DEPAUL UNIVERSITY
BULLETIN 1982-1983

college of liberal arts and sciences
graduate programs
DePaul is... Service.

"Nobody will believe in us if we do not show love and compassion."

St. Vincent de Paul
...to the memory of
Rev. William T. Cortelyou, S.T.D.
teacher, administrator, vincentian

DePaul University
(1960-1979)
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# 1982-83 Academic Calendar for Graduate Students

## Autumn Quarter

<table>
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<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2</td>
<td>TH</td>
<td>In-Person Registration for the Autumn Quarter.</td>
</tr>
<tr>
<td>September 6</td>
<td>M</td>
<td>Labor Day.</td>
</tr>
<tr>
<td>September 15</td>
<td>W</td>
<td>Autumn Quarter Begins.</td>
</tr>
<tr>
<td>October 8</td>
<td>F</td>
<td>Last Date to Apply for Pass/Fail or Change to Auditor Status.</td>
</tr>
<tr>
<td>October 11</td>
<td>M</td>
<td>St. Vincent dePaul Day.</td>
</tr>
<tr>
<td>October 18</td>
<td>M</td>
<td>No Classes.</td>
</tr>
<tr>
<td>November 8</td>
<td>M</td>
<td>Final Date for Filing for February Convocation.</td>
</tr>
<tr>
<td>November 24-28</td>
<td>W-Sat</td>
<td>Thanksgiving Holidays.</td>
</tr>
<tr>
<td>Nov. 29-Dec. 4</td>
<td>M-Sat</td>
<td>Final Examinations for the Autumn Quarter.</td>
</tr>
<tr>
<td>December 4</td>
<td>Sat</td>
<td>Autumn Quarter Ends.</td>
</tr>
</tbody>
</table>

## Winter Quarter

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 7</td>
<td>T</td>
<td>In-Person Registration for the Winter Quarter.</td>
</tr>
<tr>
<td>January 4</td>
<td>T</td>
<td>Winter Quarter Begins.</td>
</tr>
<tr>
<td>January 10</td>
<td>M</td>
<td>Late Registration for the Winter Quarter.</td>
</tr>
<tr>
<td>January 24</td>
<td>M</td>
<td>Course Changes.</td>
</tr>
<tr>
<td>February 6</td>
<td>Sun</td>
<td>Final Date for Submitted Grade Changes and Examination Scores to Graduate School for February Convocation</td>
</tr>
<tr>
<td>February 11</td>
<td>F</td>
<td>Convocation.</td>
</tr>
<tr>
<td>February 21</td>
<td>M</td>
<td>Final Date for Filing for June Convocation.</td>
</tr>
<tr>
<td>March 9-15</td>
<td>W-T</td>
<td>Last Date to Withdraw from Class.</td>
</tr>
<tr>
<td>March 15</td>
<td>T</td>
<td>Final Examinations for the Winter Quarter.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Winter Quarter Ends.</td>
</tr>
<tr>
<td>Date</td>
<td>Day</td>
<td>Event</td>
</tr>
<tr>
<td>----------</td>
<td>-----</td>
<td>--------------------------------------------------------------</td>
</tr>
<tr>
<td>March 17</td>
<td>TH</td>
<td>In-Person Registration for the Spring Quarter</td>
</tr>
<tr>
<td>March 28</td>
<td>M</td>
<td>Spring Quarter Begins</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Late Registration for the Spring Quarter,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Course Changes</td>
</tr>
<tr>
<td>April 1-3</td>
<td>F-Sun</td>
<td>Easter Holidays.</td>
</tr>
<tr>
<td>April 18</td>
<td>M</td>
<td>Last Date to Apply for Pass/Fail Option or to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change to Auditor Status.</td>
</tr>
<tr>
<td>May 2</td>
<td>M</td>
<td>Final Date for Submitted Grade Changes and Examination Scores</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to Graduate School for June Convocation.</td>
</tr>
<tr>
<td>May 16</td>
<td>M</td>
<td>Final Date for Submitting Theses and Dissertations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to Graduate School for June Convocation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Last Date to Withdraw from Coloss.</td>
</tr>
<tr>
<td>May 30</td>
<td>M</td>
<td>Memorial Day. No Classes.</td>
</tr>
<tr>
<td>June 6-11</td>
<td>M-Sat</td>
<td>Final Examinations for the Spring Quarter.</td>
</tr>
<tr>
<td>June 11</td>
<td>Sat</td>
<td>Spring Quarter Ends.</td>
</tr>
<tr>
<td>June 12</td>
<td>Sun</td>
<td>Convocation.</td>
</tr>
</tbody>
</table>
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: university and liberal arts and sciences

president's letter

board of trustees

university

liberal arts and sciences
Dear Graduate Student:

A warm welcome to graduate study 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 personism. 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,

John T. Richardson, C.M.
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board of trustees

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Chicago and North Western
Transportation Company

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Marian B. McClory
Civic Leader
R. Raymond Mueller
Chairman and Chief Executive Officer,
Self-Insurers Service, Inc.
J. Patrick Murphy, C.M.
Assistant to the Provincial, Vincentian
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President and Chairman of the Board,  
Statistical Tabulating Corporation  
Provincial, Vincentian Fathers and Brothers of the Midwest Province  
Retired President and Chief Executive Officer, WGN Continental Broadcasting Company  
Executive Vice President, Continental Illinois National Bank and Trust Company of Chicago  
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President, Midland Enterprises, Inc.  
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President, DePaul University  
Edward F. Riley, C.M.  
Administrative Assistant to the President, DePaul University  
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President, The Robbins Insurance Agency, Inc.  
James E. Ryan  
Vice President/Senior Partner, Korn/Ferry International  
John E. Pybolt, C.M.  
President, DeAndries Institute of Theology  
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President, William G. Simpson & Co.  
Rex A. Sinquefield  
Executive Vice President, Dimensional Fund Advisors Inc.  
William B. Snow  
Executive Vice President, CFS Continental Inc.  
Paul C. Wilson  
Managing Partner, Chicago Office, Arthur Andersen & Co.

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Rev. John R. Cortelyou, C.M.  
Very Rev. Comerford J. O'Malley, C.M.  
Ralph H. Beaudoin  
James R. Doyle  
Patricia A. Ewers  
Kenneth A. McHugh  
Herbert E. Newman  
Howard A. Sulkin  
Rev. John T. Richardson, C.M.  
President  
Rev. John R. Cortelyou, C.M.  
Chancellor  
Very Rev. Comerford J. O'Malley, C.M.  
Chancellor Emeritus  
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Treasurer  
Herbert E. Newman  
Vice President for Development and Public Relations  
Howard A. Sulkin  
Vice President for Planning and University Organization
liberal arts and sciences

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Robert E. Brewer, Ph.D.
Therese M. Zimmerman, B.S.
David A. White, Ph.D.
William H. Hunt, B.A.

Dean
Associate Dean
Administrative Assistant/Office Manager
Administrative Assistant
Administrative Assistant

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Therese Baker, Ph.D.
Sr. Mary Jeremy Buckman, R.S.M., Ph.D.
William A. Calzaretta, Ph.D.
Sheldon Cotler, Ph.D.
Zuhair El Saffar, Ph.D.
Heimut Epp, Ph.D.
Albert Erlebacher, Ph.D.
Robert A. Griesbach, Ph.D.
Robert M. Hellier, Ph.D.
Richard J. Houk, Ph.D.
Rodger L. Jones, Ph.D.
Martin G. Kolin, Ph.D.
James S. Molek, Ph.D.
Charles R. Strain, Ph.D.
Rev. F. Bruce Vawter, C.M., S.T.L., S.S.D.
William R. Waters, Ph.D.

Chemistry
Sociology
Nursing
Rehabilitation Services
Psychology
Physics
Computer Science
History
Biological Sciences
Public Services
Interdisciplinary Studies
Mathematical Sciences
Philosophy
English
Liberal Studies
Religious Studies
Economics
DePaul is... Vincentian.

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

St. Vincent de Paul
liberal arts and sciences — general information

philosophy
accreditations
locations
libraries
services
philosophy

Richard J. Melster, Ph.D.
Dean, College of Liberal Arts and Sciences

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 passing on the heritage of St. Vincent de Paul. Individual perfection manifested through purposeful involvement with other persons, communities and institutions.

The College of Liberal Arts and Sciences 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 College 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
locations

DePaul University has two major locations: the Lincoln Park Campus (LPC) and the Loop Campus (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, Race 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 Loop Campus includes the Frank J. Lewis Center, (LC), The Comerford J. O’Malley Place, the Administration Center 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 The College of Liberal Arts and Sciences (LAS) Loop Campus Graduate 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 chapels.
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 420,500 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 data base of OCLC, Inc. and subject computer searches from a number of data bases (Indexing 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

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 1400 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. The 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, 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 321-7965 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 321-7880, 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:

Residence Life 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 uses throughout the academic year. Monthly scheduling may be obtained through the Athletic Department.
DePaul is... Catholic.

"...it is easier to convince first with love and then with reason."

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, 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 Dean, 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 techniques 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 LAS Graduate Office 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 LAS Graduate Office. The date for filing is published in the current Bulletin and the class schedule or may be obtained directly from the LAS Graduate Office. 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.

  The student is to make application for this examination through the LAS Graduate Office no later than October 16 for the February Convocation and February 11 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 Dean, an extension of time with or without additional courses, examinations, or other conditions.
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.

Following are the 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), or Thesis Research (four quarter hours), or for minimum university registration (zero hours credit).
• Language and Allied Requirements
  Each department, with the approval of the Dean, 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
  Two examinations are required 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. 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. 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.

• 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 College of Liberal Arts and Sciences 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 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 LAS Graduate Office.

All doctoral dissertations are to be microfilmed. The doctoral candidate submits to the LAS Graduate Office 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 350-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 conferment 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 College of Liberal Arts and Sciences 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 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 LAS Graduate Office of all required supporting credentials.

Please note these are minimum requirements for full admission. 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 LAS Graduate Office 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, 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 re-classification 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, and
- submission to the LAS Graduate Office 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 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 College of Liberal Arts and Sciences 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 LAS Graduate Office. 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 College of Liberal Arts and Sciences while still completing their undergraduate program.
admission procedures

general procedures

Procedures for admission to the College of Liberal Arts and Sciences involve a completed application form, supporting credentials, admission fee, deadlines, and the Dean's admission letter.

☐ Application Form: You can obtain a graduate application form either by mailing your request to The LAS 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 LAS Graduate Office 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 LAS 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 require additional supporting credentials. Please consult the specific departments 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 LAS Graduate 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 LAS Graduate Office without the fee will be returned unprocessed. The fee is non-refundable.
□ **Deadlines:** The College of Liberal Arts and Sciences has specific dates for submission of the completed application form, all supporting credentials, and fees.

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<thead>
<tr>
<th>Initial enrollment in master's program</th>
<th>Deadline</th>
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<tr>
<td>Autumn Quarter</td>
<td>August 16</td>
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<tr>
<td>Winter Quarter</td>
<td>December 3</td>
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<tr>
<td>Spring Quarter</td>
<td>February 25</td>
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<table>
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<tr>
<th>Initial enrollment in doctoral program</th>
<th>Deadline</th>
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<tbody>
<tr>
<td>Autumn Quarter</td>
<td>July 16</td>
</tr>
<tr>
<td>Winter Quarter</td>
<td>November 1</td>
</tr>
<tr>
<td>Spring Quarter</td>
<td>January 24</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.

□ **Dean's Admission Letter:** The Dean will notify you by letter of your admission status.

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

It is the policy 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 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 LAS Graduate Office, Room 1603, DePaul University, 25 East Jackson Boulevard, 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.

☐ 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 LAS Graduate Office, DePaul University.

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

☐ Admission Fee. For your admission, 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

<table>
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<tr>
<th>Initial Enrollment</th>
<th>Deadline</th>
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<tbody>
<tr>
<td>Autumn Quarter</td>
<td>June 7</td>
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<tr>
<td>Winter Quarter</td>
<td>October 4</td>
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<tr>
<td>Spring Quarter</td>
<td>January 3</td>
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<tr>
<td>Summer Quarter</td>
<td>March 7</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 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 a graduate program in the College of
Liberal Arts and Sciences but have not been in attendance for a period of one
calendar year or longer, you must file a readmission form with the LAS 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 LAS 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 LAS 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 College of Liberal Arts and Sciences.)*

- **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 quarter hours 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 University 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 LAS Graduate 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 courses(s) will be taken. The registration forms, however, must always be returned directly to the LAS Graduate 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 College of Liberal Arts and Sciences 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

Note: A grade of “D” from another college or school of the University is not acceptable for graduate credit in the College of Liberal Arts and Sciences.

administrative 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, 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 above are graduate courses.

Advanced undergraduate courses: students must have a grade of at least "B" 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 involve the graduation application, degree requirements, requirements for graduation with honor, graduation fee, deadlines, 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 LAS 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 College of Liberal Arts and Sciences Bulletin under which admission 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 LAS Graduate Office of the completed graduation application and for completion of degree requirements.
Application for Graduation  Deadline  
February Convocation .......................... October 18
June Convocation .................................. February 11

Completed Grade Changes and  Deadline  
Examination Scores
February Convocation .......................... January 10
June Convocation ................................. May 2

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  Deadline
February Convocation .......................... January 24
June Convocation ................................. May 16

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.

Dean's Letter: The Dean 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 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 1982-83 and are applicable only to graduate students.

graduate student tuition

Tuition for Liberal Arts and Sciences:

Courses in the 100-200 series, per quarter hour ................. $ 94.00 a
Courses in the 300-600 series, per quarter hour ................... $ 115.00

general fees

Fees are not refundable.

Graduate Application Fee (non-refundable) ..................... $ 20.00
Readmission Fee (non-refundable) .............................. $ 5.00
Registration Fee (non-refundable) .............................. $10.00
Late Registration Fee (non-refundable) ......................... $ 25.00 b
Change of Registration Fee (non-refundable) .................. $ 15.00 c
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 Credits Fee .................................. $ 2.00
Deferred Payment Plan Service Fee .............................. $ 20.00
Deferred Payment Delinquency Fee .............................. $ 30.00
Each Returned Check Service Fee ............................... $ 12.00 d

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.

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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 three 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 will pay the appropriate rate for each class.

defered 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 $20.00 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 second week will be assessed the $20.00 Deferred Payment Service Fee.

- 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 LAS Graduate 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 LAS Graduate 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 $4,600 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 $1,800 made by the Howard V. Phalin Foundation for Graduate Study for the support of an exceptionally outstanding graduate student. The University adds to this gift a $2,200 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.

• **Searle 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, and mathematical sciences. Each award, up to a maximum of a $4,000 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 $4,000 stipend and a tuition payment up to $1,000. 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 a graduate scholarship: $5,000 for one student during the 1982-83 academic year. 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 academic unit 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 $3,200 to $3,500, 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 phone at (312) 321-8826/8827.

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, 4% 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 1986, 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; or (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%.
Deferral 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. Deferral 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% a year for the first three years and 20% 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% a year for the first two years and 25% 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 $4.00 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 studies
- liberal studies
- mathematical sciences
- nursing
- philosophy
- physics
- psychology
- public services
- rehabilitation services
- religious studies
- sociology
Biological Sciences (BIO)

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
Daniel Gibbs, Ph.D.
Robert A. Griesbach, Ph.D.
Danute S. Juras, Ph.D.
Dolores J. McWhinnie, Ph.D.
Daniel G. Oldfield, Ph.D.

Stanford University
University of Chicago
Marquette University
Marquette University
University of Chicago

Assistant Professors
Robert A. Andersen, Ph.D.

University of Arkansas

Emeriti
Mary A. Murray, Ph.D.
Joseph E. Sennrad, 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 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 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
• Departmental Seminar: presentation of the M.S. thesis research
• 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 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.


310 Vertebrate Physiology. Organ system physiology of vertebrates. Lecture-Laboratory (4). Laboratory Fee $20.00.

311 Histology. Microscopic study of vertebrate tissues and organs. Lecture-Laboratory (4). Laboratory Fee $20.00.


317 Aquatic Biology. The study of physical, chemical and biological phenomena in fresh water environments. Lecture only (4).

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 (4). Laboratory Fee $20.00.

328 Invertebrate Biology. Comparative biology of non-chordate animals. Lecture-Laboratory (4). Laboratory Fee $20.00.

330 Developmental Biology. Developmental phenomena of animals including gametogenesis, fertilization, cleavage, organogenesis, metamorphosis and regeneration. Lecture-Laboratory (4). 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 (4). Laboratory Fee $20.00.


386 Introduction to Endocrinology. Study of hormonal regulation in animals. Lecture Only (4). Lecture-Laboratory (4). 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).


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


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

61
472 Neurobiology. Additional studies and current problems in neurobiology (4).

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

482 Problems in Immunobiology. Evaluation of the current studies on the regulation of the immune response (4).

Special Course for Graduate Laboratory Teaching Assistants

495 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

496 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.

498 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.

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

599 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.

701 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.

702 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
(CHE)

faculty

professors
Avrom A. Blumberg, Ph.D.
Fred W. Brelbeck, III, Ph.D.
Sanat K. Dhar, Ph.D.
Edwin F. Meyer, Ph.D.
William R. Pasterczyk, Ph.D.
Franklin S. Prout, Ph.D.

associate professors
Jurgis A. Anyssas, Ph.D.
Sara Stock Melford, Ph.D.
Thomas J. Murphy, Ph.D.
Robert L. Novak, Ph.D.

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

- 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 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 216) Offered: Winter.
265 Air Chemistry. (Prerequisite: CHE 127 or 147) Offered: Spring of even-numbered years.
267 Aqueous Chemistry. (Prerequisite: CHE 127 or 147) Offered: Autumn quarter 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:

312 Quantum Chemistry. (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 Spring 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. (Prerequisites: Permission of instructor. Offered by arrangement. This course may be repeated for credit if topic is different) Offered: Spring.
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.
399 Independent Study.
graduate courses

422 Advanced Inorganic Chemistry I. (Prerequisites: CHE 312 and 321 or consent of instructor) Offered: Winter of even-numbered years.

424 Advanced Inorganic Chemistry II. (Prerequisite: CHE 422) Offered: Spring of even-numbered years.

426 Bioinorganic Chemistry. (Prerequisite: CHE 422) Offered: Spring of even-numbered years.

430 Polymer Synthesis. (Prerequisite: CHE 125 or 175) Offered: Spring of odd-numbered years.

440 Biochemistry III. (Prerequisite: CHE 342) Offered: Spring.

450 Advanced Organic Chemistry I. (Prerequisites: CHE 175 and 210) Offered Autumn.

452 Advanced Organic Chemistry II. (Prerequisite: CHE 450) Offered Winter.

470 Advanced Physical Chemistry I. (Prerequisite: CHE 215. Offered: Autumn of even-numbered years.

472 Advanced Physical Chemistry II. (Prerequisite: CHE 215. Offered: Winter of odd-numbered years.

476 Polymer Science. (Prerequisite: CHE 215 or consent of instructor) Offered: Spring of even-numbered years.

478 Advanced Topic in Physical Chemistry. (Prerequisite: Permission of chairman) By arrangement. This course may be repeated for credit if topic is different.

480 Special Topic in Analytical Chemistry. (Prerequisite: CHE 261) 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.

490 Statistical Analysis of Data. (Prerequisite: CHE 147) Offered: Spring of odd-numbered years.

497 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).

500 Independent Study. Variable credit. (Prerequisite: Permission of chairman) (This course may be repeated for credit.) Offered by arrangement.
director of graduate studies
George J. Knafl, Ph.D.

faculty

professor
Richard J. Jonsonbaugh, Ph.D. University of Oregon

associate professors
Gary F. Andrus, Ph.D. Wayne State University
Helmut Epp, Ph.D. Northwestern University
Robert Fisher, Ph.D. Harvard University
Gerald Gordon, Ph.D. University of California, Berkeley
George J. Knafl, Ph.D. Northwestern University
Glenn Lancaster, Ph.D. University of California, Irvine

assistant professors
Kam-Chan Lo, Ph.D. University of Nice
David Miller, Ph.D. University of Chicago

adjunct professor
Ronald Benjamin, M.S. DePaul University

instructors
Henry Harr, M.S. DePaul University
Thomas Sheridan, M.S. DePaul University

lecturers
Robert Binder, M.B.A. University of Chicago
Richard Courtheoux, M.S. Weizmann Institute
Bertha Mount, Ph.D. Northwestern University
Girish Parikh, B.E. Gujarat University
Edward Wegryn, J.D. Loyola University
The programs of the Department of Computer Science provide the students with the professional training required of highly competent and broadly skilled practitioners in the areas of computer science, data communications, information systems and statistical computing. These programs also provide the basis of further academic study.

**Master of Science: Computer Science**

**Admission Requirements**

For full admission, students must have the following:

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

Students with Phase I prerequisites can only receive conditional admittance to the graduate program. Students must petition the Dean for re-classification to degree-seeking full status when they complete their Phase I courses.

Phase I courses provide the students with a uniform background in computer science, as well as in fields supporting the various concentrations. 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 Director of Graduate Studies.

Students generally complete their required Computer Science Phase I courses before enrolling in degree-program courses. Exceptions must be approved in writing by the Director of Graduate Studies. Students are encouraged to take their other Phase I courses as early as possible and must complete them prior to enrolling in any courses for which they are required.

Students must earn grades of "B" or better in the Computer Science Phase I courses and also have an overall Phase I course average of "B" or better. Students who do not meet these grade requirements will be subject to academic dismissal.

The following Phase I courses are required for all degree concentrations:

**Computer Science**

CSC 210 Programming with PL/1
CSC 310, 311 Principles of Computer Science I, II
CSC 312 Assembly Language and Computer Organization

One of the following:
CSC 204 Advanced Topics in COBOL
CSC 342 Data Structures and File Processing

**Mathematics**

MAT 150, 151 Calculus I, II
Statistics

One of the following:

CSC 323 Data Analysis and Statistical Software I
MAT 348 Applied Statistical Methods and Theory I

Additional Phase I courses are required for concentrations in information systems and statistical computing.

Information systems concentration:

CSC 203 COBOL Programming
CSC 204 Advanced Topics in COBOL
CSC 373 Computer Information Systems
ACC 101 Principles of Accounting I
ACC 103 Principles of Accounting II
PSY 380 Industrial and Organizational Psychology

Statistical computing concentration:

CSC 323 Data Analysis and Statistical Software I
MAT 220 Linear Algebra with Applications 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. CSC 698, Research for Master's Thesis, may be included in the required 48 quarter hours of credit. A minimum of 40 of the 48 hours is to be chosen from computer science courses.

If a student's cumulative average falls below 2.5 average, that student must raise his or her average to at least a 2.5 after completing two further courses to continue in the program. If not, the department can recommend to the Dean that the student be dismissed from the degree program.

The Director of Graduate Studies may waive, in writing, certain courses required for a student's concentration depending on his or her experience or previous course work. However, this waiver of a course requirement does not negate the student's responsibility for the course material in his or her comprehensive written examination.

concentration courses (32 to 44 quarter hours)

Students must fulfill the requirements of a concentration. The department offers concentrations in computer science, data communications, information systems, and statistical computing. Personalized concentrations are also possible but require the written permission of the Director of Graduate Studies. Students must obtain permission prior to completion of most of the courses in their proposed personalized concentration.
Computer Science (32 quarter hours)

CSC 420 Discrete Structures
CSC 442 Data Structures
CSC 445 Computer Architecture
CSC 446 Computer Operating Systems
CSC 447 Concepts of Programming Languages
CSC 491 Design and Analysis of Algorithms

Two of the following:
CSC 452 Computer and Information Systems Modeling
CSC 448 Compiler Design
CSC 480 Artificial Intelligence
CSC 490 Theory of Computation
CSC 492 Advanced Topics in Algorithms
CSC 493 Automata Theory and Formal Grammars
CSC 545 Advanced Computer Organization
CSC 546 Operating Systems Design
CSC 548 Advanced Compiler Design
CSC 599 Topics in Computer Science

The comprehensive examination covers the six required courses and one of the remaining two concentration courses.

Data Communications (32 quarter hours)

CSC 432 Computer and Information Systems Modeling
CSC 442 Data Structures
CSC 445 Computer Architecture
CSC 446 Computer Operating Systems
CSC 462 Data Communications
CSC 463 Computer Networks
CSC 491 Design and Analysis of Algorithms

One of the following:
CSC 489 Queueing Theory with Computer Applications
CSC 498 Digital Signal Processing
CSC 562 Communication-Computer Network Design and Analysis
CSC 563 Protocols and Techniques for Data Networks
CSC 597 Topics in Data Communications

The comprehensive examination covers the seven required courses.

Information Systems (44 quarter hours)

CSC 432 Computer and Information Systems Modeling
CSC 442 Data Structures
CSC 445 Computer Architecture
CSC 446 Computer Operating Systems
CSC 459 File Management and Organization
CSC 475 Information Systems Design and Analysis
CSC 494 Software Methodologies
CSC 573 Data Bases and Data Management
SOC 415 Information Systems and Society
Two of the following:
CSC 462 Data Communications
CSC 480 Artificial Intelligence
CSC 481 Pattern Recognition and Machine Perception
CSC 491 Design and Analysis of Algorithms
CSC 560 On-line Systems and Telecommunications
CSC 571 Software Maintenance
CSC 572 Computer Security
CSC 574 Advanced Topics in Data Base
CSC 575 Computer Information Systems
CSC 596 Topics in Information Systems
SOC 467 Organizations

The comprehensive examination covers seven of the required courses including CSC 442, CSC 445, and CSC 446.

**Statistical Computing** (32 quarter hours)

CSC 423 Data Analysis and Regression
CSC 432 Computer and Information Systems Modeling
CSC 442 Data Structures
CSC 445 Computer Architecture
CSC 446 Computer Operating Systems
CSC 491 Design and Analysis of Algorithms
CSC 586 Computational Methods for Data Analysis

One of the following:

CSC 424 Advanced Data Analysis
CSC 469 Computer Graphics
CSC 481 Pattern Recognition and Machine Perception
CSC 489 Queueing Theory with Computer Applications
CSC 498 Digital Signal Processing
CSC 573 Data Bases and Data Management
CSC 598 Topics in Statistical Computing
ECO 512 Applied Time Series and Forecasting
MAT 454 Multivariate Statistics
MAT 457 Nonparametric Statistics

The comprehensive examination covers the seven required courses.

**Elective courses** (4 to 16 quarter hours)

Depending upon the number of courses taken in the student's area of concentration, he or she must complete either one or four additional computer science courses in the 400-599 range. An exception is that CSC 698 Research for Master's Thesis counts for students who qualify for the thesis option.

**Note:** At most two courses (eight hours) may be taken outside the department in DePaul's College of Liberal Arts and Sciences or the College of Commerce. Students must justify the inclusion of these courses in their graduate program and must obtain the written permission of the Director of Graduate Studies before enrolling in them. Students do not need permission to apply the following courses toward their degree requirements:

SOC 415 Information Systems and Society
SOC 467 Organization
- Professional Competency Requirements: Students must satisfy the requirements of either the comprehensive written examination option or the thesis option.

**comprehensive written examination**

All students, except those who fulfill the requirements of the thesis option, must pass a comprehensive examination. The comprehensive examination consists of seven individual course examinations. The courses covered are subject to the approval of the Director of Graduate Studies.

**Deadline:** The candidate must submit a written comprehensive examination application to the Director of Graduate Studies the quarter before the examination is to be taken.

**thesis option**

The thesis option is available to students with proven academic ability. A student must first select a faculty advisor, write a proposal for the thesis, and submit that proposal with the advisor's signature to the Graduate Committee. If the Committee approves the proposal, the student may enroll in CSC 698 Research for Master's Thesis for four or eight credit hours and apply these hours for credit toward his or her elective course requirements. The thesis is only complete when it receives the approval of the graduate committee. The committee may revoke its permission for the thesis option if it feels the student has not progressed at an acceptable pace.

Students who switch voluntarily or involuntarily to the comprehensive written examination option, may not apply any earned CSC 698 credit toward their elective course requirements.

**Note:** Students should consult the departmental graduate brochure, available upon request from the department, to obtain further details on the policies, programs, and courses of the Department of Computer Science.

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**Courses**

**Undergraduate Courses - Phase I**

These courses only count for Phase I conditions.

**ACC 101 Principles of Accounting I.** An introduction to accounting as the means of recording, storing, and summarizing economic events of the business enterprise. Emphasis is placed on financial statements and other financial reports to management and the public based on the accounting equation, accrual accounting concepts, and data gathering techniques.

**ACC 103 Principles of Accounting II.** A companion and sequel course to Accounting 101. This course continues exploring basic accounting fundamentals and concepts as well as financial statements and their use in the business world. An overview of management accounting concepts is also provided. (Prerequisite: ACC 101.)
CSC 203 COBOL Programming. An introduction to programming in the business-oriented language COBOL. The emphasis will be on business problems involving the processing of large quantities of data.

CSC 204 Advance Topics in COBOL. File management, tape and direct access devices, indexed sequential, relative, and direct files. Access methods. Subprograms, soft/merge feature. Database applications. (Prerequisite: CSC 203.)

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

CSC 311 Principles of Computer Science II. Basic data structures, stacks, queues, linked lists, trees, tree searches and string processing. (Prerequisite: CSC 310.)

CSC 312 Assembly Language and Computer Organization. Data representation, addressing schemes, and instruction charts for the VAX/MACRO assembly language. A comparative study of past and present computers. Introduction to computer organization. (Prerequisite: CSC 311 or consent of counselor.)

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 SPSSHP. The emphasis will be on actual experience with both on-line and batch processing packages.

CSC 342 Data Structures and File Processing. File processing environment and file manipulation techniques. Algorithms for manipulating and techniques for implementing inverted lists, multi-lists, indexed sequential, and hierarchical structures. ISAM and VSAM will be discussed. Programming projects in PL/1 will be assigned. (Prerequisite: CSC 311, or concurrent registration in CSC 311 and approval of a counselor.)

CSC 373 Computer Information Systems. An overview of computer-based information systems. Database design and data management concepts. Teleprocessing and distributed systems. Introduction to design and analysis of information systems with particular emphasis on business information needs. (Prerequisites: CSC 204, ACC 103 or equivalent.)

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

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

MAT 220 Linear Algebra with Applications I. Vectors; equations of lines and planes; matrices; linear independence, linear transformations; determinants. (Prerequisite: MAT 151)
MAT 348 Applied Statistical Theory and Methods I. 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. (Prerequisite: Elementary Calculus.)

PSY 380 Industrial and Organizational Psychology. Application of theories and methods of psychology to the study of human behavior in business, industrial, and other organizations. Analysis of organizations from a systems perspective. Students will learn and be able to use the concepts and terminology of Industrial/Organizational Psychology, will apply these concepts to their personal experiences with organizations, and will learn the techniques of studying organizations from a psychological perspective. (Prerequisite: an introductory statistics course.)

graduate courses

CSC 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. (Prerequisite: Completion of Phase I mathematics courses.)

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

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

CSC 432 Computer and Information Systems Modeling. Discrete event simulation. Simulation languages (e.g., SIMSCRIPT and GPSS). Output data analysis. Variance reduction techniques. Applications like simulation of queueing systems, simulation of an inventory system, modeling of timesharing systems, modeling of multiteller bank. (Prerequisites: Completion of the Phase I Calculus and Statistics requirement.)

CSC 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. (Prerequisite: CSC 311 or equivalent.)

CSC 445 Computer Architecture. A structured comparative study of computer organizations and design strategies. Memory organization, general register processors, stack processors, register transfer level, microprogramming and emulation. (Prerequisite: CSC 442.)

CSC 446 Computer Operating Systems. A conceptual introduction to operating systems. Multiprogramming, timesharing, concurrent and cooperating processes, scheduling policies, storage management and file management. (Prerequisite: CSC 312.)
CSC 447 Concepts of Programming Languages. A comparative study of computer languages such as ALGOL, PL/I, FORTRAN, APL, COBOL, LISP, and SNOBOL. Information binding, semantics, context free grammars. (Prerequisite: CSC 442.)

CSC 448 Compiler Design. Design and structure of high level languages. Lexical Scan, top down and bottom up syntactic analysis. Syntax directed translation and LR(1) grammars. (Prerequisite: CSC 442.)

CSC 459 File Management and Organization. Hardware and its parameters. File system organization including indexed and tree structured files. File system evaluation, Data base implementation. (Prerequisite: CSC 442.)

CSC 460 Topics in Operating Systems. A survey of topics of current interest. (Prerequisite: CSC 446.)

CSC 462 Data Communications. Theory and components of data communication systems, modes, codes, and error detection techniques. Data transmission, network protocols and line control procedures, communication carrier facilities and system planning. (Prerequisite: CSC 446.)

CSC 463 Computer Networks. A detailed discussion of the seven layers of the ISO reference model. Network topology, introduction to ARPANET, SNA, DECNET and public networks. (Prerequisite: CSC 462 or consent.)

CSC 469 Computer Graphics. A survey of hardware used for computer graphic displays. Mathematical software including projections and other transformations. Display file and data structure, hidden-line and surface algorithms. Real-time displays. (Prerequisite: Completion of CSC Phase I courses or consent.)

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

CSC 475 Information Systems Design and Analysis. Performance evaluations of large and small scale computer systems. User need analysis and determination of performance specifications. (Prerequisite: CSC 573 or consent.)

CSC 480 Artificial Intelligence. Introduction to machine simulation of human intelligence. Topics covered include problem solving, game playing, learning. The LISP programming language will be used. (Prerequisite: Completion of CSC Phase I courses.)

CSC 481 Pattern Recognition and Machine Perception. Computerized image analysis, scene description. Mathematical methods of pattern recognition and scene reconstruction. Applications to robotics, biomedicine and other areas. (Prerequisites: CSC 442.)

CSC 482 Legal Aspects of Data Processing. Practical legal considerations arising in a data processing environment are discussed. Areas include legislation, contracts, copyrights, patents and fraud.

CSC 485 Numerical Analysis. Use of a digital computer for numerical computation. Error analysis, Gaussian elimination and Gauss-Seidel method, solution of non-linear equations, function evaluation, approximation of integrals and derivatives, Monte Carlo methods. (Prerequisites: MAT 220 and a programming course.)
CSC 486 Advanced Numerical Analysis. Theory and algorithms for efficient computation, including the Fast Fourier Transform, Numerical solution of nonlinear systems of equations, Minimization of functions of several variables, Sparse systems of equations and corresponding eigenvalue problems. (Prerequisite: CSC 485.)

CSC 487 Operations Research I: Linear Programming. The Linear Programming problem and its dual, the simplex method, transportation and warehouse problems, computer algorithms and applications to various fields. (Prerequisites: MAT 220 and any introductory programming course)

CSC 488 Operations Research II: Optimization Theory. Integer programming, non-linear programming, dynamic programming, game theory. (Prerequisite CSC 487)

CSC 489 Queueing Theory with Computer Applications. An overview of queueing theory. Queueing systems, related random processes, classification of queues, Priority queueing, Computer time sharing and multi-access systems. (Prerequisite: CSC 432 or consent.)

CSC 490 Theory of Computation. An introduction to the mathematical foundations of computation. Random access and Turing machines, recursive functions, algorithms, computability and computational complexity. (Prerequisite: CSC 491 or consent.)

CSC 491 Design and Analysis of Algorithms. 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. (Prerequisite: CSC 442)

CSC 492 Advanced Topics in Algorithms. 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. (Prerequisite: CSC 491)

CSC 493 Automata Theory and Formal Grammars. 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: CSC 420 and Formal Grammars.)

CSC 494 Software Methodologies. 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. (Prerequisite: Completion of CSC Phase I courses or consent.)

CSC 496 Microprocessors. 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. (Prerequisite: Completion of CSC Phase I courses.)

CSC 497 Information Theory. An introduction to the basic concepts of information theory and coding theory. Measure of information, the fundamental theorem, Hamming, BCH, and other cyclic codes. (Prerequisite: CSC 420 and MAT 348 or consent.)
CSC 498 \textit{Digital Signal Processing}. 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. (Prerequisite: Graduate standing in mathematics, physics or computer science.)

CSC 510 \textit{Introduction to Systems Programming}. Introduction to macro assembly systems and general macro processors. Input and output control systems. Debugging tools. (Prerequisites: CSC 445, CSC 446 or consent.)


CSC 545 \textit{Advanced Computer Organization}. This course, a continuation of CSC 445, 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.)

CSC 546 \textit{Operating Systems Design}. 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. (Prerequisite: CSC 446.)

CSC 548 \textit{Advanced Compiler Design}. 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. (Prerequisite: 448.)

CSC 550 \textit{On-Line Systems and Telecommunications}. Topics in on-line file systems. Distributed processing. Study of large scale on-line systems. (Prerequisites: Completion of CSC Phase I courses and CSC 446.)

CSC 552 \textit{Computer-Communication Network Design and Analysis}. Quantitative approaches to the design of data communications networks. Practical examples of networks. Statistical multiplexing and buffering at communication concentrators. Topics in overall network design. (Prerequisites: CSC 432, CSC 462, or consent.)

CSC 563 \textit{Protocols and Techniques for Data Networks}. Packet communications, transport protocols, terminal, file transfer, and remote job protocols, packet broadcast protocols, coding theory, synchronization, security, data base management in distributed networks. (Prerequisites: CSC 463 or consent.)

CSC 571 \textit{Software Maintenance}. Maintenance characteristics, tasks, side effects, issues and techniques. Management considerations. Productivity in the maintenance environment. Structured technologies and maintenance. (Prerequisite: Completion of the CSC Phase I courses or consent.)

CSC 572 \textit{Computer Security}. 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. (Prerequisite: CSC 446 and consent.)
CSC 573 Data Bases and Data Management. Integrated data bases, architecter of data base systems, storage structures, integrated management systems, on-line file organization. (Prerequisite: CSC 204 or CSC 342.)

CSC 574 Advanced Topics in Data Base. 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. (Prerequisite: CSC 573.)

CSC 575 Computer Information Systems. 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. (Prerequisite: CSC 459 or consent.)

CSC 586 Computational Methods for Data Analysis. Data management and manipulations, simulation of random processes, computational graphics, numerical computations, linear and non-linear models. (Prerequisites: MAT 220, CSC 323 or equivalent.)

CSC 595 Computer Logic Design. Combinational logic design. Sequential logic design. Fault detection and fault tolerant design. Multi-valued logic. (Prerequisite: CSC 445.)

CSC 596 Topics in Information Systems. (Prerequisite: Consent of instructor.)

CSC 597 Topics in Data Communications. (Prerequisite: Consent of instructor.)

CSC 598 Topics in Statistical Computing. (Prerequisite: Consent of instructor.)

CSC 599 Topics in Computer Science. (Prerequisite: Consent of instructor.)

CSC 603 COBOL Programming. An introduction to programming in the business oriented language COBOL. The emphasis will be on business problems involving processing large amounts of data. (Prerequisites: three years high school math, MAT 101, or equivalent.)

CSC 604 Advanced Topics in COBOL. Tape and direct access programming. Job Control Language, utilities and file management.

CSC 630 Microcomputers in the Classroom. Introduction to microcomputer based instructor systems. Restricted to educators.

CSC 698 Research for Master's Thesis. Variable credit, 4-8 quarter hours.
economics
(ECO)

faculty

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

Purdue University
Northwestern University
Université de Paris
Catholic University of America
Georgetown University

associate professors
Bala Batavia, Ph.D.
William M. Dugger, Ph.D.
Animesh Ghoshal, Ph.D.
Adolph E. Mark, Ph.D.
Margaret E. Oppenheimer, Ph.D.
William H. Sander III, Ph.D.
Richard M. Thornton, Ph.D.
Richard J. Wittgen, Ph.D.

North Carolina State University
University of Texas
University of Michigan
University of Illinois
Northwestern University
Cornell University
Northern Illinois University
University of Illinois

assistant professors
Floyd R. Dill, Ph.D.
Michael L. Klima, Ph.D.
Michael S. Miller, Ph.D.

Cornell University
Washington State University
University of Pittsburgh

emeriti
Frank J. Brown, Ph.D.
Joseph S. Giganti, 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 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 five 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 (8 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 680  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 560  Economics of Underdeveloped Countries
ECO 561  International Trade
ECO 539  Comparative Economic Systems
ECO 557  Topics in Theory of International Trade
ECO 560  Development of American Economy
ECONOMICS OF MONEY AND FINANCE
ECO 557 Topics in Theory of International Trade
FIN 510 Advanced Monetary Theory and Banking
FIN 557 Problems in International Finance
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 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 333 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

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

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. 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 encycyclics. 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.


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.

360 Economics of Underdeveloped Countries. Application of the analytic skills of the economist 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.

361 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 general 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.
432 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.

433 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.

434 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.

499 Independent Study. (See Chairman for details.)

505 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.

506 Advanced Income Theory. (Prerequisite: Graduate Standing) An advanced course in macroeconomic theory that examines the determination of income, employment, and prices, and their interrelations. Covers traditional Keynesian as well as alternative models of output, consumption, investment, money demand, inflation, and unemployment. The dynamic character of income determination is emphasized, along with the effects of government policy, economic institutions, and social goals.

509 Business Conditions Analysis. (Prerequisite: Graduate standing) Examines the economist's measurement, analysis, and forecasts of the economy and relates various macroeconomic topics to the needs of the business sector. Topics include economic methodology and method, national income and product accounts, the simple and advanced models of macroeconomic activity, analysis of consumption, investment, and government spending and finance, business cycles, international economics, macroeconomic problems and policies, and macroeconomic forecasting.

511 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.
512 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.

516 Economics of Taxation. The economic effects of taxation and the objectives of taxation which include the collection of revenue for public sector projects, macro-economic stabilization and growth, and the attainment of social goals. Taxation is viewed as a pervading market distortion with corresponding effect on prices and resource allocation. The course also addresses the issue of the optimal tax system in light of the diverse goals of taxation.

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 of cities, and cost-benefit analysis to social problems of the cities.
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 G.S.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.
english
(ENG)

faculty

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

University of Chicago
Loyola University
University of Oregon
University of Wisconsin
University of Chicago

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

University of Michigan (on leave 1982-83)
University of Chicago
Loyola University
Northwestern University
University of California at Berkeley

assistant professors
William Fahrenbach, Ph.D.
Kristine Garrigan, Ph.D.
Thomas Liszka, Ph.D.
Helen L. Marlborough, Ph.D.

University of Toronto
University of Wisconsin
Northern Illinois University
Brown University

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

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 to 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 3.0, a series of undergraduate courses in English.

degree requirements

traditional concentration

thesis/creative project

- 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)
  - ENG 499: Thesis Research

- Thesis/creative project options:
  - Thesis in English. (Student should enroll in ENG 499 Thesis Research)
  - 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.
ENG
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 student 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, Jonson, 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.
432 Studies in Restoration and Eighteenth Century Drama. Studies in the comedy of manners, sentimental comedy, heroic drama, and bourgeois tragedy.
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.


444 Studies in Victorian Poetry. Major Victorian poets, including Tennyson, Browning, Housman, and Arnold.

445 Studies in Nineteenth Century British Fiction. Alternating emphasis on Austen, Scott, Dickens, Thackeray, the Brontës, Hardy, Eliot, Meredith, and Trollope.

447 Comparative Studies in the Nineteenth Century English, continental, and American thought, especially in literature, including Hegel, Mill, Eliot, Zola, Emerson, and others.

449 Seminar: Nineteenth Century Topics. See schedules for current offerings.

Modern


451 Studies in the Modern British Novel. Alternating areas of emphasis, including Woolf, Joyce, Lawrence, and Huxley.

452 Studies in Modern British Poetry. Alternating areas of emphasis, including Yeats, Auden, Lawrence, Dylan Thomas, and Hopkins.

459 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.


460 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.

461 Studies in American Literature: 1820-1870. Studies in the American renaissance, including Hawthorne and Melville, Irving, Cooper, Poe, the Transcendentalists, Whitman, and Dickinson.
462 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.


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


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

Literary Criticism


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

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

Comparative Literature

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

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

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

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

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

487 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.

489 Seminar: Topics in Comparative Literature. See schedules for current offerings.

Special Studies

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

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

faculty

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

University of Wisconsin-Madison
Northwestern University
Loyola University

associate professors
Donald Abramske, Ph.D.
Robert Garfield, Ph.D.
Sholom Singer, Ph.D.
Cornellus Sippel, Ph.D.
Arthur Thurner, 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.
James P. Krokar, Ph.D.
Sandra F. McGee, Ph.D.
Susan E. Ramirez, Ph.D.

Carnegie-Mellon University
Cornell University
University of Minnesota
Indiana University
University of Florida
University of Wisconsin

lecturers
Lynn Boughton, Ph.D.
Robert Harmon, M.A.

University of Illinois
DePaul University

emertiti
Robert F. Files, Ph.D.
Ralph J. Mairland, 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

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.

- Reading knowledge of one foreign language, preferably French, German or Spanish. The department will accept as evidence of reading knowledge of a foreign language 18 quarter hours (12 semester hours) of college study successfully completed, or four years of high school study. Students who have earned less than 18 quarter hours or the equivalent in the study of a single foreign language must have evidence of reading knowledge by passing an examination set by the department. Examinations are available only in languages taught at the University.
HST

- Thesis

- 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

Nonthesis

- 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 emergence 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 1825.

337 Expansion of Europe II: The Age of Empires. Causes of the establishment of European empires in the 19th and 20th centuries, the 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 Revolutionary China and Modern Japan. 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.

345 Toward Freedom: Afro-American History, 1860 to the Present. Reconstruction and its aftermath, Black self-help organizations, the Black Renaissance, Black participation in the World Wars, the civil rights movements.

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 Kievian 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.
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.

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


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.

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.

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.

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.

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

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

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.

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

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

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.

American Civilization in the Twentieth Century: Ideas and History. Continues course 378.


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

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 MyLai. 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 studies
(ISP)

Richard Houk, Ph.D.
Program Director

divisional coordinators

fine arts, literature and communications
To be appointed
Divisional Head, Fine Arts and Literature

business and commerce
Tom Dolan
Administrative Assistant to the Dean, College of Commerce

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
To be appointed
Associate Dean, School of Music

education
Andrew Kopan, Ph.D.
School of Education
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 Public Services. 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 studies

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

thesis

- Courses: 45 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 Studies Program.

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 Studies 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 Studies Program) and his or her thesis director.
liberal studies
(MLS)

faculty

professors
Avrom A. Blumberg, Ph.D.
Robert W. Faulhaber, Ph.D.

Yale University
Université de Paris

associate professors
John E. Price, Ph.D
Charles R. Strain, Ph.D.
Arthur W. Thurner, Ph.D.

Loyola University
University of Chicago
University of Chicago

assistant professors
Sheila C. Ribordy, Ph.D.
Robert Rotenberg, Ph.D.
J. Harry Wray, Ph.D.
Simone Zurawski, Ph.D.

University of Kansas
University of Massachusetts at Amherst
University of North Carolina at Chapel Hill
Brown University

purpose

The Masters of Arts in Liberal Studies (MALS) program is a multidisciplinary approach to graduate education which emphasizes liberal education rather than the preparation for a specific profession or career. It is particularly designed for mature learners established in a career or profession who wish to enrich their personal lives, to explore areas of knowledge that were bypassed in the earlier rush to prepare for a career and/or to pursue an avocation in a disciplined fashion.

The program is grounded in a set of four, team-designed core courses. These courses establish the aims and themes of the program, orient the student to a multidisciplinary approach to graduate education, and develop in the student advanced learning skills. They are organized around the theme “Sense of Person/Sense of Place.”
The other components of the program are colloquia, electives, and the integrating project. Colloquia are four-week topical studies that employ various approaches to one particular theme. Colloquia use various formats — guest lectures, panels, films, field experiences — to provide an intensive examination of an issue.

Electives are graduate courses chosen from traditional departmental offerings in the College of Liberal Arts and Sciences. Students select these courses with the aid of an advisor to build a program of study tailored to individual goals and interests.

Finally, students complete an integrating project. The integrating project consists of an independent, creative work that refines and pulls together learning experiences and skills developed throughout the student’s course of study in the MALS program. Integrating projects may take the form of a research paper, an original work of prose or poetry, an exhibition or performance, or the like.

master of arts: liberal studies

admissions requirements

For full admission, students must have the following:

- Bachelor’s degree from an accredited institution
- Admission essay. This essay describes why the student is considering the MALS program, how it fits into a process of personal and intellectual development, and what the student hopes to accomplish by enrolling in the program.

degree requirements

- Courses: completion of 48 quarter hours of graduate credit which must include

  Core Courses
  MLS 401    Visions of Self
  MLS 402    Perceptions of Reality
  MLS 403    The American Experience
  MLS 404    The City

  All students will be expected to complete the required core courses with a cumulative average of 2.50. Students who do not achieve a 2.50 average in the core will be warned that they will probably experience serious difficulties in the elective portion of the program. They will be advised to consider withdrawing from the program.

- Colloquia: two courses chosen from the MLS 410-430 series of colloquia.
  Topics vary from year to year. Unless otherwise indicated, all colloquia carry two hours of graduate credit.
• Electives: six courses chosen from existing departmental graduate courses with the aid of the student's advisor. Courses must be selected from at least two different departments in order to preserve the multi-disciplinary character of the program. MLS students may take no more than three 500-level courses as part of their program.

• Integrating Project: a project committee chosen with the aid of the advisor approves the topic of the integrating project. Students preparing their integrating Project should register for MLS 499. Integrating Project: Research and Preparation. When the project is completed, the project committee will conduct an oral review which will emphasize the student's own evaluation of the skills and ideas acquired in this culminating experience.

COURSES

MLS 401 Visions of the Self. A study of the differing visions of the self as presented in significant documents from the history of ideas. Materials selected from classic texts of literature, philosophy, theology, psychology, and social science.

MLS 402 Perceptions of Reality. A survey, beginning with ancient Greece and ending with the modern world, of models of universal order as developed by natural scientists and artists. Team-taught by a scientist and an art historian.

MLS 403 The American Experience. A chronological and thematic study of the location of self within American culture. Readings chosen to reflect both dominant and dissenting ideas at specific points of American history.

MLS 404 The City. A topical examination of the urban experience using the methods and sources of both historians and social scientists. Topics include survey of various images of the city, utopian and dystopian visions, and the uniqueness of the modern city.

MLS 498 Independent Study. Written permission of the student's advisor and the program director is necessary before registration.

MLS 499 Integrating Project: Research and Preparation. Students may register for this course after the integrating project proposal has been approved by the project committee. This course carries four hours of credit.
mathematical sciences
(MAT)

faculty

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

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

associate professors
Susanna Epp, Ph.D. 
Constantine Georgakis, Ph.D. 
Lawrence Gluck, Ph.D. 
Sigrun Goes, Ph.D. 
Steven Homer, Ph.D.

University of Chicago 
Illinois Institute of Technology 
Illinois Institute of Technology 
Northwestern University 
Massachusetts Institute of Technology (on leave 1982-83)

Jeanne LaDuke, Ph.D. 
Efat Mousa-Hamouda, Ph.D. 
Roger Jones, Ph.D. 
Michael Wichman, Ph.D.

University of Oregon 
University of Iowa 
Rutgers University 
Northwestern University

assistant professors
Barbara Cortzen, Ph.D. 
John Duady, Ph.D. 
Carolyn Narasimhan, Ph.D.

University of California at San Diego 
Columbia University 
Northwestern University
MAT 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
- The pure mathematics concentration requires 40 quarter hours of undergraduate mathematics, including:
  - two quarters of linear algebra
  - one quarter of real analysis
  - one quarter of complex analysis
- The applied mathematics concentrations require:
  - four quarters of calculus
  - a course in linear algebra
  - a course in statistics.

(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 543, 549 Applied Statistical Methods and Theory I, II or MAT 452, 453 Probability and Statistics II, III

  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, 548, and 549.

Applied Statistics Concentration

• Courses
  MAT 451, 452, 453 Probability and Statistics I, II, III
  MAT 556 Applied Regression Analysis
  MAT 528 Design and Analysis of Experiments
  MAT 548 Applied Statistical Methods and Theory I

  Six 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, 452, 453, and 458.

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: MAT 1152) Theory and applications of compound interest, annuities, amortization loans, sinking funds, bonds, and consumer loans.
462  Actuarial Science II. (Prerequisite: MAT 461) 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: MAT 462) Multi-life contingencies, multiple decrement mortality tables and pension mathematics.
464  Actuarial Mathematics I. (Prerequisite: MAT 1152) Calculus of finite differences and graduation methods.
465  Actuarial Mathematics II. (Prerequisite: MAT 451 and 464 or consent) Risk theory and mortality table construction methods.
466  Mathematical Demography. (Prerequisite: MAT 451 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: MAT 400) Rings, ideals, fields, quotient and extension fields.
402  Advanced Algebra III. (Prerequisite: consent) Linear Algebra.
504  Topics in Algebra. (Prerequisite: Consent)

Analysis

410  Real Analysis I. (Prerequisite, MAT 335 or its equivalent) Real numbers; continuous functions on metric spaces; convergence of infinite series and differentiation.
411  Real Analysis II. (Prerequisite, MAT 410) Sequences of functions; interchange of limits with differentiation and integration, improper integrals. Functions of several variables.
412  Real Analysis III. (Prerequisite, MAT 411) Lebesgue’s theory of measure and integration; convergence theorems and differentiation; product measure and Fubini’s theorem.
437  Advanced Complex Analysis. (Prerequisite, MAT 411 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, MAT 1437) Topics in complex analysis.
Fourier Analysis and Special Functions I. (Prerequisite: Graduate Standing)

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

Topics in Real Analysis. (Prerequisite: Consent)

Topics in Complex Analysis. (Prerequisite: Consent)

Geometry

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

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

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

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

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, theorema egregium of Gauss-Bonnet-theorem.

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

Quantitative Methods and Operations Research


Advanced Numerical Analysis. (Prerequisite: MAT485) Theory and algorithms for efficient computation, including the Fast Fourier Transform, Numerical solution of nonlinear systems of equations, Minimization of functions of several variables, Sparse systems of equations and eigen value problems.

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.

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

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)


Game Theory. The minimax theorem for two-person zero-sum games. Two person general sum games and non-cooperative person games; Nash equilibrium.

Statistics and Probability


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

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

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.

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

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.

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.

Statistical Quality Control. (Prerequisite: MAT548 or 461) Control charts for means, standard deviations and attributes, acceptance sampling inspection using one and multi-stage sampling methods. Emphasis on industrial quality control problems.

Queueing Theory with Computer Applications. (Prerequisite: MAT548 or consent, cross listed with CSC489) An overview of queueing theory - Queueing systems, related random processes, classification of queues. Priority queuing. Computer time sharing and multi-access systems.

Business and Economic Forecasting. (Cross-listed with Econ. 511) Macroeconomic data, variables, and predictions. Emphasis is on the need for accurate predictions of economic policy and in making intelligent business decisions.

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.

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.

528 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 sampling 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 cycle codes.

Miscellaneous

599 Independent Study.
nursing
(NSG)

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

faculty

associate professors
Sally A. Ballenger, M.S.
Donald A. Bille, Ph.D.
Sister Mary Jeremy Buckman, R.S.M., Ph.D.
Marilyn Kuzel, Ph.D.
Grace G. Peterson, M.N.A.
DePaul University
University of Wisconsin-Madison
St. Louis University
University of Illinois
University of Minnesota

assistant professors
Jeanne Panuncialman, M.S.
DePaul University

assistant adjunct professor
Marcia McCaughey, M.S.
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) begun 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 from a National League for Nursing accredited program with an upper division in 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
degree requirements

- Courses: minimum of 58 quarter hours.
- 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

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>Quarter Hours</th>
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<tbody>
<tr>
<td>Autumn Quarter</td>
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<tr>
<td>Medical-Surgical</td>
<td>400-Theoretical Components of Nursing</td>
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<tr>
<td>Nursing Core</td>
<td>410-Advanced Statistics</td>
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<tr>
<td>Cognate*</td>
<td></td>
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<tr>
<td>Winter Quarter</td>
<td></td>
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<tr>
<td>Medical-Surgical</td>
<td>401-Research in Nursing I</td>
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<tr>
<td>Nursing Core</td>
<td>436-Advanced Clinical Nursing I</td>
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<tr>
<td>Cognate (Nursing)</td>
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<tr>
<td>Spring Quarter</td>
<td></td>
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<tr>
<td>Medical-Surgical</td>
<td>405-Research in Nursing II</td>
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<tr>
<td>Nursing Core</td>
<td>437-Advanced Clinical Nursing II</td>
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<td>438-Perspectives in Nursing</td>
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<tr>
<td>SECOND YEAR</td>
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<td>Autumn Quarter</td>
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<tr>
<td>Nursing Education</td>
<td>455-Dynamics of Curriculum</td>
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<td>458-Dynamics of Teaching</td>
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<td>Nursing Administration</td>
<td>451-Effective Organization and Administration of Nursing Service</td>
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<td>452-Dimensions of Nursing Services</td>
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<td>Neurological Nursing Specialty</td>
<td>460-Sensory-Perception Dysfunction</td>
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<td>462-Nursing Interventions in Neurological Problems</td>
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<td>Winter Quarter</td>
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<tr>
<td>Nursing Education</td>
<td>459-Practicum in Teaching</td>
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<tr>
<td>Cognate</td>
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<tr>
<td>Nursing Administration</td>
<td>457-Practicum in Nursing Services Administration</td>
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<tr>
<td>Cognate</td>
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<tr>
<td>Neurological Nursing Specialty</td>
<td>463-Practicum in Neurological Nursing</td>
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<tr>
<td>Cognate</td>
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<td>Spring Quarter</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 designs 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.
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 in-service 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.)

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.

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 an 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 care 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.)

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.)

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

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.

Effective Organization and Administration of Nursing Services. (Prerequisite: Nursing 437 or consent of the instructor) Theoretical and philosophical concepts fundamental to administration of nursing services are examined. Administrators 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.

455 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.

457 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.)

458 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.

459 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.)

460 Sensory-Perceptual Dysfunction. (Prerequisite: NUR 437 or consent of the instructor) Emphasis on the concepts of neural and chemical regulation and imbalance. Normal physiology of the neuro-endocrine systems will be reviewed prior to the study of the pathophysiology of these systems.

462 Nursing Interventions for Neurological Problems. (Prerequisites: NUR 437, NUR 460 or consent of the instructor) The student is familiarized with therapeutic nursing interventions for patients with neurological dysfunction. The nursing process is the operating framework for discussion, study, and practice. There is a limited clinical component to help the student make relationships between classroom discussion and patient care.

463 Practicum in Neurological Nursing. (Prerequisites: NUR 437, NUR 460; NUR 462 or consent of the instructor) Observation and guided experience in the clinical area to further develop clinical expertise caring for patients with neurological dysfunction. The nursing process continues as the framework for practice. Students will be able to pace their own learning as well as evaluate the degree of achievement of pre-identified goals. The seminar portion of the course identifies the multiple roles of the clinical specialist.

499 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
(PHL)

faculty

professors
L. Edward Allemand, Ph.D.
Bernard J. Boelen, Ph.D.
Parvis Emad, Ph.D.
Manfred S. Frings, Ph.D.
Martin Kalin, Ph.D.
James Keating, Ph.D.
Gerald F. Kreyche, Ph.D.
Robert Lehner, C.Pp.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 Jeane Larrabee, Ph.D.

Duquesne University (on leave 1982-83)
University of Toronto

assistant professor
Robert A. Cooke, Ph.D.

University of Chicago

lecturer
David A. White, Ph.D.

University of Toronto

emeritus
Rev. Bruno Switalski, S.T.D., Ph.D.

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
thesis
- Requires 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 PHL 699 Thesis Research.
- Thesis
- Written Comprehensive Examination: Successful completion of a five-hour examination in the field of philosophy.

non-thesis
- Requires 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 PHL 699 Thesis Research to complete total of required hours in post-baccalaureate work.
Note: Each graduate fellow/assistant must register for PHL 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: 350-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.
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 Meditations.
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 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.
465 **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*).

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

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

492 **Philosophy of Mathematics.** Principal topics for discussion are Logicism, Formalism, and Intuitionism. (Cross listed with Mathematics 492)

495 **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**

510 **Kant I.** Critique of Pure Reason.

511 **Kant II.** Critique of Practical Reason.

512 **Kant III.** Critique of the Faculty of Judgment.

515 **Hegel I.** Phenomenology of Spirit.

516 **Hegel II.** Science of Logic.

517 **Hegel III.** Philosophy of Right.

520 **Marx I.** Basic writings of Marx and Engels. Revisionist contemporaries of Marx, such as Lasalle, Bernstein and Kautsky will also be studied.

521 **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, Bogdanov, etc.

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

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

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

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

535 **Husserl I.** Phenomenology of Consciousness-of. An investigation of basic constitutional problems of acts and objectivities of consciousness and eidetic and transcendental reductions.

536 **Husserl II.** Time Consciousness. A study of the temporalization of consciousness-of and world 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 time, space, alter-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 Holderlin 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 Lavelle'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 600 series are problem-oriented seminars. They are structured for full participation by each student in the seminars in terms of research, presentation, and critical reflection. The number of participants is limited.

Seminars


609 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.

610 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.

615 Seminar on Heidegger and the Fragments of Heraclitus.

616 Seminar on the Fragments of Parmenides.

617 Seminar on Genesis and Ego in Husserl.


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

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

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

628 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.)


640 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.

642 Seminar on Theories of Value.

643 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, Lotze, Nietzsche and Scheler.

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


655 Seminar on American Social Philosophy.
660 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 problematic 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 the 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.

700 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

(PHY)

faculty

professors
Mary L. Boas, Ph.D.
Zuhair M. E. Saffar, Ph.D.
Edwin J. Schiillinger, 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. Behof, 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 395 Methods of Theoretical Physics III
  - 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 field 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.

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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
- 340 Thermal Physics
- 350 Optics
- 360 Twentieth Century Physics I
- 361 Twentieth Century Physics II
- 380 Experimental Physics I
- 381 Experimental Physics II
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.

410 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.

420 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 420) 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.

424 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.

440 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.

441 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.

442 Applied Mechanics. (Prerequisite: PHY 310) Mechanics of continuous media; strain and stress tensors, fluid dynamics, mechanical waves, applications to acoustics and geophysics.

445 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.

454 Modern Optics. An advanced optics course with emphasis on topics in coherence theory, polarization of light, Fourier transform spectroscopy, optical transfer functions and holography.
460 Quantum Mechanics I. (Prerequisite: PHY 412) Review of basic quantum theory, vector spaces, linear operators, observables, commutators, projection operations, representations.

461 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.

464 Atomic and Molecular Physics. The experimental foundations for theories of atoms and molecules, with emphasis upon spectroscopy.

465 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.

466 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.

490 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.


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
(PSY)

Sheldon Cotler, Ph.D.
Chairperson

faculty

professors
Thomas S. Brown, Ph.D.
Sheldon Cotler, Ph.D.
Frank A. Dhelli, Ph.D.
John M. Reisman, Ph.D.
Edwin S. Zollik, Ph.D.

associate professors
Robert E. Brewer, Ph.D.
Marj K. Brown, Ph.D.
Linda Camras, Ph.D.
Ernest J. Dolney, Ph.D.
Louise Ferone, M.S.W. (Social Work)
Frederick Heilizer, Ph.D.
Leonard Jason, Ph.D.
Allen Miliewski, Ph.D.
Sheila Ribordy, Ph.D.
William Terris, Ph.D.
Robert J. Tracy, Ph.D.

professors
Catholic University of America
Southern Illinois University
Loyola University
Michigan State University
Catholic University of America

associate professors
Southern Illinois University
Columbia University
University of Pennsylvania
University of Missouri
Loyola University
University of Rochester
University of Rochester
Brown University (on leave 1982-1983)
University of Kansas
Illinois Institute of Technology
Texas Christian University

assistant professors
Joseph Orban, Ph.D.
LaVome Robinson, Ph.D.
Midge Wilson, Ph.D.

Virginia Polytechnic Institute and State University
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
- Clinical Psychology
- General Experimental 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.

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 standard 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.

For consideration for full admission to clinical psychology, the student must have also the following:

In 1981-82 over 220 students applied to the doctoral program in clinical psychology. Of the applicants 80% were rejected and about 10% were admitted in order to obtain the 8-10 students for the entering M.A.-Ph.D. program. Half the successful applicants were female and half were male. The clinical faculty wishes applicants to know that the faculty carefully evaluate all the application materials and emphasize the following criteria:

- Completeness of credentials. When important pieces of information, such as transcripts, are lacking, the faculty is compelled to reject the applicant. Last year about one applicant in seven was rejected on this basis. Your application should be completed by January 31. We begin the process of evaluating applications in February.
- GRE scores and Grade Point Average: Combined Verbal and Quantitative GRE scores of about 1200 are expected of applicants to the doctoral program. The undergraduate grades of applicants are expected to average substantially higher than "B" in psychology courses. Typically, successful applicants to our program have an undergraduate GPA of 3.5 and combined GRE scores of over 1200. However, these criteria are not followed rigidly.
- Undergraduate preparation: Students are expected to have had courses in statistics, experimental psychology, abnormal psychology, and other areas in psychology to enable advanced study in this field.
- Prior graduate study: The department does not accept students with prior graduate study in clinical psychology or closely related fields.
- Interests: The clinical program emphasizes training in clinical child psychology and clinical community psychology. Obviously those who have no special interest in those areas would be better served by some other program.
- Minority status: The clinical faculty strongly encourages applications from minority students. Four students, or about 4% of the graduate students in clinical psychology admitted last year, were members of minority groups.
- Handicapped students: At present there are no handicapped students within the program. Admission of such a student would depend upon the nature of the handicap and the ability of the program to meet the student's training needs.
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: four of the following:
  PSY 402 Perceptual Processes or 404 Learning Processes
  PSY 406 Physiological Processes
  PSY 430 Advanced Social Psychology
  PSY 437 Advanced Personality or 439 Advanced Developmental Psychology

  Statistics Courses:
  PSY 410, 411 412 Advanced Statistics I, II, III

  Additional Courses:
  PSY 481 Intelligence Testing
  PSY 482 Personality Assessment
  PSY 484 Behavioral Assessment
  PSY 486 Advanced Psychopathology
  PSY 488 Principles of Psychotherapy
  PSY 500 Professional Ethics and History of Clinical Psychology
  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 doctoral 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.
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.
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/doctoral 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.

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 or 404 Learning Processes
    - PSY 406 Physiological Processes
    - PSY 430 Advanced Social Psychology
    - PSY 437 Advanced Personality or 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: Detail 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: Detail information on the above degree requirements is listed in a separate departmental brochure. It may be obtained from the Department.
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 106) Description and evaluation of principles and theories of development from conception through childhood.

334  Development 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)


360  Theories of Learning. (Prerequisite: 276 or consent) A survey of the classical and modern theories of learning.

361  History and Systems of Psychology. (Prerequisite: PSY 275 or consent) Historical analysis of basic concepts in psychology.

362  Cognitive Process. (Prerequisite: PSY 106) Processes by which stimulus input is transformed, stored, recovered, and used; abstraction processes.

366  Behavior Problems of Children. (Prerequisite: PSY 333)

367  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.
Physiological Psychology. (Prerequisite: PSY 275) The nervous system and endocrine functions as related to behavior.

Comparative 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 350) 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.
406 Physiological Processes. (Prerequisite: PSY 377 or equivalent) The functional role of neural systems important for the processes of motivation, emotion, sleep, memory, and cognition.


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 group 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.

439 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.

450 Psychological Measurement. (Prerequisite: PSY 412) Logical and mathematical principles underlying test construction with emphasis on evaluating the reliability and validity of scores. (4)

451 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.

454 Behavior Modification. (Prerequisite: PSY 404) Analysis of principles, practices, and research related to the modification of human behavior.

476 Research Issues in Assessment. Analysis of research and current issues concerning intellectual and personality assessment. (2)

481 Individual Intelligence Testing I. (Prerequisite: PSY 356) 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.

482 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.

483 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.

484 Behavioral Assessment. (Prerequisite: PSY 356 or equivalent) Behavioral observation and recording. Self-report measures. Physiological measurement. Evaluation of behavioral measures and areas of research.


488 Principles of Psychotherapy. (Prerequisites: PSY 476 and 486) Analysis of theoretical approaches to psychotherapy.

489 Group Psychotherapy. (Prerequisite: PSY 488) Principles, theories and techniques of in-group psychotherapy. Problems of selection of group members and evaluation of progress. (2)
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>491</td>
<td>Treatment Methods with Children. (Prerequisite: PSY 487)</td>
<td>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.</td>
</tr>
<tr>
<td>492</td>
<td>Principles of Consultation. (Prerequisite: PSY 493)</td>
<td>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)</td>
</tr>
<tr>
<td>493</td>
<td>Clinical Community Psychology.</td>
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<td>495</td>
<td>Evaluation and Research in Community Mental Health.</td>
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<tr>
<td>500</td>
<td>Professional and Ethical Issues in Contemporary Psychology. (2)</td>
<td></td>
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<tr>
<td>520</td>
<td>Minority Issue Consideration of minorities as related to clinical psychology</td>
<td></td>
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</tbody>
</table>

Seminars numbered 550 through 570 may be taken for credit more than once with the consent of the instructor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>550</td>
<td>Seminar in Teaching Psychology.</td>
<td>(1 to 4)</td>
</tr>
<tr>
<td>551</td>
<td>Seminar in Experimental Psychology.</td>
<td>(1 to 4)</td>
</tr>
<tr>
<td>552</td>
<td>Seminar in Neuropsychology.</td>
<td>(1 to 4)</td>
</tr>
<tr>
<td>553</td>
<td>Seminar in Personality Research.</td>
<td>(1 to 4)</td>
</tr>
<tr>
<td>555</td>
<td>Seminar in Developmental Psychology.</td>
<td>(1 to 4)</td>
</tr>
<tr>
<td>556</td>
<td>Seminar in Social Psychology.</td>
<td>(1 to 4)</td>
</tr>
<tr>
<td>557</td>
<td>Seminar in Learning and Cognitive Processes.</td>
<td>(Prerequisite: PSY 404) (1 to 4)</td>
</tr>
<tr>
<td>558</td>
<td>Seminar in Advanced Statistics.</td>
<td>(Prerequisite: PSY 412)</td>
</tr>
<tr>
<td>562</td>
<td>Seminar in Family Therapy.</td>
<td>(Prerequisite: PSY 574)</td>
</tr>
<tr>
<td>564</td>
<td>Seminar in Clinical Research.</td>
<td>(Prerequisites: PSY 476 and 488)</td>
</tr>
<tr>
<td>566</td>
<td>Seminar in Psychopathology.</td>
<td>(1 to 4)</td>
</tr>
<tr>
<td>568</td>
<td>Seminar in Community Psychology.</td>
<td>Analysis of theories of community and human behaviors from the standpoint of general systems principles. (4)</td>
</tr>
<tr>
<td>569</td>
<td>Seminar in Program Evaluation.</td>
<td>(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)</td>
</tr>
<tr>
<td>570</td>
<td>Seminar in Psychotherapy Research.</td>
<td>(1 to 4)</td>
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</tbody>
</table>

All practicum courses numbered 574 through 583 require the consent of the Director of Clinical Training and may be repeated for 12 credits.

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>574</td>
<td>Pre-Practicum in Clinical Psychology.</td>
<td>(1) May be repeated for 3 credits.</td>
</tr>
<tr>
<td>577</td>
<td>Practicum in Clinical Assessment.</td>
<td>Supervised experience in intake interviewing, psychological evaluation and case conference presentation in a clinic, hospital or community agency setting.</td>
</tr>
<tr>
<td>578</td>
<td>Practicum in Clinical Psychology.</td>
<td>Supervised experience in diagnostic assessment, intervention planning, psychotherapy and report writing through varied assignments to campus or community agencies.</td>
</tr>
</tbody>
</table>
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.

Advanced Practicum in Clinical Psychology.

Practicum in Community Mental Health.

Practicum in Special Areas in Psychology.

Thesis Seminar. (1)


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. (O 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.
public services
(MPS)

professors
Rosemary S. Bannan, Ph.D.
Edward Ignas, Ed.D.
Dominic Parisi, Ph.D.
Deena Weinstein, Ph.D.
Loyola University
Indiana University (on leave 1982-83)
Northwestern University
Purdue University

associate professors
Grace B. DeSantis, Ph.D.
Joan Lakebrink Rebeck, Ph.D.
Charles Suchar, Ph.D.
University of Chicago
University of Wisconsin-Madison
Northwestern University

assistant professors
Larry Bennett, Ph.D.
Robert M. Heller, Ph.D.
Robert Rotenberg, Ph.D.
Charles S. Stevens, Ph.D.
Harry Wray, Ph.D.
Rutgers University
Illinois Institute of Technology
University of Massachusetts at Amherst
Northwestern University
University of North Carolina at Chapel Hill

lecturers
Stanley Bakshy, Ph.D.
Myron Block, Ph.D.
John P. Barrett, M.S.I.R.
Thomas Callahan, M.A.
Robert Cassiani, M.S.
Christopher Cohen, M.A., J.D.
Joseph Crawford, C.P.A., M.A.
Ettore DeVito, M.P.A.
George M. Gintowt, M.S.
Louis Goodman, Ph.D.
William Hay, M.B.A.
Margaret T. Hastings, Ph.D.
Leo Keryczynskyj, M.S., J.D.
Illinois Institute of Technology
University of Chicago
Loyola University
University of Illinois, Circle
Loyola University
Northwestern University
DePaul University
Illinois Institute of Technology
DePaul University
New York University
DePaul University
Northwestern University
DePaul University Lewis University (Glen Ellyn)
purposes

The Management of Public Services is committed to:

- meet the on-going education and training needs of both public service agencies and their personnel as well as individuals who aspire to enter in or interface with public, non-profit, and governmental organizations.

- provide training which will increase the skills and resources already developed by the practitioners and mid-careerists in the public services.

- assist the individual in keeping current with the state of the art in public sector issues, developments, and challenges.

- provide an atmosphere upon which the student becomes a change agent within the public sector and assists in the development of new approaches, plan, methodologies, and ideas for public services.

- direct the preparation of students toward future study or professional employment which will lead to the development of a flexible, innovative, and dedicated public administrator.

Emphasis is placed on developing individuals so as to increase their value to the agency of which they are a part and to further their personal development as a human resource in the community.

The public service areas included in the program are not limited to governmental or not-for-profit agencies, but include also all professional associations, unions, boards, educational bodies, academic and religious institutions, community agencies including rehabilitation facilities, as well as for-profit organizations working in close liaison with public service organizations.

degree programs

The student has available two programs: a master of science in the management of public services and a joint program with the College of Law leading to a master of science in the management of public services and a juris doctor degree in law.
master of science: management of public services

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

- Bachelor’s degree conferred by an accredited institution
- Grade point average of at least 2.5 on a scale of 4
- GRE scores. Not required of students with a graduate degree or its equivalent.
- Pre-program requirements. These pre-program requirements provide the student with the background in accounting, economics, management, and statistics for a successful pursuit of the degree program. Depending on the student’s background all or a part of the pre-program courses or their equivalents may be waived by the Program Director.

MPS 401 Management Foundations of Administration or equivalent
MPS 402 Financial Foundations of Administration or equivalent
MPS 403 Economic Foundations of Administration or equivalent
MAT 242 Elements of Statistics I or equivalent

degree requirements

- Courses: successful completion of 52 quarter hours of graduate credit. Included in this requirement are the following courses:

  core courses (28 quarter hours)
  MPS 500 Functions of the Administrator
  MPS 503 Executive Decision Making
  MPS 504 Introduction to Management Sciences
  MPS 533 Management Planning and Control Systems
  MPS 553 Advanced Organization Concepts
  MPS 598 Problems in Management of Organizations
  MPS 599 Research and Graduate Seminar in Management

  concentration courses (24 quarter hours)
  General concentrations: students may select one of the following concentrations:
  Behavioral Science:
  four courses from the behavioral science course grouping
  two courses from the management science course grouping
  Management Science:
  four courses from the management science course grouping
  two courses from the behavioral science course grouping
  Specific concentrations: students who wish may focus more narrowly on the following areas of concentration:

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joint programs: management of public services and juris doctor

The College of Liberal Arts and Sciences (Management of Public Services Program) and the College of Law have designed joint programs of study which permit the full-time student to obtain the M.S. degree in the management of public services and the J.D. degree in law at a substantial reduction in time.

Generally, the combined degree programs require enrollment in both the day and evening classes on a full-time coordinated basis according to a designated schedule and sequence. Enrollment in these programs is restricted to highly qualified and motivated students who meet the standards of the joint committee which coordinates these programs.

Admittance into the College of Law and into the College of Liberal Arts - Graduate Level does not necessarily guarantee acceptance into the combined degree programs.

Additional information may be obtained on request from either the Program Director, Management of Public Services, or the College of Law.

certification program: administration foundations in public services

The student also has available a program leading to a certificate in Administration Foundations in Public Services. This program is developed for mid-careerists who recognize their need to enhance their managerial and administrative skills. The program is conducted on an intensive weekend or evening basis.

admission requirement

For full admission, students must have

• Bachelor's degree conferred by an accredited institution
certification requirements

- Courses: Successful completion at graduate level of the four certificate courses:

  MPS 401 Management Foundations of Administration
  MPS 402 Financial Foundations of Administration
  MPS 403 Economic Foundations of Administration
  MAT 242 Elements of Statistics I

Courses

All courses worth four credit hours unless otherwise indicated.

Pre-program Courses

MPS 401 Management Foundations of Administration. Survey of past and emerging organizational theories, including concepts of leadership and management principles.

MPS 402 Financial Foundations of Administration. An introduction to the discipline of accounting concepts as applied to the not-for-profit organizations. Also a general understanding of statistical methodology for use with financial and other organization data.

MPS 403 Economic Foundations of Administration. Review of basic economic behavior concepts and principles in understanding the development of public services and also a review of personnel manpower needs.

MAT 242 Elements of Statistics I. Descriptive statistics: finite probability, binomial and large sample hypothesis testing, linear regression, correlation coefficient in statistics.

Core Courses

500 Functions of the Administrator. Advanced treatment of the theory and application of the management process including planning, organizing, leadership, and control.

503 Executive Decision Making. (Prerequisite: 500 or may be taken concurrently with 500) Quantitative and non-quantitative approaches to decision making; a basic discussion of probability, main emphasis on the psychological, group, and organization decision-making processing through a case study approach.

504 Introduction to Management Sciences. (Prerequisite: 500) Modern techniques in research methodology, management science and operations research, such as statistical sampling, probability theory, breakeven analysis, linear programming, and project management techniques.

533 Management Planning and Control Systems. (Prerequisite: MPS 401 or equivalent) Concepts underlying public and non-profit finance, management planning and control methods as well as the budgeting models that accomplish these functions. Also preparation for the financial administration sequence.
behavioral science courses

506 Management of Behavioral Sciences. Examination of differences between applied and pure sciences in terms of the basic contributions and concepts. Differences analyzed in terms of their relevance to administration.

513 Human Relations. (Prerequisite: 500) Focus on human, as opposed to technological, aspects of management. Study of one’s own human relations skills and how they apply to life as well as work experiences.

517 Administrative Processes and Organizational Structure of Health Care Organizations. (Prerequisite: 500) Applications of concepts of management and organizational theory to the administration of health care organizations and institutions. Emphasis on understanding the interaction of the clinical and administrative components of the health care team, the formulation of policy, and the control and distribution of resources.

520 Personnel Theory and Contemporary Practice. (Prerequisite: 500) General and special managerial functions of the personnel department administrator as exercised in the personnel department’s functions. Particular emphasis on the development and applications of personnel in various agencies.

522 Wage and Salary Administration. Topics included are methods of job evaluation for management and non-management positions, appraisal of personnel performance, construction of wage scales, fringe benefits, and related court decisions, as well as development of benefit packages.

525 Intergroup Relations. Complexities of selected groups and their problems. Consideration of the social and economic adjustments for racial, ethnic, and religious groups, and the current proposals for the reduction of intergroup tensions. Specific areas of interest may include minority groups, equal opportunity employment issues, lobbying and interest groups, as well as labor relations.

526 Industrial Psychology. Application of the psychological principles of learning, perception, and adjustment to industry. Special attention to personnel placement and selection, motivation and morale, training, and introduction to human engineering.
Human Resource Administration in Health Care Organizations.
Analysis of various personnel and industrial relations functions as they affect the human resource component of health care organizations and the role of a human resources department in such organizations. Current and projected issues examined as well as the development of sound policies and practices in the areas of recruitment and selection, compensation and benefits, training and development, employee and labor relations, and EEOC legislation.

Communications for Managers: Current Theory and Practice.
Advanced course designed to analyze written and oral communications through lectures, role-playing, and analyses of cases. Topical areas can include communication networks, leadership, conducting evaluations, and conducting business meetings.

Health Care Delivery Systems. Examination of various types of delivery systems by practitioners and agencies—public and private—which provide health services. Comparative analysis made of the evolution of health care systems on local, national, and international levels, the effects of social policy in health care delivery systems also included. Emphasis on understanding the system of delivering health care services in their different forms.

Determinants of Public Policy. Examination of the process of public policy making. Consideration of the context which limits the range of possible policy options, and details the structure and policies of the policy process. Case studies of specific public policies used to illustrate how the process works.

Health Care Policy Issues. Development of state and national health legislative policy and a survey of the current private, state, and federal policies. Analysis of such major policy areas as private reimbursement, planning access to care, cost containment, manpower development, research, and prevention.

Law Enforcement Policy Issues. Theory, application, and impact on policies in criminal law on police, corrections, and the courts.

Policies and Urban Development. (Cross-listed with Sociology 426)
Sequel to MPS 555 and Sociology 425. Community agencies viewed as problem-solving organizations. Concentration on the impact of state and local governments on community organizations and how community organizations influence social policy.

Planning, Policy, and Politics. Public planning (generally defined as guided social intervention by the state) explored as a particular component of the policy-making process. Examples drawn from the United States as well as from other political systems. Attention directed to particular substantive fields, also discussion of the relationship between planning and the broader dimensions of the particular economy.

Social Dimensions of Health Care Management. Overview of health care services. Services examined in terms of the providers of services (physicians and allied health personnel), the population receiving services and the organizational setting in which care is provided. Discussion of alternatives to traditional health services and review of health insurance mechanism.
Bureaucracy in the American Polity. Bureaucracy viewed as pervasive means of organizing complex activities in the public as well as the private sector, and examined in terms of formal structural characteristics, information, human dynamics, and examined as a decision-making institution. Further, consideration of the relative compatibility of bureaucracy, so defined, with the remaining components of the American political systems.

Management of Training and Internal Development. Methods utilized to identify training needs and certain principles necessary to develop and manage in-service training programs. Major topics include needs assessment, curriculum design and planning, and general supervision of instruction.

Law and the Human Services. (Cross-listed with Education A&S 495) Understand the laws related to fair treatment of personnel. Introduction to the variety of social and legal issues involved in the personnel dimension of their work. Development of the basic research skills necessary to obtain accurate information about them. Among the topics considered - discrimination and preferential treatment, fair employment practices, workman's compensation, fair labor standards, the Occupational Safety and Health Act, civil rights legislation, environmental protection, and grievance procedures.

Principles and Practices of Supervision. (Cross-listed with Education A&S 498) Supervision viewed from a human resources perspective. Consideration of motivation, responsibility, and success at work as means to intrinsic satisfaction. Supervisor's role studied as a linking pin for the organizational, educational, and instructional subsystems of the institution.

Urban and Community Analysis. (Cross-listed with Sociology 442) Quantitative analysis of urban issues including social area analysis, patterns of segregation, neighborhood change and other selected topics.

Strategies of Community. (Cross-listed with Sociology 425) Strategies and techniques used in the formation and process of community organizations. Primary conceptual emphasis from sociology, but a considerable interdisciplinary content included, as well as, application of social science knowledge to bring about social change.

Law Enforcement and the Community Relations. (Cross-listed with Sociology 444) Examination of the policies and practices of law enforcement agencies and personnel and their impact on the communities they serve.

Human Services Information Systems. (Cross-listed with Education HSC 453) Procedures for the dissemination of economic, occupational, social and educational information channels. Following areas analyzed- economic impact on occupational trends, sources of information, techniques for conducting local occupational surveys, developing information systems, and theories of career and occupational development.

Human Services Consulting. (Cross-listed with Education HSC 464) Focus on a human behavior rationale in consultation work with personnel in various human services agencies and institutions. Use of case studies, role playing and observation of the consultant role. Stress on the facilitation of communication and dynamics of interpersonal relationships.
561 Labor Relations and Government Policy. Examination of legal requirements and constraints which affect collective bargaining process. Emphasis upon the historical background of labor law and on the Supreme Court decisions affecting the application of these laws to labor relations. Review of present public policy regarding labor law and its impact on services.

562 Law and the Administration of Justice. (Cross-listed with Sociology 443) Analyses of legal systems and their implementation, of jurisprudence and its role in the development and change of legal systems, and of the role of the courts and the police as related to community social problems.

563 Crime, Delinquency and Systems Correction. (Cross-listed with Sociology 442) Study of major criminological theories and the application to systems of corrections. Present trends at federal, state, city and private correctional institutions.

564 Institutional Reaction to Deviants. (Cross-listed with Sociology 447) Examination of the social organization of the societal response to individuals labeled as deviant. Acquaint students with the sociological examination of deviant processing institutions and familiarize students with the major conceptual frameworks which explain the functioning of such institutions and which assess the consequences of such processing.

565 Youth Services, Health and Welfare. (Cross-listed with Sociology 434) Review of research on various youth problems (e.g., substance, abuse, pregnancy, runaways) and consideration of efforts at amelioration and control.

566 Sociology of Youth. (Cross-listed with Sociology 461) Critical analysis of literature on non-delinquent youth, focus on the social contexts within which the transition to adulthood occurs.

Management Science Courses

507 Information Technology. (Prerequisite: 504) Preliminary theoretical understanding of the computer and its applications. Principles of computerization, data base, and management information systems stressed.

508 Management Control for Non-profit Organizations. (Prerequisite: 553) Relationship of accounting information to the management functions of planning and control. Emphasis on management techniques and decisions models which aid in the financial planning and control functions.

509 Budgeting and Program Evaluation. (Prerequisite: 553 or equivalent) Pragmatic approach to resource allocation and budget preparation methods: the preparation and presentation of an actual budget document.

510 Operations Research. (Prerequisite: 504 or equivalent) Advanced treatment of scientific management and operations research. Techniques include linear and non-linear programming, simulation models, etc. Each technique examined and applied to practical case studies.
Advanced Statistics. (Prerequisite: undergraduate statistics course and 504) Study of the various sampling distributions, the use of testing hypotheses, and the concept of power of a test, as well as non-parametric methods utilized in solving management problems. Topics and methods of least squares, linear, and normal regression also covered.

Public Sector Financial Administration. (Prerequisite: 533 or equivalent) Topics include the sources of revenue and the nature of expenditures for governmental and other public section institutions, and also the factors leading to debt financing and subsequent problems of repayment.

Monetary and Debt Management. (Prerequisite: 533 or equivalent) Examination of cash management principles and administration of government debt; the various financing methods, as well as the market for public sector issues.

Policy Analysis. Problems of measuring the impact of public policies. Examination of the commonly used means of evaluating public program impacts, with emphasis placed on their respective strengths and weaknesses. In addition, consideration of the role of policy analysis in the policy making process, and hence the political implications of policy analysis.

Systems Analysis and Design. First part of a two-course sequence on the basic tools of general systems methodology. Analytical skills and problem-solving ability on a theoretical basis in dealing with systems analysis, and also the basic systems techniques of data gathering, recording, analysis, and system implementation.

Advanced Systems Techniques. (Prerequisite: MPS 574) Application of general systems methodology to project planning. A very pragmatic approach taken to develop solutions to various situations. Case studies utilized in developing the student’s problem-solving abilities.

Problems in Systems Design and Management. Prepares student to integrate users with the systems functions in understanding organizational constraints as applied to an overall computer system. Special emphasis placed on planning and managing a component of a larger system. Course stands alone from the other systems courses in developing projects plans.

Operations Research for Health Care Facilities. (Prerequisite: 504) Exploration of certain mathematical and statistical models relating to health facilities and services, which pertain to the solution of health care problems in human populations. Standard topics represented are allocation models, queuing theory, dynamic programming, forecasting, simulation, PERT, and inventory models.

special studies courses

Independent Study. (Prerequisites: consent of program director and extensive executive experience) Special topics chosen for study. A project report, the culmination of either a study done in a work setting or library-based research. (Variable credit)

Internship. Supervised work experience during one or more quarters. Focus on management skills in a public work setting. (Variable credit)
rehabilitation services
(RSA)

William A. Caiuzaretta, Ph.D.
Program Director

faculty

assistant professors
James E. Bordierl, Ph.D.
William A. Caiuzaretta, Ph.D., C.R.C.
Janice M. Daleys, Ph.D.

Illinois Institute of Technology
Northwestern University
Northwestern University

lecturers
Gary Albrecht, Ph.D.
Gary Austin, Ph.D.
James Bitter, Ed.D.
James Cleckler, Ph.D.
James DeClerk, M.S.
Alex DeVience, J.D.
Jerry Dirac, Ph.D.
Carolyn Eagen, M.S.
Donald Galvin, Ph.D.
Edwin Griswald, C.A.S.
Peter Griswald, M.A.

Emory University
Northwestern University
University of Northern Colorado
Purdue University
DePaul University
Loyola University
Northwestern University
DePaul University
University of Michigan
Northern Illinois University
Michigan State University
DePaul University
DePaul University
DePaul University
DePaul University
New York University
Emory University
Northwestern University
University of Illinois
Northwestern University
Northwestern University
University of Minnesota
Northwestern University

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purposes

Programs are offered in rehabilitation services to qualified students to provide:
- the knowledge and skills required to manage, supervise, and administer the various rehabilitation facilities which exist to develop the vocational and personal competencies of disabled persons.
- the training of men and women to meet the standards of professionalism in the field.

Four core areas of concentration provide the foundation necessary to develop well-prepared professionals in the rehabilitation field:

Programmatic: Provision of services to rehabilitate disabled persons.
Resource Utilization: Organization of resources such as staff, board of directors, funding sources, and rehabilitation research for effective management.
Community: Interagency collaboration leading to the development and use of community resources and the formation of rehabilitation facility/agency networks.
Planning: Use of socioeconomic data and current trends in legislative, professional and advocacy areas to plan for effective rehabilitation facility programs, and the professional development of staff within the rehabilitation profession.

programs
certifications
Rehabilitation Facility Administration
Psychosocial Rehabilitation

master of science
Management of Rehabilitation Services

certification: rehabilitation facility administration

- May be taken by persons without entering the degree program.
- Designed to provide students with a background in accounting, economics, management, and the legal and philosophical fundamentals of rehabilitation.
admission requirements

- Baccalaureate degree from an accredited institution or its equivalent
- Employment in a related rehabilitation work setting

certificate requirements

- Courses (twelve quarter hours)
  RSA 402 A&B  Introduction to Rehabilitation Philosophy (3 credit hours)
  RSA 403 A&B  Organization and Managerial Foundations (3 credit hours)
  RSA 406 A&B  Economic Principles for Social Service and Personnel Administration (3 credit hours)
  RSA 407 A&B  Business Law and Accounting - Principles in the Not-For-Profit Organizations (3 credit hours)

Note: A student may request in writing to have six quarter hours credit be waived based upon previous academic course experience. The request must be submitted well in advance.

certification: psychosocial rehabilitation

- May be taken by persons without entering the degree program.
- Designed to provide rehabilitation professionals with training in the practice and theory of the psychosocial approaches for psychiatically disabled persons.
- New students seeking careers in this area will be provided with the fundamentals necessary for a successful pursuit of a degree program.

admission requirements

- Baccalaureate degree from an accredited institution or its equivalent
- Employment in a related rehabilitation work setting

certificate requirements

- Courses (twelve quarter hours)
  RSA 410 A&B  Psychosocial Rehabilitation Foundations I (6 credit hours)
  RSA 412 A&B  Psychosocial Rehabilitation Foundations II (6 credit hours)

Note: A student may request in writing to have six quarter hours credit be waived based upon previous academic course experience. The request must be submitted well in advance.
master of science: management of rehabilitation services

admission requirements
For full admission, student must have the following:
- Bachelor's degree conferred by an accredited institution
- Successful completion of the certificate course requirements in Rehabilitation Facility Administration, or their equivalent

degree requirements
- Courses:
  - 12 quarter hours (Certificate of Rehabilitation Facility Administration, or the equivalent)
  - 48 quarter hours (core courses)
  - 6 quarter hours (independent study courses)

Certificate of Rehabilitation Facility Administration Courses
RSA 402 A&B Introduction to Rehabilitation Philosophy (3 credit hours)
RSA 403 A&B Organization and Managerial Foundations (3 credit hours)
RSA 406 A&B Economic Principles for Social Service and Personnel Administration (3 credit hours)
RSA 407 A&B Business Law and Accounting - Principles in the Not-For-Profit Organizations (3 credit hours)

Core Courses:
RSA 640 Theories and Concepts in Rehabilitation Practice
RSA 641 Management Theories and Concepts
RSA 642 Rehabilitation Programming: Principles and Practices
RSA 643 Managerial Principles and Practices
RSA 644 The Supervision of Programs and Staff
RSA 645 Fiscal Management and Introduction to Management Sciences in Agency/Facility Administration
RSA 646 Rehabilitation Clients: The Hidden Disabilities
RSA 647 Research Methods and Statistics in Rehabilitation Administration
RSA 648 Rehabilitation Clients: The Self Evident Disabilities
RSA 650 Social Psychology of Rehabilitation Administration
RSA 652 The Management of Human Resources
RSA 653 Program Evaluation and Funding in Rehabilitation
RSA 655 The General Management of the Rehabilitation Facility
RSA 656 Job Placement in Rehabilitation
RSA 691 Management Seminar in Advanced Organization Concepts
RSA 692 Rehabilitation Seminar: Emerging issues and Trends

Note: Degree students, with the written consent of their advisors, may waive one or two of the core courses and replace them with other rehabilitation courses.
Independent Courses

- RSA 650  Topics in Rehabilitation Research
- RSA 661  Selected Topics in Rehabilitation Research
- Master’s Project: Done under the guidance of a departmental faculty advisor

Schedules for completing programs

Students may choose to complete the certificate or degree programs through either an Intensive or a Day schedule.

- Intensive schedule
  - This schedule accommodates the educational goals of working students who reside in the Rehabilitation Services Administration Federal Region V.
  - Off-campus intensive schedules are often available locally and regionally.
  - A course offered on an intensive schedule covers a 10-week period, but contains only six days of actual class meetings. Students receive a syllabus prior to the class meetings. The first weeks of the quarter are devoted to independent reading and preparation as recommended by the instructor. The class then meets for 2 three-day sessions in Chicago, at the University, or in other off-campus locations locally or regionally.
  - Typical length of time for completion of a degree program on the intensive schedule is 10 quarters or 2 1/2 years. Each course offered on the intensive schedule carries three quarter hours of academic credit and is the full academic equivalent of a 10-week resident course. Entry into intensive schedules (both on and off-campus) is typically in the autumn and spring quarters of the academic year.

- Day schedule
  - The day schedule offers a six quarter in-residence program designed for full-time students. Entry into the full-time day schedule is annually, typically, classes commence in the autumn quarter.

Non-degree

For non-degree students who wish to increase their knowledge and expertise in the field of rehabilitation, credit for designated courses is available.

Admission Requirement

- Bachelor’s degree from an accredited institution
courses available

All courses listed below are four hours of graduate credit unless otherwise specified.

RSA 611 Family Systems and Disabilities
RSA 612 Gerontological Rehabilitation
RSA 613 Strategies for Job Placement
RSA 614 Rehabilitation Client Populations
RSA 615 Marketing Strategies in Rehabilitation
RSA 616 Principles and Practices of Private Rehabilitation
RSA 654 The Cornell Management Game (3 credit hours)

courses

Unless otherwise stated, all courses are three quarter hours.

certificate courses: rehabilitation facility administration

RSA 402 Introduction to Rehabilitation Philosophy. A review of the historical and philosophical foundations of rehabilitation. Emphasis is on the development of societal values, attitudes, and beliefs as applied to disabled individuals. A descriptive overview of the federal/state rehabilitation system is provided.


RSA 404 Economic Principles for Social Services and Personnel Administration. A - An introduction of basic economic behavior concepts and principles in understanding the development of welfare services in general and rehabilitation in particular. B - Personnel Administration - The structure, role and techniques of the personnel organization in recruitment, selection, placement, job analysis and job description are reviewed.

RSA 407 Business Law and Accounting Principles for the Not-For-Profit Organization. A - Business Law - The fundamental principles of law pertaining to business, not-for-profit organizations, unions and government regulations and ethics, are examined and applied to the rehabilitation setting. B - Accounting Principles - Accounting concepts and fundamentals applied to the not-for-profit organization.

Note: The above courses are required to meet the admission requirements for the master’s degree program in the Management of Rehabilitation Services.

certificate courses: psychosocial rehabilitation

RSA 410 Psychosocial Rehabilitation Foundations I. An introduction to theories and concepts of psychosocial rehabilitation. (6 credit hours.)

RSA 412 Psychosocial Rehabilitation Foundations II. A survey of the principles and practices of psychosocial rehabilitation. A pre-practicum experience designed as an on-site experience is required in this course. (6 credit hours.)
degree courses:

When prerequisites are stated, an equivalent course taken elsewhere is acceptable upon written consent of a faculty advisor.

RSA 611 Family Systems and Disabilities. A study of systems theory applied to the current practice of identifying and assessing family interactional patterns with disabled family members. (4 credit hours)

RSA 612 Gerontological Rehabilitation. Selected theories of psychosocial aspects of aging. Such concerns as stress reactions to retirement, physical disabilities, impact of reduced economic resources, and other personal-social changes in aging are reviewed. Topics will address the knowledge needed by students concerned with rehabilitation of aging clients in institutional, community, and home settings. (4 credit hours)

RSA 613 Strategies for Job Placement. Designed to prepare rehabilitation personnel in the development of job placement and job readiness programs within the Rehabilitation process. (4 credit hours)

RSA 614 Rehabilitation Client Populations. Principles and practices of rehabilitation programming relative to the care and treatment of special populations. (4 credit hours)

RSA 615 Marketing Strategies in Rehabilitation. This course explores the resources relevant to Rehabilitation programs and not-for-profit organizations in general. The formulation of marketing strategies are discussed. (4 credit hours)

RSA 616 Principles and Practices of Private Rehabilitation. The goals, objectives, methods, and techniques used in private for-profit rehabilitation are studied. (4 credit hours)

RSA 640 Theories and Concepts of Rehabilitation Practice. (Prerequisite: RSA 403 or equivalent) An examination of the philosophical, behavioral, and cultural foundations of rehabilitation practice.

RSA 641 Management Theories and Concepts. (Prerequisite: RSA 403 or equivalent) A critical review of management theories and the underlying management philosophy. A specific emphasis will be placed upon the consideration of current trends related to the management of an organization’s social and community responsibility to disabled persons.

RSA 642 Rehabilitation Programming: Principles and Practices. The goals, objectives, methods, and techniques used in rehabilitation programs are studied.

RSA 643 Managerial Principles and Practices. (Prerequisite: RSA 641 or equivalent) Operation systems, employing the case method, development of analytical skills and problem-solving ability, administrative management operations, concepts, and philosophies are studied.

RSA 645 Fiscal Management and Introduction to Management Sciences in Facility Administration. (Prerequisites: RSA 4078 and RSA 647 or equivalents) A - Fiscal Management - The relationship of accounting information to management control, accounting techniques, budgeting, and fiscal administration are examined. B - Introduction to Management Sciences - Quantitative methods and the use of the computer in management are reviewed.
RSA 646 Rehabilitation Clients: The Hidden Disabilities. This course will provide basic medical and psychosocial information about the impact of the hidden disabilities.

RSA 647 Research Methods and Statistics in Rehabilitation Administration. Formulation of empirical questions, basic design, statistical methods, and the utilization of research in rehabilitation will be explored.

RSA 648 Rehabilitation Clients: The Self-Evident Disabilities. This course will provide basic medical and psychosocial information about the impact of self-evident disabilities.

RSA 650 Social Psychology of Rehabilitation Administration. Contemporary issues in management of rehabilitation will be examined within the context of human interaction.

RSA 652 The Management of Human Resources. A seminar with emphasis placed on the human factor in the rehabilitation process. Methods of mobilizing the general community and other social service resources are analyzed. Specifically, problems in communication, motivation, morale, and accountability are examined. Wage and salary administration and labor relations are addressed.

RSA 653 Program Evaluation and Funding in Rehabilitation. A study of the methods used in planning and evaluating programs. Fund raising in the not-for-profit sector will be explored.

RSA 654 The Cornell Management Game. A seminar employing the technique of learning by discovery. Computerized experiences focus on the decision-making processes of the rehabilitation facility manager.

RSA 655 The General Management of the Rehabilitation Facility. The problems of marketing, contract procurement, operations, production management, and budgeting within a public sector framework are critically examined.

RSA 657 Job Placement in Rehabilitation. Principles and practices in programming associated with job placement of disabled individuals are examined.

RSA 660 Topics in Rehabilitation Research. (Independent Study) A research oriented course which allows the student to work independently under the guidance of the instructor, to review existing literature pertaining to the Management of Rehabilitation Programs and the development of a M.S. project topic.

RSA 661 Selected Topics in Rehabilitation Research. (Independent Study) Continued supervised investigation of the student's identified M.S. project. (Binding fee required.)

RSA 691 Management Seminar and Advanced Organization Concepts. Emphasis on analyzing the tasks and problems encountered in managing rehabilitation agencies and facilities. An examination is made of the current issues confronting management.

RSA 692 Rehabilitation Seminar: Emerging Issues and Trends. Identification and examination of emerging trends and issues in the field of Rehabilitation are studied.
religious studies
(REL)

faculty

professors
John Dominic Crossan, S.T.D., S.S.L.
William VanderMarck, Ph.D.
Francis Bruce Vawter, C.M., S.S.D.

associate professors
Paul F. Carneisch, Ph.D.
John J. Collins, Ph.D.
Rev. Edmund J. Fitzpatrick, S.T.D.
Charles R. Strain, Ph.D.

St. Patrick’s College, Maynooth
University of Fribourg
Pontifical Biblical Institute, Rome

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

instructor
George J. Yamin, M.A.

University of Chicago

emeriti
Rev. Patrick O’Brien, C.M., S.T.D.

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
   310 Theology of History. Representative Christian and non-Christian
   concepts of history and the interrelation of Christianity and history.
   410 World Religions and Western Culture. History and thought of the
   world's major living religions and their influences on Western culture.
   411 Mystical Tradition in Western Religions. Classics of religious mysticism,
   past and present, in Judaism, Islam, and Christianity and their
   influence on Western culture.

2. Biblical Literature
   420 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).
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.

The Eucharist. The sacrament of the Eucharist in the New Testament
sources and in later theology. The modes of Eucharistic presence.

Theology in the Patristic Period. Sources, bibliography, principal
representatives and main issues.

Theology in the Medieval Period. Sources bibliography, principal
representatives and main issues.

Theology in the Modern Period. The Protestant Reformation and
Tridentine Catholicism. Christian thought and the challenges of
Enlightenment, Science, and Historical Consciousness.

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.


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 may 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 I.
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


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
(SOC)

faculty

professors
Rosemary Bannan, Ph.D.
Roberta Garner, Ph.D.
Joyce Sweeney, Ph.D.
Deena Weinstein, Ph.D.

Loyola University
University of Chicago
Northwestern University
Purdue University

associate professors
Therese Baker, Ph.D.
Judith Bootcheck, Ph.D.
Grace DiSantis, Ph.D.
Kenneth Fidel, Ph.D.
John Koval, Ph.D.
Charles Suchar, Ph.D.

University of Chicago
Purdue University
University of Chicago
Washington University
University of Oregon, Eugene
Northwestern University

assistant professors
Robert Rotenberg, Ph.D.
Charles Stevens, Ph.D.

University of Massachusetts at Amherst
Northwestern University

lecturers
Noel Barker, M.A.
Carol Stocking, Ph.D.

University of Illinois, Urbana
University of Chicago

emeritus
Lavinia Raymond, Ph.D.

University of Sao Paulo
purpuse

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.

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 Organizations

- 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 Project Papers. Students who elect not to write a thesis complete two project papers (one, bibliographical; other, data analysis) in conjunction with two of the 400-level elective courses in order to develop skills of conceptualization and analysis.

- Thesis: Prerequisites for enrolling in the thesis research courses (SOC 500 and 501) are successful completion of the core courses and the 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, juvenile 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. Conceptual and theoretical basis for analyzing social policy, planning policy in the larger context of social change.
Methods of Policy Analysis and Evaluation. Evaluation and use of research instrumentation and statistical techniques for policy analysis.

Organizations. A consideration of current problems faced by policy planners in corporate and public sector organizations, as well as selected theoretical and empirical studies related to the administration of programs.

sociological background

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 desirable for students who have not had a previous statistics course. It does not carry graduate credit.

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 desirable for graduate students who have not had extensive undergraduate work in sociology. The course counts toward the 36 hour of graduate electives.

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 implications for social policy.

courses in specialized areas

Urban Studies

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.

Urban and Community Analysis. Quantitative analysis of urban issues including social area analysis, patterns of segregation, neighborhood change and other selected topics.

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.

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.

Strategies of Community Organizations. Strategies and techniques used in the formation and process of community organizations. The primary conceptual emphasis is from sociology, but there is a considerable interdisciplinary content, an application of social science knowledge to bring about social change.
426 Policies and Urban Development. (A sequel to 425.) Community agencies are viewed as problem-solving organizations. The course concentrates on the impact of state and local government on community organizations and how community organizations influence social policy.

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 interrelationships. An evaluation of problems in health care delivery systems.

432 The Sociology of Welfare and Welfare Services. Analysis of the concept of welfare, evaluation 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.

434 Youth Services: Health and Welfare. Reviews research on various youth problems (e.g., substance abuse, pregnancy, runaways) and considers efforts at a amelioration and control.

438 Research Strategies in HEW. 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 Inequality.

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.
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.

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.

415 Information Systems and Society. Examines the societal impact of information systems and computer technology. A social scientific perspective for comprehending technologically induced social change at the level of the larger social system and in terms of the life styles and careers of individuals in society.

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. Critical analysis of literature on non-delinquent youth, focusing on the social contexts within which the transition to adulthood occurs.

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.

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.


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 institutional 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 community to American culture, gain a functional understanding of the social, economic and political development of blacks in America; gain an insight into problems created in America because of non-acceptance relationships. (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.