student's program and research may demand.

- **Thesis**
  The University offers the master's degree both with and without the thesis. The thesis is limited to the student's field of specialization and should offer satisfactory evidence of having scholarly research possibilities.

  After degree candidacy has been granted and graduate research courses completed, the student must present the topic to the Graduate Committee of his or her department or program of specialization for approval. At the time of presentation, the student should have a clear concept of the nature of the thesis problem, the possibilities for making the investigation and the technique to be used. The Graduate Committee may require the student to make some preliminary investigation to test the availability of sources.
The student is advised to consult the Office of the Graduate School for information regarding the required form and type of paper to be used for the thesis. Responsibility for fulfilling these requirements lies with the student, not the typist.

The student, after completing the thesis, will submit it to the director of his or her Thesis Committee for consideration. Whatever changes or additions are necessary must be made by the final date of acceptance, or the student will not be permitted to graduate until a subsequent convocation. When the thesis is accepted, the student must file three or more typewritten copies in the Office of the Graduate School. The date for filing is published in the current Bulletin and the class schedule or may be obtained directly from the Graduate School. The responsibility for meeting this deadline lies with the student.

● paper on approved topic

The type and length of the paper is determined by the department or program that lists it as a requirement for the master’s degree. The purpose of the paper is to give evidence of the student’s ability to find, select, organize and interpret material in an acceptable manner.

The student’s choice of a paper topic is to be approved by his or her department or program. The paper is to follow the form approved for a thesis, and must be submitted within two months after the approval of the topic. Only one copy of the paper need be presented to the student’s major department or program advisor.

● integrating critique or examination

Procedures for such a critique or examination are set in advance in each specific case through consultation between the student and the department or program advisor.

● final examination

A student is eligible for the final examination only after all the other degree requirements have been completed. The type and the subject matter of the examination follow the regulations established in the various departments and programs of the Graduate School.

The student is to make application for this examination through the Graduate Office no later than October 17 for the February Convocation and February 14 for the June Convocation. If the student does not pass the examination, the Dean may grant permission for another examination upon the written recommendation of the department or program advisor of the student’s major field. The examination may not be repeated until after the next convocation nor may the examination be taken more than twice.

● program time limitation

Graduate students in master’s programs are expected to complete their graduate study within a six-year period or less. In a case where a graduate student fails to finish before the end of the sixth year, the department or program director may recommend, in writing, to the Graduate Dean, an extension of time with or without additional courses, examinations, or other conditions.
components in master's programs

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<th>Thesis</th>
<th>Non-Thesis (option)</th>
<th>Paper on Approved Topic</th>
<th>Integrating Examination (written or oral)</th>
<th>Final Examination (Written or Oral)</th>
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1 In M.A. Program
2 In M.S. Program
3 In M.Ed. Program
4 Or Creative Project
5 In thesis Program
6 In non-thesis Program

doctoral programs

The Doctor of Philosophy, the highest academic degree that DePaul University confers, is offered in the departments of the Biological Sciences, Philosophy and Psychology. The degree symbolizes that the recipient has demonstrated objectively his or her proficiency in some broad area of learning, as well as the potential to explore and advance that field of knowledge by independent scholarly research.

The Graduate Council has approved the following minimum general requirements for all candidates for the Doctor of Philosophy degree in the areas of 1) Credit Hours, 2) Related Field of Study, 3) Academic Achievement, 4) Residence, 5) Language and Allied Requirements, 6) Examinations, 7) Admission to Candidacy, 8) Dissertation, and 9) Program Time Limitations. Additional requirements set by the departments are stated in the departmental sections of this Bulletin.

- credit hours
  For the doctoral degree the graduate student will complete a minimum of 108 quarter hours of post-baccalaureate credit of which a maximum of 36 quarter hours of credit is applicable to the dissertation. Graduate students working toward the doctoral degree may count, without petition, as partial fulfillment of degree credit up to 48 quarter hours of graduate credit earned at an accredited institution.

- related field of study
  The program of graduate studies chosen for the doctoral degree will usually include study in related fields as determined by the student in consultation with his or her Graduate Advisory Committee.

- academic achievement
  A student will be advised to withdraw from the doctoral program when the Graduate Advisory Committee judges that he or she is not maintaining satisfactory progress toward the degree. Students are required to maintain at least a "B" average. A course grade below "C" is unsatisfactory and will not be counted toward completing degree requirements.

  Generally, when an advanced undergraduate course is to be counted for graduate credit, the grade may not be below "B." The determination of satisfactory progress is, however, not limited to the grades and grade point average. It includes all factors in the student's performance.

- residence
  At least three consecutive quarters beyond the master's level must be spent in full-time study at DePaul University. Full-time study is defined as registration for a minimum of eight quarter hours in a quarter. With prior approval of the departmental Graduate Advisory Committee, the student may satisfy residency by course work, by participation in seminars, or by research performed off campus.

  To reflect the diversity of graduate study for the Ph.D. degree, doctoral candidates are full-time students who are registered for Reading and Research (four quarter hours), for Thesis Research (four quarter hours), or for minimum university registration (zero hours credit).
• language and allied requirements
  Each department, with the approval of the Graduate Council, can make such
  language or allied requirements as the student's program and research may
  demand. Such requirements are stated in the departmental sections of this
  Bulletin.

• examinations
  The Graduate Council sets two examinations for all doctoral candidates: the
  Comprehensive (or Doctoral Candidacy) Examination, and the Final
  Examination on the dissertation. A department may, in addition, require an
  initial or preliminary examination.

  Toward the end of the year of residency and with the language or allied
  requirements satisfied, the doctoral student may petition for the
  Comprehensive (or Doctoral Candidacy) Examination. The doctoral
  candidate's Graduate Advisory Committee will endorse the petition before it
  is sent to the Dean of the Graduate School. The Dean will then notify the
  faculty of the department to prepare and administer, in accord with its
  established procedures, the examination and to submit the results, properly
  certified by the Examining Committee, to the Dean of the Graduate School.
  The examination may be written and/or oral. A student is not allowed to take
  it more than twice.

  The Final Examination is on the doctoral dissertation. A doctoral candidate
  may not petition for his or her Final Examination prior to eight months after
  admission to candidacy. The chairperson of the Examination Committee will
  prepare a report of the results of the Final Examination, signed by all members,
  and send it to the Dean of the Graduate School.

• admission to candidacy
  Admission to candidacy implies that the faculty is satisfied the doctoral
  candidate is competently knowledgeable in both breadth and depth in the
  area of specialization and versatile in the use of research tools so as to
  prepare an acceptable dissertation.

  There is a time limit of four years between admission to the Graduate School
  and admission to candidacy. Once admitted to candidacy, the doctoral
  candidate must maintain registration in the University in each of the quarters
  of the academic year until the degree requirements have been completed.
  Among other courses, the following are appropriate to maintain registration:
  Independent Study (four quarter hours), Residency Candidacy Continuation
  (non-credit), or Non-Resident Candidacy Continuation (non-Credit). Failure
  to comply with this requirement invalidates the candidacy.

  For Admission to Candidacy the doctoral candidate shall complete a) three
  consecutive quarters of full-time study beyond the master's level, b)
  departmental language or allied requirements, c) and Comprehensive (or
  Doctoral Candidacy) Examination.

  The Dean of the Graduate School will issue to each doctoral candidate a
  certification to authenticate admission to candidacy. Admission to Candidacy
  will be entered on the doctoral candidate's scholastic record.
• dissertation

The doctoral candidate will prepare a doctoral dissertation based on his or her research. The purpose of the dissertation is to evidence both one's scholarship and ability to carry on such independent research as definitely contributes to the advancement of knowledge. While the doctoral candidate may, and often does, begin the preparation of the dissertation informally prior to admission to candidacy, the candidate is expected to comply with certain regulations regarding the dissertation. The topic of the dissertation should be submitted to the head of the department of specialization who will appoint a Dissertation Committee to approve the topic and to assist the doctoral candidate through all stages in the preparation of the dissertation. The chairperson of this committee is the dissertation director.

The dissertation is the basis of the Final Examination. When the doctoral candidate files the petition for the Final Examination, two to five copies of the doctoral dissertation are submitted to the Graduate Office.

All doctoral dissertations are to be microfilmed. The doctoral candidate submits to the Office of the Graduate School two to five typewritten, unbound, final copies of the dissertation. (The first copy is to be in satisfactory condition for microfilming.) The candidate prepares and submits also a 600 word abstract of the dissertation. The abstract will be published in Dissertation Abstracts and will include announcement that the dissertation is available in film form. One microfilm copy will be deposited in the University Library and will be available for inter-library loan.

To defray the costs of microfilming and publication, a dissertation fee of $40.00 is assessed.

Microfilming is considered by the University to be a form of publication. Publication by microfilm, however, does not preclude the printing of the dissertation in whole or in part in a journal or monograph.

When these steps have been completed the doctoral candidate becomes eligible for degree conferral at the next convocation.

• program time limitations

For graduate students in the doctoral program, the time limits to complete the requirements for the Doctor of Philosophy degree are 1) between admission to the doctoral program and admission to candidacy: not more than four years; and 2) between admission to candidacy and the final examination: not less than eight months, and not more than five years.
admission classifications

Applicants are admitted to the Graduate School on the basis of their ability to complete programs of study and research prescribed for the master's and doctoral degrees. Specifically, admission qualifications are measured by academic criteria.

In accord with these criteria, applicants are admitted to the Graduate School in one of three major categories: degree seeking, non-degree seeking, and student-at-large.

degree-seeking students

Applicants are admitted as degree-seeking students in either of two ways: full or conditional.

Degree-seeking status, full: The minimum requirements for this status are

- bachelor's degree conferred by an accredited institution,
- scholastic achievement in undergraduate studies satisfying all requirements for entering a specific graduate program,
- unconditional approval by the department or program director of the applicant's proposed course of graduate study, and
- submission to the Graduate School of all required supporting credentials.

Please note these are minimum requirements for full admission to the Graduate School. The departmental and program sections of this Bulletin provide additional, more specific and selective, criteria for admission to specific programs.

Degree-seeking status, conditional: The minimum requirements for this status are

- bachelor's degree conferred by an accredited institution,
- scholastic achievement in undergraduate studies indicating a capacity to pursue successfully a specific program of graduate study,
- conditional approval by the department or program director of the applicant's proposed course of graduate study, and
- submission to the Graduate School of all required supporting credentials.

A conditionally admitted applicant is eligible for re-classification to full, degree-seeking status when the conditions of his or her admission have been satisfied.
non-degree seeking students

The Dean of the Graduate School, at his discretion, may admit as students those applicants who do not wish to pursue an advanced degree. Non-degree seeking students may, at some future date, make application for reclassification to degree-seeking status.

Non-degree seeking status: The minimum requirements for this status are
• bachelor's degree conferred by an accredited institution,
• scholastic achievement in undergraduate studies indicating a capacity to pursue successfully graduate course work,
• approval by the Dean of the Graduate School, and
• submission to the Graduate School of all required supporting credentials.

When such students file for re-classification, the departmental or program director of their specific graduate course of studies may recommend, in writing, to the Dean of the Graduate School that a maximum of three courses (12 quarter hours) completed by the student under the non-degree seeking status be counted toward fulfillment of the advanced degree requirements.

student-at-large

The Graduate School may admit as a Student-at-large a graduate student currently enrolled in a graduate program in another accredited institution upon the recommendation, in writing, of his or her own Graduate Dean.

A student-at-large must complete the form for admission to the Graduate School. The only supporting credential required is a letter from the Dean of the Graduate School where the student is in good standing. This letter should state in general terms the course or courses the student is authorized to take.

Under no circumstances does this classification constitute admission to a degree-seeking program at DePaul University.

DePaul seniors

Seniors in any of the undergraduate colleges or schools of DePaul University are eligible to apply for admission to the Graduate School while still completing their undergraduate program.
admission procedures

general procedures

Procedures for admission to the Graduate School involve a completed application form, supporting credentials, admission fee, deadlines, and the Graduate Dean's admission letter.

☐ Application Form. You can obtain a graduate application form either by mailing your request to The Graduate Office, Room 1603, DePaul University, 25 East Jackson, Chicago, Illinois, 60604 or by phoning (312) 321-7870. Please include your proposed field of study in your request because the composition of the "application packet" varies from department to department and from program to program.

Note: An undergraduate DePaul senior is eligible to submit an application to the Graduate School before completing his or her undergraduate program.

☐ Supporting Credentials. OFFICIAL TRANSCRIPTS, IN DUPLICATE, of your academic records at all universities, colleges, and junior colleges attended are required. Please direct the registrar(s) to mail these official transcripts directly to the Graduate Office, DePaul University. Since there is frequently a delay in the forwarding of transcripts, you are advised to make your request as early as possible.

Note: Several departments and divisional programs in the Graduate School require additional supporting credentials. Please consult the specific department or divisional program directors in this Bulletin to determine what additional materials are required for admission to the specific course of graduate study.

An undergraduate DePaul senior, making application, should request:

- the registrar to forward two official transcripts to the Graduate School Office,
- a written recommendation for admission from the appropriate chairperson or program director, and
- written certification by the appropriate Undergraduate Dean of the senior's completed and uncompleted requirements for the bachelor's degree.

☐ Admission Fee. A check or money order payable to DePaul University in the amount of $20.00 must accompany the completed application form. Any application form received in the Graduate Office without the fee will be returned unprocessed. The fee is non-refundable.
Deadlines: The Graduate School has specific dates for submission of the completed application form, all supporting credentials, and fees.

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<tr>
<th>Initial enrollment in master's program</th>
<th>Deadline</th>
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<tr>
<td>Autumn Quarter</td>
<td>August 15</td>
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<tr>
<td>Winter Quarter</td>
<td>December 1</td>
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<tr>
<td>Spring Quarter</td>
<td>February 25</td>
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<table>
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<th>Initial enrollment in doctoral program</th>
<th>Deadline</th>
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<tr>
<td>Autumn Quarter</td>
<td>July 15</td>
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<td>Winter Quarter</td>
<td>November 1</td>
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<tr>
<td>Spring Quarter</td>
<td>January 25</td>
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Departments may, at their discretion, establish earlier deadlines.

Admission is granted for a specific term and year. If you do not enroll in the term you applied for, your admission is cancelled. You may, however, request in writing that your entry term be advanced or deferred.

Graduate Dean's Admission Letter: The Dean of the Graduate School will notify you by letter of your admission status to the Graduate School.

No applicant is allowed to register for courses until the admission to the Graduate School has been authenticated by the Dean’s letter. This policy, however, may be waived by the Graduate Dean upon the written recommendation of the appropriate chairperson or program director.

It is the policy of the Graduate School not to review, evaluate, or act upon any application for admission without having the completed application form, all the supporting credentials, and the application fee.

International Students

Initially, all students educated outside the United States and its possessions should request general admission information and application forms from the University's

International Advisor
Admissions Office
25 East Jackson Boulevard
Chicago, Illinois 60604
USA

After receiving general admission information, as an international student, your procedure for admission to the Graduate School will involve 1) a completed application, 2) supporting credentials, 3) admission fee, 4) deadlines and, 5) letter of admission and/or Form I-20.

Application Form: You can obtain a graduate application form either by mailing your request to The Graduate Office, Room 1603, DePaul University, 25 East Jackson Boulevard, Chicago, Illinois 60604 or by phoning 332-7870. Please include your proposed field of study in your request because the composition of the "application packet" varies from department to department and from program to program.
Supporting Credentials: OFFICIAL TRANSCRIPTS, IN DUPLICATE, of academic records at ALL universities, colleges, and junior colleges attended are required. Please direct the registrar(s) to mail these official transcripts directly to the Graduate Office, DePaul University.

English Proficiency is required of all applicants to be admitted to the Graduate School. Evidence of adequate financial support is required of applicants who request student visas as scholarships are not available.

Admission Fee: For your admission to the Graduate School, a non-refundable fee of $20.00 (check or money order payable to DePaul University in U.S. dollars) must accompany your completed application form.

Deadlines: Application deadlines for international students are

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<tr>
<th>Initial Enrollment</th>
<th>Deadline</th>
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<tr>
<td>Autumn Quarter</td>
<td>June 1</td>
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<tr>
<td>Winter Quarter</td>
<td>October 1</td>
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<tr>
<td>Spring Quarter</td>
<td>January 1</td>
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<tr>
<td>Summer Quarter</td>
<td>March 1</td>
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As an international student you are strongly urged to make application as early as possible. Usually there are long delays in the forwarding of all supporting credentials.

Letter of Admission and/or Form I-20: The Graduate Dean’s formal letter of admission and/or the issuance by the International Advisor of Form I-20 will occur after all admission requirements have been fulfilled.

readmission procedures

If you are a student previously enrolled in the Graduate School but have not been in attendance for a period of one calendar year or longer, you must file a readmission form with the Graduate Office. The form must be submitted at least four to six weeks prior to the day of registration for the term in which you expect to resume your studies. There is a $5.00 service fee for processing a readmission form.

A transcript recording any scholastic work taken while not enrolled at DePaul University also should be submitted. As a general rule, students are held to the degree requirements that are in force at the time of registration.

re-classification procedures

Should you desire a change in your major or admission status, you must file a "Request for Re-classification" form with the Graduate Office.
student responsibility

As a graduate student you assume the responsibility to know and meet both the general and particular regulations, procedures, and deadlines set forth in this Bulletin.

Every effort has been made to provide you with final and accurate information. The University, however, does reserve the right to revise its bulletins and schedules of classes, and to change any policies, procedures, regulations, programs, requirements, courses or schedules of tuition and fees.

access to educational records

The University follows the requirements of the Family Educational Rights and Privacy Act of 1974 which permits all students to review their educational records. The procedures for such review and the rights of students in this regard are set forth in detail in the annual publication of the Signpost.
registration procedures

general information

- Social Security Number: Your social security number will be required for registration. If you do not have such a number, you should apply for one at your local Social Security office. International students who do not have a social security number should contact in person the Registrar's Office for an identification number assignment.

- Academic Counseling: Your graduate study differs significantly from your undergraduate study in the amount of individual attention faculty members will give to you. As a graduate student, you are expected to make appointments with your professors to ensure that you receive individual attention in an orderly and unhurried manner.

If you are a degree-seeking graduate student, you should contact your faculty advisor prior to registration. If you are a non-degree-seeking student or a student-at-large, you should contact either the Graduate Office or the appropriate department or program director prior to registration. (Note: All graduate registration forms require the signature of an authorized member of the Graduate School Office.)

- Course Credit: Credit is accumulated on the basis of quarter hours. Courses carry four quarter hours credit unless otherwise noted. For comparative purposes, 1 quarter hour equals 2/3 semester hour, 4-1/2 hour quarters equal 3 semester hours.

Graduate credit is not granted for advanced undergraduate courses (300 level) if the recorded grade is below "B." No credit will be given for any graduate level courses (400 and over) with a grade below "C."

- Course Revisions: The University reserves the right to add or cancel courses, revise subject matter content, or make any other changes it deems necessary.
specific information

☐ Mail Registration. To eliminate waiting in registration lines and to avoid the possible closing of desired classes, the following students will be mailed pre-printed registration forms.

- graduate students enrolled during the quarter previous to the one for which they are registering. (This includes Spring Quarter students for the following Autumn Quarter.)
- formally admitted new graduate students, and
- readmitted graduate students.

Graduate students who have attended the Graduate School within one year prior to the quarter for which they wish to register, but who are not scheduled to receive pre-printed forms, may pick up mail registration materials at the Graduate School Office or request by phone, (312) 321-7870, that the materials be mailed to them.

☐ In-Person Registration Students who do not register by mail or who are not eligible to do so must register in-person on the date designated in the academic calendar.

☐ Registration in Courses in Other Colleges of Schools. Graduate students are able to register for courses offered in other colleges or schools of the University. This registration requires the written permission of both their advisor and the College in which the course(s) will be taken. The registration forms, however, must always be returned directly to the Graduate School Office for the necessary signature to process the forms.

☐ Residence Registration. Whether in residence or not, all admitted graduate students, master’s and doctoral levels, who will use the facilities of the University (library, laboratory, etc.) or who will consult with faculty members regarding theses, dissertations, or examinations, must be registered in each quarter.

☐ Course Load. A full course load consists of eight or more quarter hours per quarter. Graduate students are advised to undertake no more employment than is reasonably compatible with their proposed graduate studies in any given term. For students fully employed, registration for two courses in a term is generally the maximum.
grades, credits, and course policies

grades

The key to the system of grading used in the Graduate School is as follows:

faculty grading

A  Exceptional achievement
B  Superior achievement (minimum expected of graduate students in advanced undergraduate courses)
C  Basic achievement
D  Achievement unacceptable for graduate credit
F  Failure
FX  Failure because of excessive absences
IN  All requirements for given course not completed at end of term
P  Pass (for courses taken on a pass/fail basis)
R  Thesis research not completed at end of the term

administration grading

W  Authorized withdrawal
FW  Failure because of unauthorized withdrawal
AU  Not-for-credit
M  Final grade missing at time grades were processed

Note: Graduate students are expected to maintain a higher level of academic achievement than undergraduate students. A basic C grade will be acceptable in no more than half of the graduate courses, those numbered 400 and above, completed in the major and the minor sequences.

credits

All courses carry four quarter hours of credit (2 2/3 semester hours) unless otherwise specified.

Credit Transfer: No credit transfer in degree programs leading to the master's or doctoral degree is allowed. The Dean of the Graduate School, however, may authorize an exception to this policy when, in the judgement of the Dean, following consultation with the department or program director, the circumstances justify the exception.
course policies

- Course Numbering: Courses numbered 300 to 399 inclusive are advanced undergraduate courses normally taken in the junior and senior years. If listed in this Bulletin, they may be accepted for graduate credit within the limitations stipulated by the specific departmental chairpersons or program directors. Courses numbered 400 and over are graduate courses.

Advanced undergraduate courses: students must have a grade of at least 8 if they are to receive graduate credit.

Graduate courses (those numbered 400 and above), A C grade is acceptable in no more than half the graduate courses completed by the students in their major and minor sequences.

- Course Attendance: No one is permitted to attend a class for which he or she has not been properly registered. Should a student's name not appear on the class sheet, it is the student's responsibility, not the faculty member's, to resolve the problem. An instructor is not permitted to enter a student's name on a class sheet nor give such a student a grade without first receiving from the student an official admission slip.

No registration is complete or valid until all financial arrangements have been completed. Any student owing money to the University from a previous term is not permitted to register until such an obligation has been paid.
graduation procedures

Procedures for graduation from the Graduate School involve the graduation application, degree requirements, requirements for graduation with honor, graduation fee, deadlines, Graduate Dean's confirmation letter, convocation ceremony and receipt of the diploma.

☐ Application Form. You can obtain a graduation application either by mailing your request to The Graduate Office, Room 1603, DePaul University, 25 East Jackson Boulevard, Chicago, Illinois 60604, or by phoning (312) 321-7870.

☐ Degree Requirements. You must have successfully completed all of the general and specific degree requirements as listed in the appropriate departmental or program sections of the Graduate School Bulletin under which admission to Graduate School was granted.

Completed degree requirements can include the submitting of the dissertation or the thesis or the research paper, examination scores, and, if necessary, grade changes.

☐ Graduation with honor. Graduation "with distinction" is conferred when a student a) receives the grade of "A" in at least 75% of the courses in the degree program and no grade lower than a "B" in the remainder of the degree courses, and b) passes the final oral or written examination "with distinction."

☐ Graduation Fee. You will be billed a $25.00 Graduation Fee, payable to DePaul University.

You will automatically be billed a binding fee for the minimum number of thesis, dissertation or research paper copies required by your department or program director.

☐ Deadlines. Specific dates are established for submission to the Graduate Office of the completed graduation application and for completion of degree requirements.
Application for Graduation

February Convocation ........................................ October 19
June Convocation ................................................... February 12

Completed Grade Changes and Examination Scores

February Convocation ............................................. January 11
June Convocation .................................................. May 3

Note: If you are applying for the June Convocation, you may register in the Spring Quarter for courses required in your degree program.

Completed Thesis and Dissertations

February Convocation ............................................. January 25
June Convocation .................................................. May 17

Application for Graduation is made for a specific convocation. If you cancel or are ineligible to graduate, you must re-apply for the next convocation.

Graduate Dean's Letter: The Dean of the Graduate School will notify you by letter of your confirmation for graduation.

Convocation: The Graduation ceremonies are held in February and June of each academic year.

To graduate "in absentia," you must request in writing permission from the Graduate Dean.

Diploma: The graduation ceremonies are symbolic. The diploma is mailed shortly after the convocation ceremony.
DePaul is... Urban.

"Do not fear to undertake too much in doing the good that presents itself to you."

St. Vincent de Paul
graduate financial policies and procedures

tuition and fees
payment policies
financial assistance
employment opportunities
tuition and fees

DePaul University is a not for profit corporation. No student pays the actual cost of his or her education. Tuition and fees are held at their present level through gifts of alumni, foundations, corporations, the Vincentian Priests and Brothers and friends of the University. All policies are under continual review. Therefore, the Board of Trustees reserves the right to change its charges as conditions require.

Tuition and fees for service and materials are for the academic year 1981-82 and are applicable only to graduate students.

graduate student tuition

Tuition for Liberal Arts and Sciences, Education and Music

Courses in the 100-200 series, per quarter hour ................. $ 73.00 a
Courses in the 300-700 series, per quarter hour ................. $ 97.00

Note: Economics courses in the 300-600 series, per course .......... $431.00
Course 701 Resident Candidacy (non-credit), per quarter ............ $386.00
Course 702 Non-resident Candidacy (non-credit), per quarter .... $ 30.00

Tuition for Graduate School of Business

Courses in the 100-200 series, per quarter hour ................. $ 73.00 a
Courses in the 300-600 series, per course ................. $431.00

Tuition for Goodman School of Drama

Tuition for 12 to 16 quarter hours ........................................ $1,404.00
general fees

Fees are not refundable.

Graduate Application Fee (non-refundable) ........................................ $20.00
Readmission Fee (non-refundable) ......................................................... $3.00
Registration Fee (non-refundable) ......................................................... $5.00
Late Registration Fee (non-refundable) .................................................. $25.00
Change of Registration Fee (non-refundable) ......................................... $15.00
Deferred Examination Fee
   On Designated Dates ........................................................................... $10.00
   At Time Not Designated ...................................................................... $20.00
Graduation Fee .......................................................................................... $25.00
Thesis Binding (Per Copy) ....................................................................... $10.00
Dissertation Fee ......................................................................................... $40.00
Each Transcript of Credit's Fee ................................................................. $2.00
Goodman School of Drama Audition Fee ............................................... $15.00
Goodman School of Drama Certificate Fee ........................................... $25.00
Deferred Payment Plan Service Fee ......................................................... $30.00
Deferred Payment Delinquency Fee ......................................................... $30.00
Each Returned Check Service Fee ............................................................ $12.00

a. Applicable to Graduate Students only.
b. In addition to the regular registration fee.
c. The change of registration fee is charged each time a student drops a class,
or drops a class and adds another class. No fee is charged for simply adding a
class.
d. If a student gives the University a check that is returned by the bank upon
which it was drawn, marked "Not sufficient Funds," "Payment Stopped," or
"Account Closed," a $12.00 charge will be assessed for each such
occurrence.

material fees

See individual course descriptions for specific material fees.
payment policies

general notes

• Registration. Registration cannot be accepted from a student with an unpaid balance from a prior term. Registration attempted under these circumstances will be cancelled.

• Audited Courses. Audit courses receive no credit. Tuition and fees for courses audited are charged at the regular tuition rates, must be paid at the time of registration, and are not refundable. Students may not change from the status of credit student to that of an auditor, or vice versa, after the third week of class.

• Students on Financial Aid. Students receiving financial aid in the form of scholarships, tuition grants, or loans - from Federal Programs, the State Government, or DePaul University - must determine that the amount of aid received (total amount of awards divided by 3 quarters, normally) at least equals the total tuition and fees for each term. In the event such proration leaves a balance due from the student, this balance must be paid no later than the end of the first week of the term in order to avoid a Service Fee for Deferred Payment and/or Delinquency Fee.

• Returned Check. If a student gives the University a check that is returned by the bank upon which it was drawn, marked “Not Sufficient Funds,” “Payment Stopped,” or “Account Closed,” a $12.00 charge will be assessed for each such occurrence.

• Foreign Checks. Any foreign checks must be made payable in United States dollars or will not be accepted by the University.

• Undergraduate Day Students. Undergraduate day students combining undergraduate and graduate courses in a 12-16 quarter hour program, will pay an additional $5.00 for each quarter hour of graduate study, by which the combined registration exceeds 12 hours. In addition, if the combined registration exceeds 16 hours, the regular graduate rate shall apply to such excess. Graduate courses, for this purpose, are those with a course number 400 and above.
deferred payment

All tuition and fees are due DePaul University at the time of registration, but no later than the first week of the term.

For students who are unable to meet this requirement, the University does offer on payment of the $30.00 Service Fee, the following plan:

* payment of 1/2 tuition and fees must be received in the Cashier’s Office during the first week of the term.
* payment of 1/2 of the tuition and fees must be received in the Cashier’s Office prior to the end of the fourth week of the term.
* students with any unpaid balance at the beginning of the fifth week will be assessed the $30.00 Deferred Payment Delinquency Fee.

refunds for withdrawal

Simply ceasing to attend or notifying the faculty does not constitute a withdrawal of record and will result in academic as well as financial penalties.

Withdrawals must be processed in the Graduate School Office either in person or by mail. The withdrawal will be dated as of the end of the week in which the student signs the “Enrollment Change Form” or the date his or her letter of withdrawal is postmarked.

Charges for courses are based on the period of a student’s enrollment beginning with the opening day of the Quarter until the student initiates an “Enrollment Change Form” to withdraw.

Upon processing the Enrollment Change Form the tuition charge for courses during the regular academic year will be reduced according to the following schedule where the Effective Date is:

Prior to the first week of class .................................................. 100%
At the end of the first week of classes .................................. 90%
At the end of the second week of classes ................................. 75%
At the end of the third week of classes ................................. 50%
At the end of the fourth week of classes ............................... 25%
After the fourth week of classes ............................................. 0%

During the summer sessions an accelerated proration of tuition charges will apply.

Fees are not refundable. All refunds are initiated by the Cashier’s Office only upon receipt of an approved Enrollment Change Form and a specific request by the student within one calendar year of the opening of the Quarter in which the credit accrued.

NOTE: Students receiving financial aid are advised to contact a financial aid counselor to discuss the consequences of a withdrawal affecting academic progress and eligibility at DePaul University or any other school to which they may transfer.
financial assistance

DePaul University’s policy is to make financial aid decisions without regard to race, creed, color, national origin, age or sex. Various types of financial aid are available to graduate students through awards funded by foundations or corporations, University graduate assistantships, traineeships, grants, and student loans.

general procedures

- Loans: Applicants for loan programs should contact the Office of Financial Aid, DePaul University, 25 East Jackson Boulevard, Chicago, Illinois 60604 either by mail or by phone (312) 321-8526/8527.

- University Financial Aid: Applicants seeking any other form of financial aid should make preliminary application by letter to the chairperson of their proposed major department or the program director of their particular graduate study.

- Deadlines: New applicants for financial aid must have all their credentials (completed admission form, admission fee, duplicate copies of transcripts, and letters of recommendation - if required) in the Graduate School Office by February 15 prior to their Autumn Quarter admission.

May 1 is the priority deadline for completing a financial aid file and thereby being considered for Federally funded loan or work study programs. Exact requirements involving what constitutes a complete file can be obtained from the Financial Aid Office by calling (312) 321-8526/8527.

corporate and foundation awards

- Arthur J. Schmitt Awards: Fifteen awards for exceptionally outstanding candidates are allocated to the University’s three doctoral-granting departments: biological sciences, philosophy, and psychology. Each award, up to a maximum of a $3,000 stipend, is supplemented by the University with a full tuition grant. Students receiving the awards are eligible upon the positive recommendation of the department to have the awards renewed. During the period of the award, the recipients must be admitted full-time degree-seeking students. They will be assigned by the department to admitted activities appropriate for teaching and/or research assistants.

- Howard V. Phalin Award: This award is a gift of $1,500 made by the Howard V. Phalin Foundation for Graduate Study for the support of an exceptionally outstanding graduate student. The University matches this gift with a $1,500 stipend. In addition, the University supplements the award with a full tuition grant. During the period of the award, the recipient must be an admitted full-time degree-seeking student. He or she will be assigned by the department to activities appropriate for teaching and/or research assistants.
• **Seal le Foundation Awards.** These awards are made to support students identified as having high academic potential but not able to afford the expenses, who intend to major on the graduate level in one of the following fields of study: accountancy, biological sciences, business administration, chemistry, computer science, economics, finance, general business, management, marketing, mathematical sciences, and Master of Law in taxation. Each award, up to a maximum of a $3,000 stipend, is supplemented with a full tuition waiver by the University. Recipients of the awards must be admitted full-time degree seeking students. They will be assigned by the department or the program director to such activities appropriate for their development in teaching, research, or administration.

• **IBM Corporation Awards.** These awards are made to support two outstanding graduate students: one in computer science, the other in marketing. Each award consists of a $3,000 stipend and a tuition payment up to $2,000. Whenever necessary, the University supplements each award with a tuition grant to cover the remainder of the awardee's costs. Recipients must be admitted full-time degree seeking students. They will be assigned by their respective departments to activities appropriate for a teaching and/or research assistant.

• **Borg-Warner Foundation Awards.** The Borg-Warner Foundation has made available a restricted gift for two graduate scholarships. $5,000 for one student during the 1981-82 academic year and $5,000 for a second student during the 1982-83 academic year. During the period of the award the recipients must be admitted full-time degree seeking students. They will be assigned by their academic unit(s) to activities appropriate for teaching, research or administration.

Announcement of graduate assistantships is normally made by April 1. The assistantships must be accepted or declined, in writing, by April 15.

**university assistantships**

The University provides a number of teaching, research, and administrative assistantships to applicants accepted as degree-seeking, full admitted, graduate students. Last year over 90 assistantships were awarded (both full and partial). The stipends for such assistantships range from $2,600 to $3,200, and include a full tuition waiver.

Recipients must be admitted, full-time degree seeking students. They will be assigned by their respective departments or program directors to activities appropriate for a teaching, research, or administrative assistant.

Application for an assistantship should be made, in writing, directly to the chairperson of the department or the program director in which the applicant plans his or her graduate study.

Announcement of graduate assistantships is normally made by April 1. The assistantships must be accepted or declined, in writing, by April 15.
traineeships

- Mental Health Traineeships: Students in clinical psychology are eligible to apply to the Department of Psychology for one of these traineeships. The traineeships are awarded to students who have completed at least two quarters of graduate work and are full-time degree seeking students. As trainees, the students are assigned to the University Mental Health Clinic on a half-time basis.

  Application for a Mental Health Traineeship should be made directly to the Director of the Mental Health Center.

- Public Health Service Traineeships. A number of such traineeships are available. The Department of Nursing offers traineeships which provide monthly stipends and a tuition allowance for each quarter the student is registered as an admitted, full-time degree seeking student. Applicants should apply, in writing, directly to the Chairperson of the Nursing Department.

student loans

Applicants for all loan programs should contact by mail the University's Office of Financial Aid, Room 1730, 25 East Jackson Boulevard, Chicago, Illinois, 60604 or by telephone at (312) 321-8526/8527.

National Direct Student Loan (NDSL)

The National Direct Student Loan program is for students enrolled at least half-time who need a loan to meet their educational expenses, and who meet the requirements in Section 2 of the Loan Act.

An eligible student may borrow up to a total of $12,000 for graduate study. (This total includes any amount borrowed under NDSL for undergraduate study.)

Repayment begins six months after graduation or withdrawal from school. Students may be allowed up to ten years to repay based on the amount they have borrowed. This repayment period may be extended an additional ten years for low-income borrowers with repayment related to the borrower's income. During the repayment period four percent interest will be charged on the unpaid balance of the loan principal.

Loan payments can be deferred when the borrower is (a) a student, (b) a member serving in the Armed Forces, the Peace Corps, or VISTA, (c) an officer in the Commissioned Corps of the Public Health Service, (d) a volunteer for nonprofit organizations doing work similar to VISTA or Peace Corps, or a full-time volunteer for an organization which is exempt from taxation under Section 501(c)(3) of the Internal Revenue Code of 1954, or (e) an individual temporarily totally disabled or unable to secure employment by reason of care required by a spouse who is so disabled.

The financial aid staff can provide information about loan cancellation provisions for borrowers who enter fields of teaching or who teach in designated schools.
Guaranteed Student Loan (GSL)

The Guaranteed Student Loan includes the Illinois Guaranteed Student Loan and the Federally Insured Loans.

The Guaranteed Student Loan program enables an eligible student to borrow directly from a bank, credit union, savings and loan association or other participating lender willing to make the loan. The loan is guaranteed by a State or a private nonprofit agency, or in the case of the Federal Insured Student Loan, insured by the Federal government.

The maximum annual amount that can be borrowed is $5,000 for graduate and professional students. In some States the amount may be less. The interest rate is nine percent on the unpaid balance of the loan principal for first-time borrowers, and the Federal government will pay to the lender the total interest due prior to the beginning of the repayment period and during authorized deferment periods.

The aggregate loan maximum is $25,000 for undergraduate and graduate borrowing.

The loan must be repaid. Repayments begin six months after the student graduates or leaves school, and up to ten years may be allowed to repay the loan. The amount of the student's payments depends upon the size of the debt and the student's ability to pay, but, in most cases, payments of at least $360 a year are required unless the lender agrees to a lesser amount.

Payment on a loan may be deferred when the borrower is (a) pursuing a full-time course of study at an eligible institution; (b) serving in the Armed Forces, the Peace Corps or VISTA; (c) actively seeking but not finding full-time employment; (d) serving as an officer in the Commissioned Corps of the Public Health Service, (e) serving as a full-time volunteer for an organization exempt from taxation under Section 501 (c)(3) of the Internal Revenue Code of 1954, or serving as a volunteer for nonprofit organizations doing work similar to VISTA or Peace Corps; (f) serving an internship, the successful completion of which is required to begin professional practice or service; (g) being temporarily totally disabled or unable to secure employment by reason of the care required by a spouse who is so disabled; and (h) pursuing an approved course of study under a rehabilitation training program for disabled individuals.

Nursing Student Loans

Students pursuing a course study, either full-time or half-time, in Nursing and who want to request financial assistance are required to borrow under this program rather than to request a National Direct Student Loan. Loans up to a maximum of $1,000 per year, depending on need and funds available, may be granted for any academic year. The maximum amount for all years of study is $10,000. Repayment of loans begins nine months after the borrower ceases to be a half-time student and is payable over a ten year period. The rate of interest is 3%.
Deferment of payments may be obtained for up to three years, for active duty in the armed forces or as a volunteer in the Peace Corps. Deferment may also be granted for a period of, up to five years, for further study in nursing on at least a half-time basis.

Cancellation of parts of the loan, plus interest, may be obtained for each year of completed employment as a professional nurse in any public or non-profit private agency institution or organization (including neighborhood health centers) at the rate of 15 percent a year for the first three years and 20 percent for the next two years, up to a maximum of 85% of the loan, plus interest.

Nurses who enter practice in an officially approved area where there is a shortage of nurses may receive cancellations of all educational loans, plus interest, at the rate of 30 percent a year for the first two years and 25 percent for the third year, i.e., allows a cancellation maximum of 85%.

NOTE: Please be advised that changes are pending on many of these programs. You should contact the Financial Aid Office or your lender for the correct regulations for these programs.
employment opportunities

college work study program
Full-time and half-time graduate students who can demonstrate financial need may apply for part-time and/or summer employment under this program. The program is co-sponsored by the Federal Government and DePaul University. Students may work (mostly on campus) up to 20 hours weekly while attending classes, and up to 40 hours weekly when no classes are scheduled. The basic pay range is from $3.35 to $10.00 or more per hour for Graduate School students, depending upon their job classification. The student's earnings cannot exceed his or her need. Application should be made to the Office of Career Planning and Placement. Room 1716 25 East Jackson Boulevard Chicago, Illinois 60604 Telephone: (312) 321-7639.

part-time employment
The location of the University in a metropolitan area contributes greatly to the number and variety of opportunities for employment. Part-time and summer jobs, both on and off campus, are available for students through the services of the Office of Career Planning and Placement. Rates of pay for graduate students are from $3.35 to $5.00 or more per hour.

In addition, the University itself can offer positions to students. After students have registered for their classes, the Office of Career Planning and Placement will assist them in finding jobs. No proof of need is necessary to qualify for this service.
We are...  ...DePaul.

"Charity unites us as members of one body; affability makes this union perfect."

St. Vincent de Paul
graduate academic offerings

college of liberal arts and sciences
  biological sciences
  chemistry
  computer science
  economics
  english
  history
  interdisciplinary study
  mathematical sciences
  nursing
  philosophy
  physics
  psychology
  religious studies
  sociology

school of education
  teacher education
  human development
  educational policy studies and services
biological sciences

Robert A. Griesbach, Ph.D.
Chairperson

faculty

professors
John R. Cortelyou, C.M., Ph.D.
Robert C. Thommes, Ph.D.
James E. Woods, Ph.D.
Northwestern University
Northwestern University
Stritch School of Medicine, Loyola University

associate professors
Robert A. Griesbach, Ph.D.
Danute S. Juras, Ph.D.
Dolores J. McWhinnie, Ph.D.
Daniel G. Oldfield, Ph.D.
University of Chicago
Marquette University
Marquette University
University of Chicago

assistant professors
Robert A. Andersen, Ph.D.
Charlene J. Denys, Ph.D.
Daniel Gibbs, Ph.D.
University of Arkansas
DePaul University
Stanford University

emertii
Mary A. Murray, Ph.D.
Joseph E. Semarad, Ph.D.
University of Chicago
Northwestern University

purposes

The Department offers programs of advanced study which will enable qualified students to earn degrees at the master's and doctoral levels.

More specifically the Department provides

- assistance in planning a specific program or sub-concentration of studies which will enable the student to advance toward his or her career goal,

- a series of lecture, laboratory, and seminar courses appropriate to the specific degree programs offered.
opportunities for research leading to the thesis or dissertation in accord with the student’s degree program and the faculty’s research interests, and
continuing opportunities for interaction between faculty and students through formal and informal learning situations in order to further promote the existence of a scholarly environment.

The learning objectives of the Department are
- acquisition and understanding of knowledge to the extent expected at the master’s and doctoral levels,
- improvement in ability to synthesize, interpret and conceptualize biological information consistent with achievement of the master’s and doctoral degrees,
- development of laboratory skills and methodologies at a level that enables the student to acquire, independently, new knowledge relating to life and the principles of living systems,
- achievement of the ability to communicate biological knowledge effectively to others in both an oral and a written fashion, and
- achievement of the habit of objective observations and evaluation as well as attitudinal values, in keeping with the expectations of Science and professional biologists.

degree programs

master of science
A program of study leading to the Master of Science degree in Biology is designed for students who
- have a strong desire to increase their scope and understanding of the life sciences,
- plan additional education at the master’s level for increased proficiency in teaching and/or research, and
- plan to continue study toward the Ph.D. degree.

The master’s program provides lecture, laboratory and seminar courses — along with learning experiences in research and undergraduate laboratory assisting, to aid students in achieving their stated goals. Students develop a particular concentration of studies in consultation with their academic advisor.

doctor of philosophy
The doctoral program is intended for mature persons who have clearly defined objectives, and who possess the background necessary for a concentrated program of research and independent study. Examples of competencies required of candidates for the Ph.D. degree are
- critical evaluation of scientific literature,
- originality in research, and
- competence in written and oral presentation of data and their interpretation.

The doctoral program provides counseling, instruction, seminars and research to aid the students in achieving high scholarship in broad aspects of biology and in-depth understanding in regulatory biology; and, to engage them effectively in a full professional life of independent research and continued learning.
master of science: biological sciences

admission requirements
For full admission, students must have the following:

- Bachelor’s degree: major in biological sciences or its equivalent
- Chemistry: minimum two academic years, including one year of organic
- General Physics: one year
- Calculus: one course
- Prerequisite course work: completion by the end of the first year of graduate study
- Transcript of credits
- Graduate Record Examination Scores
- Three letters of recommendation from science professors, preferably biology
- Grade point average of at least 2.5 on a scale of 4

degree requirements
- Courses: a minimum of 44 quarter hours of graduate credit, including four quarter hours of BIO 498 Research for Master Thesis; maximum of four additional hours of BIO 496 Research or BIO 498 Research for Master’s Theses; and, minimum of two seminar courses.
- Advancement to Candidacy: approval by the Dean of the Graduate School based upon the results of a colloquium between the departmental faculty and the student taken near the end of the second quarter of the student’s first full year.
- Participation in undergraduate laboratory instruction and/or research assisting: minimum of three courses and/or two quarters.
- Thesis: results based upon an independent laboratory investigation
- Final examination: contents covering all areas of graduate study, including coursework, basic biological concepts and thesis
doctor of philosophy of biological sciences

admission requirements
  For full admission, students must have the following:
  • Master's degree, major in biological sciences or its equivalent
  • General Physics, one year
  • Calculus, one year
  • Chemistry, two years, including one year in organic
  • Transcript of credits
  • Graduate Record Examination Scores
  • Three letters of recommendation from science professors, preferably biology

degree requirements
  • Courses, minimum of 108 quarter hours of study beyond the baccalaureate degree (maximum of 48 quarter hours of a master's program applicable toward doctoral degree requirements)
  • Selection of a Graduate Concentration, concentration developed in consultation with the Departmental Graduate Committee within the first quarter of admission
  • Preliminary Comprehensive Examination, satisfactory completion of examination within the first year of the Ph.D. program
  • Written Ph.D. Dissertation Research Proposal, approval by the Departmental Graduate Committee
  • Written and Oral Doctoral Candidacy Examination, successful completion of the examination, with the consequent advancement to candidacy for the degree, one year prior to the expected date of convocation
  • Advancement to Doctoral Candidacy, approval by the Dean of the Graduate School based upon the results of a colloquium between the student and the departmental faculty
  • Modern Language, evidence of at least a two-year level of competence
  • Dissertation, results of an original investigation acceptable for publication
  • Formal (Public) Seminar
  • Final Oral Examination; contents on the dissertation and related information
  • Time Limitations: 1) between admission to the doctoral program and admission to doctoral candidacy, not more than four years, and 2) between admission to candidacy and the final examination, not less than eight months, and not more than five years.

Note: Students in the doctoral concentrations are strongly urged to study one academic term at a biological station or research institute to be selected in consultation with the Graduate Advisory Committee.
courses

All courses offered in Michael J. O’Connell Center, Lincoln Park Campus (1036 W. Belden Avenue).

advanced undergraduate courses

A maximum of five 300-level courses may be applied toward the degree requirements. These courses carry quarter credit hours as designated in parentheses.

308 **Plant Anatomy.** Differentiation, development and structure of cells, tissues, tissue systems, and organs of vascular plants. Lecture-Laboratory (5). Laboratory Fee $20.00.

309 **Plant Physiology.** Functional and developmental aspects of plants, especially of vascular autotrophs. Lecture-Laboratory (5). Laboratory Fee $20.00.

310 **Vertebrate Physiology.** Organ system physiology of vertebrates. Lecture-Laboratory (5). Laboratory Fee $20.00.

311 **Histology.** Microscopic study of vertebrate tissues and organs. Lecture-Laboratory (5). Laboratory Fee $20.00.

315 **Ecology.** Study of organismal interactions, and responses of individuals, populations and natural communities to their external environment. Lecture Only (4). Lecture-Laboratory (5). Laboratory Fee $20.00.

317 **Aquatic Biology.** The study of physical, chemical and biological phenomena in fresh water environments. Lecture only (4). Lecture-Laboratory (5). Laboratory Fee $20.00.

318 **Insect Physiology and Development.** Introduction to the physiology and development of insects, including embryogenesis, hormonal control of molting, metamorphosis and reproduction. Lecture Only (4). Lecture-Laboratory (5). Laboratory Fee $20.00.

328 **Invertebrate Biology.** Comparative biology of non-chordate animals. Lecture-Laboratory (5). Laboratory Fee $20.00.

330 **Developmental Biology.** Developmental phenomena of animals including gametogenesis, fertilization, cleavage, organogenesis, metamorphosis and regeneration. Lecture-Laboratory (5). Laboratory Fee $20.00.

335 **Concepts in Evolution.** Study of continuity, change, and diversity in the animal kingdom. Lecture Only (4).

340 **Neurobiology.** Introduction to the structure and function of vertebrate and invertebrate nervous systems. Lecture Only (4).

368 **Cell Physiology and Toxicology.** Analysis of organelle enzyme systems, unit structures, and physiology relating to cellular metabolism, transport, and energy conversion processes in the presence of toxic substances. Lecture Only (4). Lecture-Laboratory (5). Laboratory Fee $20.00.

370 **Immunobiology.** Basic factors governing immune phenomena and antigen-antibody reactions. Lecture Only (4). Lecture-Laboratory (5). Laboratory Fee $20.00.
graduate courses

400  Discussions of Selected Topics in Biology. Required of all first-year graduate students (0). Offered in the Autumn and Winter quarters.

401  Independent Study. Experimental and/or Library study of selected topics in the life sciences.
A. Cell Biology, B. Immunobiology, C. Developmental Biology, D. Physiology, E. Endocrinology, F. Genetics, G. Structural Biology, H. Ecology. Offered in the Autumn, Winter, Spring and Summer quarters (2 or 4). Laboratory Fee $15.00 per credit hour.

410  Biology of Hard Tissues I. Analysis of structure and biochemistry, and cell function in hard tissues of invertebrate and vertebrate organisms (3).

412  Biology of Hard Tissues II. (Prerequisite: Biology 410.) Analysis of the regulation of structure, function and biochemistry of vertebrate hard tissues by vitamins and hormones (3).

418  Advanced Genetics. A study of chromosomes and (prokaryotic) genophores as chemically, morphologically, functionally and evolutionarily dynamic genetic elements concerned with cell and organismal heredity. Lecture (3).

420  Cell Cycle Physiology-Interactions. Analysis of organelle interactions governing cellular growth, division, differentiation and energy conversion processes during the cell cycle. Lecture (3).

421  Cell Cycle Physiology-Interactions. Laboratory (2). Laboratory Fee $25.00.


426  Experimental Immunology. Laboratory (2). Laboratory Fee $25.00.

440  Physiology of the Endocrine System. Analysis of the regulatory role of hormones in vertebrates. Lecture (3).

441  Physiology of the Endocrine System. Laboratory (2). Laboratory Fee $25.00.

442  Neurobiology. Additional studies and current problems in neurobiology. Lecture (3).

444  Physiology of Reproduction. Comparative study of neuroendocrine mechanisms in vertebrate reproduction. Lecture (3).

445  Physiology of Reproduction. Laboratory (2). Laboratory Fee $25.00.

447  Comparative Endocrinology. Comparative and phylogenetic aspects of regulatory mechanisms in the animal kingdom. Lecture (3).

Seminars

450  Problems in Cell Biology. Analysis of basic contemporary problems in cellular morphology and physiology, with emphasis on the regulation of cell cycle processes by organelle interactions (4).

Reproductive Physiology. Aspects of neuroendocrine regulation of reproduction in vertebrates (4).


Insect Physiology and Development. Current problems in the physiology and development of insects (4).

Neurobiology. Additional studies and current problems in neurobiology (4).

Hormonal Regulation of Mineral Metabolism. Influence of the hormonal environment on the structure and biochemistry of skeletal and soft tissues, and mineral homeostasis (4).


Special Course for Graduate Laboratory Teaching Assistants

Practicum in Teaching Biology. Open to graduate student laboratory assistants. One registration may be applied to the M.S. and/or Ph.D. Degree (2). Autumn Only.

Research

Research. (Prerequisite: Approval of the Department) Experimental work in selected areas of biology. These studies do not necessarily relate to a thesis or dissertation. Autumn, Winter, Spring, Summer. Laboratory (2,4) Laboratory Fee $15.00 per credit hour.

Research for Master's Thesis. (Prerequisite: Approval of the Department) Original study of a specific biological problem leading to a thesis. Autumn, Winter, Spring, Summer. Laboratory (2,4). Laboratory Fee $15.00 per credit hour.

Research for Doctoral Dissertation. (Prerequisite: Approval of the Ph.D. Dissertation Proposal) Original investigation of a specific biological research problem leading to a dissertation. Autumn, Winter, Spring, Summer. Laboratory (2,4 or 6). Laboratory Fee $15.00 per credit hour.

Doctoral Candidate Research. (Prerequisite: Approval of the Department Graduate Committee and the Dean of the Graduate School) Open to doctoral candidates who have fulfilled language and residency requirements for the degree and who are devoting full time to dissertation research and study. Autumn, Winter, Spring, Summer. (No credit. Tuition equal to one 4-hour course). Laboratory (0). Laboratory Fee $50.00.

Resident Candidacy Continuation. (Prerequisite: Admission to candidacy) Students admitted to candidacy for the doctoral degree who have completed all course and dissertation registration requirements but who are regularly using the facilities of the University for study and research are required to be registered each quarter of the academic year until the dissertation and final examination have been completed. Non-credit, $388.00 per quarter.

Non-Resident Candidacy Continuation. (Prerequisite: Admission to candidacy) This registration provides for doctoral candidates who have been admitted to candidacy who are not in residence and need only occasional use of University facilities, including the libraries. Non-credit, $30 per quarter.
chemistry

faculty

professors
Avram A. Blumberg, Ph.D.
Fred W. Breitbell, Ill, Ph.D.
Sanat K. Dhar, Ph.D.
Edwin F. Meyer, Ph.D.
William R. Pasterczyk, Ph.D.
Franklin S. Prout, Ph.D.

Yale University
University of Cincinnati
Wayne State University
Northwestern University
Loyola University, Stritch School of Medicine
Vanderbilt University

associate professors
Jurgis A. Anysas, Ph.D.
Sara Steck Meiford, Ph.D.
Thomas J. Murphy, Ph.D.
Robert L. Novak, Ph.D.

Illinois Institute of Technology
Northwestern University
Iowa State University
University of Delaware

purpose

The degree of Master of Science in Chemistry is designed to prepare students for advanced work in the profession of Chemistry or Biochemistry and for further graduate study.

master of science : chemistry

admission requirements
For full admission, students must have the following:

- Bachelor's degree: Chemistry
- Calculus: one year
- Physics, with laboratory: one year
• General Chemistry: one year
• Quantitative Analysis: one year, including one course in instrumental analysis
• Organic Chemistry: one year, including spectral analysis
• Physical Chemistry: one year

degree requirements

chemistry: thesis
• Courses: a minimum of 44 quarter hours, including
  CHE 422, 424  Advanced Inorganic Chemistry I, II
  CHE 430 or 476  Polymer Synthesis or Polymer Science
  CHE 450, 452  Advanced Organic Chemistry I, II
  CHE 470, 472  Advanced Physical Chemistry I, II
  CHE 490  Statistical Analysis of Data
  twelve quarter hours of research credit
• Satisfactory thesis
• Oral examination: in two parts. The first part is the thesis presentation and defense; the second part, an oral examination concerning the candidate's general knowledge of chemistry.

chemistry: non-thesis:
• Courses: a minimum of 44 quarter hours, including
  CHE 430 or 476  Polymer Synthesis or Polymer Science
  CHE 422, 424  Advanced Inorganic Chemistry I, II
  CHE 450, 452  Advanced Organic Chemistry I, II
  CHE 470, 472  Advanced Physical Chemistry I, II
  CHE 480  Special Topics in Analytical Chemistry
  CHE 490  Statistical Analysis of Data
  two elective courses

biochemistry: thesis
• Courses: a minimum of 44 quarter hours, including
  CHE 340, 342, 440  Biochemistry I, II, III
  CHE 341, 343  Experimental Biochemistry I, II
  one set of two courses from:
    CHE 422, 424  Advanced Inorganic Chemistry I, II
    CHE 450, 452  Advanced Organic Chemistry I, II
    CHE 470, 472  Advanced Physical Chemistry I, II
  two elective courses (eight quarter hours)
  twelve quarter hours of research credit
• Satisfactory thesis
• Oral examination: in two parts. The first part is the thesis presentation and defense; the second part, an oral examination concerning the candidate's general knowledge of chemistry.
chemistry as a minor field
Six quarters of chemistry and three quarters each of physics and calculus, must be completed before a minor sequence can be started. The 200-level courses listed below and CHE 300 Forensic Science can be used for graduate credit only by chemistry minors.

210 Physical Chemistry I. (Prerequisite: CHE 133) Offered: Autumn.
211 Physical Chemistry II. (Prerequisite: CHE 196) Offered: Winter.
215 Physical Chemistry III. (Prerequisite: CHE 211) Offered: Spring.
260 Analytical Equilibrium Chemistry. (Prerequisite: CHE 147 or 127 or consent of instructor) Offered: Autumn.
261 Instrumental Analysis. (Prerequisite: CHE 215) Offered: Winter.
265 Air Chemistry. (Prerequisite: CHE 127 or 147) Offered: Spring of even-numbered years.
267 Aquatic Chemistry. (Prerequisite: CHE 127 or 147) Offered: Autumn of even-numbered years.
269 Industrial Chemical Hazards. (Prerequisite: CHE 127 or 147 and CHE 125 or 175) Offered: Spring of odd-numbered years.

COURSES
All of the following courses are held in the Michael J. O’Connell Center, 1036 West Belden Avenue or the Arthur J. Schmitt Academic Center on the Lincoln Park Campus. Courses with laboratory are odd numbered. All courses carry four quarter hours of credit unless otherwise noted.

advanced undergraduate courses:

300 Forensic Science. No prerequisite.
312 The Chemical Bond. (Prerequisite: CHE 211) Offered: Autumn.
321 Intermediate Inorganic Chemistry. (Prerequisite: CHE 125 or 175, 210 or consent; and 312 strongly recommended.) Offered: Autumn.
325 Solid Waste Chemistry. (Prerequisite: CHE 196) Offered: the Winter of odd-numbered years.
340 Biochemistry I. (Prerequisite: CHE 125 or 175) Offered: Autumn.
342 Biochemistry II. (Prerequisite: CHE 340) Offered: Winter.
343 Experimental Biochemistry II. (Prerequisite: CHE 341, 261 or consent) Offered: Winter (2).
356 Spectral Interpretation. (Prerequisite: CHE 125 or 175, 261 or consent) Offered: Spring.
374 Selected Topics in Physical Chemistry. (Prerequisite: Permission of instructor. Offered by arrangement. This course may be repeated for credit if topic is different (2). This course may be any topic in the field of polymers, phenomena, etc.
385 Advanced Chemical Techniques. (Prerequisite: Permission of Chairman) This is a laboratory course which may be in the fields of analytical, biochemistry, inorganic, organic, or physical chemistry. This course may be repeated for credit if topic is different. (2)
399 Independent Study.
### Graduate Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
<th>Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>422</td>
<td>Advanced Inorganic Chemistry I. (Prerequisites: CHE 312 and 321 or consent of instructor)</td>
<td>Offered: Winter</td>
<td></td>
</tr>
<tr>
<td>424</td>
<td>Advanced Inorganic Chemistry II. (Prerequisite: CHE 422)</td>
<td>Offered: Spring</td>
<td></td>
</tr>
<tr>
<td>426</td>
<td>Bioinorganic Chemistry. (Prerequisite: CHE 422)</td>
<td>Offered: Spring of even-numbered years</td>
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<tr>
<td>430</td>
<td>Polymer Synthesis. (Prerequisite: CHE 125 or 175)</td>
<td>Offered: Spring of odd-numbered years</td>
<td></td>
</tr>
<tr>
<td>440</td>
<td>Biochemistry III. (Prerequisite: CHE 342)</td>
<td>Offered: Spring</td>
<td></td>
</tr>
<tr>
<td>450</td>
<td>Advanced Organic Chemistry I. (Prerequisites: CHE 175 and 210)</td>
<td>Offered: Autumn</td>
<td></td>
</tr>
<tr>
<td>452</td>
<td>Advanced Organic Chemistry II. (Prerequisite: CHE 450)</td>
<td>Offered: Winter</td>
<td></td>
</tr>
<tr>
<td>470</td>
<td>Advanced Physical Chemistry I. (Prerequisite: CHE 215)</td>
<td>Offered: Autumn</td>
<td></td>
</tr>
<tr>
<td>472</td>
<td>Advanced Physical Chemistry II. (Prerequisite: CHE 215)</td>
<td>Offered: Winter</td>
<td></td>
</tr>
<tr>
<td>476</td>
<td>Polymer Science. (Prerequisite: CHE 215 or consent of instructor)</td>
<td>Offered: Spring of even-numbered years</td>
<td></td>
</tr>
<tr>
<td>478</td>
<td>Advanced Topic in Physical Chemistry. (Prerequisite: Permission of chairman)</td>
<td>Offered: By arrangement. This course may be repeated for credit if topic is different.</td>
<td></td>
</tr>
<tr>
<td>480</td>
<td>Special Topic in Analytical Chemistry. (Prerequisite: CHE 261)</td>
<td>This course may be any topic related to chemical analysis, such as mass spectroscopy, electrochemical analysis, principles of chromatography, etc. This course may be repeated if topics are different.</td>
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<tr>
<td>490</td>
<td>Statistical Analysis of Data. (Prerequisite: CHE 147)</td>
<td>Offered: Spring of odd-numbered years</td>
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</tr>
<tr>
<td>497</td>
<td>Research. (Prerequisite: Permission of advisor) Students doing laboratory research must register for this course. This course may be repeated for credit. Offered every quarter. Variable credit (1-4 quarter hours).</td>
<td></td>
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</tr>
<tr>
<td>500</td>
<td>Independent Study. Variable credit. (Prerequisite: Permission of chairman) This course may be repeated for credit. Offered by arrangement.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
computer science

faculty

associate professors
Helmut Epp, Ph.D.
Robert Fisher, Ph.D.
Gerald Gordon, Ph.D.
Glenn Lancaster, Ph.D.

Northwestern University
Harvard University
University of California, Berkeley
University of California, Irvine

assistant professors
Gary F. Andrus, Ph.D.
George Knatt, Ph.D.
David Miller, Ph.D.

Wayne State University
Northwestern University
University of Chicago

adjunct professor
Ronald Benjamin, M.S.

DePaul University

instructors
Henry Harr, M.S.
James Kenevan, M.S.
Thomas Sheridan, M.B.A.

DePaul University
University of Chicago
DePaul University

lecturers
Robert Binder, M.B.A.
Richard Courtheoux, M.S.
Girish Parikh, B.E.
Stephan Samuels, M.A.
Jay Shah, M.S.
Edward Wegryn, J.D.

University of Chicago
Weizmann Institute
Gujarat University
DePaul University
DePaul University
Loyola University

purpose

Computer Science is concerned with the basic principles and technology involved in the applications and development of digital computers. The program provides the student with the knowledge required for further study and/or the professional training required of highly competent and broadly skilled practitioners.
master of science: computer science

admission requirements

For full admission, students must have the following:

- Bachelor's Degree
- Phase I: Pre-program conditions

Phase I Courses provide the students with the background in computer science, mathematics and statistics for a successful pursuit of the degree program. Depending on the student's background, all or part of the Phase I courses may be waived through available equivalency examinations or after consultation with the Chairperson, Computer Science Department.

Computer Science

CSC 210 or 220 Programming with PL/1 or PASCAL
CSC 310, 311 Principles of Computer Science I, II
CSC 344 Assembly Language

Mathematics

MAT 150, 151 Calculus I, II
MAT 220 Linear Algebra with Applications I (This course is a conditional course only for students who choose the statistical computing concentration.)

Statistics

One of the following:
CSC 323 Data Analysis and Statistical Software I
MAT 348 Applied Statistical Methods and Theory I

degree requirements

- Courses: successful completion of 48 quarter hours of courses numbered at the 400 and 500 levels. A minimum of 40 of the 48 hours is to be chosen from computer science courses. Included in the minimum must be the four core courses.

- core courses (16 quarter hour)

CSC 442 Data Structures
CSC 445 Computer Architecture
CSC 446 Computer Operating Systems
CSC 491 Design and Analysis of Algorithms
concentration courses (16 to 20 quarter hours)

Students may select one of the following concentrations and complete the indicated course work. Alternately, a student may petition the Department Chairperson to choose a personalized concentration.

**Computer Science (16 quarter hours)**

CSC 447 Concepts of Programming Languages

Three of the following:

CSC 420 Discrete Structures
CSC 448 Compiler Design
CSC 490 Theory of Computation
CSC 492 Advanced Topics in Algorithms
CSC 493 Automata Theory
CSC 545 Advanced Computer Organization
CSC 546 Operating Systems Design
CSC 548 Advanced Compiler Design

**Data Communications (16 quarter hours)**

CSC 462 Data Communications
CSC 489 Queueing Theory with Computer Applications
CSC 562 Communication-Computer Network Design and Analysis

One of the following:

CSC 563 Protocols and Techniques for Data Networks
CSC 589 Queueing Networks
CSC 597 Topics in Data Communications

**Information Systems (20 quarter hours)**

CSC 459 File Management and Organization
CSC 573 Data Bases and Data Management

Three of the following:

CSC 462 Data Communications
CSC 475 Computer Systems: Design and Analysis
CSC 480 Artificial Intelligence
CSC 481 Pattern Recognition and Machine Perception
CSC 494 Software Methodologies
CSC 560 On-line Systems and Telecommunications
CSC 574 Advanced Topics in Data Base

**Statistical Computing (16 quarter hours)**

CSC 423 Data Analysis and Statistical Software I
CSC 586 Computational Methods for Data Analysis

Two of the following:

CSC 424 Data Analysis and Statistical Software II
CSC 433 Computer Simulation
CSC 485 Numerical Analysis
CSC 487 Operations Research I
CSC 489 Queueing Theory with Computer Applications
CSC 593 Topics in Statistical Computing
additional courses (4 to 8 quarter hours)

Depending upon the number of courses taken in the student's area of concentration, he or she must complete either one or two additional computer science courses from the 400 and/or 500 levels.

non-thesis course option (8 quarter hours)

To complete the course requirements of the program, the student can take two additional 400 and/or 500 level Computer Science courses or, with the written approval of the Department Chairperson, two graduate level courses chosen from the College of Liberal Arts and Sciences and/or the College of Commerce, DePaul University.

thesis course option (8 quarter hours)

With written departmental approval, in lieu of the non-thesis option, the student can choose to submit a thesis. In choosing this option the student is to register for eight quarter hours in CSC 698 Research for Master's Thesis. The thesis may be submitted prior to or after the comprehensive written examination.

• Comprehensive Written Examination: four core courses and three topical areas. The three areas, chosen by the candidate from his or her field of concentration, require written departmental approval.

Deadline: The candidate must submit a written comprehensive examination application to the Chairperson the quarter before the examination is to be taken.

COURSES

undergraduate courses—phase I

These courses only count for Phase I conditions.

CSC 210 Programming with PL/1. An introduction to structured computer programming using the language PL/1. Topics include: simple data types, control structures, character string processing, array processing, procedures and functions.

CSC 220 Programming with Pascal. An introduction to structured computer programming using the language Pascal. Topics include: elementary data types, program control structures, character strings, array processing, procedures and functions, and an introduction to user defined data types.

CSC 310 Principles of Computer Science I. (Prerequisite: CSC 210 or 220 or consent) Conceptual models of a computer, machine and assembly language. Internal data representation, programming methods, recursion.

CSC 311 Principles of Computer Science II. Basic data structures, stacks, queues, linked lists. Trees, tree searches and string processing.
CSC 323 Data Analysis and Statistical Software I. Introduction to data analysis. Elementary statistical inference. Regression and correlation analysis. These topics will be supported by a thorough introduction to computer packages including BMDP, IDA, MINITAB, SPSS and SPSS+. The emphasis will be on actual experience with both on-line and batch processing packages.

CSC 344 Assembly Language Programming. (Prerequisite: 311 or equivalent) Data representation, addressing schemes and instruction formats, introduction to IBM 360/70 assembly language.

MAT 150 Calculus I. (Prerequisite: MAT 131 or three years of high school mathematics.) Limits and derivatives, extrema, curve sketching, convexity, inverse functions, continuity.

MAT 151 Calculus II. (Prerequisite: MAT 150) Definite and indefinite integral; volumes, arc length, trigonometric functions, logarithmic and exponential functions.

MAT 220 Linear Algebra with Applications I. (Prerequisite: MAT 151) Vectors, equations of lines and planes, matrices, linear independence, linear transformations, determinants.

MAT 348 Applied Statistical Theory and Methods I. (Prerequisite: Elementary Calculus and one course in elementary statistics.) Elements of probability theory, discrete and continuous probability models, principles of estimation theory and hypothesis tests with continuous probability models, principles of estimation theory and hypothesis tests with emphasis on large and small samples, inference concerning means, variances and proportions.

graduate courses

420 Discrete Structures. Basic set theoretic and finite algebraic structures with their applications to computer science, graph theory, switching circuits, finite state machines, and other topics.

422 Mathematical Software. (Prerequisite: MAT 220) Computer packages for numerical methods and operations research, including linear and non-linear optimizations.

423 Data Analysis and Statistical Software I. (Prerequisite: 323 or consent) Multiple regression and correlation, residual analysis, stepwise regression, analysis of variance, modelling, and robustness. These topics will be studied from a data analytic perspective, supported by a thorough investigation of available statistical software.

424 Data Analysis and Statistical Software II. (Prerequisite: CSC 423 or consent) Topics chosen from among multivariate statistical methods, discriminant analysis, principal components analysis, and factor analysis, discrete multivariate analysis and non-parametric statistics.

433 Computer Simulation. (Prerequisite: Knowledge of a programming language) Computer simulation of social, biological and physical systems. Topics include: system characterization, classification and modelling, generators of random numbers and stochastic variables, collection of meaningful statistics, descriptions of several of the simulation languages: DYNAMO, GPSS, GASP, SIMSCRIPT, SIMPAC, AND SIMULATE.

442 Data Structures. Representation and management of data in a computer. String and numeric representation, string manipulation, arrays, stacks, queues, linked lists, trees, graphs, sorting and searching.
445 Computer Architecture. (Prerequisite: CSC442 or consent of instructor) A structured comparative study of computer organizations and design strategies. Memory organization, general register processors, stack processors, register transfer level, microprogramming and emulation.

446 Computer Operating Systems. (Prerequisite: CSC444 or consent of instructor) A conceptual introduction to operating systems. Multiprogramming, time-sharing, concurrent and cooperating processes, scheduling policies, storage management and file management.

447 Concepts of Programming Languages. (Prerequisite: CSC442 or consent of instructor) A comparative study of computer languages such as ALGOL, PL/I, FORTRAN, APL, COBOL, LISP, and SNOBOL. Information binding, semantics, context free grammars.

448 Compiler Design. (Prerequisite: CSC442 or consent of instructor) Design and structure of high level languages. Lexical Scan, top down and bottom up syntactic analysis. Syntax directed translation and LR(k) grammars.


460 Topics in Operating Systems. (Prerequisite: CSC446) A survey of topics of current interest.

462 Data Communications. (Prerequisite: MAT 151 and consent of instructor) Theory and components of data communication systems, modes, codes, and error detection techniques for data transmission, network protocols and line control procedures, communication carrier facilities and system planning.


472 Metamathematics, Logical Deduction and Computers. (Prerequisite: Some familiarity with formal mathematical reasoning) Deduction in formal theories, decidability, consistency and completeness, the limits of formal reasoning, Goedel's Theorem, the halting problem for Turing machines, other undecidable problems, elementary recursion theory.


480 Artificial Intelligence. (Prerequisite: CSC447 or consent) Introduction to machine simulation of human intelligence. Topics covered include problem solving, game playing, learning. The LISP programming language will be used.

481 Pattern Recognition and Machine Perception. (Prerequisites: MAT 348 and CSC 480 or consent of Instructor) Computerized image analysis, scene description. Mathematical methods of pattern recognition and scene reconstruction. Applications to robotics, biomedicine and other areas.
Data Processing: A Legal Perspective. Practical legal considerations arising in a data processing environment are discussed. Areas include legislation, contracts, copyrights, patents and fraud.


Operations Research I: Linear Programming. (Prerequisite: MAT 220 and any introductory programming course.) The Linear Programming problem and its dual; the simplex method; transportation and warehouse problems; computer algorithms and applications to various fields.

Operations Research II: Optimization Theory. (Prerequisite: CSC487) Integer programming, non-linear programming, dynamic programming, game theory.

Queueing Theory with Computer Applications. (Prerequisite: MAT 348 or consent) An overview of queueing theory-queueing systems, related random processes, classification of queues. Priority queueing. Computer time sharing and multi-access systems.

Theory of Computation. (Prerequisite: CSC491 or consent) An introduction to the mathematical foundations of computation. Random access and Turing machines, recursive functions, algorithms, computability and computational complexity.

Design and Analysis of Algorithms. (Prerequisite: CSC442) Consideration of interesting and efficient algorithms for sorting, graph theory, matrix operations and integer arithmetic. Emphasis on measuring the complexity of algorithms and on methods of designing algorithms.

Advanced topics in Algorithms. (Prerequisite: CSC491) An in-depth discussion of one or more of the following topics: algorithms for integer operations, polynomial arithmetic including applications of the Fast Fourier transform, matrix operations, pattern matching algorithms, proving lower bounds on the complexity of algorithms.

Automata Theory. (Prerequisite: CSC420 or consent) An introduction to the most important abstract models of computation and their applications. Finite state machines, pushdown automata, Turing machines, intractable problems, NP-complete problems. The relationship between formal grammars and automata.

Software Methodologies. (Prerequisite: consent of instructor) A survey of recent techniques for software development and software management. Problem specification, software design and testing, evaluation and documentation. Students will participate in a class project which will be integrated with the lectures.
495 Formal Grammars. (Prerequisite: CSC420 or consent) Study of formal grammars as they relate to automata and to other areas of computer science. Regular, context-free and context-sensitive grammars, closure properties of languages, ambiguity, decidability, AFL's.

496 Microprocessors. (Prerequisite: Consent of instructor) An introduction to the hardware and software aspects of microprocessors. Digital electronics, microprocessors, programming. Interfacing. Laboratory work will involve hands-on-work with microprocessor systems.

497 Information Theory. (Prerequisite: CSC420 and MAT 348 or consent) An introduction to the basic concepts of information theory and coding theory. Measure of information, the fundamental theorem, Hamming, BCH and other cyclic codes.

498 Digital Signal Processing. (Prerequisite: Graduate standing in mathematics, physics or computer science) Elements of circuit and signal theory, theory of modulation, mathematical basis of sampling and coding, principles of digital filtering. Applications to communications, process control, image and voice recognition, voice synthesis.

510 Introduction to Systems Programming. (Prerequisite: CSC445, 446 or consent of instructor) Introduction to macro assembly systems and general macro processors. Input and output control systems. Debugging tools.

545 Advanced Computer Organization. This course, a continuation of CSC445, will discuss parallel, array and pipeline processors and other topics of current interest. As a class project, students will design and microprogram a CPU using bit-slice techniques. (Prerequisite: 445)

546 Operating Systems Design. (Prerequisite: CSC446) An algorithmic approach to the design of an operating system. Topics are: I/O programming, procedure and data sharing in main storage, process and resource control, deadlocks, file systems.

548 Advanced Compiler Design. (Prerequisite: 448) Emphasis on practical problems in implementing compilers, data flow analysis, code optimization, error analysis. Discussion of compiler generators. As a class project students will write a compiler.

560 On-Line Systems and Telecommunications. Topics in on-line file systems, distributed processing. Study of large scale on-line systems.

562 Computer-Communication Network Design and Analysis. (Prerequisite: MAT 348, CSC462 or consent of instructor) Quantitative approaches to the design of data communications networks. Practical examples of networks. Statistical multiplexing and buffering of communication concentrators. Topics in overall network design.

563 Protocols and Techniques for Data Networks. (Prerequisite: CSC562 or consent) Packet communications, transport protocols, terminal, file transfer, and remote job protocols, packet broadcast protocols, coding theory, synchronization, security, data base management in distributed networks.

572 Computer Security. (Prerequisite: Consent of instructor) Security issues and problems specific to the computer environment. Software and hardware protection mechanisms including encryption and authorization schemes. Special security problems in distributed and teleprocessing environments.
Data Bases and Data Management. (Prerequisite: CSC 204, 442, or consent of instructor) Integrated data bases, architect of data base systems, storage structures, integrated management systems, on-line file organization.

Advanced Topics in Data Base. (Prerequisite: CSC 573) Study and comparison of relational, hierarchical and network data base systems. Problems of implementation of data base management systems. Critical evaluation of commercial data base systems.

Computer Information Systems. (Suggested Prerequisite: 573 or consent.) Introduction to the design and analysis of computer based information storage and retrieval systems. Retrieval systems using natural language, question-answering techniques. Storage and retrieval of unstructured and well-structured data. On-line inventory systems and bibliographic search systems.

Computational Methods for Data Analysis. (Prerequisite: MAT 220 and consent of instructor) Data management and manipulations. Simulation of random processes, computational graphics, numerical computations, linear and non-linear models.

Queueing Networks. (Prerequisite: MAT 348 or consent of instructor) Markov processes and reversibility, migration processes, applications to communication networks, computer systems, and teletraffic models, clustering processes, spatial processes and random fields.


Topics in Data Communications. (Prerequisite: Consent of Instructor)

Topics in Statistical Computing. (Prerequisite: Consent of Instructor)

Topics in Computer Science. (Prerequisite: Consent of Instructor)

COBOL Programming. (Prerequisite: 3 years high school math, MAT 101, or equivalent) An introduction to programming in the business oriented language COBOL. The emphasis will be on business problems involving processing large amounts of data.

Advanced Topics in COBOL. (Prerequisite: CSC 603) Tape and direct access programming, Job Control Language, Utilities and File management.

Statistical Software. Introduction to data analysis. Elementary statistical inference. Regression and correlation analysis. Analysis of variance. These topics will be supported by a thorough introduction to computer packages including BMDP, IDA, MINITAB, SPSS, AND SPSSHP. The emphasis will be on actual experience with both on-line and batch processing packages.

Research for Master's Thesis. Variable credit, 4-8 quarter hours. Permission of the Chairperson required. This course may be repeated for credit. Offered by arrangement with thesis advisor.
faculty

professors

James J. Diamond, Ph.D.
Robert W. Faulhaber, Ph.D.
William A. Hayes, Ph.D.
William R. Waters, Ph.D.

Northwestern University
Université de Paris
Catholic University of America
Georgetown University

visiting professor

Christos C. Paraskevopoulos, Ph.D.

Wayne State University

associate professors

Boa N. Batawia, Ph.D.
James E. Ciecka, Ph.D.
William M. Dugger, Ph.D.
Salvatore V. Ferrera, Ph.D.
Animesh Ghoshal, Ph.D.
Adolph E. Mark, Ph.D.
Margaret E. Oppenheimer, Ph.D.
Richard M. Thornton, Ph.D.
Richard J. Willgen, Ph.D.

North Carolina State University
Purdue University
University of Texas
University of Chicago
University of Michigan
University of Illinois
Northwestern University
Northern Illinois University
University of Illinois

visiting associate professor

Theodore A. Gebhard, Ph.D.

University of Illinois

assistant professors

Floyd R. Dill, Ph.D.
Michael L. Kilma, Ph.D.
Michael S. Miller, Ph.D.
William H. Sander III, Ph.D.

Cornell University
Washington State University
University of Pittsburgh
Cornell University

emeriti

Frank J. Brown, Ph.D.
Joseph S. Gigante, Ph.D.

Catholic University of America
University of Rome
purpose

The purpose of the graduate program of the Economics Department is to provide extensive knowledge and intensive analysis of economic theories and institutions. The program provides wide acquaintance with the basic sources in the field and initiates the student to habits of economic research. The degree in economics prepares the graduate, as a professional economist, to teach economics in high school and college, and to work as a business or a government economist doing forecasting and other tasks associated with that profession.

master of arts: economics

admission requirements

For full admission, students must have the following:

• Bachelor's Degree

• Nine courses in the social sciences. At least seven of these courses are to be economics or finance. The economic courses are to include ECO 305 Pricing and Distribution Analysis and ECO 306 National Income Analysis. The remaining courses may be in political science, sociology, psychology, statistics, history, or geography.

• Note: Often the number of required courses is reduced when the analytic background and the maturity of the student are taken into consideration.

degree requirements

thesis

• Courses: Eleven (44 quarter hours)
  Core Courses: Five (20 quarter hours)
  ECO 375 Introduction to Econometrics I or equivalent
  ECO 505 Advanced Price and Distribution Theory
  ECO 506 Advanced Income Theory
  ECO 530 History of Economic Thought
  ECO 580 Topics in Quantitative Economics
  or
  ECO 599 Seminar in Economics

  Thesis Research: ECO 600 Thesis Research (6 quarter hours)

  Additional Courses: Four (16 quarter hours)
  The additional courses, to be chosen from economics and/or allied fields, require the student to have the written permission of his or her advisor. Two of the four additional courses must be chosen from the 400 and/or 500 levels.
• Thesis: The student must seek the approval of a faculty member in the department to write the thesis under his/her direction. Essential to this approval is acceptance of the thesis topic by the professor.

If the thesis is evaluated as "excellent" and the student's grade point is above average, the chairperson may dispense with the oral examination requirement that follows.

• Oral Comprehensive Examination: This examination covers the thesis and the Area of Economic Concentration of the thesis. The specific areas a student may wish to concentrate in are listed below. The examination is taken after submission of the approved final draft of the thesis.

non-thesis

• Courses: Eleven (44 quarter hours)

  Core Courses: Five (20 quarter hours)
  ECO 375 Introduction to Econometrics I or equivalent
  ECO 505 Advanced Price and Distribution Theory
  ECO 506 Advanced Income Theory
  ECO 530 History of Economic Thought
  ECO 580 Topics in Quantitative Economics
  or
  ECO 599 Seminar in Economics

  Additional Courses: Six (24 quarter hours) The additional courses, to be chosen from economics and/or allied fields, require the student to have the written permission of his or her advisor. Four of the six additional courses must be chosen from the 400 and/or 500 levels.

• Written Comprehensive Examination: The comprehensive examination includes questions from the core courses (ECO 505, 506, 530, and 580 or 599) and in addition, either (a) a minimum of two questions from the student's Area of Economic concentration, or (b) if the student has not chosen a concentration, questions from two courses chosen by the student with the written approval of the chairperson or student's advisor.

The examinations are given in the last half of November and the last half of April. Students must notify the chairperson in the last week of October or March of their intention to sit for the examination.

areas of economic concentration courses

While not required, a student may acquire an Area of Concentration by completing four courses in one of the areas listed below.

Business Economics
  ECO 512 Applied Time Series and Forecasting
  ECO 514 Industrial Organization and Prices
  ECO 515 Business and Public Policy
  ECO 516 Economics and Taxation
  ECO 518 Labor Force Analysis
  ECO 576 Econometric Methods
  ECO 580 Topics in Quantitative Economics

(Note: Student is required to have an accounting background to concentrate in this area.)
### Development and International Economics
- **ECO 359** Theory of Economic Development
- **ECO 360** Economics of Underdeveloped Countries
- **ECO 361** International Trade
- **ECO 539** Comparative Economic Systems
- **ECO 557** Topics in Theory of International Trade
- **ECO 560** Development of American Economy
- **ECO 561** Economics of Underdeveloped Countries
- **FIN 557** Problems in International Finance

### Economics of Money and Finance
- **ECO 557** Topics in Theory of International Trade
- **FIN 505** Finance and Public Policy
- **FIN 510** Advanced Monetary Theory and Banking
- **FIN 599** Graduate Seminar in Finance

### Social Economics
- **ECO 320** Economics and the Common Good
- **ECO 325** Economics of Poverty
- **ECO 359** Theory of Economic Development
- **ECO 515** Business and Public Policy
- **ECO 518** Labor Force Analysis and Wage Theory
- **ECO 539** Comparative Economic Systems
- **ECO 551** Health Economics
- **ECO 560** Development of the American Economy
- **ECO 561** Economics of Underdeveloped Countries

### Urban and Manpower
- **ECO 310** Economics of the Urban Environment
- **ECO 325** Economics of Poverty
- **GEO 333** City Problems and Planning
- **MGT 332** Labor Law and Legislation
- **ECO 335** Resource, Energy, and Environmental Economics
- **ECO 368** Industrial and Commercial Location
- **ECO 518** Labor Force Analysis and Wage Theory
- **ECO 550** Regional and Urban Economics
- **ECO 551** Health Economics

### Quantitative Economics
- **ECO 380** Mathematics for Economics and Business
- **ECO 512** Applied Time Series and Forecasting
- **ECO 576** Econometric Methods
- **ECO 580** Topics in Quantitative Economics
- **ECO 581** Mathematics for Economics and Business II

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**Economics as a minor field**

Economics may be combined as a minor field only with those departments whose chairpersons permit such a minor. The undergraduate prerequisites for taking graduate-level economics courses consist of eight courses in the social sciences. Six of these must be in economics or finance, the remaining two courses may be in political science, sociology, history, or geography.
courses

advanced undergraduate courses

305 Pricing and Distribution Analysis. A detailed analysis of micro-economic theory. Both marginal analysis and indifference curve analysis are treated. The basic principles of production and pricing are examined. Emphasis is placed on pricing under various forms of imperfect competition, and the results of theory are constantly appraised in the light of economic realities. The implications of oligopolistic pricing for public policy are investigated.

306 National Income Analysis. A study of economic aggregates. The determinants and statistical measurement of total income, output, and employment are explained. The analytical tools of Keynesian theory are critically examined and current controversies are investigated. The relationship of fiscal and monetary policy to economic stability is studied and appropriate forms of public policy are examined.

310 Economics of the Urban Environment. (Prerequisite: Economics 104) Economic principles are used in analysis of problems of pollution, health, transportation, housing and education.

320 Economics and the Common Good. Economic theories, systems, and problems will be studied and analyzed in reference to the economic common good as defined in key modern documents, particularly the social encyclicals. Stress will be placed on both theory and practice.

325 The Economics of Poverty. Material and cultural, absolute and relative forms of poverty will be investigated insofar as they derive systematically, directly, and indirectly, from the American economy. Taking elimination of poverty as an appropriate objective, existing private, institutional and governmental activities will be analyzed, including economic activity itself. Personal, social, demographic, technological, and political background factors will also be brought to bear in the consideration of more successful antipoverty economic programs and policy.

335 Resource, Energy, and Environmental Economics. Introduction to the fundamental problems of resource depletion and environmental deterioration, trade-offs between the use of natural resources, environmental pollution, and population growth, alternative methods to achieve an optimal ecological system. Economic analysis of cost-benefit techniques, the role of effluent fees, government subsidies, and legislative action.

359 The Theory of Economic Development. A balanced coverage of the major aspects of the theory of economic development. The course includes an introduction to the more important theories of economic growth, as well as explanations of the role of land, capital, labor, and technology in the development process.
International Trade. A study of international trade theory and policy. It examines the fundamental basis for trade and the question of equilibrium and disequilibrium in the world economy. It includes analyses of the Balance of Payments, international investment flows, and the position of the dollar in foreign exchange transactions. Modern international institutions are studied.

Industrial and Commercial Location. Analysis of the factors involved in selecting locations for the development of commercial and industrial facilities. (Cross-listed with Geography 368 and Marketing 368.)

Introduction to Econometrics. This course introduces the student to the application of statistical methods to empirical testing of theoretical models of economic behavior. It proceeds from a discussion of mathematical models to probability theory and the methodology of statistical inference relevant to econometric work. Simple and multiple regression and correlation analysis will be emphasized along with a brief consideration of some problems raised by these methods of estimation.

Mathematics for Economics and Business I. This and the succeeding course are designed to provide a basic competency in the use of mathematics in Economics and Business. More and more, traditional as well as new concepts are discussed in the language of mathematics. In addition, successful study in the area of quantitative methods is greatly facilitated if the student has prior knowledge of the required mathematical tools. This first course consists of a genera and elementary survey of three areas: the nature of a mathematical model, matrix algebra, and an introduction to calculus. All tools will be developed within the framework of problems common to Economics and Business. The student is assumed to have only a high school background.

graduate courses

Economic Concepts for Use in Existing School Curriculums. (Prerequisite: Graduate Standing. Not applicable to a master's degree in economics. Cross-listed with Education 417.) A basic survey course aimed at teachers of social studies, history and consumer education who have not had college level economics or whose exposure to economics was too far in the past to have dealt with current economic theories and policies. Teachers attending the course will become familiar with curriculum material available for teaching economic concepts at almost any grade level and within any subject content.

The Teaching of Economics in U.S. History. (Prerequisite: Graduate Standing. Not applicable to a master's degree in economics. Cross-listed with Education 429) Basic economic concepts and the tools of analysis as they appear in American History with emphasis upon topics of contemporary concern. Designed for teachers of American history, social studies and business education on a secondary level.

Basic Concepts in Economic Education. (Prerequisite: Graduate standing. Not applicable to a master's degree in economics. Cross-listed with Education 431) Basic economic concepts and tools of analysis by teachers for a clear understanding of the American economic system, the consumer and contemporary economic problems.
Manpower Economic Education. (Prerequisite: Graduate Standing. Cross-listed with Education 432) Basic economic concepts and tools of analysis pertinent to understanding the world of work. Stresses the nature of output, income, money, employment and unemployment, capital, and related topics.

Development of Economic Curriculum in the Schools. (Prerequisite: Graduate standing. Not applicable to a master's degree in economics. Cross-listed with Education 433) Examination of the concepts and tools of analysis of economics with particular reference to development of individual lesson plans for particular grade levels and their introduction into the various levels of curricula.

The Implementation of Economics in the Curriculum. (Prerequisite: Graduate Standing. Not applicable to a master's degree in economics. Cross-listed with Education 434) Methods-oriented course with workshop sessions in curriculum development. Project development, role playing, games, examination of textural, audio-visual and other resources for the teaching and integration of economics in the schools.

Independent Study.

Advanced Price and Distribution Theory. (Prerequisite: Graduate Standing) An advanced course in micro-economic theory. Extensive reading in the field is required and recent developments are examined. Emphasis is on those modern contributions which have made economic theory more realistic and applicable to the world of business.

Advanced Income Theory. (Prerequisite: Graduate Standing) A macro-economic analysis which examines the determinants of income, employment, and prices and their interrelations aiming at the construction of a general theory. The dynamic character of income determination will be emphasized as well as the effects of government policy, economic institutions, and social goals.

Managerial Macroeconomics. (Prerequisite: Graduate standing) The introduction and uses by business of GNP and other national income accounts, explanation and uses by business of the major macroeconomic models, the significance of social capital rates to private business, the use of time series in business planning, the composition and use of price indexes, and income policy proposals.

Business and Economic Forecasting. (Prerequisite: Graduate Standing. Cross-listed with Mathematics 511) This course will be primarily concerned with macroeconomic data, variables, and predictions. Emphasis will be on the need for accurate predictions of economic activity and the importance of accurate predictions in implementing national economic policy and in making intelligent business decisions.

Applied Time Series and Forecasting. Theory and computer implementation of the Box-Jenkins Techniques with emphasis on forecasting business and industrial activity. (Cross-listed with Mathematics 512.)
514 Industrial Organization and Prices. (Prerequisite: Graduate Standing) A course designed to investigate the structure and behavior of modern industrial markets. In addition to a survey of modern theories of pricing in oligopolistic markets and the forms and effectiveness of competition in selected industries, the nature and rationale of certain institutions and practices will be studied e.g., problems of entry, excess capacity, vertical and horizontal integration, mergers, and the problem of conglomerates, patents, and cross-licensing. The economics of advertising and concentration in industry.

515 Business and Public Policy. A critical examination of the modern business economy in terms of the public purposes of the American people leading to consideration and development of major issues of public policy.

517 Materials and Methods for Introducing Economic Concepts into Existing School Curriculum.

518 Labor Force Analysis and Wage Theory. (Prerequisite: Graduate Standing) A study of the American labor force, measurement, characteristics, behavior under changing income, employment, and technology. An examination of recent trends in real and money earnings and the distribution of the national income provides the basis for a critical economic analysis and appraisal of contemporary wage theory.

530 History of Economic Thought. (Prerequisite: Graduate Standing) A study of the evolution of the science of economics. Emphasis is on the important contributions made to the field by the great thinkers, starting with the Physiocrats and extending to the work of contemporary economists.

539 Comparative Economic Systems. (Prerequisite: Graduate Standing) A study of the theory and practice of modern economic systems. Attention will be devoted to the United States, the Soviet Union and other major nations.

550 Regional and Urban Economics. (Prerequisite: Graduate Standing) An analysis and evaluation of the following methods of regional science will be made: economic base studies, regional multipliers, input-output analysis, industrial location measures, shift and share analysis, and gravity migration models. Inquiries into the problems of regional income inequality, planning, system of cities, and cost-benefit analysis to social problems of the cities.

551 Health Economics. (Prerequisite: Graduate Standing) An introductory economic analysis of the health industry in which the structure of the demand for, and supply of, medical services will be surveyed in relation to theories of cost initiation. Recent proposals for cost control and regulation will be emphasized.

557 Topics in Theory of International Trade. (Prerequisite: Graduate Standing: Economics 361 or equivalent) Modern theories of international trade: Classical theory of comparative advantage, factor proportion of theory, factor price equalization, application to international trade of welfare economics, including regional economic integration, commercial policy and tariff problems.
560 Development of the American Economy. (Prerequisite: Graduate Standing) This course describes the economic development of the United States by tracing the effects of the significant innovations. Consideration is divided among the various American metropolitan economies.

561 Economics of Underdeveloped Countries (Prerequisite: Graduate Standing) An introduction to the analytic skills of the economist applied to the special problems of underdeveloped countries. The view that development requires authoritarian control by the state is contrasted with the position that it may be accomplished by private economic decision-making.

576 Econometric Methods. (Prerequisite: Economics 375) The existence of various fundamental problems in the application of statistical procedures to econometric estimation will be studied, multicollinearity, identification, serial correlation, and nonhomogeneity of error variance. In addition, more sophisticated estimation techniques will be studied, e.g., reduced form and multi-stage regression techniques.

580 Topics in Quantitative Economics (Prerequisites: Graduate Standing, Economics 305 or GS&E 512, and Economics 380 or equivalent) This course is designed to acquaint students with certain areas of quantitative and mathematical economics. To a great extent the content of the course will depend upon the individual instructor. Topics generally included in this course are activity analysis, linear programming, game theory, input-output analysis, growth theory, and inventory and portfolio analysis.

581 Mathematics for Economics and Business II. (Prerequisites: Graduate Standing and Economics 380) This course is a continuation of Economics 380. Areas of concentration will include: a survey of the relevant concepts of both differential and integral calculus, differential equations, difference equations, and the mathematics of statistical inference.

599 Seminar in Economics. This course seeks to integrate and unify economic theory and history and empirical economics. The logical structure of economic theory, the interpretation and the testing are emphasized. Students are expected to read, analyze, and discuss articles and books throughout the course.

600 Thesis Research. (Prerequisite: Permission of the Department Chairman) The student writing his thesis for the Master of Arts degree must register for this course. He will pursue his research under the direction and guidance of the graduate faculty. Eight quarter hours of credit is given upon the successful completion of the thesis.
faculty

professors
Bernard A. Brunner, Ph.D.
Patricia Ewers, Ph.D.
William J. Feeney, Ph.D.
Ellin M. Kelly, Ph.D.
James S. Malek, Ph.D.

associate professors
Hugh J. Ingrasci, Ph.D.
John E. Price, Ph.D.
Lavon Rasco, Ph.D.
Frank Sherman, Ph.D.

assistant professors
Kristin Brady, Ph.D.
Joanne Devine, Ph.D.
William Fahrbach, Ph.D.
Kristine Garrigan, Ph.D.
Thomas Liszka, Ph.D.
Zahava McKeon, Ph.D.
Helen L. Manborough, Ph.D.

emeriti
Rev. James Larkin, C.S.V., Ph.D.
Rev. Jeremiah Lehane, C.M., Ph.D.
Margaret M. Neville, Ph.D.
Rev. John Smith, C.M., M.A.
Frederick L. Tietze, Ph.D.

University of Chicago
Loyola University
University of Oregon
University of Wisconsin
University of California at Berkeley

University of Michigan
Loyola University
Northwestern University
University of Wisconsin

Brown University

University of Toronto
Michigan State University
University of Toronto
University of Wisconsin

Northern Illinois University
University of Chicago

Illinois University
St. Louis University
Loyola University
DePaul University

University of Wisconsin
purposes

The purposes of the English Department's Graduate Program are to aid students in broadening their knowledge of the English language and literature and to help them prepare for professional work through intensive study in several fields, in the ordering and establishing of scholarly evidence, in linguistic history and theory, in literary history and criticism, and in special fields related to English, American, and comparative literature.

traditional concentration

The Department's Traditional Concentration, which involves course work with or without a thesis, is intended to prepare the student for advanced work in English and related fields, including professional work for which a master's degree is usually considered an appropriate kind of preparation.

prospective college teachers concentration

The Department's offerings for prospective college teachers combine traditional course work in English literature and course work with a special emphasis on language and writing.

master of arts: english

admissions requirement

For full admission, students must have the following:

- Bachelor's degree, ordinarily completed with a major in English. Students with undergraduate degrees in other majors may be admitted to the Department's graduate concentrations by completing, with a minimum overall average of B, a series of undergraduate courses in English.

degree requirements

traditional concentration

thesis/creative project

- Courses: 48 quarter hours of credit, including
  
  Core Courses:
  - EN 400 Bibliography and Literary Research
  - EN 401 History of the English Language
  - EN 470 Studies in Literary Criticism
  - Seven additional English courses (no more than two may be on the 300-level)
  - EN 499 Thesis Research

- Thesis/creative project options:
  - Thesis in English. (Student should enroll in EN 499 Thesis Research)
  - or
  - Creative writing project in fiction, drama, or poetry. (Student should have approval of the Creative Thesis Committee of the Department.)

- Written Comprehensive Examination: after satisfying the course requirements, student must pass a written comprehensive examination, based on a reading list drawn up by the Comprehensive Examination Committee of the Department.
non-thesis

• Courses: 48 quarter hours of credit, including
   Core Courses
   ENG 400 Bibliography and Literary Research
   ENG 401 History of the English Language
   ENG 470 Studies in Literary Criticism

   Seven additional English courses (no more than two may be on the 300-level)
   Two additional courses, including one seminar, of which not more than one
   may be on the 300-level in English

• Written Comprehensive Examination: after satisfying the course requirements,
   student must pass a written comprehensive examination, based on a reading
   list drawn up by the Comprehensive Examination Committee of the
   Department.

prospective college teachers concentration

• Courses: 48 quarter hours, including
   Core Courses
   ENG 400 Bibliography and Literary Research
   ENG 401 History of the English Language
   ENG 403 The Twentieth-Century English Language
   ENG 405 The Process of Composition
   ENG 470 Studies in Literary Criticism
   ENG 475 Studies in Literary Analysis

   Six additional courses (ordinarily all in English, and no more than three on the
   300-level in English)

• Written Comprehensive Examination: after satisfying the course requirements,
   student must pass a written comprehensive examination, based on a reading
   list drawn up by the Comprehensive Examination Committee.

courses

Courses on the 300-level in English are undergraduate courses for which
graduate students with the approval of his or her departmental advisor, may
earn graduate credit. Courses on the 400-level in English are usually limited to
graduate students.

Writing and Language

300 Composition and Style. Instruction and practice in writing in a clear,
concise, forceful prose style.
305 Creative Writing
400 Bibliography and Literary Research. A general course for the
guidance of students in methods of literary research.
401 History of the English Language. A systematic study of the nature,
history, and usage of the English language. The course traces the
language from its origin to its present status in England and America.
403 The Twentieth Century English Language. Survey of major theories of
grammar.
405 The Process of Composition.
407 Problems in Editing and Publishing. Theory, skills, and practice in writing and editing for various kinds of publications.
409 Seminar, Topics in Writing and Editing. See schedule for current offerings.

Medieval
310 English Literature to 1500. A survey of English literature from the beginnings to 1500.
412 Studies in Middle English Verse Romances. Emphasis on non-Arthurian matter.
419 Seminar, Topics in Medieval Literature. See schedules for current offerings.

Renaissance
320 English Renaissance Literature. Survey of English literature from 1500 to 1600.
421 Studies in English Renaissance Prose. Major prose works, including More's Utopia, Sidney's Defence of Poesie, Bacon's Essays, and Milton's Areopagitica.
423 Studies in English Renaissance Drama. Renaissance drama, excluding Shakespeare, including works by Kyd, Marlowe, Janson, Webster, and Ford.
428 Studies in Shakespeare. Study of selected plays through various critical and scholarly perspectives.
429 Seminar, Topics in Renaissance Literature. See schedules for current offerings.

Restoration and Eighteenth Century
330 Restoration and Eighteenth Century Literature. Survey of English literature from 1660 to the 1780's.
430 Studies in Restoration and Eighteenth Century Literature. Alternating areas of emphasis include the Augustan Age, the Age of Dryden, and the Age of Johnson.
452 Studies in Restoration and Eighteenth Century Drama. Studies in the comedy of manners, sentimental comedy, heroic drama, and bourgeois tragedy.
439 Seminar, Topics in Restoration and Eighteenth Century Literature. See schedules for current offerings.
Nineteenth Century

340 Nineteenth Century English Literature. Survey of English literature from the 1780's to 1900.
344 Studies in Victorian Poetry. Major Victorian poets, including Tennyson, Browning, Housman, and Arnold.
345 Studies in Nineteenth Century British Fiction. Alternating emphasis on Austen, Scott, Dickens, Thackeray, the Brontës, Hardy, Eliot, Meredyth, and Trollope.
347 Comparative Studies in the Nineteenth Century. English, continental, and American thought, especially in literature, including Hegel, Mill, Eliot, Zola, Emerson, and others.
349 Seminar: Nineteenth Century Topics. See schedules for current offerings.

Modern

351 Studies in the Modern British Novel. Alternating areas of emphasis, including Woolf, Joyce, Lawrence, and Huxley.
352 Studies in Modern British Poetry. Alternating areas of emphasis, including Yeats, Auden, Lawrence, Dylan Thomas, and Hopkins.
359 Seminar: Topics in Modern British Literature. See schedules for current offerings.

American Literature

360 Early American Literature. Survey of American literature from the beginnings to 1830.
361 Romanticism in American Literature. Survey of American literature from 1830 to 1860.
364 American Genre Studies. Studies in either the American novel, drama, poetry, or short story.
360 Studies in American Literature: Beginnings to 1820. Studies in the origins of American literature and culture, including Puritanism in American Culture, Franklin and Edwards, journals, diaries, and historical literature.
361 Studies in American Literature: 1820-1870. Studies in the American renaissance, including Hawthorne and Melville, Irving, Cooper, Poe, the Transcendentalists, Whitman, and Dickinson.
362 Studies in American Literature: 1870-1920. Studies in American Realism and Naturalism, including Twain, James, the development of modern poetry, the colloquial style, and Naturalism.

Studies in Modern American Poetry. Alternating areas of emphasis, including Imagism, Eliot, Frost, and contemporary poets.


Seminar: Topics in American Literature. See schedule for current offerings.

Literary Criticism


Studies in Literary Analysis. Theoretical and practical instruction in literary analysis for college teachers.

Stylistics. The study of style as conveyed in literary texts, with emphasis on contemporary methods of stylistics.

Comparative Literature

Masterpieces of World Literature. Selected works in translation from Homer to the present.

Studies in Comparative Literature: Ancient. Greek, Roman, and Biblical traditions that underlie Western literature.

Studies in Comparative Literature: Medieval. Alternating areas of emphasis, including the romance tradition, of Dante, Chaucer, and Boccaccio.

Studies in Comparative Literature: Modern. Alternating areas of emphasis, including the twentieth century novel, Symbolist poetry, and developments in form in modern literature.

Studies in the Novel. Comparative studies in English, continental, and American novelists, including Faulkner, Dostoevsky, Dickens, Tolstoy, Mann, Gide, and others.

Studies in Drama. Comparative studies in English, continental, and American dramatic literature. Alternating areas of emphasis including tragedy, comedy, English and Irish drama, and modern drama.

Seminar: Topics in Comparative Literature. See schedule for current offerings.

Special Studies

Independent Study. Written permission of supervising faculty member and of departmental chairperson is necessary before registration.

Thesis Research. Written permission of supervising faculty member and of departmental chairperson is necessary before registration (4).
faculty

professors
Albert Erlebacher, Ph.D.
Joseph J. Lehmann, Ph.D.
Martin J. Lowery, Ph.D.
Bernadine Pietraszek, Ph.D.

University of Wisconsin-Madison
Northwestern University
Loyola University
Loyola University

associate professors
Donald Abramsky, Ph.D
Robert Garfield, Ph.D.
Shalom Singer, Ph.D.
Cornellius Sippel, Ph.D.
Arthur Thumer, Ph.D.

University of Chicago
Northwestern University
University of Chicago
University of Michigan
University of Chicago

assistant professors
Thomas Croak, C.M., D.A.
Bruce L. Fenner, Ph.D.
Gregory C. Kozlowski, Ph.D.

Carnegie-Mellon University
Cornell University
University of Minnesota

lecturers
Lynn Boughton, M.A.
Robert Hamon, M.A.
Jean Knoll, Ph.D.

University of Illinois
DePaul University
University of Chicago

emeriti
Robert F. Fries, Ph.D.
Ralph J. Mailliard, Ph.D.

University of Wisconsin
Loyola University
purpose

The purpose of all courses offered by the Department of History is to provide a broad and critical acquaintance with the past experience of human society. Graduate courses involve wide contact with historical literature, including source materials, some practice in collecting, interpreting, and presenting data according to acceptable standards of method and style, and intensive discussion of the nature and problems of the discipline.

The degree program is intended to prepare the student for further advanced study, as well as to give him or her a disciplinary background adequate for those professions, in which a master’s degree is ordinarily considered adequate, such as secondary school teaching and archival work.

master of arts: history

admissions requirement

For full admission, students must have the following:

- Bachelor’s degree: 48 quarter hours in the social sciences. At least 36 of the hours must be in history and include both European and United States History. Remaining 12 hours are to be in other fields of the social sciences.

Note: In special cases the Department may accept applicants who have not completed the minimum number of credit hours in history.

degree requirements

history: thesis

- Courses: minimum of 48 quarter hours, including
  HST 401 Historical Method and Bibliography
  HST 499 Thesis Research

  Four 400-level history courses

  Six 300-level history courses, including
  one in American (if not previously taken in undergraduate program)
  one in European (if not previously taken in undergraduate program)
  one in Latin America
  one in East Asia
  one in Islam

Note: In an exceptional case a 300-level course may be substituted for a 400-level course in the same field with the written consent of the student’s advisor and the chairperson.
• Thesis
• Written or Oral Comprehensive Examination. Type to be chosen by student. Examination covers two of the following fields of history:
  Medieval Empire 400-1500
  Modern Europe to 1850
  Modern Europe since 1850
  England to 1750
  Great Britain since 1700
  Latin America
  United States to 1860
  United States since 1860

history: non-thesis
• Courses: minimum of 48 quarter hours, including
  HST 401 Historical Method and Bibliography
  Five 400-level courses
  Six 300-level history courses, including
  one in American (if not previously taken in undergraduate program)
  one in European (if not previously taken in undergraduate program)
  one in Latin America
  one in East Asia
  one in Islam

  Note: In an exceptional case a 300-level course may be substituted for a 400-level course in the same field with the written consent of the student’s advisor and the chairperson.
• Written or Oral Comprehensive Examination. Type to be chosen by student. Examination covers two of the following fields of history:
  Medieval Europe 400-1500
  Modern Europe to 1850
  Modern Europe since 1850
  England to 1750
  Great Britain since 1700
  Latin America
  United States to 1860
  United States since 1860

history as a minor field
  History may be combined as a minor with education, English, economics, geography, and philosophy. The prerequisites in history are 24 quarter hours, of which at least four must be in United States and four in European history.
COURSES

Advanced Undergraduate Courses

322 History of Medieval Europe. The breakup of the Roman Empire, growth and development of Christianity and Islam, feudalism and the feudal states, the medieval papacy, the Slavic world, rise of urban life, transition to the modern age, decline of the influence of the Church.

328 English Constitutional History. A study of Anglo-Saxon institutions, feudalism after the Norman conquest, growth of the common law, foundations of Parliament and the development of central administrative systems.

330 The Renaissance and the Reformation. A detailed consideration of the significant political, economic, intellectual, religious, and artistic developments of the early modern period.

332 French Revolution and Napoleon. Political and economic failure of the Old Regime, influence of the philosophers, the rise and fall of revolutionary idealism, the spread of revolutionary principles, the development of imperialism and dictatorship under Napoleon, the settlement of Europe and the Congress of Vienna.

333 Europe from Metternich to Bismarck. The decline of the aristocratic-clerical order, the emergency of capitalism, the appearance of liberal states, and the rise of nationalism in Italy and Germany.

334 Europe in the Age of German Ascendancy. Continental culture, development of imperial rivalries, failure of internationalism and the coming of World War I.

335 Europe Since 1914. A study of the main currents of international affairs during the period, and domestic problems of the leading states, with emphasis upon the dynamic of power politics.

336 Expansion of Europe I: The Age of Discovery. A survey of the political, intellectual and scientific roots of the expansion of Europe and of the main voyages of discovery between 1400 and 1525.

337 Expansion of Europe II: The Age of Empires. Causes of the establishment of European empires in the 19th and 20th centuries, their nature and effect of empires, the reasons for their disappearance and their legacy for Europe and the non-Western world.

338 Modern Britain Since 1715. (formerly 346) Development of Parliamentary sovereignty, social, political, and economic reforms, political parties and the rise of the labor movement, British foreign policy during the period.

339 Traditional East Asia. Examines developments in the history and civilization of China and Japan approximately to 1800.

340 Modern East Asia. Coming of the Europeans, problems of modernization, the two world wars and post-war developments.

341 Islam in World History: The Foundations. A study of Islam as a religious faith, a civilizing tradition and a political system from the time of the Prophet to the 19th century.
342 Islam and the West in the Modern World. An examination of the economic, cultural and political interaction of Europe and the Islamic world.

343 The Origins of the Afro-Americans: Afro-American History to 1750. Europeans in West Africa, the middle passage, slavery in the West Indies, development of the Slave trade, introduction of slavery into the American colonies.

344 From Slavery to Freedom: Afro-American History, 1750-1865. Black participation in frontier life, in the War of 1812, in the growth of the cotton industry, in the Civil War and Reconstruction.


346 The Black Mind in America. Black contributions in the areas of philosophy, theology, politics, literature, and art from 1619 to the present.

348 Themes in Afro-American History Presents the historical roots of the conflict of the Black and White races in America and considers means proposed for resolving it.

349 Africa: The Age of Empires, African History to 1800 A study of African history from earliest times, concentrating on the political, social, and religious aspects of major African States and empires.

350 Africa: The Age of Conquest, African History 1750-1900 The focus is on the origins of Afro-European relations and the political, economic, and military causes of the European partition and occupation of the continent.

351 Africa: The Age of Revolution, African History 1900 to the Present. The workings of the colonial system, the rise and course of independence movements, and the history of individual African states since independence.

352 Themes in the History of Africa. In-depth studies in the political, religious, cultural, and economic aspects of African history, relates past development to present-day problems in the area.

355 Russia Under Khans and Tsars. The Kievan period, the Mongol Invasions, Ivan the Terrible, the emergence of modern Russia, 19th century tsarist autocracy and the formation of the radical tradition.

356 Soviet Russia, 1905 to the Present. The Bolshevik revolution, Stalin's rise to power, the Five Year Plans, the Second World War and Russia's place in the modern world.

357 History of Spain and Portugal. An analysis of the social, economic, political, and intellectual development of the Iberian Peninsula from the time of Ferdinand and Isabella.

361 Colonialism and Independence in Latin America. A thorough analysis of Spanish and Portuguese colonizing techniques and comparative development of institutions under the Hapsburgs and Bourbons.

362 Liberalism and Conservative Response in Latin American Republics A study of the enlightenment and the various causes behind the revolt of the Spanish and Portuguese colonies from the mother country, including foreign intervention, revolutionary leaders, their ideals and effectiveness.
363 Contemporary Latin American Republics. An analysis of the major domestic and foreign problems confronting the new republics, including a study of liberalism, conservatism, federalism, socialism, and communism.

364 Dictatorships and Militarism in Latin America. A study of causes, characteristics, and effects of dictatorships in Latin America, emphasizing the role of the military.


366 Topics in Contemporary United States-Latin American Relations. The development of the Pan-American concept from the Congress of Panama in 1826 up to the Alliance for Progress and the Organization of American States.

367 The Caribbean. The history of the Caribbean from colonial times to the present, with special emphasis upon the role of the United States in the development of this region.

370 The Beginnings of American Civilization to 1760. The discovery, exploration, and settlement of the eastern seaboard, with discussion of significant political, economic, and social consequences.

371 The Age of the American Revolution. The establishment of American independence, adoption of the Constitution, the first years of the republic considered in analytical detail.

372 Jefferson, Jackson, and the Coming of the Civil War. The historical forces that shaped the early growth and development of the republic.

373 Civil War and Reconstruction, 1860-1877. The causes of the war, its development, and major problems of the peace.

374 The Emergence of Modern America, 1877-1914. New culture patterns, political party battles, growth of big business and organized labor, Populism and the Progressive period.

375 America in the Age of World War I, 1914-1945. A consideration of World War I, the Twenties, the Great Depression, the New Deal, World War II.

376 The United States Since 1945. Significant developments in American life during the period after World War II.

378 America in the Nineteenth Century: The Development of the Pragmatic Tradition. A study of the social development of the American people and of patterns of thought, religion, and art.


384 Topics in American Studies. Taught in cooperation with the English Department. May carry credit in English or History.

385 United States Constitutional History to 1865. Examines the English colonial charters, the constitutional aspects of the American Revolution and the federal constitution, explores the concepts of federalism and separation of powers with reference to major supreme court decisions.
United States Constitutional History since 1865. Problems of industrial regulation, civil liberties, constitutional issues of the New Deal and controversies arising during and after World War II, including the major decisions of the Warren court.

Teaching History and the Social Sciences. Introduces methods, techniques, and basic problems encountered in the teaching of history and the social sciences.

The Law, the State, and Freedom in America. A pre-law discussion course dealing with major ideas of the law, government, and civil liberties in the United States from 1620-1896.

Historical Sources and Evidence. Nuremberg to My Lai. Designed to develop in the pre-law student analytic and adversary skills useful in the practice of law and to confront controversial issues dealing with values of the lawyer and the citizen.

History of American Legislation. A study of the nature of American laws and the reciprocal influences of law and society upon each other in the context of national legislation in the 19th and 20th centuries.

Independent Study. Prerequisites: Junior standing, approval of instructor and chairman.

graduate courses

401 Historical Method and Bibliography.

402 Colloquium in Latin American History. (Prerequisite: one 300-level course in Latin-American History or consent of the instructor)

403 Colloquium in African History. (Prerequisite: one 300-level course in African History or consent of the instructor)

404 Colloquium in American History. (Prerequisite: one 300-level course in American History or consent of the instructor)

405 Colloquium in European History. (Prerequisite: one 300-level course in European History or consent of the instructor)

492 Extramural Internship. Internships in alternative careers for history majors. Students are placed in work-study positions under faculty supervision to help prepare themselves for non-teaching careers which require background in historical technique. Credit variable.

499 Thesis Research.
interdisciplinary study

divisional coordinators

fine arts, literature and communications
Kristin Brady, Ph.D. Divisional Head, Fine Arts and Literature

business and commerce
Robert O’Keefe, Ph.D. Associate Dean, Graduate School of Business

social sciences
Grace DeSantis, Ph.D. Sociology Department

theatre and arts
John Watts, Ph.D. Dean, Goodman School of Drama

physical sciences
Avrom Blumberg, Ph.D. Divisional Head, Natural Sciences and Mathematics

music
Wesley Vos, Ph.D. Associate Dean, School of Music

education
Andrew Kopan, Ph.D. School of Education

Dr. Richard Houk, Ph.D.
Program Director
purpose

The Interdisciplinary Studies Program (ISP) at DePaul University offers a unique and flexible opportunity for the older, more mature working student to build a master's program around his or her individual interests.

The Program seeks to transcend traditional departmental boundaries by allowing the student, with the advice and support of an appointed academic committee, to design a series of courses in a variety of substantive fields.

For example, an urbanologist interested in communications management can design a sequence of interrelated courses in the Departments of Management, English, Political Science and Administrative Studies. Likewise, someone interested in Arts and Management may tailor a program of courses selected from Arts and Sciences, the Goodman School of Drama, and the College of Commerce.

With proper planning virtually any combination of courses is open to the self-guided master's degree candidate.

master of art or master of science:
interdisciplinary study

admission requirements

For full admission, students must have the following:

- Bachelor's degree adequate background in the appropriate fields required as preparation for the successful completion of the student's proposed program of study

- Written rationale for a proposed program of study, rationale to include both a statement of educational and/or vocational objectives and a proposed listing of courses to make up that program

- Evaluation and approval of proposed program

- Foreign Language or Research Tool need to be determined as part of the proposed program evaluation and approval
degree requirements

interdisciplinary study: thesis

- Courses: 48 quarter hours of graduate credit, including
  1) ISP 499 Thesis Research (4 to 8 quarter hours),
  2) maximum of 16 quarter hours of credit in 300-level courses, and
  3) remainder of credit hours from 400/500 level courses.

- Foreign Language or Research Tool: provided need for specific proficiencies in a foreign language, in computer science, or in statistics was determined initially as part of the student's proposed program of study.

- Thesis

- Final Oral Examination: conducted by a committee of three faculty members appointed by the Director of the Interdisciplinary Study Program.

interdisciplinary study: non-thesis

- Courses: 48 quarter hours of graduate credit, including maximum of 16 quarter hours of credit in 300-level courses, and remainder of credit hours from 400/500 level courses.

- Foreign Language or Research Tool: provided need for specific proficiencies in a foreign language, in computer science, or in statistics was determined initially as part of the student's proposed program of study.

- Final Oral Examination: conducted by a committee of three faculty members appointed by the Director of the Interdisciplinary Study Program.

course

ISP 499 Thesis Research. Registration for either four or eight quarter hours credit. Student must have written approval before registering of both the chairperson of his or her Program Committee (or Director of the Interdisciplinary Study Program) and his or her thesis director.
mathematical sciences

faculty

professors

J. Marshall Ash, Ph.D.
Jerry Goldman, Ph.D.
Walter Pranger, Ph.D.
Jacob Towber, Ph.D.
Stephen Vagi, Ph.D.
Yuen-Fat Wong, Ph.D.

associate professors

Susanna Epp, Ph.D.
Constantine Georgakis, Ph.D.
Lawrence Gluck, Ph.D.
Sigrun Goes, Ph.D.
Mearne LaDuke, Ph.D.
Effat Moussa-Hamouda, Ph.D.
Roger Jones, Ph.D.
Michael Wichman, Ph.D.

assistant professors

Barbara Cortzen, Ph.D.
John Duddy, Ph.D.
Steven Homer, Ph.D.
Carolyn Narasimhan, Ph.D.
Felice Ronga, Ph.D.

University of Chicago
Illinois Institute of Technology
University of Chicago
University of Chicago
Cornell University

University of Chicago
Illinois Institute of Technology
Northwestern University
University of Oregon
University of Iowa
Rutgers University
Northwestern University

University of California at San Diego
Columbia University
Massachusetts Institute of Technology
Northwestern University
University of Geneva
purposes

In the Pure and Applied Mathematics concentrations the purposes of the Department are to provide the student with the mathematical knowledge required for study and research in mathematics, for the teaching of secondary school mathematics, or for the attainment of career goals in other professions requiring a thorough mastery of pure and applied mathematics.

The graduate student in mathematics may choose one of four areas of concentration: 1) pure mathematics, 2) quantitative analysis and operations research, 3) applied statistics, and, 4) actuarial science. Each of these areas has its own concentration of courses and comprehensive examination.

master of science: mathematical sciences

admission requirements

For full admission, students must have the following:

• Bachelor's degree

• 40 quarter hours of undergraduate mathematics, including:
  two quarters of linear algebra
  one quarter of real analysis
  one quarter of complex analysis

(Note: Students without this background may be required to enroll in appropriate mathematics undergraduate courses.)

degree requirements

• Courses: 48 quarter hours of graduate level work in mathematics

• Comprehensive Examination: content of specific courses selected from the student's chosen areas of concentration.

  Pure Mathematics Concentration
  • Courses
    MAT 400, 401, 402  Advanced Algebra I, II, III
    MAT 410, 411  Real Analysis I, II
    MAT 437  Advanced Complex Analysis
    MAT 480  Introduction to Topology

  Five 400 and 500-level mathematics courses, with the exception of 500-level applied courses. (Note: With written approval of the Departmental Chairperson a student may substitute two 300-level courses for two of the 400/500 level courses.)

• Comprehensive Examination: contents include MAT 400, 401, 402, 410, 411, 437 and 480, in addition to the content of MAT 370 Linear Algebra II.
Quantitative Analysis and Operations Research Concentrations

- Courses
  - MAT 451 Probability and Statistics I
  - MAT 487, 488 Operations Research I, II
  - MAT 489 Queueing Theory with Computer Applications
  - MAT 495 Dynamic Programming
  - MAT 525 Decision Theory
  - MAT 548, 549 Applied Statistical Methods and Theory I, II

Two courses from the operations research area.

Two courses from either the statistics or operations research areas. One of these two courses may be taken outside of the Department. (Note: With written approval of the Departmental chairperson, a student may substitute two 300-level courses for two courses from the operational research or statistics areas.)

- Comprehensive Examination: The examination covers the contents of MAT 451, 487, 488, 489, 548, and 549.

Applied Statistics Concentration

- Courses
  - MAT 451 Probability and Statistics I
  - MAT 455 Statistical Processes
  - MAT 457 Nonparametric Statistics
  - MAT 525 Decision Theory
  - MAT 528 Design and Analysis of Experiments
  - MAT 548, 549 Applied Statistical Methods and Theory I, II
  - MAT 586 Computational Methods for Data Analysis

Four additional courses in mathematics, at least three from the statistics areas.

(Note: With written approval of the Departmental chairperson a student may take two 300-level courses among the four additional courses.)

- Comprehensive Examination: The examination covers the contents of MAT 451, 455, 457, 525, 548, and 549.

Actuarial Science Concentration

- Courses
  - MAT 451, 452, 453 Probability and Statistics I, II, III
  - MAT 461, 462, 463 Actuarial Science I, II, III
  - MAT 464, 465, 466 Actuarial Mathematics I, II, III
  - MAT 487 Operations Research I

Two additional courses from the applied areas. (Note: With written approval of the Departmental chairperson, a student may take these two additional courses on the 300-level.)

- Comprehensive Examination: The examination covers the contents of MAT 451, 452, 453, 461, 462, and 463.
courses

advanced undergraduate courses

335  Advanced Calculus.
336  Calculus of Several Variables.
337  Complex Analysis.
370  Linear Algebra II.

graduate courses

Actuarial Science

461  Actuarial Science I. (Prerequisite: MAT152) Theory and applications of compound interest, annuities, amortization loans, sinking funds, bonds, and consumer loans.
462  Actuarial Science II. (Prerequisite: MAT461) Theory and application of single-life contingencies, introduction to mortality tables, premiums for life annuities and insurance, analysis of reserves.
463  Actuarial Science III. (Prerequisite: MAT462) Multi-life contingencies, multiple decrement mortality tables and pension mathematics.
464  Actuarial Mathematics I. (Prerequisite: MAT152) Calculus of finite differences and graduation methods.
465  Actuarial Mathematics II. (Prerequisite: MAT451 and 464 or consent) Risk theory and mortality table construction methods.
466  Mathematical Demography. (Prerequisite: MAT451 or consent) Introduction to demography, mortality table construction and methods of population and demographic analysis.

Algebra

400  Advanced Algebra I. Groups, isomorphism, theorems of Lagrange and Cayley, homomorphism.
401  Advanced Algebra II. (Prerequisite: MAT400) Rings, ideals, fields, quotient and extension fields.
402  Advanced Algebra III. (Prerequisite: consent) Linear Algebra. (Prerequisite: Consent)
504  Topics in Algebra. (Prerequisite: Consent)

Analysis

410  Real Analysis I. (Prerequisite: MAT335 or its equivalent) Real numbers, continuous functions on metric spaces, convergence of infinite series and differentiation.
411  Real Analysis II. (Prerequisite: MAT410) Sequences of functions, interchange of limits with differentiation and integration; improper integrals, Functions of several variables.
412  Real Analysis III. (Prerequisite: MAT411) Lebesgue’s theory of measure and integration, convergence theorems and differentiation, product measure and Fubini’s theorem.
437  Advanced Complex Analysis. (Prerequisite: MAT411 and 337 or consent) Complex integration and calculus of residues, maximum modulus principle, analytic continuation and the monodromy theorem, conformal mapping.
438  Complex Analysis II. (Prerequisite: MAT437) Topics in complex analysis.
481 Fourier Analysis and Special Functions I. (Prerequisite: Graduate Standing)

484 Functional Analysis. (Prerequisite: MAT412) Topics from Hilbert space theory, operator theory, spectral theory, and topological vector space theory.

515 Topics in Real Analysis. (Prerequisite: Consent)

516 Topics in Complex Analysis. (Prerequisite: Consent)

Geometry

459 Introduction to Algebraic Topology. Homotopy and the fundamental group, polyhedra, elementary homology and cohomology theory, covering space and fibrations.

480 Introduction to Topology. Definition of topological space, subspaces, continuity, separation axioms, axioms of countability, metric spaces, products and quotients, connectedness and compactness.

520 Geometry I. Incidence and separation properties of the plane, congruence, parallel postulate, area theory, ruler and compass construction.

521 Geometry II. (Prerequisite: MAT520) Riemannian and hyperbolic geometry; metric axioms, triangles and angle sums, consistency of hyperbolic postulates.

581 Differential Geometry. Topics from: the Frenet formulas and structured equations on a curve, differential forms on a surface and their integration, shape operators, fundamental equations, theorem egregium of Gauss-Bonnet-theorem.

582 Introduction to Differentiable Manifolds. (Prerequisite: MAT581) The elements of differentiable manifolds including vector bundles over manifolds.

Quantitative Methods and Operations Research


487 Operations Research I. (Prerequisites: MAT220 and any introductory programming course) Linear Programming. The Linear Programming problem and its dual, the simplex method, transportation and warehouse problems, computer algorithms and applications to various fields.

488 Operations Research II. (Prerequisite: MAT487) Optimization Theory. Integer programming, non-linear programming.

493 Automata Theory. An introduction to the most important abstract models of computation and their applications. Finite state machines, pushdown automata, Turing machines, intractable problems, NP-complete problems. The relationship between formal grammars and automata. (Prerequisite: consent of instructor)


496 Game Theory. The minmax theorem for two-person zero-sum games. Two person general sum games and non-cooperative person games: Nash equilibrium.

Statistics and Probability


452 Probability and Statistics II. (Prerequisite: MAT451) Joint probability distributions and correlation, sampling distributions, theory of estimation.

453 Probability and Statistics III. (Prerequisite, MAT452) Testing of hypotheses: simple linear regression, one-way analysis of variance, nonparametric statistics.

454 Multivariate Statistics. (Prerequisite, MAT453 or 549) The general linear model for multivariate regression and analysis of variance, principal components and factor analysis applications and use of SPSS.

455 Stochastic Processes. (Prerequisite: MAT548 or 452) Markov chains, branching processes, Poisson process, queuing theory, telephone traffic problems, Brownian motion applications.

456 Applied Regression Analysis. (Prerequisite, MAT548 or 452) Simple linear, multiple, polynomial regression models. Selection of best regression equation and examination of residuals for homoscedasticity and autocorrelation. Data analysis with the aid of computer programs.

457 Nonparametric Statistics. (Prerequisite, MAT548 or 452 or consent) Inference concerning location and scale parameters, goodness of fit tests, association analysis, and tests of randomness using distribution free tests.

458 Statistical Quality Control. (Prerequisite, MAT548 or 451) Control charts for means, standard deviations and attributes, acceptance sampling inspection using one and multi-stage sampling methods. Emphasis on industrial quality control problems.

489 Queuing Theory with Computer Applications. (Prerequisite: MAT548 or consent; cross listed with CSC499) An overview of queuing theory - Queuing systems, related random processes, classification of queues, Priority queuing, Computer time sharing and multi-access systems.

512 Applied Time Series and Forecasting. (Prerequisite, MAT549 or consent) Theory and computer implementation of the Box-Jenkins Techniques with emphasis on forecasting Business and Industrial activity.

525 Decision Theory. (Prerequisite: MAT549 or 453) Structure of statistical decision problems, optimal decision rules, Bayes decision rules, Invariance, hypothesis testing and estimation.

526 Sampling Theory and Methods. (Prerequisite: MAT548 or 452) Simple random, stratified, systematic, and cluster sampling, Multistage and area sampling, Random response and capture-recapture models.
525 Design and Analysis of Experiments. (Prerequisite: MAT549 or 453)
Linear models and quadratic forms. Single, two and several factor experiments, incomplete designs, confounding and fractional factorial experiments. Response surfaces and partially balanced incomplete block designs.

548 Applied Statistical Methods and Theory I. (Prerequisite: MAT150) The objective of the sequence, of which this is the first course, is to develop competence in the application and understanding of the theoretical foundations of statistical methods. Emphasis is given to both the application of such methods to real life data and the underlying theoretical rationale of the application. Among the topics to be covered are elements of probability theory, discrete and continuous probability models, principles of estimation theory and hypotheses tests with emphasis on large and small samples inference concerning means, variances and proportions.

549 Applied Statistical Methods and Theory II. (Prerequisite: MAT548) A continuation of MAT 548. Emphasis is given to statistical methods of inference. Topics to be covered are sample survey methods, cross classifications and the \( X^2 \) tests, analysis of variance and some experimental designs, simple and multiple regression, non-parametric inference and time series.

586 Computational Methods for Data Analysis. Data management and manipulations, simulation of random processes, computational graphics, numerical computations, linear and nonlinear models. (Prerequisite: MAT 348 or 352)

628 Design of Experiments. (Prerequisite, MAT549) Analysis of variance in experiments involving randomized designs, block designs, Latin square and factorial designs.

Foundations

472 Logical Deduction and Computers. (Prerequisite, Some familiarity with formal mathematical reasoning) Deduction in formal theories, decidability, consistency, and completeness, the limits of formal reasoning, Godel's theorem, the halting problem for Turing machines, other undecidable problems, elementary recursion theory.

474 Set Theory. Naive set theory, ordinal and cardinal numbers, axiom of choice and Zorn's lemma, the Zermelo-Frankel axioms.

492 Philosophy of Mathematics. (Cross-listed with Philosophy 492) The three main currents in the foundations of mathematics, logicism, formalism, and intuitionism, will be discussed. These areas will be studied with an emphasis on how they treat the existence of mathematical objects. A number of more recent views of these topics will be considered.

497 Information Theory. (Prerequisites: MAT311 and MAT451 or Consent) An introduction to the basic concepts of information theory and coding theory. Measure of information, the fundamental theorem, systematic and cyclic codes.

Miscellaneous

599 independent Study.
nursing

Sister Mary Jeremy Buckman, R.S.M., Ph.D.
Chairperson

faculty

associate professors
Sally A. Ballenger, M.S.  DePaul University
Donaid A. Bille, Ph.D.
Sister Mary Jeremy Buckman, R.S.M., Ph.D.
Grace G. Peterson, M.N.A.

University of Wisconsin-Madison
St. Louis University
University of Minnesota

assistant professors
Marilyn Kuzel, Ph.D.
Mary deMeneses, M.A.

University of Illinois
DePaul University

purpose

The purpose of the graduate program in nursing is to prepare qualified nurses
for leadership roles in teaching or administration, as well as preparation in
advanced clinical practice. Provision is made for continued growth in clinical
skills, as well as exploration and testing of various nursing theories.

The graduate program in nursing is based on the same philosophical principles
as its undergraduate program. The conceptual framework of the graduate
program articulates with and builds on the conceptual framework of the
undergraduate program. Three vertical strands (nursing practice, research, and
theory development) begin in the baccalaureate program, form the
foundation of the graduate conceptual framework.

First year of graduate studies: six core roles of the master's graduate are
introduced as organizing threads for the curriculum. The core roles (clinician in
medical-surgical nursing, manager, change agent, teacher, humanizer, and
researcher) intertwine with and build upon the vertical strands of nursing
practice, research, and theory development.
Second year of graduate studies: each student through specifically designed learning experiences pursues a functional area (either nursing education, nursing administration or nursing clinical specialization). Cognate courses are taken to support both advanced nursing practice and/or the functional area. A thesis rounds out the student's course of studies. Students undertaking graduate study are expected to be self-directed.

**Master of Science: Nursing**

**Admission Requirements**
For full admission, students must have the following:
- Bachelor's degree. Program, with upper division nursing major, accredited by the National League for Nursing
- Acceptable baccalaureate and/or graduate grade point average performance
- Basic statistics course or its equivalent
- Satisfactory achievement on the Graduate Record Examination
- Current licensure as a registered professional nurse in Illinois
- Written statement of personal philosophy of nursing
- One-page biographical sketch

**Degree Requirements**
- Courses: minimum of 58 quarter hours, with an overall grade point average of 3.00 on all graduate work attempted
- Thesis
- Comprehensive Oral Examination: qualification for this examination requires completion of a) all course requirements, b) completion of satisfactory thesis, and c) a professional portfolio.
## Curriculum

### First Year

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Subject</th>
<th>Quarter Hours</th>
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<tbody>
<tr>
<td>Autumn</td>
<td></td>
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<tr>
<td>Medical-Surgical</td>
<td>400-Theoretical Components of Nursing</td>
<td>4</td>
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<tr>
<td>Nursing Core</td>
<td>410-Advanced Statistics</td>
<td>4</td>
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<tr>
<td></td>
<td>Cognate*</td>
<td>4</td>
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<tr>
<td>Winter</td>
<td></td>
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<tr>
<td>Medical-Surgical</td>
<td>401-Research in Nursing I</td>
<td>4</td>
</tr>
<tr>
<td>Nursing Core</td>
<td>436-Advanced Clinical Nursing I</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Cognate (Nursing)</td>
<td>4</td>
</tr>
<tr>
<td>Spring</td>
<td></td>
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<tr>
<td>Medical-Surgical</td>
<td>405-Research in Nursing II</td>
<td>4</td>
</tr>
<tr>
<td>Nursing Core</td>
<td>437-Advanced Clinical Nursing II</td>
<td>6</td>
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<td></td>
<td>438-Perspectives in Nursing</td>
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</table>

### Second Year

<table>
<thead>
<tr>
<th>Quarter</th>
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<th>Quarter Hours</th>
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<tbody>
<tr>
<td>Autumn</td>
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<tr>
<td>Nursing Education</td>
<td>455-Dynamics of Curriculum</td>
<td>4</td>
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<td>458-Dynamics of Teaching</td>
<td>4</td>
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<tr>
<td>Administration</td>
<td>451-Effective Organization and Administration of Nursing Service</td>
<td>4</td>
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<td></td>
<td>452-Dimensions of Nursing Services</td>
<td>4</td>
</tr>
<tr>
<td>Neurological</td>
<td>460-Sensory-Perception Dysfunction</td>
<td>4</td>
</tr>
<tr>
<td>Nursing Specialty</td>
<td>462-Nursing Interventions in Neurological Problems</td>
<td>4</td>
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<tr>
<td>Winter</td>
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<tr>
<td>Nursing Education</td>
<td>459-Practicum in Teaching</td>
<td>6</td>
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<tr>
<td></td>
<td>Cognate*</td>
<td>4</td>
</tr>
<tr>
<td>Administration</td>
<td>457-Practicum in Nursing Services Administration</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Cognate*</td>
<td>4</td>
</tr>
<tr>
<td>Neurological</td>
<td>463-Practicum in Neurological Nursing</td>
<td>6</td>
</tr>
<tr>
<td>Nursing Specialty</td>
<td>Cognate</td>
<td>4</td>
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<td>Spring</td>
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<td>Oral Examination</td>
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</tbody>
</table>
COURSES

All courses are four quarter hours unless otherwise indicated.

cognates in nursing

N.420 Health History and Physical Assessment. (This course, or its equivalent, is a prerequisite to N. 436.)

N.421 Evaluation in Allied Health Education and Service.

N.425 Fiscal Management, Nursing Services and Nursing Education.

graduate courses

400 Theoretical Components in Nursing. A course designed to examine the nature, function and development of concepts, models and theories. The structure of a theory will be analyzed in reference to the relationship between its components and the type of theoretical statements utilized. Selected theories in nursing will be critiqued with emphasis on their implications for nursing practice, administration, education and research.

401 Research in Nursing I. (Prerequisite: NUR 410) A seminar course designed to broaden the student's concepts of the research process through presentation, discussion and analysis of various research approaches, methodological issues, research design and instrumentation. Problems related to validity and reliability will be explored. Ethical considerations relevant to the use of human subjects in research will be discussed. Critiques of published nursing research will enable the student to utilize concepts presented to evaluate studies in an area of interest and to prepare for the formulation of his research problem.

405 Research in Nursing II. (Prerequisite: NUR 401) Selection, development and testing of a nursing problem. The student identifies a nursing problem and then proceeds to study the problem following a basic research design.

406 Extended Research. This course will be required for students who do not complete their thesis during the quarter after all other course work is completed. The credits from this course will be over and above those required for graduation. (2 hrs.)

410 Advanced Statistics. This course will emphasize the applied statistical approach. Building on the prerequisite undergraduate statistics course, students will initially review basic concepts regarding descriptive and inferential statistics and the use of select formulae. The focus on statistical inference, hypothesis testing, regression, correlation, and analysis of variance techniques will incorporate examples derived from medical science discipline.

420 Health History and Physical Assessment. (Prerequisite: Graduate standing or consent of instructor) An advanced survey course which will provide an enhancement of basic skills in taking and recording a health history and performing physical assessment to differentiate normal from abnormal health status.
421 Evaluation in Allied Health Education and Service. (Prerequisite: Graduate standing or consent of instructor.) This course explores evaluation systems used in the extant settings of multidisciplinary health professional education and service. These evaluation systems include: quality control for patient care, program evaluation, evaluation of curriculum and instruction, employee performance appraisal, evaluation of inservice education, and evaluation of educational or service administration. Focus is placed on the synthesis and critique of evaluation tools. (This course is open to non-nurses.)

425 Fiscal Management: Nursing Service and Nursing Education. Fiscal management and budgetary practices in hospitals and higher education institutions are explored. Budget preparation for nursing services and nursing education programs are emphasized. Cost-benefit, cost effectiveness, strategies of clinical nurse specialists and staff development programs as well as fee-setting for nursing services and tuition-setting for higher education programs are determined.

436 Advanced Clinical Nursing I. (Prerequisite: Nursing 420 or its equivalent) A clinical and seminar course designed to provide the student with an opportunity to expand his scope of nursing practice in adult health. The clinical focus is on application of physical assessment and development of the ability to discriminate between current and potential health problems of clients. The student examines theories relevant to the core roles of humanizer, change agent, manager and teacher and the application of these theories to patients and coworkers in a select clinical setting. (6 hrs.)

437 Advanced Clinical Nursing II. (Prerequisite: NUR 436) A clinical and seminar course that is designed to further expand the scope of nursing practice in adult health. The focus is on developing the ability to relate the nursing process to a select theoretical model of practice. Systematic assessment, analysis, conceptualization, implementation and evaluation of adult client care is integrated into the theoretical framework under study. (6 hrs.)

438 Perspectives in Nursing. Emphasis is placed on major current issues confronting professional nursing.

450 Seminar in Selected Topics in Nursing. This course is reserved for
a) Individual study at a graduate level,

b) special seminars organized from time to time to accommodate the needs of groups in specialized subjects of topical interest.

451 Effective Organization and Administration of Nursing Services. (Prerequisite: Nursing 437 or consent of the instructor.) Theoretical and philosophically based concepts fundamental to administration of nursing services are examined. Administrative functions are used as the framework for exploration and various aspects of the system. The health needs of man are the basis for viewing the system and its functioning to determine how well the system has been modeled to meet these needs and whether the system should be redesigned.
Dimensions of Nursing Service Administration. (Prerequisite: NUR 437 or consent of the instructor.) The various components of the role of the nurse administrator are explored. Areas specific to nursing services are examined such as the utilization of a professional standards board, quality assurance program, and staff development. In addition, labor relations and management by objectives are considered. These are viewed within the theoretical framework involving the health needs of the client and their possible effect on meeting the client's health needs.

Dynamics of Curriculum Development. (Prerequisite: NUR 436 or consent of the instructor.) Theories, principles and methods for shaping and changing a nursing curriculum are examined. Sources and issues for curriculum decisions are analyzed, and curriculum evaluation strategies are discussed. A theory of nursing is utilized to construct a selected nursing curriculum.

Practicum in Nursing Service Administration. (Prerequisites: NUR 451 and NUR 452) Observation and guided experience in a dynamic hospital department of nursing services. Needs and interests of the student are integrated into the experience. Behavior and actions of various administrative and staff personnel are observed and evaluated in relation to applicable theory with emphasis on the activities of the nurse administrator and the assistant nurse administrator. (6 hrs.)

Dynamics of Teaching. (Prerequisite: NUR 437 or consent of the instructor.) Theories, principles and methods of teaching and learning (for application to nursing education) are examined. Emphasis is placed on how to arrange factors external to the learner in order to achieve the most efficient and effective learning. A philosophy of teaching-learning is synthesized and then integrated with a selected philosophy of nursing.

Practicum in Teaching. (Prerequisites: NUR 455 and NUR 458) Observation, investigation and application of theories, principles and methods of teaching and learning is carried out in selected nursing education settings. The individual's objectives for the practicum are emphasized in the extant educational setting. (6 hrs.)

Sensory-Perceptual Dysfunction.

Nursing Interventions for Neurological Problems

Practicum in Neurological Nursing. (6 hrs.)

Graduate Nursing Major. This is a non-credit course for nursing majors. Students may register for this course with permission of the Department Chairperson. (0 hrs.)
philosophy

faculty

professors
L. Edward Allemand, Ph.D.
Bernard J. Boelen, Ph.D.
Parvis Emad, Ph.D.
Mantfred S. Frings, Ph.D.
Martin Kalin, Ph.D.
James Keating, Ph.D.
Gerald F. Kreyche, Ph.D.
Robert Lechner, C.P.P.S, Ph.D.
Rev. Thomas Munson, Ph.D.
University of Louvain
University of Louvain
University of Vienna
University of Cologne
Northwestern University
Catholic University of America
University of Ottawa
University of Fribourg
University of Louvain

associate professors
Jeffner Allen, Ph.D.
Mary Jeanne Larrabee, Ph.D.
Duquesne University
University of Toronto

lecturer
David A. White, Ph.D.
University of Toronto

emeriti
Rev. Francis H. Eterovich, O.P., Ph.D.
Rev. Bruno Switalski, S.T.D., Ph.D.
University of Paris
University of Toronto
purposes

The purposes of the Department are: 1) to prepare those for teaching and research, who have the scholarly competence to pursue academic work culminating in the master’s or doctoral degree, and 2) to offer to the capable adult whose philosophical goals are non-vocational, the opportunity to study seriously for personal enrichment the value orientation of the Department.

In keeping with the intercontinental interests of its faculty, and in serving the needs of philosophical relevance, the Department focuses its attention on phenomenology, life philosophy, philosophies of existence, and the historical sources of these movements.

implementation

The Department offers directed research, courses, seminars, symposia, and colloquia that should guide and stimulate the student in an investigation of various philosophies and philosophical problems. It also stresses faculty counseling so that the program of each student can be tailored to his or her particular needs.

degree programs

master of arts

The Department offers both a thesis and a non-thesis program leading to the master’s degree. Students advancing directly to the doctorate are strongly advised to enter the thesis program. Those looking immediately to teaching might more profitably enter the non-thesis program.

doctor of philosophy

The Department offers courses, seminars, independent studies and dissertation direction culminating in the award of a Ph.D. in philosophy. While the program touches diverse areas of philosophy, its chief orientation is toward continental phenomenology.

master of arts: philosophy

admission requirements:

For full admission, students must have the following:

- Bachelor’s degree
- Satisfactorily completed a minimum of 44 quarter hours (or its equivalent) in major sequence in philosophy
degree requirements

philosophy, thesis
- Courses: 44 quarter hours of graduate study, including
  28 quarter hours of philosophy courses numbered 400 and over
  8 quarter hours in philosophy courses numbered 300 and over or, if the
  necessary prerequisites are met and the Department gives written approval,
  the 8 quarter hours may be taken in fields related to philosophy
  8 quarter hours in PHIL 699 Thesis Research
- Thesis
- Written Comprehensive Examination: Successful completion of a five-hour
  examination in the field of philosophy

philosophy, non-thesis
- Courses: 44 quarter hours of graduate study, including
  32 quarter hours of philosophy courses numbered 400 and over
  12 quarter hours in philosophy courses numbered 300 and over or, if the
  necessary prerequisites are met and the Department gives written approval,
  the 12 quarter hours may be taken in fields related to philosophy
- Written Comprehensive Examination: Successful completion of a five-hour
  examination in the field of philosophy

doctor of philosophy: philosophy

admissions requirement
For full admission, student must have
- Master of Arts degree in Philosophy or its satisfactory equivalent. Academic
  work must be comparable to that offered at DePaul and must present clear
  evidence of the applicant's ability to pursue successfully the doctoral
  program.

degree requirements
Following are the minimal degree requirements. Additional study may be
required depending on the student's academic background and his or her
achievement in the program.
- Courses: minimum of 108 quarter hours of post-baccalaureate credit
  including
  48 quarter hours in philosophy offerings numbered 400 and over. These credit
  hours must include courses, seminars, and independent study.
  Additional credits in PHIL 699 Thesis Research to complete total of required
  hours in post-baccalaureate work.
  
  Note: Each graduate fellow/assistant must register for PHIL 682 Teaching
  Colloquium. Registration must be made in two different quarters for two
  credits each on a Pass/Fail basis.
- Residency: three consecutive quarters of full-time residence, i.e., registration for eight quarter hours.

- Preliminary (Qualifying) Examination: successful performance on this examination required before the end of the second quarter of residence. The examination, similar to the Comprehensive Examination for the master's degree requirements, may be waived at the discretion of a Department Committee.

- Foreign language: thorough reading facility in one foreign language evidenced through departmentally administered tests. This requirement must be fulfilled before the comprehensive examination requirement. (This time factor represents a change from previous departmental policy. For adjustment, see the chairperson of the Department.)

- Comprehensive Examination: permission to take examination not given prior to the student's completion of three consecutive quarters of full-time residency. Parts of this examination may be given orally.

- Admission to doctoral candidacy: approval of the Dean of Graduate School given when the student has 1) successfully passed the preliminary and the comprehensive examinations, the language requirement, all course requirements (excluding Phl 699 Thesis Research), and 2) completed the requirements for full-time residency.

- Candidacy Continuation: registration in non-residency or resident candidacy continuation required each quarter between admission to candidacy and graduation.

- Time Limitations:
  - between admission to the doctoral program and admission to doctoral candidacy: not more than four years,
  - between admission to candidacy and the oral examination: not less than eight months, and not more than five years.

- Dissertation: Departmental Committee approval of topic and outline of dissertation given only after admission to candidacy approved.

- Oral examination: "defense of the dissertation" or a public lecture.

- Dissertation Abstract: 600-word abstract of the dissertation filed with the Graduate School Office.

NOTE: Detailed information on the above degree requirements is listed in a separate departmental brochure. It may be obtained from the Chairperson of the Department.
Courses

Courses listed in the 300 series are background, general orientation, and are intended for advanced students in undergraduate philosophy or beginning students in graduate philosophy.

Cognitive Skills
301 Basic Logic.
302 Symbolic Logic. (301 recommended, but not required.)
303 Critical Thinking
305 Philosophy of Language.

History, Traditions, and Foundations
310 Greek Thought: The Roots of Western Culture.
311 Medieval Thought: Reason and Faith.
312 Modern Thought: Ideas in Revolution.
313 Contemporary Thought: The Human Condition.
314 Existentialism.
315 American Philosophy: Political Ideals & Pragmatism.
320 Systems of Metaphysics.
321 Theories of Knowledge.
325 Basic Concepts of Phenomenology.

Value Studies
330 Ethical Theory.
332 Values and Human Experience.
333 Social Issues and Ideology.
334 Philosophy of Person.
340 Philosophy of Religion.
341 Philosophy of the Arts.
342 Philosophy of Law.
343 Philosophy of Work and Play.

Topics and Controversies
350 Philosophy and the Natural Sciences.
351 Philosophy and Sociology.
352 Philosophy and Psychology.
353 Philosophy and History.
361 Figures in Intellectual History.
362 Themes in Eastern Thought.
370 Existential Thinking. (Cross listed with Religious Studies 302).
380 Ethics; Selected Problems (e.g., Medical Ethics, Business Ethics).
381 Philosophy of Love.
382 Insights of Myth.
383 Philosophical Themes in Literature.
390 Selected Topics. (e.g., phenomenology of resentment, theory of interpretation, philosophy and technology, etc.).
391 Independent Study.
graduate courses

Courses in the 400-500 series are intended to be specific, dealing with individual philosophers, their backgrounds and subsequent influences. They are meant to be detailed both analytically and critically. Normally they are open only to students with graduate academic standing.

Traditional and Anglo-American Philosophers

Traditional Philosophers

410 Philosophy of Plato I. A study of Plato’s life and early dialogues.
411 Philosophy of Plato II. A study of the middle and later dialogues.
415 Philosophy of Aristotle I. A study of Aristotle’s life and theoretical philosophy; Organon, Physics, Psychology, and Metaphysics.
416 Philosophy of Aristotle II. A study of Aristotle’s practical and productive philosophy; Ethics, Politics, Rhetoric, and Poetics.
420 Philosophy of Augustine. A study of Augustine’s philosophy through an examination of his major writings.
425 Philosophy of Aquinas I. A study of the factors that gave rise to the culmination of Scholasticism and the birth of Thomism; characteristics of the Thomistic revolution, his critical spirit, interpretation of previous thinkers, and organization of materials; the relation between philosophy and theology.
426 Philosophy of Aquinas II. A study of Aquinas’ natural philosophy, philosophical anthropology, metaphysics, ethics, and esthetics.
435 Philosophy of Descartes. An examination of Descartes’ role as the father of modern philosophy; a study of the Regulae, the Discours, and the Meditationes.
440 Philosophy of Spinoza. A study of the Ethics and/or the Theologico-Political Treatise.

Anglo-American Philosophers

451 The Philosophy of James. A study of William James’ Pragmatism and Radical Empiricism with special attention to the writings of James that interest the contemporary phenomenologist.
453 The Philosophy of Peirce. An examination of the development of Peirce’s thought from his concern with scientific method, through his development of the theory of thirds, to Peirce’s own particular pragmatism.
457 The Philosophy of Royce. An examination of the thought of Josiah Royce with emphasis on his early psychology and epistemology, the metaphysics of the World and the Individual, The moral teaching of the Philosophy of Loyalty, and the philosophy of the community in The Problem of Christianity.
459 The Philosophy of Santayana. A study of his major works such as Skepticism and Animal Faith, The Life of Reason, and The Sense of Beauty.
Philosophy of Russell. An examination of Russell's philosophical development and influence; a study of selected essays (e.g., Logic and Knowledge) and/or a major work (e.g., An Inquiry into Meaning and Truth).

Philosophy of Wittgenstein I. A study of Wittgenstein's earlier works, particularly the Tractatus Logico-Philosophicus.

Philosophy of Wittgenstein II. A study of Wittgenstein's later works, particularly the Philosophical Investigations.

Philosophy of Mathematics. Principal topics for discussion are logicism, formalism, and intuitionism. (Cross listed with Mathematics 492)

Advanced Symbolic Logic. A study of modal logic, multi-valued logics, logical antimonies, the logic of relations, and the philosophical presuppositions of logical systems. (Prerequisite: Philosophy 302 Symbolic Logic or equivalent.)

Continental Philosophers

German Philosophers

Kant I. Critique of Pure Reason.

Kant II. Critique of Practical Reason.

Kant III. Critique of the Faculty of Judgment.

Hegel I. Phenomenology of Spirit.

Hegel II. Science of Logic.

Hegel III. Philosophy of Right.

Marx I. Basic writings of Marx and Engels. Revisionist contemporaries of Marx, such as Lenin, Trotsky, Stalin, Mao Tse-Tung. Also touched upon will be philosophers such as Plekhanov, Bakunin, Togranov, etc.

Marx II. An investigation into some major writings of Russian and Chinese Marxist leaders such as Lenin, Trotsky, Stalin, Mao Tse-Tung. Also touched upon will be philosophers such as Plekhanov, Bakunin, Togranov, etc.

Marx III. Contemporary developments in Marxism (1956 to date). East and West representatives will be studied. These include Boch, Lukacs, Marcuse, Fromm, Hook, etc.

Philosophy of Schelling. A study of Schelling's thought by focusing on fundamental themes such as Ego, Spirit, Nature, History, God, Freedom and Being.

Nietzsche I. The reversal of values and criticism of morality.

Nietzsche II. The conceptions of Eternal Recurrence, Will to Power, Overtman, Nihilism and Justice. One of the following themes will also be incorporated: art, space, perspectivism or Christianite.

Husserl I. Phenomenology of Consciousness. An investigation of basic constitutinal problems of acts and objectivities of consciousness and edantic and transcendental reductions.

Husserl II. Time Consciousness. A study of the temporalization of consciousness-of and word with special attention to the absolute flux, primal sensation, retention and protention, and the structure of the Now.

Husserl III. Phenomenology of the Life-World. An investigation of its structure and its function in transcendental phenomenology. Transcendental intersubjective problems such as space, after-ego, constitution of the Divine, All-Humanity and culture will also be treated.

Scheler II. Phenomenology of Sociology.

Scheler III. Philosophical Anthropology and Metaphysics.

Hartmann I. A study of his ethics and discussion of his relation to the phenomenological movement.

Hartmann II. A study of Hartmann's Ontology of Reality.

Heidegger I. Thoughts from Being and Time to the Essence of Truth.

Heidegger II. Thoughts from Comments on Hölderlin to Time and Being.

Heidegger III. Presocratic thought.

Hermeneutics I. A critical study of Gadamer's principles of the philosophical hermeneutic by focusing on his Truth and Method.

Hermeneutics II. A continuation of Philosophy 553 stressing Gadamer's Shorter Essays.

French Philosophers

The Philosophy of Gabriel Marcel. A study of Marcel's Philosophy of Existence with special attention given to his major work, The Mystery of Being.

Merleau-Ponty I. A study of The Phenomenology of Perception with consideration of Merleau-Ponty's place and influence in contemporary philosophy.

Merleau-Ponty II. A study of the themes of his social philosophy and final ontology.

Sartre I. A study of Being and Nothingness with attention given to Sartre's early phenomenological studies as background and to some of his literary works as illustrations of his ontology, such as Nausea and Saint-Genet.

Sartre II. The Social Thought of Jean-Paul Sartre. A Study of A Critique of Dialectic Reason along with appropriate literary works and more recent political writings.

The French Spiritualist Tradition. A study of the "philosophers of the spirit," beginning with Maine de Biran and ending with a study of Louis Lavell's work, Dialectic of the Eternal Present, as particularly representative of this philosophic tradition.

The Philosophy of Henri Bergson. A study of The Two Sources of Morality and Religion as a means of considering the whole life-philosophy of Bergson.

The Philosophy of Paul Ricoeur. A study of Ricoeur's philosophy and phenomenology of the will with stress on its background and its place in contemporary French phenomenology.

Trends in Contemporary French Philosophy. A look at the increasing importance of structuralism, philosophy of language, and hermeneutics in Contemporary French Philosophy.

The courses in the 500 series are problem-oriented seminars. They are structured for full participation by each student in the seminar in terms of research, presentation and critical reflection. The number of participants is limited.
Seminar on the Idea of Eternal Peace and Pacifism. Historical survey of ideas of peace, war and pacifism. Special attention given to the works of Kant and Scheler.


Seminar on the Person, Scheler’s View on the moral, religious, and metaphysical dimensions of the human person as individual and as member of society.

Seminar on the Philosophy of History. Reflections on history as a phenomenon, and history as a science with reference to thinkers such as Augustine, Hegel, Marx, Spengler, Heidegger, etc.

Seminar on Heidegger and the Fragments of Heraclitus.

Seminar on the Fragments of Parmenides.

Seminar on Logic and Language in Husserl. Husserl’s treatment of transcendental logic and its place in the phenomenology of language, in Logical Investigations and formal and transcendental Logic.

Seminar on the Metaphysics of the Absolute. An investigation of the model of traditional metaphysics as criticized by contemporary thinkers.

Seminar on the Human Personality. A critical study of modern personality theories in the light of existential phenomenology.

Seminar on the Phenomenology of Language. A study of the problems of language and interpretation in Heidegger’s thought.

Seminar on Contemporary Problems. Provides the student with experience in applied phenomenology. Topics such as phenomenology of death, phenomenology of shame, phenomenology of resentment etc., will be treated at various times. (This may be taken twice when different topics are offered.)


Problems in Ethics. A reappraisal of American ethical values and problems made in view of the present moral and cultural revolution taking place in the nation.

Seminar on Theories of Value.

Seminar on Heidegger’s Critique of Value Theories. A study of the basis and justification of the criticism which Heidegger levels at theories of value in Neo-Kantianism, Latze, Nietzsche and Scheler.

Seminar on the Philosophy of Law. A study of current theories and controversial issues of jurisprudence.


Seminar on American Social Philosophy.

Seminar on Gabriel Marcel. A study of Marcel’s philosophy in relation to his literary works and a consideration of the journal as a philosophical style.
664 Seminar on the Problem on the Transcendent in Contemporary French Philosophy. Special consideration of Emmanuel Levinas' Totality and Infinity.

668 Seminar on Maurice Merleau-Ponty. A consideration of Merleau-Ponty's later work, especially The Visible and the Invisible, as it relates to his earlier writings and the problematics of being.

672 Seminar on Paul Ricoeur. A study of the linguistic and hermeneutical problems in Ricoeur's recent writings, Le Conflit des Interprétations.

675 Seminar on Michel Foucault. A study of the themes of insanity, art, language and history in Foucault. Focus will be on the confrontation between philosophy and madness as subjected to a phenomenological criticism.

682 Teaching Colloquium. (2 hours credit; Pass/fail basis.) May be taken twice. Once offered at theoretical level; once as practicum.

684 Seminar on the Phenomenology of Spirit. Recent readings of Fink and Heidegger.

685 Seminar on Phenomenology of Art and Beauty. An investigation of the basic questions concerning the nature and structure of aesthetic phenomena both in the beauty of nature and the arts.

687 Seminar on Textual Exercises. A study into the historical development of basic philosophical concepts such as substance, space, freedom, being and their different uses in various epochs in the texts of thinkers from Plato to Hegel.

699 Thesis Research. Independent investigation of a philosophical problem for the thesis-dissertation. The problem is assigned by the chairman or his designate after consultation with the student. Overall direction and advisement is given by the thesis director. Variable credit.

701 Independent Study.

701 Resident Candidacy Continuation. Students admitted to candidacy for the doctoral degree who have completed all course and dissertation registration requirements but who are regularly using the facilities of the University for study and research are required to be registered each quarter of the academic year until the dissertation and final examination have been completed. Non-credit, $388.00 per quarter. (Prerequisite: Admission to Candidacy.)

702 Non-Resident Candidacy Continuation. This registration provides for doctoral candidates who have been admitted to candidacy who are not in residence and need only occasional use of University facilities, including the libraries. Non-credit, $30 per quarter. (Prerequisite: Admission to candidacy.)
physics

Zuhair M. El Saffar, Ph.D.
Chairperson

faculty

professors
Mary L. Boas, Ph.D.
Zuhair M. E. Saffar, Ph.D.
Edwin J. Schilling, Ph.D.
Thomas G. Stinchcomb, Ph.D.
Donald O. Van Ostenburg, Ph.D.
Massachusetts Institute of Technology
University of Wales
University of Notre Dame
University of Chicago
Michigan State University, Chairperson,
Graduate Committee

associate professors
Anthony F. Behn, Ph.D.
Gerald P. Lietz, Ph.D.
Margaret Stautberg Greenwood, Ph.D.
Pon-Nyong Yi, Ph.D.
University of Notre Dame
University of Notre Dame
University of Colorado
Harvard University

emeritus
Julius J. Hupert, Ph.D.
Northwestern University

purpose

The purpose of the Graduate Physics Program is to develop professional competence in its students. To fulfill this purpose, the Department offers two degree programs: Master of Science in Physics, and the Master of Science in Teaching Physics. The latter degree program develops breadth in the fundamentals of physics for those students interested in high school and junior high school teaching.
As a public service to the educational, scientific and technological communities of the Chicago area, the Department offers graduate and advanced undergraduate courses in the evenings for industrial scientists and engineers. The evening offerings emphasize the physics and the mathematical skills so necessary for the successful mastery of sophisticated and rapidly changing technologies.

**degree programs**

**master of science: physics**

**master of science: teaching of physics**

**admission requirement**

For full admission, students must have the following:

- Bachelor's degree: satisfactory completion of a suitable program in advanced physics beyond a general physics course. Candidates with less extensive backgrounds should consult with the chairperson of the Departmental Graduate Committee about course prerequisite(s) to graduate study.

**Note:** Strongly recommended that the student submit the results of the GRE Physics examination at the time of application.

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**master of science: physics**

**degree requirements**

- Courses: a minimum of 44 quarter hours of graduate credit (11 courses), including:
  
  - PHY 305 Methods of Theoretical Physics I
  - PHY 410, 411, 412 Theoretical Physics I, II, III
  
  - Two of the following:
    - PHY 420 Electrodynamics I
    - PHY 440 Theoretical Mechanics I
    - PHY 460 Quantum Mechanics I
    - PHY 480 Thesis Research
  
  - Two 400-level physics courses

Additional courses from 300 or 400 level. Selection from courses in biological sciences, chemistry, mathematics, physics, or other minor fields with the written approval of the Departmental Graduate Committee. The exact number of the additional courses required is dependent upon credit earned from PHY 480 Thesis Research.
• Candidacy Examination: A three hour written examination based on student's general knowledge of physics.

• Degree Candidacy: Upon satisfactory completion of the candidacy examination and upon satisfactory completion of all course requirements, excluding PHY 480 Thesis Research, the student may make application for Degree Candidacy. Upon advancing to degree candidacy, the student is now eligible to enroll in PHY 480.

• Thesis: Based on independent research in theoretical or experimental physics is generally required. However, a review thesis reflecting study of a broad subject or development of an interdisciplinary, historical or educational theme is also acceptable.

As a rule, one course credit of 4 quarter hours in PHY 480 is applicable to the thesis research. An additional course credit (4 quarter hours) for thesis research may be allowed with the written approval of the student's Faculty Advisor. In no case will more than two thesis research course registrations be applied to the Master of Science degree.

• An oral examination on the thesis.

master of science: teaching of physics

degree requirements

The science requirements in the program are the following:

• Complete sequence of courses in general physics

• Complete sequence of courses in mathematics up to and including integral calculus

Individual student programs are planned in consultation with a faculty member.
courses

advanced undergraduate courses

The following list represents courses scheduled as undergraduate courses. To be used as graduate credit, a grade of B or better must be earned.

- 310 Mechanics
- 312 Computer Interfacing
- 320 Electricity and Magnetism
- 331 Modern Circuit Theory
- 336 Electronic Circuits
- 34O Thermal Physics
- 35O Optics
- 36O Twentieth Century Physics I
- 361 Twentieth Century Physics II
- 38O Experimental Physics I
- 381 Experimental Physics II
- 382 Experimental Physics III
- 393 Methods of Theoretical Physics I
- 394 Methods of Theoretical Physics II
- 395 Methods of Theoretical Physics III

graduate courses

These courses carry, as a rule, 4 quarter hours of credit. When a deviation from this rule is justified, the applicable number of credit hours is shown in the specific schedule applicable to the academic quarter in question. Scheduling of courses is announced quarterly.

- 41O Theoretical Physics I. Lagrangian formalism, angular momentum, central forces and celestial mechanics, particle systems and rigid body rotation about fixed axis, accelerated coordinate systems.
- 411 Theoretical Physics II. Electrostatics and magnetostatics in vacuum and in media, Gauss Theorem, Poisson’s equation, Green’s Theorem, Stoke’s Theorem; the vector potential, electromagnetic induction, Maxwell’s equations, the Poynting vector, electromagnetic wave propagation, scattering, electron theory and dispersion.
- 412 Theoretical Physics III. Schroedinger equation, operators, eigenvalues, series of eigenfunctions, physical interpretation, one and three-dimensional applications.
- 42O Electrodynamics I. (Prerequisite: PHY 411) Review of Maxwell’s equations and time dependent electromagnetic fields, bounded structures and guided waves, electromagnetic radiation, including multipole radiations and radiation from systems of radiators.
- 421 Electrodynamics II. (Prerequisite: PHY 42O) More problems in radiation, use of Green’s functions, charged particle radiations, bremsstrahlung and Cerenkov radiation; special theory of relativity and four-vectors as applied to electrodynamic phenomena; field invariants.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>424</td>
<td>Electrodynamics of Plasma. (Prerequisite: PHY 411) Introduction to plasmas, single particle motions in electric and magnetic fields, treatment of plasmas as fluids, electrodynamic properties of plasmas.</td>
</tr>
<tr>
<td>440</td>
<td>Theoretical Mechanics I. (Prerequisite: PHY 410) Variational principles, Lagrangian mechanics, two-body collisions, the two-body central force problem, rigid body dynamics and special relativity theory.</td>
</tr>
<tr>
<td>441</td>
<td>Theoretical Mechanics II. (Prerequisite: PHY 440) Hamilton’s equations of motion, canonical transformations, Hamilton-Jacobi Theory, small oscillations, and introduction to the Lagrangian and Hamiltonian formulations for continuous systems and fields.</td>
</tr>
<tr>
<td>442</td>
<td>Applied Mechanics. (Prerequisite: PHY 310) Mechanics of continuous media, strain and stress tensors, fluid dynamics, mechanical waves, applications to acoustics and geophysics.</td>
</tr>
<tr>
<td>445</td>
<td>Statistical Mechanics. Principles of statistical mechanics, applications to weekly interacting systems such as the classical plasma and Fermi gas, strongly interacting systems, transport theory, fluctuations and irreversible processes, phase transitions.</td>
</tr>
<tr>
<td>454</td>
<td>Modern Optics. An advanced optics course with emphasis on topics in coherence theory, polarization of light, Fourier transform spectroscopy, optical transfer functions and holography.</td>
</tr>
<tr>
<td>460</td>
<td>Quantum Mechanics I. (Prerequisite: PHY 412) Review of basic quantum theory, vector spaces, linear operators, observables, commutators, projection operations, representations.</td>
</tr>
<tr>
<td>461</td>
<td>Quantum Mechanics II. (Prerequisite: PHY 460) Angular momentum, theory, rotations, spin, addition of angular momenta, Clebsch-Gordan coefficients, Wigner-Eckart Theorem, systems of identical particles. Invariance.</td>
</tr>
<tr>
<td>464</td>
<td>Atomic and Molecular Physics. The experimental foundations for theories of atoms and molecules, with emphasis upon spectroscopy.</td>
</tr>
<tr>
<td>465</td>
<td>Nuclear Physics. (Prerequisite: PHY 412 or equivalent) Theoretical and phenomenological approaches to nuclear structure and strong, electromagnetic, and weak interactions of nuclei. Topics of study include the theory of scattering and decay of nuclei, resonances, nuclear models.</td>
</tr>
<tr>
<td>466</td>
<td>Radiation Physics. (Prerequisite: PHY 361 and 395 or equivalent) Interactions of X-rays, nuclear radiations, etc. with matter, radiation detectors, dosimetry, shielding, applications to medical physics.</td>
</tr>
<tr>
<td>490</td>
<td>Solid State Physics I. Periodicity and classification of crystal structure, X-ray diffraction, reciprocal lattice, crystal binding, phonons, Debye theory of heat capacity, inelastic scattering, anharmonic interactions and thermal conductivity.</td>
</tr>
</tbody>
</table>
492 Solid State Device Physics. Physics background for the operation of such devices as the bipolar transistor, the junction field effect transistor (JFET), surface field-effect transistors (MOSFETS), charge coupled devices, Gunn oscillators, the solar cell, etc.

495 Mathematical Physics. (Prerequisite: PHY 395) Topics in mathematical physics more advanced than 395, such as group theory, tensor analysis, functional analysis (linear vector spaces, operators, generalized functions), Green's functions, differential and integral equations.

498 Digital Signal Processing. (Prerequisite: Graduate standing in mathematics, physics or computer science) Elements of circuit and signal theory, theory of modulation, mathematical basis sampling and coding, principles of digital filtering. Applications to: communications, process control, image and voice recognition, voice synthesis.

Seminars and Independent Study Courses

478 Seminar in Selected Topics of Physics. This course number is reserved for individual study at the graduate level. Special seminars organized from time to time to accommodate the needs of groups of students in specialized subjects of topical interest.

480 Thesis Research. This course number designates research performed to gather thesis material. Up to two registrations are allowed.
psychology

faculty

professors
Thomas S. Brown, Ph.D.
Frank A. Dinello, Ph.D.
John M. Reitman, Ph.D.
Edwin S. Zollik, Ph.D.

associate professors
Robert E. Brewer, Ph.D.
Marti J. K. Brown, Ph.D.
Sheidion Cotier, Ph.D.
Ernest J. Doleys, Ph.D.
Louise Ferone, M.S.W. (Social Work)
Frederick Hellizer, Ph.D.
Leonard Jason, Ph.D.
Allen Milewski, Ph.D.
William Terris, Ph.D.
Robert J. Tracy, Ph.D.

Catholic University of America
Loyola University
Michigan State University
Catholic University of America

Southern Illinois University
Columbia University
Southern Illinois University
University of Missouri
Loyola University
University of Rochester
University of Rochester
Brown University
Illinois Institute of Technology
Texas Christian University

assistant professors
Linda Camras, Ph.D.
Joseph Orban, Ph.D.
Sheila Ribordy, Ph.D.
LaVonne Robinson, Ph.D.
Midge Wilson, Ph.D.

University of Pennsylvania
Virginia Polytechnic Institute and State University
University of Kansas
University of Georgia
University of North Carolina

adjunct faculty
Edward Michael, Ph.D.

Northwestern University
purposes

The general purpose of the graduate programs in psychology is to provide qualified students with the opportunity to become thoroughly acquainted with the methodology and content of scientific psychology and trained in the quantitative methods and scientific rigor necessary for the understanding of human behavior and personality.

A specific purpose is application: the utilization of psychology for the benefit of individuals and society. A major function of the graduate programs in psychology is to bring the student an acute awareness of the unity of psychological study and practice. The student comes to appreciate that psychology is both a "pure" and "applied" science, and that these aspects are not mutually exclusive.

degree programs

The Department of Psychology offers graduate work leading to the degrees of Master of Arts and Doctor of Philosophy. Available programs leading to these degrees are as follows:

master of arts

General Experimental Psychology
Clinical Psychology

doctor of philosophy

Clinical Psychology
General Experimental Psychology

Additional information concerning graduate programs may be obtained by writing to the Chairperson, Department of Psychology.
master of arts: psychology

admission requirements

The Department accepts as graduate students only those who show definite promise for completing the requirements for advanced degrees. Meeting the minimum admission standards or having extensive undergraduate course work in psychology does not guarantee acceptance, since the number of applicants who can be admitted is limited.

Preference is given to those applicants who have a well-balanced background of psychology courses, and some background in another science and in mathematics. However, students who do not have an undergraduate major in psychology but who otherwise satisfy requirements are encouraged to apply.

For consideration for full admission, the student must have the following:

• Bachelor's degree

• Satisfactory undergraduate scholastic average

• Minimum of 32 quarter hours (i.e. 21 semester hours) in psychology. A three-hour elementary statistics course to be included in this minimum.

The Departmental Graduate Admission Committee will determine, on the basis of a consideration of each student's proposed program of study, whether the minimum 32 quarter hours in psychology is sufficient for advanced study. The student judged to be deficient in prerequisites or other respects will be required to take, without graduate credit, such courses as necessary to remedy any deficiencies upon entering Graduate School.

• Graduate Record Examination results of the Verbal and Quantitative tests, required, Advanced Test in Psychology, recommended.

• Three letters of recommendation.
master of arts: general experimental psychology

degree requirements
  • Courses: minimum of 44 quarter hours including 4 hours thesis credit. (Note: Students are expected to carry a minimum of 12 hours per quarter.)

Core Courses:
  PSY 402  Perceptual Processes
  PSY 404  Learning Processes
  PSY 406  Physiological Processes
  PSY 430  Advanced Social Psychology
  PSY 437  Advanced Personality
  PSY 439  Advanced Developmental Psychology

Note: With the written consent of their advisor, students may waive one or two courses in the core sequence and replace them with graduate courses in experimental psychology.

Statistics Courses:
  Three courses, including either PSY 410 Advanced Statistics I or PSY 411 Advanced Statistics II, and PSY 412 Advanced Statistics III

Two additional psychology courses
  • Degree Candidacy: upon completion of at least half of the graduate course requirements, each student is evaluated for acceptance as a candidate for the master's degree. Only those students who have given evidence of satisfactory academic performance as graduate students will be advanced. The Department reserves the right to require the student to take special or oral examinations in fulfilling this requirement. Students, denied candidacy, will be advised to strengthen areas of scholastic weakness or to withdraw from the program.

  • Research Thesis: complete a thesis on a topic approved by the Department.

  • Comprehensive Examination, either written or oral: the examination, in the field of graduate study, may be, but is not necessarily, limited to a defense of the student's thesis.
master of arts: clinical psychology

degree requirements

• Courses: minimum of 72 quarter hours including 4 hours thesis credit, but not including credit for pre-practicum or practicum courses.

Core Courses:
- PSY 402 Perceptual Processes
- PSY 404 Learning Processes
- PSY 406 Physiological Processes
- PSY 430 Advanced Social Psychology
- PSY 437 Advanced Personality
- PSY 439 Advanced Developmental Psychology

Note. With the written consent of their advisor, students may waive one or two courses in the core sequence and replace them with graduate courses in experimental psychology.

Statistics Courses:
- PSY 410, 411 412 Advanced Statistics I, II, III

Additional Courses:
- PSY 454 Behavior Modification
- PSY 481 Intelligence Testing
- PSY 482 Personality Assessment
- PSY 484 Behavioral Assessment
- PSY 486 Advanced Psychopathology
- PSY 487 Psychopathology of the Child
- PSY 488 Principles of Psychotherapy
- PSY 500 Professional Ethics and History of Clinical Psychology
- PSY 564 Seminar in Clinical Research
- PSY 574 Pre-practicum

• Degree Candidacy: upon completion of at least half of the graduate course requirements, each student is evaluated for acceptance as a candidate for the master's degree. Only those students who have given evidence of satisfactory academic performance as graduate students will be advanced. The Department reserves the right to require the student to take special oral examinations in fulfilling this requirement. Students, denied candidacy, will be advised to strengthen areas of scholastic weakness or to withdraw from the program.

• Research Thesis: complete a thesis on a topic approved by the Department.

• Comprehensive Examination, either written or oral; the examination, in the field of graduate student, may be, but is not necessarily, limited to a defense of the student’s thesis.
doctor of philosophy: psychology

The Department offers programs in Clinical and General Experimental Psychology. The Clinical Program has special emphasis in Community and Clinical Child Psychology. Within the General Experimental Program the student may specialize in learning, physiological, developmental, social and research methodology. All doctoral programs include a strong emphasis on research.

admission requirements

- Students holding a bachelor's degree are not admitted directly into doctoral programs. During the Winter Quarter of the student's second year, an evaluation of the student's progress in meeting course and degree requirements is made by the faculty. Assuming such progress is satisfactory, the student is formally admitted into the master's/dottoral program.

- Students who have already obtained a master's degree in psychology from another institution may be admitted into the General Experimental Program, but are not admitted into the Clinical Program. However, the Clinical Program does consider admissions of doctoral applicants in psychology who wish to retraining.

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doctor of philosophy: clinical psychology

degree requirements

- Courses: minimum of 124 quarter hours beyond the bachelor's degree, including the following:

  Core Courses:
  
  PSY 361 History and Systems of Psychology or passing a special exam in this area
  PSY 402 Perceptual Processes
  PSY 404 Learning Processes
  PSY 406 Physiological Processes
  PSY 430 Advanced Social Psychology
  PSY 437 Advanced Personality
  PSY 439 Advanced Developmental Psychology
  PSY 597 Master's Thesis Research (4 hours)
  PSY 599 Dissertation Research (12 hours)

  Note 1. The minimum of 124 quarter hours excludes credit for pre-practicum and practicum courses.

  Note 2. The student is expected to take courses consistent with an area of specialization in Clinical Child or Clinical Community Psychology.
• Doctoral Candidacy Examination: designed to assess the student's knowledge of experimental psychology and the student's area of specialization. The examination is given in three sections. First two sections cover two minor areas of experimental psychology selected by the student from the areas of learning, perception, physiological psychology, personality, developmental psychology and social psychology. Third section consists of an examination in the student's area of specialization.

• Admission to Doctoral Candidacy: approval by the Dean, Graduate School, formally given to the student who has successfully passed the Doctoral Candidacy Examination.

• Candidacy Continuation: registration in resident or non-resident candidacy continuation required each quarter between admission to candidacy and graduation.

• Internship: one-year internship in facility approved by the Director of Clinical Training. Student's fourth year in program is usually the internship year.

• Dissertation: Departmental Committee approval and acceptance of topic and outline of dissertation given only after admission to candidacy approved.

• Oral Examination: student to defend his or her dissertation and to show competence in the general field of psychology and in the area of specialization.

• Time Limitations: 1) between admission to the doctoral program and admission to doctoral candidacy, not more than four years, and 2) between admission to candidacy and the final examination, not less than eight months, and not more than five years.

Note: Detailed information on the above degree requirements is listed in a separate departmental brochure. It may be obtained from the Department.
doctor of philosophy: general experimental psychology

degree requirements

- Courses: a minimum of 124 quarter hours beyond the bachelor's degree, including the following:

  Core Courses:

  PSY 361 History and Systems of Psychology or passing a special exam in this area
  PSY 402 Perceptual Processes
  PSY 404 Learning Processes
  PSY 406 Physiological Processes
  PSY 430 Advanced Social Psychology
  PSY 437 Advanced Personality
  PSY 439 Advanced Developmental Psychology
  PSY 597 Master's Thesis Research (4 hours)
  PSY 599 Dissertation Research (12 hours)

  Note: The minimum of 124 quarter hours excludes credit for pre-practicum and practicum courses.

- Doctoral Candidacy Examination, designed to assess the student's knowledge of experimental psychology and the student's area of specialization. The examination is given in three sections. First two sections cover two minor areas selected by the student from the areas of learning, perception, physiological psychology, personality, developmental psychology and social psychology. Third section consists of an examination in the student's area of specialization.

- Admission to Doctoral Candidacy: approval by the Dean, Graduate School, formally given to the student who has successfully passed the Doctoral Candidacy Examination.

- Candidacy Continuation, registration in resident or non-resident candidacy continuation required each quarter between admission to candidacy and graduation.

- Dissertation: Departmental Committee approval and acceptance of topic and outline of dissertation given only after admission to candidacy approval. Research for the dissertation should normally be completed during the student's fourth year in the program.

- Oral Examination: student to defend his or her dissertation and to show competence in the general field of psychology and in the area of specialization.

- Time Limitations: 1) between admission to the doctoral program and admission to doctoral candidacy: not more than four years; and 2) between admission to candidacy and the final examination: not less than eight months, and not more than five years.

Note: Detailed information on the above degree requirements is listed in a separate departmental brochure. It may be obtained from the Department.
courses

courses for advanced undergraduate and graduate students

302 Personal Adjustment and Mental Health. (Prerequisite: PSY 105) Introduction to psychological principles involved in personality and interpersonal adjustments.

303 Human Development. (Prerequisite: PSY 105) A survey of principles of development from conception through maturity. May not be taken for credit by psychology majors, or if Psychology 333 has been completed with a grade of C or better.

333 Developmental Psychology I: Infancy and Childhood. (Prerequisite: PSY 105) Description and evaluation of principles and theories of development from conception through childhood.

334 Developmental Psychology II: Adolescence through Maturity. (Prerequisite: 333) Continuation of 333 covering development, personality organization, and adjustment.

347 Social Psychology. (Prerequisite: PSY 106) Survey of social psychological principles emphasizing individual behavior in a social context.

351 Theories of Personality. (Prerequisite: PSY 106) Emphasis on distinction between clinical and scientific theories of personality.

352 The Psychology of Prejudice. (Prerequisite: PSY 106)

353 Abnormal Psychology. (Prerequisite: PSY 106) Description of the nature, symptoms, and etiology of psychological disorders.

355 Small Groups and Leadership. (Prerequisite: PSY 347)

356 Introduction of Psychological Measurement. Measurement in psychology; emphasis on standardization, reliability, validity, test and scale development. (Prerequisites: PSY 106 and 240.) Materials fee $5.00.

350 Theories of Learning. (Prerequisite: 276 or consent) A survey of the classical and modern theories of learning.

351 History and Systems of Psychology. (Prerequisite: PSY 275 or consent) Historical analysis of basic concepts in psychology.

352 Cognitive Process. (Prerequisite: PSY 106) Processes by which stimulus input is transformed, stored, recovered, and used, abstraction processes.

355 Behavior Problems of Children. (Prerequisite: PSY 333)

357 Psychology of Exceptional Children. (Prerequisite: PSY 333)

368 Computer Programming. Development of BASIC programs for computing statistics. (Prerequisite: PSY 240 or consent). Laboratory fee $15.00.

370 Research Methods in Developmental Psychology. (Prerequisite: PSY 334)

372 Research Methods in Social Psychology. (Prerequisite: PSY 275) Laboratory fee $5.00.

375 Perception. (Prerequisite: PSY 277) Environmental and stimulus control of behavior; chemical control of perception.

377 Physiological Psychology. (Prerequisite: PSY 275) The nervous system and endocrine functions as related to behavior.
Comparison Psychology. (Prerequisite: PSY 106) Patterns of behavior shown by various animal species.

Industrial and Organizational Psychology. (Prerequisites: PSY 106 and a course in statistics) Application of theories and methods of psychology to the study of human behavior in business, industrial, and other organizations.

Personnel Selection and Placement. (Prerequisite: PSY 380) Application of concepts from differential psychology and measurement to employee selection, counseling, and placement in business and other organizations.

Personnel Training and Organizational Development. (Prerequisite: PSY 380) Application of learning theories and teaching methods of employee training and development. Design and evaluation of training programs. Methods of organizational development.

Engineering Psychology. (Prerequisites: PSY 275 and 380) Application of experimental psychology and individual differences to the design of man-machine systems, work environments, and living environments.

Consumer Behavior and Advertising. (Prerequisite: PSY 380) Application of psychological principles and methods to advertising, marketing, product development, sales, and propaganda.


Psychology of Alienation. (Prerequisites: PSY 347 and 351) Causes of individual and group alienation, and the resultant behavior.

Psychology of Language. (Prerequisite: PSY 360) Development of language in children, and effects of language on thinking.

Advanced Topics in Psychology. (Prerequisites: Senior standing and consent of Chairman)

Field Work and Study. (Prerequisite: Junior standing and consent of Chairman) Supervised experience in selected off-campus settings and associated readings.

Reading and Research. (Prerequisites: Senior standing and consent of Chairman)

Graduate Courses

When prerequisites are stated in numbers below 400, an equivalent course taken elsewhere is acceptable. Where no prerequisite is listed, students not majoring in psychology must obtain the consent of the instructor. Psychology majors who do not meet the prerequisites for a given course must obtain the consent of the instructor. Unless otherwise stated all courses are 4 credit hours.

Perceptual Processes. (Prerequisite: Twelve hours in psychology) Analysis of the variables involved in the determination of perception with particular attention to the problems of space, motion, distance, size, form, the after effects and the constancies.

Learning Processes. (Prerequisite: Twelve hours in psychology) Basic concepts and research in acquisition, extinction, generalization, discrimination, transfer, retention in both animals and humans.

Physiological Processes. (Prerequisite: PSY 377 or equivalent) The functional role of neural systems important for the processes of motivation, emotion, sleep, memory, and cognition.
409  **Statistics for the Behavioral Sciences.** (Prerequisite: PSY 240) Applied inferential statistics.

410  **Advanced Statistics I.** (Prerequisite: PSY 240 or equivalent) An introduction to sample spaces, random variables, distributions and parametric statistics. Sampling, the concept of sampling distributions of statistics.

411  **Advanced Statistics II.** (Prerequisite: PSY 410) Point estimation procedures are compared for a variety of parameters. Analyses of variance, planned and post-hoc contrasts, orthogonal polynomials.

412  **Advanced Statistics III.** (Prerequisite: PSY 411) Linear and non-linear regression and correlation.

416  **Methods in Behavioral Research.** (Prerequisite: PSY 411) Principles and techniques of research design in behavioral, social and clinical research, questionnaires, interview schedules, rating scales involving multivariable analysis. Application of parametric and non-parametric tests. Application of research findings to professional practice.

418  **Multivariate Analysis.** (Prerequisite: PSY 411) Theory and statistical techniques underlying the analysis of multiple measurements.

419  **Factor Analysis.** (Prerequisite: PSY 418) Theoretical foundations, methods of analysis, and comparison of various factor analytic models. (4)

420  **Advanced Experimental Psychology.** (Prerequisite: PSY 411) Design, analysis, and execution of psychological research. Includes philosophy of science and the role of theory in psychology.

421  **Advanced Experimental Design.** (Prerequisite: PSY 412)

423  **Instrumentation.** Design, construction and use of instrumentation in the behavioral sciences. (1 to 4)

425  **Cognitive Processes.** (Prerequisite: PSY 404) Theories and methods in the study of concept formation, problem solving, thinking, verbal learning, psycholinguistics.

427  **Sensory Processes.** (Prerequisites: PSY 402 and 406) Receptor system processes and their relations to psychological phenomena, with attention to similarities and differences among sensory systems and to general principles of sensory integration and orientation.

430  **Advanced Social Psychology.** Contemporary theory and research in social behavior, emphasizing the behavior of the individual in a social context.

432  **Attitude Analysis.** (Prerequisite: PSY 430) Theory and research in attitude formation and organization, communication and persuasion, resistance to persuasion, and measurement techniques.

433  **Social Judgement.** (Prerequisite: PSY 430) Theory and research in judgement of social stimuli, perceiving and evaluating persons, and social comparison processes.

434  **Small Group Behavior.** (Prerequisite: PSY 430) Theory and research in goal formation, conformity, power and communication structures, cohesion, and task performance. The emphasis is on the behavior of persons within groups.

437  **Advanced Personality.** Critical analysis of research in personality with emphasis on the development and testability of major constructs in contemporary research.
Advanced Development Psychology. (Prerequisite: PSY or EDU 333 or 334) Current research and theories in child development relating to the preschool child, elementary school child, and adolescent. Emphasis on the dynamics of motivation, personality, learning and socialization. Case studies and analysis of various developmental problems.

Psychological Measurement. (Prerequisite: PSY 412) Logical and mathematical principles underlying test construction with emphasis on evaluating the reliability and validity of scores. (4)

Applied Statistical Prediction. (Prerequisite: PSY 412) Applications of statistics and psychological measurement to the problems of predicting human performance. Several computer programs will be used to analyze data.

Behavior Modification. (Prerequisite: PSY 404) Analysis of principles, practices, and research related to the modification of human behavior.

Research Issues in Assessment. Analysis of research and current issues concerning intellectual and personality assessment. (2)

Individual Intelligence Testing I. (Prerequisite: PSY 365) Theories of intelligence and cognitive development. Introduction to the administration of verbal and various non-verbal tests including the Stanford Binet, Wechsler Intelligence Scale for Children and Wechsler Adult Intelligence Scale and the clinical use of these instruments. Materials fee $10.00.

Personality Assessment. (Prerequisite: PSY 481) Administration and scoring of the Rorschach and Thematic Apperception Test and other tests. Evaluation of tests and needed areas of research and development.

Advanced Psychodiagnosics. (Prerequisite: PSY 482) Advanced study of projective techniques and other assessment methods, with emphasis on analysis, interpretation and integration of all pertinent clinical data and report writing.

Behavioral Assessment. (Prerequisite: PSY 356 or equivalent) Behavioral observation and recording. Self-report measures. Physiological measurement. Evaluation of behavioral measures and areas of research.


Principles of Psychotherapy. (Prerequisites: PSY 476 and 486) Analysis of theoretical approaches to psychotherapy.

Group Psychotherapy. (Prerequisite: PSY 488) Principles, theories and techniques of in-group psychotherapy. Problems of selection of group members and evaluation of progress. (2)

Treatment Methods with Children. (Prerequisite: PSY 487) Consideration of a variety of treatment approaches used to help alleviate the psychological problems of children with emphasis on psychotherapy. Evaluation of treatment methods and indications of areas for research.
Principles of Consultation. (Prerequisite: PSY 493) The principles and dynamics involved in the various types of consultative relationships. Techniques of consultation with parents, teachers, agencies, physicians and others in regard to problems and deviancy, methods of management and treatment. (2)

Community Mental Health.

Evaluation and Research in Community Mental Health.

Professional and Ethical Issues in Contemporary Psychology. (2)

Minority Issue. Consideration of minorities as related to clinical psychology.

Seminars numbered 550 through 570 may be taken for credit more than once with the consent of the instructor.

Seminar in Teaching Psychology. (1 to 4)

Seminar in Experimental Psychology. (1 to 4)

Seminar in Neuropsychology. (1 to 4)

Seminar in Personality Research. (1 to 4)

Seminar in Developmental Psychology. (1 to 4)

Seminar in Social Psychology. (1 to 4)

Seminar in Learning and Cognitive Processes. (Prerequisite: PSY 404) (1 to 4)

Seminar in Advanced Statistics. (Prerequisite: PSY 412)

Seminar in Family Therapy. (Prerequisite: PSY 574) (2)

Seminar in Clinical Research. (Prerequisites: PSY 476 and 488) (1 to 4)

Seminar in Psychopathology. (1 to 4)

Seminar in Community Psychology. Analysis of theories of community and human behaviors from the standpoint of general systems principles. (4)

Seminar in Program Evaluation. (Prerequisite: PSY 493) Analysis of major research programs dealing with social and mental health problems with emphasis on epidemiological and socio-clinical research methods. (4)

Seminar in Psychotherapy Research. (1 to 4)

All practicum courses numbered 574 through 583 require the consent of the Director of Clinical Training and may be repeated for 12 credits.

Pre-Practicum in Clinical Psychology. (1) May be repeated for 3 credits.

Practicum in Clinical Assessment. Supervised experience in intake interviewing, psychological evaluation and case conference presentation in a clinic, hospital or community agency setting.

Practicum in Clinical Psychology. Supervised experience in diagnostic assessment, intervention planning, psychotherapy and report writing through varied assignments to campus or community agencies. (Minimum of two days per week.) (By arrangement with Chairman.)

Practicum in Child Clinical Procedures. Supervised practice in the diagnosis and treatment process of the problems of children and adolescents. May be repeated for a maximum credit of 8 hours. (By arrangement with Chairman.)

Advanced Practicum in Clinical Psychology.

Practicum in Community Mental Health.

Practicum in Special Areas in Psychology.
Thesis Seminar. (1)

Directed Research. A-Experimental, B-Learning, C-Social, D-Physiological, E-Personality, F-Psychopathology, G-Community Mental Health, H-Perception, I-Psychotherapy, J-Developmental. The course involves individual projects (non-thesis research) under the supervision of a faculty member. (Arranged by consultation with the Chairman.) (1 to 4)

Psychological Research. A course involving intensive readings in contemporary psychological literature. (Arranged by prior consultation with the Chairman.)

Colloquium. Required of all graduate students. Lectures by psychologists and members of the staff. (No credit.)

Internship in Clinical Psychology. (Arranged with consent of Director of Clinical Training.)

Master's Thesis Research. Original investigation of a specific research problem. (3 or 4)

Master's Candidate Research. (Prerequisite: PSY 597) Open to Master's candidates who have fulfilled all requirements for the degree and who are devoting full time to thesis research and study. (0 credits; tuition equal to one four-hour course.)

Dissertation Research. (4 to 12 credits per quarter)

Resident Candidacy Continuation. (Prerequisite: Admission to Candidacy) Students admitted to candidacy for the doctoral degree who have completed all course and dissertation registration requirements but who are regularly using the facilities of the University for study and research are required to be registered each quarter of the academic year until the dissertation and final examination have been completed. Non-credit. $388.00 per quarter.

Non-Resident Candidacy Continuation. (Prerequisite: Admission to Candidacy) This registration provides for doctoral candidates who have been admitted to candidacy who are not in residence and need only occasional use of the University facilities, including the libraries. Non-credit. $30 per quarter.
religious studies

faculty

professors
John Dominic Crossan, S.T.D., S.S.L.
William VanderMarck, Ph.D.
Francis Bruce Vawter, C.M., S.S.D.
St. Patrick's College, Maynooth
University of Fribourg
Pontifical Biblical Institute, Rome

associate professors
Paul F. Camerilich, Ph.D.
John J. Collins, Ph.D.
Rev. Edmund J. Fitzpatrick, S.T.D.
Charles R. Strain, Ph.D.
University of St. Thomas, Rome
Princeton University
Harvard University
St. Mary of the Lake, Mundelein
Theological Faculty Marianum, Rome
University of Chicago

assistant professors
Rev. Walter T. Brennan, O.S.M., Ph.D.
Dennis F. McCann, Ph.D.
Vasudha Narayanan, Ph.D.
DePaul University
University of Chicago
University of Bombay

emeriti
Rev. William T. Cortelyou, C.M., S.T.D.
Rev. Patrick O'Brien, C.M., S.T.D.
Catholic University of America
Weston College
Catholic University of America
purposes

The Department of Religious Studies endeavors to continue the academic work of persons of scholarly competence toward the master's degree in preparation for a teaching or research career.

Students planning careers in Religious Education as supervisors, administrators, department chairpersons, coordinators, etc., please consult the School of Education programs in "School Administration and Supervision" and "Curriculum Development" in this Bulletin.

The objectives of the program are (1) knowledge of the varieties of religious experience as found in world religion, (2) knowledge of the pluralism of the Western religious heritage, (3) knowledge of one's own religious heritage, (4) knowledge of the relationship between the religious and the American cultural context, (5) knowledge of the prevailing issues in religious thought, and (6) skills for communicating a sense of religious and cultural identity to one's students.

To provide a coherent and integrated sequence of studies the structure of the graduate program involves a grid composed of four major areas and four major concentrations.

The four major areas are (A) Religion and Western Cultures, (B) Religion and the American Experience, (C) Contemporary Questions in Religion, and (D) Religion and Education. The four major concentrations are (1) World Religions, (2) Biblical Literature, (3) Christianity, Worship, Theology, History, and (4) Values, Ethics, and Morality.

The 300-number courses are open to both undergraduate and graduate students and are numbered according to departmental undergraduate coding. The 400, 500, 600, 700-number courses are open only to graduate students. These numbers do not represent levels. They are coded by areas (hundreds) and concentrations (tens).

master of arts: religious studies

admission requirements

For full admission, students must have the following:

- Bachelor's degree
- Satisfactory completion of a minimum of 48 quarter hours in a religious studies major sequence (or its equivalent). The Chairperson of the Department will determine whether a student has fulfilled the equivalent.
degree requirements:

- Courses: completion of 48 quarter hours of graduate study which must include
  1) eight quarter hours of 400-level courses from different decimal classes (e.g., 410 and 430),
  2) four quarter hours of 500-level courses from a new decimal class (e.g., 540),
  3) four quarter hours of 600-level courses from the fourth decimal class (e.g., 620), and
  4) either (a) one 700-level laboratory course, or (b) evidence of the knowledge of a relevant foreign language. Competency in the language is to be established either by successfully completing REL 231 Introduction to Biblical Language or by passing a foreign language examination. (Application for the examination must be made before the completion of twenty quarter hours in course work, or by the end of the second quarter of full-time residency, whichever is later.)

- Integrating Critique or Examination, oral or written. Chosen by the student with the agreement of the Chairperson. (Procedures for the examination will be set in advance in each specific case through consultation between the student and Department.)

- Thesis/Non-Thesis. In consultation with a departmental advisor the student will determine whether to write a master’s thesis or not.

  Thesis students will register for REL 499 Thesis Research for eight quarter hours. This credit will constitute eight of their forty-eight quarter hours requirement.

  Thesis students will conclude their program with a one hour examination as a "defense of the thesis."

  Non-thesis students will conclude their program by satisfactorily completing the remainder of their forty-eight quarter hours requirement.

## COURSES

### A. Religion and Western Culture

#### 1. World Religions

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>310</td>
<td>Theology of History. Representative Christian and non-Christian concepts of history and the interrelation of Christianity and history.</td>
</tr>
<tr>
<td>410</td>
<td>World Religions and Western Culture. History and thought of the world's major living religions and their influences on Western culture.</td>
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<tr>
<td>411</td>
<td>Mystical Tradition in Western Religions. Classics of religious mysticism, past and present, in Judaism, Islam, and Christianity and their influence on Western culture.</td>
</tr>
</tbody>
</table>

#### 2. Biblical Literature

<table>
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<tr>
<td>420</td>
<td>Genesis and the Theology of History. Genesis is used as the principal outline for a study of the theology of history of major Pentateuch sources (excluding the Deuteronomic history).</td>
</tr>
</tbody>
</table>
Deuteronomic Theology. The origins and emphasis of the Deuteronomic theology as reflected in the Deuteronomic history and editing of other Old Testament material.

Israelite Prophecy.

Israelite History.

Historical Jesus. Authentic teachings of Jesus in historical and literary perspective.

Resurrection of Jesus in the Gospels. By concentrating on the terminal chapters of the gospels, the genesis of Easter faith is investigated and its meaning clarified.

Gospel of John. Recent research in the meaning of the fourth gospel.

3. Christianity: Worship, Theology, History

Theological Issues in Eastern Christianity. Crucial theological themes in non-Latin Christianity following the separation of East and West.

Studies in the Thought of Great Theologians.


Theology in the Patristic Period. Sources, bibliography, principal representatives and main issues.

Theology in the Medieval Period. Sources bibliography, principal representatives and main issues.


Revelation and the "Modernist" Crisis. A study of traditional doctrines of revelation, the "Modernist" revision, and its impact on current understanding.

World Views and Religion. Classical, modern, and post-modern understanding of religion.

Rituals and Symbols in the Sacraments. A study of the natural symbols and collective ritual expressions of meaning in the Christian sacraments.

4. Values, Ethics, Morality

Major Representatives and Traditions in Western Religious Ethics.

B. Religion and the American Experience

1. World Religions

Religions and American Education. Legal basis of their current relationship and state certification of religion teachers. Cross listed with Education 356.

Spiritual Movements in Contemporary America. Sociological study of some emerging sects and cults in contemporary America.

2. Biblical Literature

American Contributions to Historical Biblical Criticism. (2 hrs.)

American Contributions to Literary Biblical Criticism. (2 hrs.)

*Specific topics vary from year to year and are noted in the current Bulletin or Schedule.
3. Christianity: Worship, Theology, History

530 History of the American Religious Experience. Various religious movements which have shaped American life and the historical roots of religious pluralism.

531 Figures and Ideas in American Theology. Central issues raised for theological reflection by American religious experience.

532 The Arts and Religion. Analysis of select representatives of the arts and religion in contemporary American culture.

4. Values, Ethics, Morality


540 Key Figures and Currents in American Religious Ethics. An examination of selected figures, currents, or schools of thought ranging from Jonathan Edwards to the Niebuhrs which have shaped American Religious Ethics.

541 Moral Issues in American Culture. An investigation of selected moral issues which have arisen in the American experience, of the ways American religious communities responded to them, and of the moral/ethical resources they brought to bear on them.

C. Contemporary Questions in Religion

1. World Religions

302 Existential Thinking. Attempt to rethink the nature of philosophy as related to the human condition. Cross listed with Philosophy 370.

610 Anthropological Study in Religion and Culture. A systematic study of the significant messianic and millenarian cults in traditional societies.

611 Hindu Religious Thought. A study of the history and development of religious thought in the dominant culture of India.

612 Christian Theology and Other Religions. Self understanding of Christian theology in response to the study of world religions.

613 Contemporary Chinese Religion, Culture, and Philosophy.

2. Biblical Literature

330 Old Testament Problems*.

331 New Testament Problems*.

620 Problems in Biblical Literature*.

621 Dimensions of Biblical Wisdom. Selected writings from the Wisdom literature of the Old Testament and a study of the resulting contrasts and issues.

622 Mark's Gospel in Recent Research. Meaning and Intention of Mark's gospel in the light of redaction criticism.

623 Christology, Paul and His Predecessors. A study of the earliest Christological formulations recoverable from the tradition together with the use and adaptation of them made by Paul and other canonical writers.

*Specific topics vary from year to year and are noted in the current Bulletin or Schedule.
3. Christianity: Worship, Theology, History

630 Faith. Changing concepts of faith since Vatican II.
631 God in Contemporary Thought. Secularism. Possibility of meaningful language about God in a secular age. (2 hrs.)
632 God in Contemporary Thought. Evil and Absurdity. Possibility of meaningful language about God after Auschwitz. (2 hrs.)
634 Selected Questions in Roman Catholic Theology.

4. Values, Ethics, Morality

320 Problems in Christian Ethics.
640 Psychologists and Religion. Contemporary literature on the relation between psychology and religion.
642 Religious Ethics and Contemporary Moral Problems. An examination of the ways in which theological ethics have been and might be applied to selected moral problems currently facing Christians.

D. Religion and Education

1. World Religions

388 Teaching Religion II. High School. Study and practice in course design, media, and methods for teaching religion. Cross listed with Education 388.
391 Student Teaching. Religion. Seminar and practice teaching. Cross listed with Education 391. (12 hrs.)
710 LAB: Teaching World Religions. (2 hrs.)

2. Biblical Literature

720 LAB: Teaching the Bible. (2 hrs.)

3. Christianity: Worship, Theology, History

730 LAB: Teaching Church History. (2 hrs.)
731 LAB: Teaching the Sacraments and Liturgy. (2 hrs.)

4. Values, Ethics, Morality

321 Moral Education and Ethics. Relation of moral reasoning and values clarification to ethics and their use in the class room. Cross listed with Education 321.
740 LAB: Teaching Ethics. (2 hrs.)

Independent Study and Thesis Research

399 Independent Study.
499 Thesis Research. (8 hrs.)

*Specific topics vary from year to year and are noted in the current Bulletin or Schedule.
sociology

faculty

professors
Rosemary Bannan, Ph.D.
Roberta Garner, Ph.D.
Joyce Sween, Ph.D.
Deena Weinstein, Ph.D.

associate professors
Therese Baker, Ph.D.
Judith Bootcheck, Ph.D.
Grace DeSantis, Ph.D.
Kenneth Fidel, Ph.D.
John Koval, Ph.D.
Charles Suchar, Ph.D.

assistant professors
Robert Rotenberg, Ph.D.
Charles Stevens, Ph.D.

lector
Noel Barker, M.A.

emeritus
Lavinia Raymond, Ph.D.

Loyola University
University of Chicago
Northwestern University
Purdue University
University of Chicago
Purdue University
University of Chicago
Washington University
University of Oregon, Portland
Northwestern University
University of Massachusetts at Amherst
Northwestern University
University of Illinois, Urbana
University of Sao Paulo
The purpose of the graduate program in Sociology is to enable students to apply the findings of sociology to concrete issues of social policy. The program emphasizes the learning of sociological principles, the strategies and methods of research, and the implications of sociological findings for policy planning. These intellectual and practical skills are oriented toward the needs of individuals involved in social research, evaluative work settings, and policy decision-making and implementation.

A Core Program provides a basic knowledge of issues of social policy, social change, formal organization, and research strategies and modes of analysis. Three specialized areas offer more detailed training in applied sociology: Urban Studies, Law and Society, and Health and Human Services. As an alternative to specialized training, the student may develop a program in general sociology.

Training at the master's level in sociology is applicable to employment in such areas as law enforcement, corrections services, urban planning, public and private administration, health and welfare services, community organizations, and education.

Graduate courses in the Department of Sociology are given primarily in the evening and on Saturday mornings.

A limited number of assistantships and traineeships are available to graduate students, as well as internships. Additional information is available upon written request to the Chairperson, Department of Sociology.

**Master of Arts: Sociology**

**Admission Requirements:**

For full admission, students must have the following:

- Bachelor's degree

The Department accepts as graduate students only those who show definite promise for completing the requirements for the advanced degree. Preference is given to applicants who have had undergraduate study in social science, who are currently employed in jobs related to the Department areas of specialization, or who have an expressed interest in these specialized areas.

- One page written statement describing the applicant's reason for wishing to undertake graduate study in sociology and social policy is required.
degree requirements

- Core Courses: Students must complete a series of courses introducing them to the concepts and the methods of social policy.

  SOC 402 Issues in Policy Analysis
  SOC 403 Social Policy and Social Change
  SOC 411 Methods of Policy Analysis and Evaluation
  SOC 467 Formal Organization

- Qualifying Examination. Upon completion of core courses, students will take a qualifying examination for continuance in the graduate program.

- Courses: Specialized or General Electives. Students must complete 32 hours in courses, selected from specialized areas or from a set of general electives. Students may, upon consultation with their advisor, supplement their training by taking additional courses in other departments.

- Non-thesis: Two Projected Papers. Students who elect not to write a thesis complete two project papers in conjunction with two of the 400-level elective courses in order to develop skills of conceptualization and analysis.

  (1) First paper is a review of the literature in a subfield of sociology involving the preparing of a bibliography, critical selective reading, and writing an overview of the field. The review of the literature examines the major issues, theories and findings of the subfield.

  (2) Second paper is the result of a study based on data: this analysis of data could be a secondary analysis, a replication, pretest or pilot study, an original study, or a technical report in policy analysis.

The procedure for completing these two project papers is as follows:

(1) The papers can be done in conjunction with any two scheduled substantive courses. (Written permission of the course instructors is required at the time of enrollment.)

(2) Instructors can limit the number of project-papers written in conjunction with their course. In the case that student requests exceed the number of papers the instructor can supervise, priority will be given to students that are closer to completion of their master's program.

(3) The instructor offering the course and advising on the project paper must indicate, in writing, approval of the completed work, this approval will be included in the student's file and will be required for graduation.

(4) A student can arrange to write the project papers concurrent with or after completing SOC 411 Methods of Policy: Analysis and Evaluation.

- Thesis: Prerequisites for enrolling in the thesis research courses (SOC 500 and 501) are successful completion of both core courses and qualifying examination.

- Admission to Candidacy requires approval of the student's Thesis Committee.
Courses:

Advanced Undergraduate Courses

Graduate students may take 300-level undergraduate courses for graduate credit with permission of the Chairperson. A graduate student in an advanced undergraduate course must receive an A or a B to obtain graduate credit.

The Sociology Department offers advanced undergraduate courses in the areas of law and society, urban studies, social services, juveniles justice, and foundations of sociology. Please refer to the undergraduate bulletin for the complete listings.

Graduate Courses

Core Courses

402 Issues in Policy Analysis. Case studies in the areas of human services, law, and community, and examines the theoretical underpinnings in the formulation of social policies and the implementation of programs.

403 Social Policy and Social Change. This course provides a conceptual and theoretical basis for analyzing social policy, planning policy in the larger context of social change.


467 Formal Organization. A consideration of current problems faced by policy planners in corporate and public sector organization, as well as selected theoretical and empirical studies related to the administration of programs.

Sociological Background

240 Introductory Statistics for the Social Sciences. (Prerequisite: MAT 101 or two years of high school math or consent of instructor) Presentation and description of data, contingency table construction and interpretation, introduction to multivariate analysis, correlation and hypothesis testing. This course is required for students who have not had a previous statistics course. It does not carry graduate credit.

400 Essential Sociology for Graduate Study. Review of sociological perspectives on social interaction and the organization of societies. The goal of the course work is to provide students with a basic understanding of the language, conceptual frameworks and sub-fields of the discipline of sociology. This course is required for graduate students who have not had extensive undergraduate work in sociology. The course counts toward the 36 hours of graduate electives.

401 Sociological Theory: Concepts and Perspectives. Introduction to the major theoretical and conceptual perspectives of sociology and the ways in which they are applied to research and analysis — with an emphasis upon implication for social policy.
courses in specialized areas

Urban Studies

420 Urban Sociology. Comprehensive introduction to advanced level studies in applied and evaluative aspects of urban sociology. This course introduces the student to contemporary urban theory and research and presents an evaluation of selected urban issues.

422 Urban Analysis. Quantitative analysis of urban issues including social area analysis, patterns of segregation, neighborhood change and other selected topics.

423 Urban Cultural Areas. Ethnological approach to urban life stressing the qualitative analysis and evaluation of different types of urban communities, community organizations and urban life styles.

424 The Sociology of Housing. An in-depth approach to a major area of urban problems and policy stressing the use of techniques of analysis and the formulation of social policy and policy analysis.

Other courses recommended for students in this area include Population Trends, Intergroup Relations, Social Deviation and Collective Behavior.

Health, Education, and Welfare

431 Medical Sociology. Analysis of the social system of health care, practitioners, organizations, patients, and their multiple inter-relationships. An evaluation of problems in health care delivery systems.

432 The Sociology of Welfare and Welfare Services. Analysis of the concept of welfare, valuation of the social organization of welfare and the problems of welfare service systems. The interrelationships between welfare and the family, employment, health and crime are explored.

433 The Sociology of Education. Analysis of educational organizations and their effects—including characteristics of institutional structures, teaching as an occupation, and the relationship between educational attainment and social mobility.

438 Research Strategies in HEB. Examination of special and general research techniques, an assessment of procedures, strategies, data sources related to evaluative research.

Other courses recommended for students in this area includes Sociology of Youth, Socialization, Social Deviation, Formal Organizations, Social Psychology and Social Stratification.

Law and Society

440 Law and Social Science. Analysis of the American legal system as an instrument of social control, social change and social reform. The impact of social science research on public policy decisions.

442 Crime, Delinquency and Systems of Correction. Study of major criminological theories and their application to systems of corrections. Present trends at federal, state, city and private correctional institutions.
443 Law and Administration of Justice. Analysis of legal systems and their implementation; jurisprudence and its role in the development and change of legal systems, role of the courts and the police as related to community social problems.

444 Law Enforcement and the Community. Examination of the policies and practices of law enforcement agencies and personnel and their impact on the communities they serve.

447 Institutional Reaction to Deviants. Examination of the social organization of the societal response to individuals labeled as deviant. The goal of the course is to acquaint students with the sociological examination of deviant processing institutions and to familiarize students with the major conceptual frameworks which explain the functioning of such institutions and which assess the consequences of such processing.

448 Research Strategies in Law and Society. Techniques used for evaluating agencies, policies and problems of law enforcement, corrections, and legal systems.

Other courses recommended for students in this area include Intergroup Relations, Social Deviation and Collective Behavior.

general electives

400 Essential Sociology for Graduate Study.

412 Program Evaluation. Policy impact analysis; experimental and quasi-experimental approaches for assessing the consequences of education, social services, criminal corrections, law, welfare reform, urban and business administrative programs; practical and political problems of evaluation research; formative and summative distinctions.

450 Advanced Statistics I. An introduction to sample spaces, random variables, distributions and parametric statistics and sampling. (Cross-listed with PSY410.)

451 Advanced Statistics II. Point estimation procedures are developed for a variety of parameters. Interval estimation and hypothesis testing are compared. Linear regression, correlation, and analysis of variance are studied. (Cross-listed with PSY411.)

461 Sociology of Youth. Review and critical analysis of selected theories and findings relating to high school and college-age populations, emphasizing the concepts of a generation subculture and counterculture.

462 Socialization. A synthesis of relevant psychological and sociological perspectives relating to the individual's acquisition of patterns of behavior and culture in social groups.

463 Individual in Society. The influence of group life on personality development, social interaction and social behavior.

464 Social Inequality. An analysis of inequalities in power, wealth and prestige with an emphasis on the concept of social class, trends in social mobility and relationships to current social topics such as housing, welfare, and political participation.

465 Intergroup Relations. Theoretical perspectives on minority groups emphasizing processes of group formation, patterns of prejudice and discrimination, and an evaluation of methods to reduce prejudice and/or discrimination.
Collective Behavior: Study of social trends, social movements, communications, and crowd behavior. Emphasis on processes of social change, includes examination of historical and cross-cultural case material.

Formal Organization: A consideration of important current problems faced in organizations and of selected theoretical and empirical studies related to them.

Social Deviation: An analysis of the various theoretical positions and findings in the sociology of deviant behavior. Emphasis upon such topics as the labeling of deviants, the analysis of deviant careers and patterns of deviant socialization and the roles of agents or agencies of social control.

Population Trends: An examination of demographic variables—birth, death, and migration, their measurement, current trends and their implications, projections and forecasts.

Sex Roles: Analysis of the Concept of Sex Roles. Attention to the growing literature and empirical research on changing patterns in economic, psychological and social outcomes for women and men. Development of bibliographies and analyses of current data on sex differences in social indicators.

Sociology of Knowledge: An analysis of the social forms of knowledge and the social processes by which individuals acquire this knowledge. The institutionalized organization and social distribution of knowledge.

Sociology of Religion: An historical and contemporary analysis of the interrelationship between religion and society. Emphasis upon the sacred-secular and church-sect typologies, new religious movements and religion's contributions to societal values, beliefs and meaning systems.

Afro-American Culture: Intended for teachers in order that they may examine the contributions of the black man to American culture; gain a functional understanding of the social, economic, and political development of the black man in America; gain an insight into problems created in America because of non-acceptance of relationships; gain an understanding of the intensity of the impact of the black man on American culture. (Cross-listed with EDU 450.)

Special Topics in Sociology: Special courses will be offered as students and faculty identify selected topics of common interest.

Internship: Students may be placed with agencies where they will have the opportunity to participate in typical sociological research. Credit may vary, but is subject to the limit of eight quarter hours.

Independent Study:

thesis research


Thesis Research: The student works independently toward the completion of the thesis.
school of education

philosophy

The School of Education seeks to prepare students for professional positions in educational and community service settings. In addition, the School strives to engage the public at-large, as well as professionals of other related fields, in the consideration of basic ideas, questions, and concerns underlying Education as a personal, life-long phenomenon, and an institutional obligation to all members of society. The School believes that an in-depth and comprehensive understanding of educational issues is crucial to the preparation of professional educators and to a more knowledgeable public.

By presenting programs that stress concept mastery, skill development and competency achievement, as well as the broadening of insights into the nuances and complexities of education, the School of Education provides students with an opportunity to function effectively in a wide variety of professional positions based in the school and other service-oriented institutions.

purposes

The School of Education seeks students who show intellectual promise, social responsibility, and those personal qualities suitable for working with others in a social setting. Students admitted to degree programs must demonstrate these social characteristics by working with others in tutorial projects or programs that foster human development. Completion of a program will lead to a specific degree, and candidates with appropriate prior requisites may apply for State of Illinois Certification.

Located in a large metropolitan area, the School of Education is specifically committed to preparing personnel for professional service in those fields that touch upon and affect the human development of people living in an urban environment. To this end, the School of Education espouses the following for its graduate programs:
• To prepare graduate students in specialized areas for assuming leadership roles in educational settings.
• To prepare graduate students for professional service in organizations that are committed to developing human potentials and dealing with human problems.

graduate program office
The School of Education maintains a Graduate Program Office on the Lincoln Park Campus, Arthur J. Schmitt Academic Center (SAC), Room 182 (312/321-8126). Additional graduate information can be obtained from this office.

programs: degree, certification, specialization, non-degree
To achieve its goals, the School of Education offers programs leading to a Master of Arts or a Master of Education degree, certification programs, a specialization program and a non-degree program.

teacher education
  Business Education: M.A. or M.Ed.

human development
  Human Services and Counseling: M.A. or M.Ed.
    Elementary Schools concentration
  Secondary Schools, Higher Education, Agencies, and Family Concerns concentration
  Reading and Learning Disabilities: M.A. or M.Ed.
  Reading and Learning Disabilities Certifications:
    Learning Disabilities Supervisory
    Reading Specialist (K-12)
  Reading and Learning Disabilities Specialization:
    Bilingual Bicultural Learning Disabilities
  Non-Degree

educational policy studies and services
  Educational Leadership: M.A. or M.Ed.
    Administration and Supervision concentration
  Physical Education concentration
  Curriculum/Program Development: M.A. or M.Ed.
    Administration and Supervision
general admission requirements

In addition to meeting the requirements for admission to the Graduate School, all candidates for admission to the School of Education must meet the following:

- Bachelor's degree in professional education or in the Liberal Arts and/or Sciences, acceptable for the program of specialization to which the student is seeking admission
- Superior Undergraduate Record
- Recommended by School of Education

Note: Candidates for admission are advised that a particular program may have admission requirements unique to its area of professional specialization.

general degree requirements

All graduate programs in professional education have the following degree requirements

- Completion of a minimum of 48 quarter hours of course work
- Master of Arts: thesis
  Master of Education: paper
- Master of Arts: oral examination on thesis
  Master of Education: written comprehensive examination
- Written recommendation for the degree by the student's program director

accreditation

Teacher preparation programs at DePaul University were initially accredited by the Illinois Office of Education in 1963. All programs were fully approved by the State Superintendent and the State Teacher Certification Board in November 1975.

Furthermore, each program is accredited by the National Council for Accreditation of Teacher Education. Each program may lead to official certification by the Chicago Board of Education after the student has passed the Board's Examinations.
teacher education

Faculty

Associate professors
Jean Nordberg, M.S.Ed.
Kenneth F. Sarubbi, D.P.E.
James Serri, M.S.
Cecile Small, Ed. Spec.

Southern Illinois University
Indiana University
University of Wisconsin-Madison
DePaul University

Assistant professors
John C. Boran, M.A.
John W. Burr, Ed.D.
Peter Pereira, M.A.T.
Gloria P. Solya, M.S.

University of Illinois
Brigham Young University
Harvard College
University of Wisconsin

Instructor
Patricia Burt, M.S.

Eastern Illinois University

Purpose

The purpose of teacher education is to continue the professional education of classroom teachers at all levels of secondary education. Both the Master of Arts and Master of Education degrees are offered in business education. The programs present a core of courses designed to provide professionals with skills, concept-mastery, and competencies which will enable them to offer comprehensive services in business education.
degree programs

master of arts or master of education: business education

admission requirements

• General requirements for admission to graduate programs in the School of Education

• Completed certification requirements to teach business education in the secondary school.

• Three of the following areas:
  Accountancy  (8 quarter hours)
  Economics    (8 quarter hours)
  Finance      (4 quarter hours)
  Management   (4 quarter hours)
  Marketing    (4 quarter hours)

An applicant who does not satisfactorily meet these specific requirements must remedy the deficiencies through course work. In no case will credit earned in course work to remove deficiencies be applicable to the degree.
degree requirements

- Courses: minimum of twelve (48 quarter hours)
  - five courses (20 quarter hours)
    - 400 Educational Research Design and Statistics
    - 402 Psychology of Learning
    - 408 Contemporary Issues in Education
    - 433 Current Issues and Trends in Business Education
    - 440 Foundations in Business Education
  - two courses (8 quarter hours) from
    - 436 Teaching Basic Business Subjects
    - 437 Improving Instruction in Typewriting
    - 438 Improving Instruction in Shorthand
    - 439 Improving Instruction in Bookkeeping and Accounting
    - 534 Methods and Materials in Office Practice
  - three courses (12 quarter hours) from Business Administration: selection requires the student advisor's written consent
  - one course (4 quarter hours) from Business Education: selection requires the student advisor's written consent
  - one course (4 quarter hours) from
    - Master of Arts: BEG 539 Thesis Research in Business Education
    - Master of Education: BEG 531 Research Seminar in Business Education

- Thesis/Paper
  - Master of Arts: BEG 539 Thesis Research in Business Education
    - The master's thesis is written to fulfill the requirements of this course.
  - Master of Education: BEG 531 Research Seminar in Business Education
    - The master's paper is written to fulfill the requirements of this course.

- Examination
  - Master of Arts: oral examination on thesis
  - Master of Education: written comprehensive examination

- Letters of Recommendation: at least two from previous employers
Courses

Business Education (BEG)

420 Career Education: Instructional Modules for Business. Designed to assist business education teachers to integrate career education into the curriculum with special emphasis in the following areas: the development of a philosophical base for career education, the determining of goals and objectives for career education, and the development of instructional modules for career emphasis in accounting, secretarial, clerical, data processing, sales and related job clusters.

430 Teaching Consumer Education. The teaching of installment purchasing, budgeting, comparison of prices, and other topics to comply with the recent legislation requiring such instruction in grades 8 through 12. Meets the certification requirements for teachers of consumer economics in Illinois.

435 Current Issues and Trends in Business Education. An analysis of current issues, trends, and recent developments with emphasis on curriculum, objectives, media, automation, and career education.

436 Teaching Basic Business Subjects. Course content and teaching methodology in economic education, general business and allied fields.

437 Improving Instruction in Typewriting. New approaches to the teaching of typewriting with emphasis on objectives, new materials, and the changing technology in the office.

438 Improving Instruction in Shorthand. New approaches in the teaching of shorthand and transcription with emphasis on updated instructional techniques and the use of multiple-channel equipment.

439 Improving Instruction in Bookkeeping and Accounting. Materials, teaching aids, instructional methods, and analysis of current literature.


502 Data Processing for Teachers. Computer fundamentals, computer number systems, and the arithmetic and logical operations of the computer. Very short programs will be written which may be utilized for instructional purposes.

503 Coordination Techniques. Methods for administering and facilitating effective teaching-learning situations in Cooperative Business Education Programs. Individualization of instruction for the Business Education "co-op" student will be included as well as job competencies, training plans, and vocational youth organizations as part of the cooperative program.

504 Computer Programming for Teachers. Business-oriented COBOL showing various computing techniques that produce business reports. Class will be teacher-oriented.
505  International Society for Business Education Study Tour. Travel to the country for the International Society for Business Education Conference with side trips to points of interest for Business Educators to tour schools and businesses in the host country for the conference. Attendance at the ISBE Conference is included in this course. Students may register for 3, 4, or 4.5 quarter hours of credit.

506  Advanced Machine Shorthand Methods. General philosophy and psychology used in teaching any business skill subject with specific emphasis upon the principles used in teaching computer-compatible machine shorthand.

508  Seminar: Current Topics in Education. Weekly seminar focusing on student selected themes/problems in Education. (4.5 quarter hours.)

531  Research Seminar in Business Education. Opportunity provided in this seminar for Master of Education candidates to write their 5,000 word paper. Individual research and study of problems in business education form the basis for this class.

532  Organization/Administration of Cooperative Education. Organize a cooperative program which provides training in certain skills and gives occupational information. The business community supplies the laboratory in which the pupil can practice these skills.

534  Methods and Materials in Office Practice. Methods, arrangements, techniques and materials for creating, constructing, administering, and facilitating effective teaching-learning situations in Office Practice. Module in Instructional Design in Business Education, or its equivalent, should be successfully completed prior to participation in this module. Time will be devoted to organizational plans for Office Practice. This is for graduate students only.

536  Methods for Mainstreaming in Business Education. Examination of P.L. 94-142 which outlines requirements for mainstreaming in the Public schools. In addition, characteristics of handicapped students covered by this legislation as well as specific methods and techniques to be used for each handicap will be included.

537  Machine Shorthand Theory and Methods. This course will introduce the theory of machine shorthand. Also included will be specific methods, techniques, and evaluation systems for teaching machine shorthand.

538  Independent Study in Business Education. (Prerequisite: Permission of Director) (2-4).

539  Thesis Research in Business Education. (Prerequisite: Admission to candidacy and thesis topic outline approval) A student writing a thesis registers for this course for four quarter hours of credit. Where the thesis research and the writing of the thesis itself is prolonged beyond the usual time, the program director may require the student to register for additional credit.
human development

Rafaela E. Wetter, Ph.D.
director

faculty

professor
Edward Ignos, Ed.D.

Indiana University

associate professors
William E. Gorman, Ed.D.
Suzanne T. Major, Ph.D.
Rafaela E. Wetter, Ph.D.

Northwestern University
Northwestern University
Illinois Institute of Technology

assistant professors
Frances J. Beck, Ph.D.
Judith A. Gunnison, Ph.D.
Carol T. Wren, Ph.D.

University of Chicago
University of Chicago
Northwestern University

lecturer
Judith Cooney, Ed.D.

Indiana University

purpose

Human Development has as its purpose the maximizing of human potential, and
the preparation of professionals with the concept mastery, skills and
competencies that will enable them to contribute to this maximization. The
programs involve working with all age levels from pre-school to adulthood.

Master's degrees in Human Services and Counseling and in Reading and
Learning Disabilities, are offered. Each of the master's degree programs offers
more than one area of concentration along with the possibility of multiple state
certifications.
human services and counseling

The Human Services and Counseling programs present a core of courses designed to provide professionals with skills, concept mastery and competencies which will enable them to provide comprehensive counseling and consulting services in many educational and community environments.

Some of the specific career opportunities for Human Services and Counseling graduates include private and public school elementary and secondary counseling, rehabilitation counseling, mental health and corrections, employment counseling, ministerial counseling, teaching, work in social welfare and community agencies, junior college personnel work, human relations consulting, migrant family counseling, general hospital service counseling, work in institutional care settings, counseling and aging, and marriage and family counseling.

Emphasis is placed on assisting students from a variety of professional disciplines: 1) in developing leadership skills which facilitate understanding and influence organizational systems, 2) in developing effective communication performance, and 3) in actualizing human potential through group and individual counseling approaches.

reading and learning disabilities

The Reading and Learning Disabilities Programs, at the Lincoln Park, Elgin, and Chicago Heights locations, offer courses for those interested in earning a master's degree, for those who, in addition to a master's degree, wish State or Chicago Board of Education certification in Learning Disabilities or consideration as a State of Illinois Reading Specialist K-12, and for the non-degree student who holds a baccalaureate degree from an accredited university and wishes to increase his or her knowledge and expertise in the field.

center for reading and learning

Located on the third floor of McGaw Hall, 802 West Belden, the Center for Reading and Learning provides diagnostic and remedial services for children, adults, and DePaul University students who want to improve their skills in reading and learning. Both day and evening programs and services are available.

The day program offers DePaul University students (who may also enroll in reading courses) the opportunity to develop reading skills to a higher level through self-teaching learning modules and tutoring assistance.

The evening program provides diagnostic and remedial programming services for children and adults with specific reading and learning disabilities. Trained clinicians and instructors in the graduate program in Reading and Learning Disabilities supervise the diagnostic-remedial process. Advanced graduate students in the Master's Degree Program are trained in the skills of diagnosis and remediation through observation and participation. On-going services are provided through periodic evaluation and staffing and continuing programming.
programs: degree, certification, specialization, non-degree

master of arts or master of education: human services and counseling
  elementary schools concentration
  secondary schools, higher education, agencies, and family concerns concentration

master of arts or master of education: reading and learning disabilities

certifications: reading and learning disabilities
  learning disabilities
  supervisory
  reading specialist (K-12)

specialization: reading and learning disabilities
  bilingual bicultural learning disabilities

non-degree

master of arts or master of education: human services and counseling
  elementary schools concentration

admission requirements
  • General requirements for admission to graduate programs in the School of Education
  • Two years of successful teaching or other work experience
degree requirements

- Courses: minimum of twelve (48 quarter hours)
  - eleven courses (44 quarter hours)
    400  Educational Research Design and Statistics
    402  Psychology of Learning
    408  Contemporary Issues in Education
    453  Educational, Occupational and Social Information in Human Services
    458  Facilitating Human Services through the Group Process
    460  Guidance in the Elementary School
    461  Use of Test in Appraisal and Development
    462  Counseling Theory and Practice for Human Services
    463  Techniques of Human Services and Counseling in Elementary and Junior High School
    464  Consulting in Human Services
    562  Practicum in Human Services and Counseling Elementary

Note: Students who have career needs in a subject matter field may substitute one course in that field. The course substitution needs the written approval of the student's advisor.

one course (4 quarter hours) from
- Master of Arts: HSC 559 Thesis Research in Human Services and Counseling
- Master of Education: HSC 551 Research Seminar in Human Services and Counseling

- Thesis/Paper
  - Master of Arts: HSC 559 Thesis Research in Human Services and Counseling
  - The master's thesis is written to fulfill the requirements of this course.
  - Master of Education: HSC 551 Research Seminar in Human Services and Counseling
  - The master's paper is written to fulfill the requirements of this course.

- Examination
  - Master of Arts: oral examination on thesis
  - Master of Education: written comprehensive examination

- Letters of Recommendation: at least two from previous employers

Note: Students holding valid teaching certifications are eligible for the Illinois State Certificate in Guidance upon completion of the appropriate Master's sequence.
master of arts or master of education: human services and counseling

secondary schools, higher education, agencies, and family concerns concentration

admission requirements
• General requirements for admission to graduate programs in the School of Education
• Two years of successful teaching or other work experience

degree requirements
• Courses: minimum of twelve (48 quarter hours)
  eleven courses (44 quarter hours)
  400 Educational Research Design and Statistics
  402 Psychology of Learning
  404 Contemporary Issues in Education
  452 Seminar in Human Services and Counseling
  453 Educational, Occupational and Social Information in Human Services
  456 Counseling the College-Bound Student
  458 Facilitating Human Services through the Group Process
  459 Clinical Studies in Human Services and Counseling
  461 Use of Test in Appraisal and Development
  462 Counseling Theory and Practice for Human Services
  552 Practicum in Human Services and Counseling Elementary

Note: Students who have career needs in a subject matter field may substitute one course in that field. The course needs the written approval of the student's advisor.

one course (4 quarter hours) from
  Master of Arts: HSC 559 Thesis Research in Human Services and Counseling

• Thesis/Paper
  Master of Arts: HSC 559 Thesis Research in Human Services and Counseling
  The master's thesis is written to fulfill the requirements of this course.
  The master's paper is written to fulfill the requirements of this course.

• Examination
  Master of Arts: oral examination on thesis
  Master of Education: written comprehensive examination

• Letters of Recommendation, at least two from previous employers

Note: students holding valid teaching certificates are eligible for the Illinois State Certificate in Guidance upon completion of the appropriate Master's sequence.
master of arts or master of education: reading and learning disabilities

admission requirements

- General requirements for admission to graduate programs in the School of Education
- A previous grade point average of between 2.75-3.00 on a 4.00 scale

degree requirements

- Courses: minimum of thirteen (52 quarter hours)
  - eleven courses (44 quarter hours)
  - 400 Educational Research Design and Statistics
  - 402 Psychology of Learning
  - 408 Contemporary Issues in Education
  - 441 The Psychology of Reading
  - 442 Characteristics of the Exceptional Learner
  - 443 Psychological Tests and Methods in Diagnosis
  - 444 Characteristics and Diagnosis of Reading and Learning
  - 445 Remediation of Reading and Learning Disabilities
  - 542 Testing and Diagnosis of Reading and Learning Disabilities Practicum I
  - 543 Diagnosis and Remediation of Reading Disabilities Practicum II
  - 544 Diagnosis and Remediation of Reading Disabilities Practicum III

- one course (4 quarter hours) from Reading Area

- one course (4 quarter hours) from
  - Master of Arts: R&L 549 Thesis Research in Reading and Learning Disabilities
  - Master of Education: R&L 541 Seminar on the Psychopathology of Learning

- Thesis/Paper
  - Master of Arts: R&L 549 Thesis Research in Reading and Learning Disabilities. The master’s thesis is written to fulfill the requirements of this course.
  - Master of Education: R&L 541 Seminar on the Psychopathology of Learning. The master’s paper is written to fulfill the requirement of this course.

- Examination
  - Master of Arts: oral examination on thesis
  - Master of Education: written comprehensive examination

- Letters of Recommendation: at least two from previous employers
certifications: reading and learning disabilities

learning disabilities certification

admission requirement
  • Master's degree in learning disabilities

certification requirements
  • Due to the recent changes proposed by the State of Illinois, the student is requested to contact the School of Education directly for further information.

supervisory certification

admission requirements
  • Master's degree in learning disabilities
  • Learning disabilities certification

certification requirements
  Endorsement for the supervisory certification requires the student to complete the following:
  • Courses: three (12 quarter hours)
    • 491 Administrative Theory and Behavior
    • 495 School Law or 496 Community Relations
    • 498 Principles and Practices of Supervision
  • Practicum: 150-200 hours

reading specialist (K-12) certification

admission requirements
  • Master's degree in reading and learning disabilities
  • Teaching certificate from the State of Illinois

certification requirements
  To be eligible for consideration as a Reading Specialist (K-12), the student must complete one course from the following:
  • Course: one (4 quarter hours)
    • 547 Creative Methods/Materials for Teaching Reading in the Mainstreamed Classroom
    • 646 Teaching Reading to the Disadvantaged
    • 648 Corrective Reading Problems
    • 649 Teaching of Reading in the Content Areas
specialization: reading and learning disabilities

bilingual bicultural learning disabilities

admission requirements
- Bachelor's degree in Education
- A previous grade point average of between 2.75-3.00 on a 4.00 scale
- Proficiency in both English and Spanish
- Teaching certificate from the State of Illinois

specialization requirements
- Courses, five (20 quarter hours)
  404 Child Rearing Across Cultures
  406 Psychology and Education of the Bilingual Child
  407 Non-Discriminatory Tests — SOMPA System
  425 Teaching Reading in First and Second Language
  466 First and Second Language Acquisition

non-degree

For non-degree students who wish to increase their knowledge and expertise in the field of education, credit for designated courses are available.

admission requirement
- Bachelor's degree from an accredited institution

courses available
  441 The Psychology of Reading
  442 Characteristics of the Exceptional Learner
  443 Psychological Tests and Methods in Diagnosis
  444 Characteristics and Diagnosis of Reading and Learning Disabilities
  445 Remediation of Reading and Learning Disabilities
  447 Speech and Language Development
  547 Creative Methods/Materials for Teaching Reading in the Mainstreamed Classroom
  646 Teaching Reading to the Disadvantaged
  648 Corrective Reading Problems
  649 Teaching of Reading in the Content Areas
human services and counseling (HSC)

452 Seminar in Human Services and Counseling. Principles and current practices used in the development and organization of programs in human services and counseling program. Administrative problems, integration of human services, community relations and evaluation procedures will be studied. The organizational structure and management styles, as they affect counseling and other human services, are examined and discussed.

453 Educational, Occupational and Social Information in Human Services. Results of studies in educational, occupational and social opportunities. The following areas will be discussed: occupational trends, sources of information, techniques for conducting local occupational surveys, uses of educational, occupational and social information.

454 Human Services and Counseling for Career Development. Ways to assist the individual to choose, prepare for, and progress in a career. Vocational testing, sources of occupational information are described. Study of vocational behavior in relation to career patterns, with special attention to the analysis of empirical data and theories pertaining to vocational choice.

455 The Administration of Human Services and Counseling Programs. The Administration of Human Services Programs, an interdisciplinary approach to meeting human needs, describes how administrators and counselors can develop skills and competencies to employ, assign and supervise their staff. An analysis of various supervisory techniques is made.

456 Counseling the College-Bound Student. Designed to assist professionals in the human services and counseling areas in formulating a deeper perspective of the college counseling process. The use of profile, types of colleges and admission procedures, testing scholarships, advance placement, the preparing of the school report and many other items will be included in the Instruction. The workshop approach will be used in the final two weeks of the course to put into practice the concepts, skills and techniques learned earlier.

457 Seminar, Improving Parent-Child Relationships. Structured to assist the student to develop a theoretical understanding of the development growth enhancing child-parent relationships. Lectures, discussions and action oriented group encounters focus on the following: understanding child development, the goals of misbehavior, logical and natural consequences, establishing a family council and utilizing effective encouragement methods within the family structure.

458 Facilitating Human Services through the Group Process. (Prerequisite: 462. Permission of instructor) Study of group process, its theory, procedures and problems as they relate to facilitating human growth and development through counseling. The class engages in a regular group experience. Opportunity to observe and participate in group work is provided.
Clinical Studies in Human Services and Counseling. Study of normal person with learning and emotional problems. The nature, synthesis and use of case studies for personal development will be stressed. The interrelationship among the various counseling and human service techniques will be demonstrated.

Guidance in the Elementary School. A study of the philosophy concepts and rationale which underlie elementary school guidance. Principles and practices as they relate to the guidance program are presented. The student is acquainted with the role of the counselor and is introduced to the various facets of the elementary school program. Attention is given to the development of guidance techniques in the classroom and group guidance.

Use of Tests in Appraisal and Development. Detailed analysis of intelligence, aptitude, personality, and achievement tests used with groups and individuals. The course is intended to familiarize students with various appraisal procedures and their utilization. Attention is given to the development of the institutional testing program.

Counseling Theories and Practice in Human Services. An understanding of the major counseling theories and their application for professionals in the human services. Each student investigates counseling theory through wide reading and has an opportunity to see the implications of the theories in demonstration and practice. The basic theoretical consideration underlying human services and counseling are stressed. Students are expected to develop a personal theory of counseling.

Techniques of Human Services and Counseling in Elementary and Junior High School. (Prerequisites: 460 and 462) A thorough study of the counseling relationship and counseling process. Students are introduced to specific techniques in counseling. The course is designed to help the student acquire the necessary counseling skills such as the establishment of a relationship, reflection, summarization, tentative analysis, and encouragement. The student evaluates and analyzes tapes, develops listening skills to facilitate communication, engages in role playing, and has limited contact with the counselor. The relationship of counseling and consultation and the skills necessary to employ human services are considered.

Consulting in Human Services. Focus on the utilization of helping techniques in consultation work with teachers, parents, and other working in institutional and social service agencies. Students are engaged in the case study, role playing, and observation of the consultant role. Investigation is made of consulting techniques in the helping professions.

Research Seminar in Human Services and Counseling. Opportunity is provided in this seminar for Master of Education candidates to write their 5,000 word paper. Individual research and study of problems in guidance form the basis of this class.

Practicum in Human Services and Counseling—Secondary. (Prerequisite: Open to students in degree programs only by advisement) Selected and directed experiences provided to qualify students to service in the secondary schools as student personnel and guidance staff members.
Internship in Human Services and Counseling. Intern is assigned to one or more cooperating schools of social agency for one, and preferably two quarters, where he or she, under the joint supervision of the counseling services, administrator and the University supervisor, gains practical experience in various aspects of counseling materials, functions, procedures and services. Intern completes a jointly approved research project related to human services and counseling in cooperating school or school district. (4-8 quarter hours)

Human Services and the Aging Process.

Family and Marriage Counseling.

Thesis Research in Human Services and Counseling. (Prerequisites: Graduate standing and thesis topic and outline approved.) A student writing a thesis registers for this course for four quarter hours of credit. Where the thesis research and the writing of the thesis itself are prolonged beyond the usual time, the program advisor may require the student to register for additional credit.

Physical and Sexual Abuse of Children.

Practicum in Human Services and Counseling - Elementary. (Prerequisite: Open to students in degree program only by advisement) Selected and directed experiences provided to qualify students to serve in the elementary schools as student personnel and guidance staff members.

Thesis Research in Managing the Human Services. (Prerequisite: Graduate standing and thesis topic and outline approved.) A student registers for four quarter hours of credit. Where the thesis research and the writing of the thesis are prolonged beyond the usual time, the program advisor may require the student to register for additional credit.

Practicum in Human Services and Counseling - Agencies, Higher Education, and Family Concerns.

Practicum in Managing the Human Services. (Prerequisite: Open to students in degree program only by advisement) Selected and directed experiences provided to qualify students to serve in the management of human services programs.


Guidance in Basic Adult Education. Intended for educators who are actively engaged in work with disadvantaged adults. Emphasis is placed on personnel services in basic education centers for adults. (6 quarter hours)

Counseling in Basic Adult Education. Intended for educators who are actively engaged in work with disadvantaged adults. Emphasis is placed on counseling in basic education centers for adults. (6 quarter hours)
reading and learning (R&L)

404 Child Rearing Across Cultures. Study of child rearing practices, the
effects of culture on cognitive development and the implications for
teaching strategies for the bilingual child.

406 Psychology and Education of the Bilingual Child. Psycho-social
aspects of bilingualism as well as the implications for teaching
strategies for the bilingual child.

407 Non-Discriminatory Tests: SOMPA System. Administration and
interpretation of diagnostic test using a pluralistic model to make
testing procedures more responsive to cultural pluralism. (Case Study
Approach)

425 Teaching Reading in First and Second Language. Analysis of reading
problems of bilingual children. Educational implications of language
dominance assessment as a prerequisite to the decision in which
language to teach reading. Advantages and disadvantages of
teaching in dominant and/or weak languages will be emphasized.

441 The Psychology of Reading. Introduces the student to current
information concerning the role of the neurophysiological,
psychological and educational factors that influence both normal
and abnormal development of reading.

442 Characteristics of the Exceptional Learner. A survey of educational
programs as well as a consideration of alternative placement
appropriate to children with disabilities in the various handicapped,
auditory impaired, mentally retarded, gifted, multiple handicapped,
emotionally disturbed and learning disabled children reviewed.
Emphasis will include theoretical, practical and legal implications and
issues.

443 Psychological Tests and Methods in Diagnosis. Background into the
principles of measurement, including an evaluation of standardized
test instruments, and administration of selected assessment tools
appropriate for diagnosing reading and learning disabilities and an
understanding of strengths and limitations of specific testing
instruments.

444 Characteristics and Diagnosis of Reading and Learning Disabilities.
Exploration of the theory and nature of reading and disabilities. This
course proceeds to enhance the student's skills at translating test
scores to meaningful diagnostic hypotheses. A case study approach
will culminate in the students' ability to integrate assessment
information from a variety of sources, especially an individually
administered instrument(s), that leads to a profile analysis.

445 Remediaiton of Reading and Learning Disabilities. (Prerequisite: 444)
A study of theoretical and practical approaches to the remediation of
reading and learning problems. Basic principles of diagnostic
Teaching will be introduced, instructional materials will be evaluated
and reviewed.

447 Speech and Language Development. A review of the development of
verbal language in normal and atypical learners, as presented by
psychologists and the speech pathologists. Basic teaching
procedures and evaluation of language skills will be emphasized.

466 First and Second Language Acquisition. Study of language theories
and their applications to first and second language acquisition in
bilingual children.
Seminar on the Psychopathology of Learning. A review of specific research applicable to the atypical learner. Opportunity is provided in this seminar for the Master of Education candidate to write the master’s paper. 4 hours credit. The student may enroll as many times as is necessary to complete seminar paper.

Testing and Diagnosis of Reading and Learning Disabilities: Practicum I. (Prerequisites: 443, 444) Students participate in a clinical setting and evaluate children and adults with suspected learning problems. Under close instructor supervision, students will administer and interpret tests, deal with the ethics of testing and interpretation and communicate results to parents and school and other social agencies.

Diagnosis and Remediation of Reading Disabilities: Practicum II. (Prerequisite: 542) (Students may enroll for 4 or 6 hours) Clinical observation and practical application of the diagnostic-remedial process by working in a supervised clinical setting with children and young adults who have specific reading disabilities.

Diagnosis and Remediation of Reading Disabilities: Practicum III. (Prerequisite: 542) Clinical observation and practical application of the diagnostic-remedial process by working in a supervised clinical setting with children and young adults who have specific reading disabilities.

Methods and Techniques for Teaching Comprehension. Techniques and instruction for developing instructional materials to teach and practice comprehension skills presented within a theoretical model of the reading process. Use of content area subject matter to teach and practice reading comprehension is emphasized.

Individual Assessment of Children Using the WISC-R. (Prerequisites: 443 or 444; approval of the instructor) Focus on further development of diagnostic skills in the areas of reading and learning disabilities. This course teaches advanced clinicians the skills involved in both administration and interpretation of the WISC-R. Emphasis placed on analyzing characteristic test profiles, and on application of this information to educational treatment plans.

Creative Methods and Materials for Teaching Reading in the Mainstreamed Classroom. Emphasis on the creative utilization of a variety of multisensory materials designed to provide specific learning goals. Teaching techniques that precede the use of materials also discussed.

Independent Study in Reading and Other Learning Disabilities. (Prerequisite: Permission of program director) (2-4 quarter hours.)

Thesis Research in Reading and Learning Disabilities. (Prerequisite: Thesis outline approved) (4 hours credit. The student may enroll as many times as is necessary to complete the thesis) A Master of Arts candidate conducts original research, writes a thesis and presents an oral defense before a committee of faculty members.

Internship in Applied Educational Research, Evaluation and Development. Offered in the following departments: Educational Leadership, Curriculum/Program Development, Human Services and Counseling and Reading and Other Learning Disabilities.
Teaching Reading to the Disadvantaged. A consideration of the linguistic, demographics and educational factors that are believed to be disadvantaged. An examination of teaching methods and materials that might be appropriate for this group also pursued.

Correcting Reading Problems. Techniques appropriate to the diagnosis of reading problems in a classroom setting presented along with methods and materials for correcting those reading difficulties. Emphasis upon informal assessment techniques and methods of instruction that allow for the creation of individualized learning environments in a group setting.

Teaching of Reading in the Content Areas. Focus on the special skills and problems involved in the teaching of reading in the content areas. The course also acquaints the student with both the place of content reading in the development of skilled reading and methods and techniques of improving the teaching of reading in the content areas.
educational policy studies and services

faculty

professors
Andrew T. Kapan, Ph.D.
Wilma S. Longstreet, Ph.D.
Hans A. Schlesier, Ph.D.

associate professors
John J. Lane, Ph.D.
Joan Lakebrin Rebeck, Ph.D.
John R. Taccarino, Ph.D.

assistant professor
Barbara R. Reque, Ph.D.

adjunct professor
Gilbert S. Derr, Ed.D.

lecturers
Richard A. Ewanio, M.B.A.
Edna Hickey Fanning, M.A.
Frank Tavano, Ed.D.
Lezek A. Wolkowski, Ph.D.

emeriti
Urban H. Fleege, Ph.D.
Alfred L. Pappillon, Ph.D.

University of Chicago
Indiana University
Loyola University
University of Wisconsin-Madison
University of Wisconsin-Madison
Northwestern University
University of Chicago
University of Sarasota
DePaul University
Northwestern University
Loyola University
Loyola University
Catholic University of America
Catholic University of America
purposes

Educational Policy Studies and Services provides required foundational courses in both undergraduate and graduate degree programs in the School of Education, as well as housing advanced degree programs at the graduate level in educational leadership and curriculum development.

Educational foundations courses — extracted from the disciplines of history, philosophy, psychology, sociology, and research methodology — are an integral part of all degree programs. In this respect the educational foundations program is composed of humanistic and behavioral studies. These studies have as their major purpose providing students with a set of contexts in which educational problems can be understood and interpreted at a level beyond that required for the initial preparation of teachers at the graduate level.

As in basic programs, the problems of education are studied with respect to their historical development and the sociological and philosophical issues to which they are related. They are also studied with respect to the findings and methods of behavioral and social sciences in the areas of research methodology and statistics, learning theories, and developmental psychology. The component comprises the educational policy studies.

The other major purpose of the Educational Policy Studies and Services is to prepare educational personnel for administrative, supervisory and curriculum positions for schools, industry, business, and a variety of social, medical, recreational, and welfare agencies. These programs — educational leadership and curriculum development — are

- discipline-based: concepts, research findings, and models of inquiry in social sciences,
- theory-based: relevant theories of organization, leadership and curriculum,
- problem-based: contemporary issues and problems likely to confront administrators, supervisors, and curriculum developers, and
- career-based: examination of administrative, supervisory, and curriculum development functions and objectives within a variety of settings and for different purposes.

degree programs

master of arts or master of education:
educational leadership
  Administration and Supervision concentration
  Physical Education concentration

master of arts or master of education:
curriculum/program development
master of arts or master of education: educational leadership
administration and supervision concentration

admission requirements
• General requirements for admission to degree programs in the School of Education
• Bachelor's degree conferred by an accredited institution
• Evidence of two successful years of teaching experience or equivalent successful professional experience (required only for state certification)
• Evidence of adequate background for the program

degree requirements
• Courses: minimum of 12 (48 quarter hours)
  seven courses (28 quarter hours)
  400  Education Research Design and Statistics
  401  Advanced Developmental Psychology or 402 Psychology of Learning
  408  Contemporary Issues in Education
  491  Administrative Theory and Behavior
  495  School of Law
  496  Community Relations
  498  Principles and Practices of Supervision

  four courses to be selected from
  465  Administrative Planning
  492  The Principalship
  494  School Finance
  497  Principles of Curriculum/Program Development
  499  Clinical Supervision
  590  Organizational Development
  594  Internship in Educational Leadership
  596  Personnel Administration
  597  Politics of Education

  courses in cognate disciplines; students who have career needs in a subject matter field may substitute one course in that field. (This course needs the written approval of the program advisor.)

  one course (4 quarter hours) from
  Master of Arts: A&S 599 Thesis Seminar in Educational Leadership
  Master of Education: A&S 591 Research Seminar in Educational Leadership
• Thesis/Paper
  Master of Arts: A&S 599 Thesis Seminar in Education Leadership. The master's thesis is written to fulfill the requirements of this course.
  Master of Education: A&S 591 Research Seminar in Educational Leadership. The master's paper is written to fulfill the requirements of this course.
• Examination:
  Master of Arts: oral examination on thesis
  Master of Education: written comprehensive examination
• Letters of Recommendation: at least two from previous employers

Illinois Administrative Certificate

Students holding valid Illinois teaching certificates with two years successful teaching experience are eligible for the Illinois Administrative Certificate upon completion of the program.
master of arts or master of education: educational leadership

physical education concentration

admission requirements

- General requirements for admission to degree programs in the School of Education
- Bachelor's degree conferred by an accredited institution
- Evidence of adequate background for the program

degree requirements

- Courses: minimum of 12 (48 quarter hours)
  
  seven courses (28 quarter hours)
  
  400  Education Research Design and Statistics
  401  Advanced Development Psychology or 402 Psychology of Learning
  408  Contemporary Issues in Education
  491  Administrative Theory and Behavior
  495  School of Law
  496  Community Relations
  498  Principles and Practices of Supervision

  four courses (16 quarter hours) from Physical Education. The courses need the written approval of the program advisor.

  one course (4 quarter hours) from:
  Master of Arts: A&S 599 Thesis Seminar in Educational Leadership
  Master of Education: A&S 591 Research Seminar in Educational Leadership

- Thesis/Paper
  Master of Arts: A&S 599 Thesis Seminar in Educational Leadership. The master's thesis is written to fulfill the requirements of this course.
  Master of Education: A&S 591 Research Seminar in Educational Leadership. The master's paper is written to fulfill the requirements of this course.

- Examination:
  Master of Arts: oral examination on thesis
  Master of Education: written comprehensive examination

- Letters of Recommendation: at least two from previous employers
master of arts or master of education: curriculum/program development

admission requirements

- General requirements for admission to degree program in the School of Education
- Bachelor’s degree conferred by an accredited institution
- Evidence of two successful years of teaching experience or equivalent successful professional experience (required for state certification)
- Evidence of adequate background for the program

degree requirements

- Courses: minimum of 12 (48 quarter hours)
  - eight courses (32 quarter hours)
    - 400 Education Research Design and Statistics
    - 401 Advanced Developmental Psychology or 402 Psychology of Learning
    - 408 Contemporary Issues in Education
    - 431 Observation and Analysis of Teaching
    - 485 Curriculum/Program Evaluation
    - 491 The Administration of Curriculum/Program Planning
    - 497 Principles of Curriculum/Program Development
    - 582 Practicum in Curriculum Program Development
  - three courses (12 quarter hours). The courses need the written approval of the student’s advisor:
    - one course (4 quarter hours) from
      - Master of Arts: CDG 589 Thesis Research in Curriculum/Program Development
      - Master of Education: CDG 580 Research Seminar in Curriculum/Program Development
  - Thesis/Paper
    - Master of Arts: CDG 589 Thesis Research in Curriculum/Program Development. The master’s thesis is written to fulfill the requirements of this course.
    - Master of Education: CDG 580 Research Seminar in Curriculum/Program Development. The master’s paper is written to fulfill the requirements of this course.

- Examination
  - Master of Arts: oral examination on thesis
  - Master of Education: written comprehensive examination

- Letters of Recommendation, at least two from previous employers
Courses

Foundations of Education (CUG)

400 Educational Research Design and Statistics. (Prerequisite: Graduate Standing) Content of the course includes principles of research design, bibliographical skills and statistical procedures for the interpretation of educational data.

401 Advanced Developmental Psychology. (Prerequisite: 209 or 337) Current research and theories in child development relating to the elementary school child and secondarily to motivation, personality, learning and socialization. Case studies and an analysis of various developmental problems.

402 Psychology of Learning. Study of the learning-teaching process with specific emphasis on the person as a learner, human capacity and potential, learning theories and materials, motivation, concept formation and behavior.

404 Child Rearing Across Cultures. Study of child rearing practices, the effects of culture on cognitive development and the implications for teaching strategies for the bilingual child.

405 History and Philosophy of Bilingual Education.

407 Non-Discriminatory Tests - SOMPA System. Administration and interpretation of diagnostic test using a pluralistic model to make testing procedures more responsive to cultural pluralism. (Case Study Approach)

408 Contemporary Issues in Education. An analysis of selected issues and controversies in American education in their political, social, economic, religious and cultural dimensions and the dynamics inherent in the changing concepts of the educational enterprise.

409 Seminar: Understanding the Urban Child: Discipline and Learning. An interdisciplinary seminar which studies the anthropological, philosophical, social, medical and practical aspects of children's needs with specific emphasis on discipline and learning problems. Strategies and materials that meet and facilitate learning in both home and classroom are examined and discussed. (Offered during summer sessions only.)

419 Field Experience: British Infant Schools. An intensive experience in England. Students will visit schools, attend workshops and seminars conducted by British education specialists. (Offered during summer sessions only.) (Cross listed with Geo. 395.)

450 Dynamics of African-American Culture. This course is intended for those interested in cultural and human relations in order that they may examine the contributions of the black man to American culture, gain a functional understanding of the social economic and political development of the black man on America itself. (Cross listed with Soc. 490.)
451 Use of Tests in Appraisal and Development. Detailed analysis of intelligence, aptitude, personality, and achievement tests used with groups and individuals. The course is intended to familiarize students with various appraisal procedures and their utilization. Attention is given to the development of the institutional testing program.

509 Advanced Educational Statistics.
510 Advanced Educational Measurement.
511 Advanced Educational Design.
527 Comparative Education. Studies of school systems outside the United States, their methods, curriculum and achievements. (Offered during summer sessions only.)

administration supervision (A&S)

465 Administrative Planning. This course concerns program budgeting and systems analysis. Students will be introduced to operations analysis, PERT, input-output analysis and cost-effectiveness.

469 Educational Finance. This course examines the bases for collecting and distributing local, state, and federal funds for education. Problems and issues in financial support of education. Special emphasis: assessment and evaluation techniques for the review of individually budgeted programs and familiarization with current worksheets and formulas for computing state aid.

479 Supervision and Administration in Religious Education.

491 Administrative Theory and Behavior. This course concerns theoretical concepts and empirical research relating to administrator behavior in organizations with special reference to educational organizations. Concepts are examined within the typical decisional framework of supervisors, chief school business officers, principals, and superintendents, and similar positions in the helping professions. Assignments are individualized.

492 The Principalship. (Prerequisite: 491 or permission of advisor) An intensive study of factors involved in the administration and supervision of a school. Topics considered include the administration and supervision of student personnel, faculty, the instructional program, financial and physical resources, community relations and other basic needs in administering and supervising schools.

494 School Finance. (Prerequisites: 491, 492 or permission of advisor) Major consideration will be given to problems relating to the preparing of a school budget, procuring revenue, financial accounting, capital outlays, insurance on property, and taking of inventory.

495 School Law. Authority, powers, and liability of school personnel; status of students; character of districts and school board control of curriculum, school property, finances. Special emphasis on recent state and federal court decisions as they affect Illinois and neighboring states.
Community Relations. Importance of designing programs around the needs and problems of the organization and its special publics. Students will review findings from research and ideas of practitioners in the field as sources for the enrichment and development of sound and defensible programs.

Principles and Practices of Supervision. Supervision viewed from a human resources perspective, dealing with motivation, responsibility, and success at work as means to intrinsic satisfaction. The supervisor's role studied as a linking pin for the organizational, educational, and instructional subsystems of the institution.

Clinical Supervision. Develop competencies in a system of person-to-person supervision that will give supervisors reasonable hope of accomplishing significant improvements in the personnel performance.


Finance Seminar.

Organizational Development. A development approach used in combining theory, research, and applications for improving interpersonal effectiveness in organizations. The course is about people in organizations and the achievement of individual and organizational goals.

Research Seminar in Educational Leadership. (Prerequisite: 400) Master of Education students complete a bibliographical research study of issues and problems in administration and supervision.

Practicum in Educational Leadership. (Prerequisites: Advanced students in administration or supervision and permission of department chairman) The practicum provides opportunities for advanced students in administration and supervision to participate in and complete a research project in selected systems on a full-time or part-time basis. The experiences are intended to provide, under professional direction and supervision for (1) study of major factions policies, and problems of administration and supervision and (2) intensive study of certain critical administrative and supervisory practices.

Internship in Educational Leadership. (Prerequisites: Advanced students in administration and supervision and permission of department chairman) The internship provides supervised experiences in selected organizations on a full-time or part-time basis. The student intern is cooperatively assigned to an organization under the immediate supervision of organization personnel. The experiences provided are designed to enrich the student's theoretical background with practical opportunities of participating in (1) overall contact with personnel and with the major functions and problems of certain critical administrative and/or supervisory activities, and (2) a detailed study and analysis of a particular administrative and/or supervisory function or activity. (4-8 quarter hours)
595 **Workshop in Administration and Supervision.** (Prerequisite: Consent of instructor) Topics of particular interest and concern to administrators and supervisors will be presented in a high involvement seminar format. Primary reliance will be on written materials, however, audiovisual and role-playing mechanisms may also be used. Participation in workshops is limited to advanced students of administration and supervision. (4-8 quarter hours.)

596 **Personnel Administration.** Theory, practice and relevant research in modern personnel administration. Recruitment, staff development, interviewing, collective bargaining, conflict resolution and employee evaluation are emphasized.

597 **Politics of Education.** Policy development in education as a political process, community power, state and national politics in educational decision making and role of leadership and pressure groups in the shaping of educational policy at local, state, and national levels.

598 **Independent Study in Educational Leadership.** (Prerequisite: Consent of instructor) (4-8 quarter hours)

599 **Thesis Seminar in Educational Leadership.** (Prerequisites: 400 and thesis topic and outline approved) A student writing a thesis registers for this course for four quarter hours of credit. Where the thesis research and the writing of the thesis itself are prolonged beyond the usual time, the program advisor may require the student to register for additional credit.

640 **Legal Aspects of Special Education for Classroom Teachers.**

645 **The Administration and Operation of Special Education.** Recent state and federal legislation have changed the nature of Special Education services in selected states. This legislation has both modified Special Education services and increased the involvement of general education in the instruction of handicapped students. Both practicing public school administrators who now find themselves active participants in the education of exceptional children, and Special Education staff members who wish to obtain an increased understanding of the intent of the legislative innovations have been affected by this legislation.

683 **Management of the Instructional Process.**

**Curriculum Development (CDG)**

414 **Exploring the Use of Mathematics Manipulatives.** Focus on the knowledge and understanding, skills, attitudes, objectives and activities which will help teachers make more effective use of mathematic manipulatives in their classroom.

417 **Economic Concepts for Use in Existing School Curriculums.** A basic survey aimed at teachers of social studies, history and consumer education who have not had college level economics or whose exposure to economics was too far in the past to have dealt with current economic theories and policies. Teachers attending the course will become familiar with curriculum material available for teaching economic concepts at almost any grade level and within any subject content. (Cross listed with Econ. 417.)
Career Education: Instructional Modules for Business. Designed to assist business education teachers integrate career education into the curriculum with special emphasis in the following areas: the determining of goals and base for career education, the determining of goals and objectives for career education, and the development of instructional modules for career emphasis in accounting, secretarial, clerical, data processing, sales, and related job clusters.

Instructional Methodology in Allied Health Professions. Curriculum planning, materials development, teaching methodology and evaluation of performance. Emphasis on organizing a course of study for adult learners in allied health professions such as radiation technology, medical technology or nursing.

Educational Evaluation in Allied Health Professions. An introduction to techniques for designing, administering and interpreting tests and other evaluation tools in classroom and clinical settings.

Practicum for Educators in Allied Health Professions. For allied health professionals who are teaching or developing curriculum during the quarter in which the course is offered. Class sessions will concentrate on the methods, materials and problems encountered.

Workshop for Inservice Teachers.

The Teaching of Writing. Focus on important aspects of a writing program from the primary grades to college; the composing process, motivation and writing, the teaching of grammar and syntax, and the relationship of speaking and writing. Also teaching the various types of writing - personal, narrative, expository writing, poetry and correspondence - examined and practiced by the class.

Curriculum in Language Communications. Develop models for a curriculum in communications. To develop these models, the communications activities of speaking, reading and writing will be related to each other and to a central core-language so that communication can be viewed more in a unified related sense and less in a discrete, fragmented sense. Approaches for teaching speaking, reading and writing as integrated phenomena will be examined.

Literature and the Reader. Analysis of the interaction which occurs between the reader and the literary work and an examination of the implications for classroom teaching and curriculum development, kindergarten through college. The emphasis is on the reader in the reading of the work.

Teaching of Economics in U.S. History. Basic economic concepts and the tools of analysis as they appear in American history with emphasis upon topics of contemporary concern. Designed for teachers of American history, social studies and business education on a secondary level. (Cross listed with Econ. 429.)

Teaching Consumer Education. The teaching of installment purchasing, budgeting, comparison of prices, and other topics to comply with the recent legislation requiring such instruction in grades 8 through 12. Meets the certification requirements for teachers of consumer economics in Illinois.
Basic Concepts in Economic Education. Basic economic concepts and
tools of analysis needed by teachers for a clear understanding of the
American economic system, the consumer and contemporary
economic problems. (Cross listed with Econ. 431.)

Manpower Economic Education. Basic economic concepts and tools
of analysis pertinent to understanding the world of work. Stresses the
nature of output, income, money, employment and unemployment,
capital and related topics. (Cross listed with Econ. 432.)

Development of Economics Curriculum in the Schools. Examination of
the concepts and tools of analysis of economics with particular
reference to development of individual lesson plans for particular
grade levels and their introduction into the various levels of curricula.
(Cross listed with Econ. 433.)

Implementation of Economics in the Curriculum. Methods-oriented
course with workshop sessions in curriculum development. Project
development, role playing, games, examination of textual,
audio-visual and other resources for the teaching and integration of
economics in the schools. (Cross listed with Econ. 434.)

Psychology and Instructional Strategies for Individualized Programs.
Examination of the psychological principles and instructional models
of the individualized teacher-learner process. (45 quarter hours.)

First and Second Language Acquisition. Study of language theories
and their applications to first and second language acquisition in
bilingual children.

Current Trends and New Techniques in the Arts. (3 quarter hours.)

Curriculum for Religion Education. Recent developments in the
formation of religious studies curriculum for public and private school
settings, including materials, resources, and criteria.

Connected Images I & II. In-depth study of parameters of each
discipline and how these are interrelated. Explore conceptual ideas
through practical strategies. Second quarter will include synthesis of
these studies into curriculum for elementary and secondary levels.
Students will be involved in direction and planning of strategies and
projects. (4.5 quarter hours each.)

Visual Arts Practicum. Designed to provide basic practical experience
in concept, skill and technique in music. (3 quarter hours.)

Music Practicum. (3 quarter hours.)

Literary Arts Practicum. Designed to provide basic practical
experience in concept, skill, and technique in literary arts. (3 quarter
hours.)

Movement Practicum. Designed to provide basic practical experience
in concept, skill and technique in Movement. (3 quarter hours.)

Teaching Core Curriculum Subjects Through the Arts. A systematic
exploration of how artistic expression can be used as a tool for
understanding academic disciplines.

Human Interaction and Teaming. Student makes a study of group
process. Its theory, procedures, and problems as they relate to
facilitating human growth and development through group
counseling. The class engages in a regular group experience.
Opportunity to observe and participate in group work is provided.
477 Historical Perspectives. A synthesis of the arts in history. Building on the art history backgrounds of the students, the instructor will focus on the force of the arts as expressions of and influences on the various movements and philosophies of each age.

478 Research Paper and Practicum in the Arts. Field experience in which the student will be required to design a program in integrated learning based on his or her own field of specialization and carry out the program in either an elementary or high school or a community organization. The research paper should include the development of the program, its implementation, and its evaluation.

480 Practicum in Material Development. A series of workshop experiences designed to explore the technology of curriculum in social studies, language arts, science and mathematics. (4.5 quarter hours.)

481 Observation and Analysis of Teaching. (Prerequisite: Educ. 497.) Ways in which teaching has been studied and analyzed. Includes discussion of formal schemes of classroom, analysis of data from classroom observation, research on teaching, methodological issues in analyzing teaching, and use of observation and research in improving teaching.

482 Microcomputer Literacy for Classroom Teachers. (2)

484 Multimedia Materials Production. The role of multimedia materials in meeting local instructional needs. Setting objectives, selecting content, filmstrips, slides, transparencies and cassettes to meet educational needs.

485 Curriculum/Program Evaluation. Theories of evaluation. The role of evaluation in curriculum/program development. Materials and methods for curriculum/program evaluation in the schools and organization. (Prerequisite: 497.)

486 Instructional Television and Radio. The use of television and radio for general and specific instructional purposes.

488 Alternatives and Futures in Curriculum/Program Development. (Prerequisite: 497.) Curriculum program in terms of current research and theory.

489 Learning Resources Centers. Goals, learning resource materials, staffing, location, space equipment, functions, services budgeting and human relations as all of these are involved in establishing and operating learning resources centers.

490 Administration of Curriculum/Program Planning. (Prerequisite: 497.) Exploration of the issues and new developments in planning on the state, the district, and the federal level; effective leadership of teachers, students, the public, and parents; the organization and functioning of workshops, laboratories, libraries, and study centers; research and evaluation, financing of planning; and relationships between school administration and curriculum/program planning.

491 Administrative Theory and Behavior. Theoretical concepts and empirical research relating to administrator behavior in organizations with special reference to educational organization. Concepts are examined within the typical decisional framework of supervisors, chief school business officers, principals, and superintendents, and similar positions in the helping professions. Assignments are individualized.
497 Principles of Curriculum/Program Development. Special role of organizing and administering the curriculum. Course treats relationships of the curriculum to the social order, principles of content selection and sequence, patterns of curriculum organization, personnel and organization required for curriculum development and revision.

500 Facilitative Teaching Role. Examination of the teacher’s role as a facilitator of learning in individualized and open programs. (4.5 quarter hours.)

517 Materials and Methods for Introducing Economic Concepts into Existing School Curriculum.

522 Curriculum and Methods in Bilingual Education.

523 Methods of Teaching Spanish Language Arts.

524 Teaching English as a Second Language.

526 Clinical Workshop.

580 Research Seminar in Curriculum Program Development. Students in the Master of Education program in curriculum development complete a bibliographical research study of issues and problems in curriculum development. Students who currently hold positions in curriculum may complete an action research project for this seminar.

582 Practicum in Curriculum Program Development. (Prerequisite: Advisement by program director.) The student is provided directed experiences in decision-making for curriculum, participation and leadership in curriculum committee activities, planning and management of learning resource centers and representative other aspects of administration of curriculum development in schools and school systems.

583 Workshop in Curriculum Program Supervision.

584 Workshop in Computer Usage in Curriculum/Program Development, Research, and Evaluation. In this workshop, students have the option, under direction of the professor, to plan a set of experiences that will add to their competencies and qualify them to perform leadership functions. Areas of study available in the workshop include: introduction to program writing in basic language, analysis of statistical computer programs, use of common parametric and non-parametric intermediate statistics in the analysis of data, teacher-made programs for teaching, and programs designed to facilitate curriculum program evaluations. Opportunity is provided for hands-on experiences with Hewlett-Packard Timesharing equipment and for applications of competencies to school organization activities and data, including participants’ own.

585 Internship in Applied Educational Research, Evaluation and Development. This course offered in the following departments: Educational Leadership, Curriculum Program Development, Human Services and Counseling and Reading and Other Learning Disabilities.

586 Independent Study in Curriculum/Program Development. (Prerequisite: Permission of the program director.) (2-4 quarter hours.)

589 Thesis Research in Curriculum/Program Development. (Prerequisites: Admission to candidacy and thesis topic outline approved.) A student writing a thesis registers for this course for four quarter hours of credit. Where the thesis research and the writing of the thesis itself are prolonged beyond the usual time, the program advisor may require the student to register for additional credit.
Workshop - Alternative Approaches to Early Childhood Education.
(Offered during summer sessions only.)

Interdisciplinary Approach to the Analysis of Issues in Multicultural Education.

Public Policy and Multicultural Education.

Curricular Design and Multicultural Education.

Methods and Materials in Multicultural Education.

Administrative Issues in Multicultural Education.

Schools and Community: Strategies for Cooperation.

Integrated Project for Multicultural Education.

Multicultural Education Today. An inter-disciplinary seminar studying the anthropological, historical and philosophical aspects of ethnicity as multicultural education in America.

Pluralism, Ethnicity and the Schools. An effort to come to terms with the implications for human service professionals of the multiethnic, pluralistic environment of the schools and other public institutions. Ways of studying ethnic diversities and of developing appropriate methodologies for meeting diversity are especially emphasized.

Teaching About the Law: K-12. An examination and demonstration of a wide variety of strategies for teaching young people about the role of law in our democratic society with particular emphasis on student participation and use of the community.


Workshop: Problem Areas in Elementary and Secondary Athletic Programs.

Athletic Training and Coaches Workshop.

Workshop: Theories, Methods, and Content in Science Education in the Elementary School.

Workshop: Theories, Methods, and Content in Mathematics Education in the Elementary School.

Workshop: Piaget and Teaching Elementary Science and Mathematics.

Workshop in Data Processing. The teaching of data processing at the secondary and post-secondary levels.

Metric Education Workshop.

Curriculum Development in Crime Prevention in the School/Community.

Individually Guided Education (IGE) Workshop.


Introduction to Drug Education.

Curriculum Development in Drug Education.

Practicum in Drug Education.

Strategies for Implementing Law-Focused Education in the Elementary and Secondary Schools.

Advanced Seminar in Strategies for Implementing Law-Focused Education Programs.