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Purpose

The College of Science and Health provides students with innovative, science-based curricula. Our departments represent the natural sciences, mathematics, psychology, nursing, and health science, each of which is committed to providing the highest quality education. The College of Science and Health educates students with a strong Vincentian commitment to social justice and civic engagement.

The College of Science and Health is dedicated to helping members of DePaul's diverse student body reach their full academic and professional potential. The innovative curricula supported by the college encourages active participation in research, internships and other opportunities that further prepare students for successful careers and as lifelong learners. Faculty in the college embody the commitment to student academic and professional development through their quality instruction and by conducting meaningful, student accessible research.

Location

The College of Science and Health is located on the Lincoln Park Campus.

Administration

JERRY W. CLELAND, Ph.D.,
Interim Dean

Admission

Applicants are admitted to the College of Science and Health on the basis of their ability to complete programs of study and research prescribed for the masters 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.
FULL DEGREE-SEEKING STATUS
The minimum requirements for this status are:
- Bachelor's degree conferred by a regionally accredited institution.
- Scholastic achievement in undergraduate studies satisfying all requirements for entering a specific graduate program.
- Submission of all required supporting credentials.
- Unconditional approval by the department or program director of the applicants proposed course of graduate study.

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

CONDITIONAL DEGREE-SEEKING STATUS
The minimum requirements for this status are:
- Bachelor's degree conferred by a regionally accredited institution.
- Scholastic achievement in undergraduate studies indicating a capacity to pursue successfully a specific program of graduate study.
- Submission of all required supporting credentials.
- Conditional approval by the department or program director of the applicants proposed course of graduate study.

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

NON-DEGREE-SEEKING STUDENTS
The dean 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 to a graduate program, but they are not accorded special consideration for admission. Students should consult the intended degree program's website for information about application requirements.

NON-DEGREE-SEEKING STATUS
The minimum requirements for this status are:
- Bachelor's degree conferred by a regionally accredited institution
- Academic achievement in undergraduate studies indicating a capacity to succeed in graduate course work (minimum of 2.50/4.00)
- Submission of official transcript from bachelor's degree granting college or university
- Approval by the director of graduate admission.

When such students apply to a graduate program, the departmental or program director of their specific graduate course of study 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 STATUS
The College of Science and Health 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 submit a graduate application. The supporting credentials required are an official transcript from the bachelor's granting college or university and 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 program at DePaul University.

DEPAUL STUDENTS AND 5-YEAR PROGRAMS
Students 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 completing their undergraduate program. Some programs of study offer an accelerated masters degree that can be started in an undergraduates senior year and completed in a minimum of one additional year. Further information about these 5-year programs can be found within specific program descriptions in this Catalog.
Please use the menu items to the left for current catalog navigation. Access archived catalogs by choosing the link to the right. Prior to Summer 2011, information can be found within the College of Liberal Arts and Sciences.
Programs of Study

Biological Sciences

Introduction

The department offers a program of advanced study which will enable qualified students to earn a degree at the master's level.

More specifically the department provides:

- Assistance in planning a specific program or sub-concentration of studies which will help the student to achieve his or her goals.
- A series of lecture, laboratory and seminar courses appropriate to the degree program offered, and a continuing series of seminars by recognized scientists from other institutions.
- Opportunities for research leading to the thesis in accord with the students and the faculty's research interests.
- Continuing opportunities for interaction between faculty and students in order to promote the existence of a scholarly and collegial environment.

The learning objectives of the graduate program are:

- Improved understanding of biology to the extent expected at the master's level.
- Improvement in ability to synthesize, interpret and conceptualize biological information consistent with achievement of the master's degree.
- Development of laboratory skills and methodologies which enable the student to acquire, independently, new knowledge relating to life and the principles governing living systems.
- Achievement of the ability to communicate biological knowledge effectively to others in both an oral and a written fashion.
- Achievement of the habit of objective observations and evaluation as well as attitudinal values, in keeping with the expectations of science and the community of professional biologists.

Faculty

MARGARET E. SILLIKER, Ph.D.
Associate Professor and Director of Graduate Program
University of California, Berkeley

WINDSOR E. AGUIRRE, Ph.D.
Assistant Professor
Stony Brook University

JOANNA S. BROOKE, Ph.D.
Master of Science: Biological Science (Thesis)

A program of study leading to the Master of Science degree in Biology designed for students who:
- Have a strong desire to increase their understanding of the life sciences.
- Plan additional education at the masters level for increased proficiency in teaching and/or research, or
- Plan to continue study toward the Ph.D. degree.

The masters program provides lecture, laboratory and seminar courses to aid students in achieving their stated goals. Students develop a particular concentration of studies in consultation with their academic advisor.

ADMISSION REQUIREMENTS
For full admission, students will generally have the following:
- Bachelors degree: major in biological sciences or its equivalent.
- Chemistry: minimum two academic years, including one year of organic.
- General Physics: one year.
- Calculus: one year.
- Working knowledge of computers and of statistics.
- Prerequisite course work completed 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 3.0 on a scale of 4

DEGREE REQUIREMENTS

Courses: 52 quarter hours of graduate credit, including graduate core courses, BIO 400 Development of Topics for Research, BIO 495 Introduction to Graduate Study, and up to 16 hours of Research, of which at least eight hours must be BIO 498 Research for Masters Thesis. Graduate students are also required to attend all of the seminars presented in the departments Seminar Series. Note: Students are expected to have at least two courses in each of the three core areas of study.

CORE AREAS OF STUDY

Ecology, Evolution, and Population biology
BIO 415 - Topics in Ecology
BIO 415 - Aquatic Biology
BIO 420 - Microbial Ecology
BIO 421 - Molecular Methods in Ecology and Evolution
BIO 433 - Mycology
BIO 435 - Concepts in Evolution
BIO 445 - Topics in Paleobiology
BIO 447 - Topics in Medical Bacteriology

Genetics, Cell and Molecular biology
BIO 409 - Plant Physiology
BIO 421 - Molecular Methods in Ecology and Evolution
BIO 425 - Cellular Events in the Immune System
BIO 430 - Developmental Biology
BIO 433 - Mycology
BIO 447 - Topics in Medical Bacteriology
BIO 448 - Biology of Infection
BIO 450 - Cell Motility
BIO 455 - Genetic Toxicology
BIO 460 - Molecular Biology
BIO 461 - Topics in Molecular Biology
BIO 471 - Immunobiology
BIO 475 - Introduction to Pharmacology
BIO 480 - Cancer Biology

Physiology and Neurobiology
BIO 409 - Plant Physiology
BIO 439 - Cellular Neurobiology
BIO 440 - Systems Neurobiology
BIO 441 - Topics in Neurobiology
BIO 452 - Advanced Comparative Physiology
BIO 465 - Principles of Toxicology
BIO 475 - Introduction to Pharmacology
BIO 486 - Introduction to Endocrinology
BIO 490 - Special Topics, as appropriate, may also be approved in one of the three core areas.

Advancement to Candidacy: based upon the results of a qualifying examination taken near the end of the third quarter of the students first full year and earning grades of B or better on graduate courses taken during the first year. Participation in undergraduate laboratory instruction is strongly encouraged.

Thesis: results based upon an independent laboratory investigation.

Final Examination: An oral examination, including presentation of a seminar based on the M.S. thesis research, and a period of questioning on the thesis, the area of research which the thesis addresses, and basic biology as it relates to the thesis area.

College of Science and Health - Graduate Studies ▪ Programs of Study ▪ Biological Sciences ▪ Master of Arts: Biological Science (Non-thesis)

Master of Arts: Biological Science (Non-thesis)

A program of study leading to the Master of Arts degree in Biology is designed for students who:
- Have a strong desire to increase their understanding of the life sciences.
- Plan additional education at the masters level for increased proficiency in teaching. This program is not intended for those students pursuing technical and/or laboratory research-related careers, or planning to continue study towards the Ph.D. degree.

ADMISSION REQUIREMENTS:
Admission requirements are the same as described for the Master of Science program.

DEGREE REQUIREMENTS:
**Courses:** 50 quarter hours of graduate credit, including the graduate core courses BIO 495 Introduction to Graduate Study and BIO 400 Master of Arts Seminar, and ten additional courses from the three core areas described in the Master of Science program. Specifically, MA students will complete a minimum of three courses from each of the following core areas: Ecology, Evolution and Population Biology; Genetics, Cell and Molecular Biology; and Physiology and Neurobiology.

**Advancement to Candidacy:** based upon results of a qualifying examination taken near the end of the third quarter of the student's first full year of course work.

**Final Project:** based upon an independent library research project under the supervision of a faculty member. Up to four credit hours of BIO 496-Research may be taken to complete the Final Project.

Special Programs

**CERTIFICATION FOR HIGH SCHOOL (6-12) TEACHING**

DePaul University College of Education offers approved programs for State of Illinois certification in 6-12 teaching. Students who complete the requirements for the Master of Science or Master of Art in Biological Sciences listed above may also obtain certification. Please see the following Web site for the most current requirements.

http://sr.depaul.edu/catalog/catalogfiles/Current/College%20of%20Education%20Graduate%20Studies/pg68.html>College of Education

Student Handbook

**Probation:** Students are expected to maintain a minimum grade point average (GPA) of 3.0. If a students GPA goes below this minimum the student will be put on probation and will have one quarter to bring their GPA up to the minimum or face dismissal from the program. If the students GPA goes below the minimum a second time, they will be dismissed from the program.

**Dismissal:** In addition to the minimum GPA requirement, students may be dismissed for breaches of academic honesty, breaches of the code of student responsibility, failing a retake of the oral qualifying exam, or lack of progress towards degree completion. Students who have completed their coursework, but who are still working on their thesis (MS) or final project (MA) must be enrolled in candidacy continuation during the three quarters of the academic school year. Failure to enroll in candidacy continuation will result in dismissal from the program.

**Readmission:** If a student leaves the program for any reason they must reapply to the program unless prior agreement for readmission has been granted by the Director of Graduate Studies in Biology (hereafter, Graduate Director). A specific timeline for readmission must be specified and agreed to by the Graduate Director prior to the student leaving the program.

**Transfer credit:** Two semester courses or three quarter courses may be accepted as transfer credit upon approval of the Graduate Director. Credit will only be transferred for courses that have equivalents in the DePaul curriculum as determined by the Graduate Director.

**Undergraduate courses:** No undergraduate courses will be counted towards the graduate degree.
**Graduation requirements:** In order to graduate, students must satisfy the degree requirements as specified in the course catalog for MA and MS degrees and maintain a minimum GPA of 3.0.

**Graduation with distinction:**

*Criteria for Distinction, M.S. Degree*

The criteria for graduating with distinction are a minimum 3.5 GPA in graduate level biology courses and the recommendation of the final project/thesis committee.

In order for the thesis committee members to have sufficient input into the development of the thesis research and to be able to properly assess the candidates abilities and effort, the thesis committee must be formed and have met once by November 1, of the candidates second year of graduate study. The thesis committee will consist of the Thesis Advisor and two additional members (typically DePaul biology faculty).

The responsibility of the thesis committee is to assess whether the candidate has achieved the following:

- While conducting his/her research the candidate has become an independent thinker and researcher. They have demonstrated problem solving abilities, have been self-motivated, and have shown determination in accomplishing his/her research goals.
- In presenting his/her research the candidate can interpret their results, understand the limitations of their work, effectively communicate their work, and put their work into the larger context of their field.
- The completed thesis/final project represents a significant contribution, which is clearly above average.

*Criteria for Distinction, M.A. Degree*

The criteria for graduating with distinction are a minimum 3.5 grade point average in graduate level biology courses and the recommendation of the final project/thesis committee.

A final project committee needs to be established by Nov 1. The Advisor and two committee members (typically DePaul faculty members) will read and evaluate final project.

The responsibility of the final project committee is to assess whether the candidate has achieved the following:

- While conducting his/her research the candidate has become an independent thinker and researcher. They have demonstrated problem solving abilities, have been self-motivated, and have shown determination in accomplishing his/her research goals.
- In presenting his/her research the candidate can done a comprehensive review and effectively communicate the key issues associated with their topic. They demonstrate their understanding of the field by effectively answering questions during the final project presentation.
- Has an in depth understanding of the field and synthesized it in a way which points in new/creative experimental and/or analytical directions that have the potential to contribute to new approaches in better understanding the research area.

**Courses**

Please visit Campus Connection for current course information. If you do not have a password for Campus Connection you may log on as a guest. Once you are on Campus Connection please select Course Catalog or Course Descriptions.

**Chemistry**

**Introduction**

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.
ADMISSION REQUIREMENTS
For full admission, students must have the following:
- Bachelor's degree: Chemistry or equivalent.
- Calculus: one year.
- Physics, with laboratory: one year.
- General Chemistry: one year.
- Analytical Chemistry: including quantitative and instrumental analysis.
- Organic Chemistry: one year, including spectral analysis.
- Inorganic Chemistry: one upper-level course.
- Physical Chemistry: one year.

Applicants must also possess an overall GPA of 2.75 or above, with a science GPA of 3.00 or above. See the department website at http://chemistry.depaul.edu for more detailed information about the application process.

Faculty

RICHARD F. NIEDZIELA, Ph.D.
Associate Professor and Chair
The University of Chicago

JURGIS A. ANYSAS, Ph.D.
Professor Emeritus
Illinois Institute of Technology

FRED W. BREITBEIL, III, Ph.D.
Professor Emeritus
University of Cincinnati

MATTHEW R. DINTZNER, Ph.D.
Associate Professor
Syracuse University

LIHUA JIN, Ph.D.
Associate Professor
Princeton University

CAITLIN E. KARVER, Ph.D.
Assistant Professor
University of Southern California

GREGORY B. KHARAS, Ph.D.
Professor
Technion University

JOHN J. KOZAK, Ph.D.
University Professor
Princeton University

JUSTIN J. MARESH, Ph.D.
Assistant Professor
The University of Chicago

SARA STECK MELFORD, Ph.D.
Associate Professor Emeritus
Northwestern University

EDWIN F. MEYER, Ph.D.
Professor Emeritus
Northwestern University

THOMAS J. MURPHY, Ph.D.
Professor Emeritus
Iowa State University

RUBEN D. PARRA, Ph.D.
Associate Professor
University of Nebraska-Lincoln

WILLIAM R. PASTERCZYK, Ph.D.
Professor Emeritus
Loyola University, Stritch School of Medicine

SANDRA CHIMON PESZEK, Ph.D.
Assistant Professor
University of Illinois at Chicago

FRANKLIN S. PROUT, Ph.D.
Common Core

All graduate degree options in the department require completion of a common core from which 32 quarter credit hours are earned. The courses, and their allocations, are as follows:

All six of the following (for a total of 24 quarter credit hours):
CHE 422: Advanced Inorganic Chemistry I
CHE 424: Advanced Inorganic Chemistry II
CHE 442: Advanced Biochemistry I
CHE 444: Advanced Biochemistry II
CHE 450: Advanced Organic Chemistry I
CHE 452: Advanced Organic Chemistry II

One course in advanced statistical analysis of data (for a total of 4 quarter credit hours):
CHE 490: Statistical Analysis of Data

Any two of the following special topics courses (for a total of 4 quarter credit hours):
CHE 480: Special Topics in Analytical Chemistry
CHE 482: Special Topics in Biochemistry
CHE 484: Special Topics in Inorganic Chemistry
CHE 486: Special Topics in Organic Chemistry
CHE 488: Special Topics in Physical Chemistry

Special topics courses may be repeated as long as the topic of the course is different.

Chemistry- Thesis

The following list indicates the requirements for the thesis-based M.S. degree in chemistry. In all, students must accumulate 44 quarter credit hours or more to graduate:

The Graduate Common Core (32 quarter credit hours)
CHE 497: Research (minimum of 12 quarter credit hours)

In addition, M.S. thesis students must write a thesis based on their research project and successfully pass complete a two-part oral exam. The first part of the examination consists of the thesis presentation and defense; the second part is an oral examination concerning the student's general knowledge of chemistry.

Chemistry- Non-Thesis, Standard Track
The following are required to earn a non-thesis M.S. degree, Standard Track:

Graduate Common Core (32 quarter credit hours)

Any three courses taken either from options for other tracks or 400-level courses from the Graduate Common Core (total of 12 quarter credit hours).

No more than three 300-level courses may be taken for graduate credit.

---

**Chemistry - Non-Thesis, Analytical/Physical Chemistry Track**

The following are required to earn a non-thesis M.S. degree, Analytical/Physical Chemistry Track:

Graduate Common Core (32 quarter credit hours)

Any three of the following courses (total of 12 quarter credit hours):
- CHE 310: Nuclear Chemistry
- CHE 318: Biophysical Chemistry
- CHE 474: Advanced Quantum Mechanics
- CHE 476/477: Computation Chemistry (Lecture and Laboratory)

No more than three 300-level courses may be taken for graduate credit.

---

**Chemistry - Non-Thesis, Biochemistry/Medicinal Chemistry Track**

The following are required to earn a non-thesis M.S. degree, Biochemistry/Medicinal Chemistry Track:

Graduate Common Core (32 quarter credit hours)

Any three of the following courses (total of 12 quarter credit hours):
- CHE 318: Biophysical Chemistry
- CHE 348: Chemical Biology
- CHE 360: Medicinal Chemistry
- CHE 362: Drugs and Toxicology
- CHE 364: Nutrition
- CHE 474: Advanced Quantum Mechanics
- CHE 476/477: Computation Chemistry (Lecture and Laboratory)

No more than three 300-level courses may be taken for graduate credit.

---

**Chemistry - Non-Thesis, Polymer/Coating Technology Track**

The following are required to earn a non-thesis M.S. degree, Polymer/Coating Technology Track:

Graduate Common Core (32 quarter credit hours)

Any three of the following courses (total of 12 quarter credit hours):
CHE 430: Polymer Synthesis
CHE 431: Polymer Synthesis Laboratory
CHE 432: Physical Chemistry of Polymers
CHE 434: Polymer Characterization
CHE 435: Polymer Characterization Laboratory
CHE 436: Polymer Technology
CHE 438: Materials Science

No more than three 300-level courses may be taken for graduate credit.

College of Science and Health - Graduate Studies ▶ Programs of Study ▶ Chemistry ▶ Chemistry - Non-Thesis, Synthetic Chemistry Track

Chemistry - Non-Thesis, Synthetic Chemistry Track

The following are required to earn a non-thesis M.S. degree, Synthetic Chemistry Track:

Graduate Common Core (32 quarter credit hours)

Any three of the following courses (total of 12 quarter credit hours):
CHE 320/321: Intermediate Inorganic Chemistry (Lecture and Laboratory)
CHE 326/327: Intermediate Organic Chemistry (Lecture and Laboratory)
CHE 360: Medicinal Chemistry
CHE 378: Applied Spectroscopy
CHE 364: Nutrition
CHE 430: Polymer Synthesis
CHE 438: Materials Science

No more than three 300-level courses may be taken for graduate credit.

College of Science and Health - Graduate Studies ▶ Programs of Study ▶ Chemistry ▶ Student Handbook

Student Handbook

Department of Chemistry
Master of Science Program Policies

Probation and Dismissal: Students must maintain a minimum overall GPA of 2.75 to remain in and graduate from the program. A student whose GPA falls below 2.75 will be placed on academic probation and given one academic quarter to raise the GPA to 2.75 or above.

All students are expected to adhere to the Code of Student Responsibility as outlined in the Graduate Student Handbook. Any violation of the Code of Student Responsibility is considered very serious and is grounds for probation or dismissal at the discretion of the Chemistry Graduate Committee.

Conditional Admission:
An applicant may be admitted conditionally to the program at the discretion of the Chemistry Graduate Committee for one or more of the following reasons:

Undergraduate GPA is less than 2.75 but the student has shown considerable promise in other areas (such as research).
The applicant is missing one or two of the required courses but otherwise has met all of the criteria for admission; the applicant will be required to complete the missing coursework either at DePaul or comparable institution prior to taking graduate courses for which the missing course(s) is(are) prerequisite.
The applicant has not yet taken the required GREs but has otherwise met all of the criteria for admission; the applicant will be required to take the GREs (both general and subject tests) within their first quarter of being enrolled at DePaul.

The Chemistry Graduate Committee will consider other circumstances not included in the above list on an
individual basis.

**Transfer Credit:**
Up to 20 quarter hours of coursework may be accepted as transfer credit towards the M.S. degree for courses that articulate with current courses in our program.

**Graduation with Distinction:**
Students may graduate with distinction by earning an overall GPA of 3.75 upon completion of their program, or on the recommendation of the thesis defense committee.

---

**Courses**

Please visit Campus Connection at https://campusconnect.depaul.edu for current course information. If you do not have a password for Campus Connection you may log on as a guest. Once you are on Campus Connection please select Course Catalog followed by the department.

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**Mathematical Sciences**

**Introduction**

The Department of Mathematical Sciences provides students with the sound mathematical foundation in pure and applied mathematics required for many areas of study.

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**Faculty**

AHMED ZAYED, Ph.D.
*Professor and Chair*
University of Wisconsin-Milwaukee

MOHAMED AMEZZIANE, Ph.D.
*Assistant Professor*
University of Central Florida

J. MARSHALL ASH, Ph.D.
*Professor*
University of Chicago

ALLAN BERELE, Ph.D.
*Professor*
University of Chicago

JEFFREY BERGEN, Ph.D.
*Professor*
University of Chicago

WILLIAM BUTTERWORTH, Ph.D.
*Associate Professor*
Northwestern University

STEFAN CATOIU, Ph.D.
STEFAN CATOIU, Ph.D.
Associate Professor
University of Wisconsin, Madison

WILLIAM CHIN, Ph.D.
Professor
University of Wisconsin

JONATHAN COHEN, Ph.D.
Professor
Washington University

BARBARA CORTZEN, Ph.D.
Associate Professor
University of California, San Diego

SUSANNA EPP, Ph.D.
Professor
University of Chicago

A. EDUARDO GATTO, Ph.D.
Associate Professor
Universidad de Buenos Aires

CONSTANTINE GEORGAKIS, Ph.D.
Associate Professor
Illinois Institute of Technology

LAWRENCE GLUCK, Ph.D.
Associate Professor
Illinois Institute of Technology

YEVGENIA KASHINA, Ph.D.
Associate Professor
University of Southern California

LEONID KROP, Ph.D.
Associate Professor
University of Chicago

TIMOTHY McMURRY, Ph.D.
Assistant Professor
University of California, San Diego

CAROLYN NARASIMHAN, Ph.D.
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T. KYLE PETERSEN, Ph.D.
Assistant Professor
Brandeis University

NICHOLAS RAMSEY, Ph.D.,
Assistant Professor
Harvard University

AYSE SAHIN, Ph.D.
Associate Professor
University of Maryland, College Park

CLAUDIA SCHMEGNER, Ph.D.
Assistant Professor
University of Texas, Dallas

BRIDGET TENNER, Ph.D.
Assistant Professor
Massachusetts Institute of Technology

ILIE UGARCOVICI, Ph.D.
Assistant Professor
M.S. in Applied Mathematics

The department offers programs of study leading to Master of Science degrees in Applied Mathematics in two areas of concentration: Statistics and Actuarial Science. These degrees are designed to provide students with the necessary quantitative background for employment in business, industry or government and to provide a solid foundation for students interested in pursuing a Ph.D. degree in Statistics. This is an evening program offered at the Lincoln Park campus. Some course may also be taken at the Naperville Campus, completed in two academic years.

ADMISSION REQUIREMENTS:
For full admission, students must have the following:

- Bachelors degree.
- Two years of calculus and linear algebra (The equivalent of the undergraduate sequences MAT 150-152 or 160-162, or 170-172, and 260-262).
- A course in statistics.
- A course in a scientific computer programming language (other than COBOL).

Applicants who do not have this minimal preparation may be admitted on a conditional basis until completion of the prerequisite requirements with a grade of B or better.

DEGREE REQUIREMENTS:
Courses: at least 48 quarter hours of graduate level work in applied mathematics and passing two sets of comprehensive examinations, which are offered twice a year in the Autumn and Spring quarters. Parts I-A and I-B are based on material covered in MAT 451, 452 and 453. Part II is based on courses taken in the special area of concentration. Students should request syllabi for the comprehensive exams from the department secretary.

All students in the program are required to complete the following six core courses:

- MAT 451 Probability and Statistics I
- MAT 452 Probability and Statistics II
- MAT 453 Probability and Statistics III
- MAT 448 Statistical Methods with SAS
- MAT 456 Applied Regression Analysis
- MAT 459 Simulation Models and the Monte Carlo Method

In addition, students must complete at least six courses, which are selected from their area of concentration.

Statistics Concentration:
526 and 528, and at least four courses selected from MAT 454, 455, 457, 458, 460, 470, 485, 487, 489, and 512.

Actuarial Science Concentration:
MAT 461, 462, and 463; and at least three courses selected from MAT 455, 464, 467, 468, 470, 485, 489, and 512.

Comprehensive Examination: Degree-seeking students are required to take a two-part comprehensive examination given near the completion of their course work. These are offered twice a year in the Autumn and Spring quarters. Parts I-A and I-B are based on material covered in MAT 451, 452 and 453. Part II is based on material covered in MAT 456, 526, and 528 for the Statistics concentration, and on MAT 461, 462, and 463 for the Actuarial Science Concentration.
COMPUTER USAGE:
The department places strong emphasis on computation and is well supported with equipment and software necessary for research. The computer is used for data analysis and to find solutions to problems that arise in numerical analysis, simulations, and mathematical modeling. The computer packages used in these courses are likely to play an important role in the solution of problems students will encounter in their places of employment.

M.S. in Applied Statistics

MASTER OF SCIENCE: APPLIED STATISTICS
The department offers a program of study leading to the Master of Science degree in Applied Statistics. The program is designed to provide students with the necessary quantitative background for employment in business, industry, or government and to proved a solid foundation for students interested in pursuing a Ph.D. degree in applied statistics. Courses in this program are offered at the Naperville campus. Some may also be taken at the Lincoln Park Campus.

ADMISSION REQUIREMENTS:
For full admission, students must have the following:

- Bachelors degree in Mathematics.
- Two years of calculus and linear algebra (i.e., the equivalent of one of the first-year sequences MAT 150-152, 160-162, or 170-172; and the second year sequence 260-262
- A course in statistics.

Applicants who do not have this preparation may be admitted on a conditional basis provided they complete the requirements with grades of B or better.

DEGREE REQUIREMENTS:
Courses: at least 48 quarter-hours of graduate level work in applied statistics and pass two sets of comprehensive examinations.

All students in the program are required to complete the following ten core courses:

- MAT 441 Statistical Data Analysis with SAS- I
- MAT 442 Statistical Data Analysis with SAS- II
- MAT 443 Statistical Data Analysis with SAS- III
- MAT 451 Probability and Statistics I
- MAT 452 Probability and Statistics II
- MAT 453 Probability and Statistics III
- MAT 456 Applied Regression Analysis
- MAT 512 Applied Time Series and Forecasting
- MAT 526 Design of Experiments
- MAT 454 Multivariate Statistics
- MAT 455 Stochastic Processes
- MAT 457 Nonparametric Statistics
- MAT 458 Statistical Quality Control
- MAT 459 Monte Carlo Simulation Methods
- MAT 460 Topic in Statistics: Survival Analysis, Reliability Theory
- MAT 489 Queueing Theory

Comprehensive Examination: Degree-seeking students are required to take a two-part comprehensive examination given near the completion of their course work. These are offered twice a year in the Autumn and Spring quarters. Parts I-A and I-B are based on material covered in MAT 451, 452 and 453. Part II is based on material covered in MAT 456, 526, and 528. At the beginning of the quarter when students plan to take the comprehensive examinations, they should register with the program director.
COMPUTER USAGE:
The department places strong emphasis on computation and is well-supported with equipment and software necessary for research. The computer software packages used in most courses are likely to play an important role in the solution of the problems students will encounter in their places of employment.

MA. in Mathematics Education

The purpose of the program leading to the degree of Master of Arts in Mathematics Education is to improve the quality of mathematics instruction in schools within the greater-Chicago area and to offer a response to the shortage of secondary school and junior college mathematics teachers. This six-quarter degree program is offered on an accelerated basis during intensive weekend sessions and may be taken while in-service at the rate of two courses per quarter. However, students may proceed through the program at a slower pace depending upon their individual needs. The emphasis in the program is on mathematical content, but significant amounts of time are spent on methods of incorporating new teaching strategies and technologies in the classroom. The program is directly tied to secondary and junior college curriculum needs and is directed toward previously or currently certified teachers with degrees in non-mathematics fields, to teachers with bachelors degrees in mathematics who wish to upgrade their command of the field, and to bachelors degree holders in other fields who wish to enter teaching. For more information please visit the program director's website at http://condor.depaul.edu/~jbergen.

ADMISSION REQUIREMENTS:
This program is administered by the Department of Mathematical Sciences through the College of Liberal Arts and Sciences. Details regarding admission requirements, course schedules, and so forth, may be obtained at http://condor.depaul.edu/~jbergen/mamed.html or from the program director in the Department of Mathematical Sciences at jbergen@depaul.edu. Registration for MA. in Mathematics Education program courses is open only to program majors or to those students who have the written authorization of the program director.

DEGREE REQUIREMENTS:
The standard program consists of twelve courses chosen from among 609, 610, 611, 612, 618, 620, 631, 640, 650, 651, 660, 670 and 671. Certain modifications may be made in consultation with and subject to the approval of the program director.

M.S. in Middle School Mathematics Education

The Master of Science in Middle School Mathematics Education is a joint program designed collaboratively by faculty from DePaul University's College of Science and Health and the College of Education and by teacher leaders from the Chicago Public Schools. The design includes innovative approaches and strategies that interweave:

- content and pedagogy throughout the participants experiences,
- the use of technology in the classroom, and
- investigation of research-based curricular materials supported by the Chicago Public Schools.

This is a summer and evening program offered at the Lincoln Park campus. The 12 required courses in the proposed program address the appropriate Illinois Content Area Standards in Elementary Education. For information on scheduling and endorsement, visit the program web site at http://condor.depaul.edu/~asahin/msme.htm.

ADMISSION REQUIREMENTS:
For full admission, students must have the following:

- Bachelors degree with a cumulative GPA of 2.75 or higher
- An elementary or secondary teaching certificate
- A completed MSME application form (this can be downloaded from the program web site)

DEGREE REQUIREMENTS:
Registration for M.S. in Middle School Mathematics Education program courses is open only to program majors or to those students who have the written authorization of the program directors.

**All students in the program are required to complete the following 12 courses:**

- MMT 400 Experimentation, Conjecture, and Reasoning with Numbers
- MMT 401 Foundations of Mathematical Thinking and Learning in the Middle School
- MMT 405 Geometry
- MMT 410 The Development of Middle School Mathematics Literacy
- MMT 415 Algebra for Middle School Teachers 1
- MMT 416 Algebra for Middle School Teachers 2
- MMT 417 Functions and Modeling
- MMT 420 Teaching, Learning, and Assessment of Middle School Mathematics
- MMT 425 Data Analysis and Probability
- MMT 430 Applied Project in Mathematics Education
- MMT 435 Ideas of Calculus in the Middle School Curriculum
- MMT 440 History and Cultural Foundations of Mathematics

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**College of Science and Health - Graduate Studies ▸ Programs of Study ▸ Mathematical Sciences ▸ Student Handbook**

**Student Handbook**

**Applied Mathematics and Applied Statistics Policies & Standards**

**Probation:** A student will be put on probation if his/her GPA falls below of 2.7.

**Dismissal:** A graduate student will be dismissed if one or more of the following conditions hold: his/her GPA continues to fall below 2.7 after one year of being on probation; lack of progress toward degree completion, or failing the comprehensive examinations twice.

**Conditional Admission:** Students whose undergraduate degrees were in majors other than mathematics or related fields may be conditionally admitted provided they complete the following minimum prerequisites: two years of calculus [the equivalent of MAT-150-152], multivariable calculus and linear algebra [the equivalent of MAT-260-262], and a course in statistics. Additionally, for the applied mathematics program, a course in computer programming is required.

**Readmission:** The same re-admission standards outlined in the University Graduate Student Handbook and approval of the program director are observed for students in these programs.

**Transfer Credit:** No more than two graduate courses [8 credit hours] may be transferred from another program or institution provided that they are equivalent to courses offered in DePaul's graduate program, and they did not count toward another degree.

**Undergraduate courses:** No undergraduate courses shall count toward the graduate degree.

**Graduation requirements:** Twelve graduate courses [48 credit hours] at a minimum GPA of 2.7, and passing of Part-I and Part-II comprehensive Examinations.

**Graduation with Distinction:** A minimum GPA of 3.7 and high performance on the comprehensive examinations are required for graduation with distinction.

**Time Limit:** The degree is expected to be completed in a maximum of six years.

**M.A.M.Ed. Policies**

**Readmission:** If a student leaves the program for any reason, they must reapply to the program.

**Transfer credit:** Typically, at most two quarter courses may be accepted for transfer credit. Depending upon the circumstances, the program director may accept a third quarter course for transfer credit. Courses accepted for transfer credit must be graduate courses, have not been used for a previous degree, and must be deemed as appropriate by the program director.

**Undergraduate courses:** No undergraduate courses will be counted towards the graduate degree.

**Graduation requirements:** In order to graduate, students must satisfy the degree requirements with a GPA of at least 2.5.
Graduation with distinction: The requirement to graduate with distinction is a GPA of at least 3.75 in all courses taken in the M.A.M.Ed. program.

Time limit: Students requiring more than 3 years to complete the M.A.M.Ed. requirements will need the approval of the program director to graduate.

Special Programs

B.S. (B.A.)/M.S. IN PURE MATHEMATICS

The combined B.S. (B.A.)/M.S. degree in Pure Mathematics allow promising undergraduate students to earn both a B.S. or B.A. in Mathematics and a M.S. in Pure Mathematics within about one year after the completion of the Bachelor degree. The program is designed for undergraduate mathematics majors in the Pure Mathematics concentration. It is expected that students will complete the Common Core in Mathematics by the end of the sophomore year, will begin taking some graduate-level courses during the senior year, and will complete the requirements for the Master of Science in Pure Mathematics degree in approximately one year after earning the Bachelors degree.

To be admitted to this program, students must apply to the program director no later than the beginning of the junior year. Careful planning of course sequencing in this program is essential. A maximum of 12 quarter hours taken at the graduate level while undergraduate may be double-counted toward the B.S. (B.A.) and M.S. degrees provided the grades are B or better. During the senior year, and for formal admission in the graduate program, students in the combined B.S (B.A.)./M.S. program should submit an application form to the College of Science and Health admissions office. Please visit the Mathematical Sciences Departments website http://las.depaul.edu/math.

For the degree requirements, see the Mathematical Sciences section of the undergraduate course catalog.

GRADUATE CERTIFICATE IN APPLIED STATISTICS

Students may also elect to obtain a certificate in applied statistics rather than a master's degree. The certificate program requires successful completion of six courses in Applied Statistics including MAT 441-442-443, Data Analysis I, II, and III, respectively, and three courses selected from MAT 456, Applied Regression Analysis, MAT-457, Nonparametric Statistics, MAT-528, Design of Experiments, MAT 526, Sample Survey Methods, and MAT 458, Statistical Quality Control.

Students in the certificate program in applied statistics should contact the program director during their last quarter to apply for graduation and issuance of the certificate.

CERTIFICATION FOR SECONDARY (6-12) TEACHING

DePaul University College of Education offers approved programs for State of Illinois certification in 6-12 teaching. Students who complete the requirements for the Master of Arts in Mathematics Education listed above may also obtain certification by satisfying the following additional requirements: Courses: College of Education: SCG 410, 406 and either 408 or 601; LSI 446, T&L 405, 525, and 590 (student teaching). These courses lead to a secondary teaching certificate; SCG 439 is needed for a middle school (grades 6-8) endorsement.

MAT 609 or T&L 436

Other requirements:

- Specific courses in general education (such as science or U.S. history) if not taken as an undergraduate.
- Basic skills and subject matter tests.
- Field experiences.

Students in this program must apply to and have an advisor in the College of Education.

Courses

Please visit Campus Connection at https://campusconnect.depaul.edu for current course information. If you do not have a
password for Campus Connection you may log on as a guest. Once you are on Campus Connection please select Course Catalog followed by the department.

Nursing

Introduction

ACCREDITATION
Commission on Collegiate Nursing Education
Council on Accreditation of Nurse Anesthesia Educational Programs

CERTIFICATION & LICENSING ELIGIBILITY
American Association of Nurse Anesthetists
American Nurses' Credentialing Center
Adult Nurse Practitioner
Family Nurse Practitioner
National Certification Corporation (pending)
Illinois Department of Professional Regulation (NCLEX-RN)

MISSION
The mission of the Department of Nursing is the preservation, enrichment and transmission of nursing science as a discipline and its application to promote the health and well being of individuals, families, and communities. The faculty pursues this mission through excellence in teaching as the primary focus of scholarship; and research that has the potential to advance nursing knowledge, scientific inquiry, teaching and health. The Department maintains a commitment to serving persons with diverse talents, qualities, interests, and socio-economic backgrounds in its educational programs and professional practice. It seeks to provide accelerated, inquiry-based education that anticipates the rapid pace of change in health promotion and illness care.

SPECIAL ADMISSION CRITERIA
- Graduation from a NLN- or CCNE-accredited Master of Science* in Nursing program
- Registered Nurse licensure in the State of Illinois
- Evidence of professional practice within the last 5 years.
- Evidence of professional writing ability
- Graduate GPA of 3.0

*Applicants with an earned doctorate or current APN certification in nursing are eligible for a portfolio evaluation of their prior transcripts, clinical practice (written documentation required), and teaching experience (syllabi documentation required). Special fee ($500) applies.

Faculty

KAY THURN, PsyD., RN
Professor & Chair
Adler School of Professional Psychology

KIM AMER, PhD, RN
Associate Professor
University of Illinois at Chicago

LORI FEWSTER-THUENTE, MSN, RN
Visiting Instructor
Loyola University Chicago

LINDA GRAF, MSN, APN, CNM, WHNP
Clinical Assistant Professor
M.S. in Nursing (Master's Entry into Nursing Practice Program)

PROGRAM SUMMARY:

Designed for the college graduate who wants to become a registered nurse, the MENP program provides the advanced education for general professional nursing practice and eligibility for the RN licensure examination (NCLEX-RN).

ADMISSION REQUIREMENTS
For full admission, applicants must have the following:
• BS or BA degree from a regionally accredited institution
• GPA of 3.0/4.0 (baccalaureate OR graduate cumulative)
• Official GRE scores of at least 1000 and 4.0 on writing portion (Institution Code: 1165) if undergraduate GPA is below 3.2 (cumulative) on a 4.0 scale
• TOEFL of 590 (PBT) or 96 (iBT) if non-native English speaker
• Two courses of chemistry (organic and inorganic) with Lab
• Two courses of human anatomy/physiology with labs
• Prerequisite Worksheet - (please complete with all prerequisite course information and email to GradDePaul@depaul.edu)
• Personal Statement (1-2 pages)
• Online application (www.depaul.edu/apply) and $40 application fee

REQUIRED COURSES

LEVEL I (BASIC GRADUATE GENERIC) - 36 CREDITS
NSG 301 Art & Science of Nursing I (6)
NSG 302 Art & Science of Nursing II (8)
NSG 303 Art & Science of Nursing III (8)
NSG 307 Art & Science of Nursing IV: Psychiatric Mental Health (6)
NSG 322 Basic Pathophysiology & Pharmacology (4)
NSG 332 Physical and Psychosocial Assessment Strategies (4)
LEVEL III (GRADUATE CORE COURSES) - 19 CREDITS
NSG 400 Nursing Theories (4)
NSG 401 Nursing Research I (3)
NSG 481 Biostatistics and Applied Epidemiology (4)
NSG 540 Culture, Ethics, and Policy Analysis (4)
Students also choose one Final Project from the following courses:
NSG 598: Graduate Research Synthesis (4)
NSG 599: Nursing Thesis (4)
LEVEL IV (ADVANCED PRACTICE CORE COURSES) - 11 CREDITS
NSG 422 Applied Physiology (4)
NSG 426 Pharmacology II (4)
NSG 460 Advanced Health Assessment (3)

PROGRAMS & ROLE CONCENTRATIONS
Adult Nursing: Adult Nurse Practitioner
Advanced Practice Nursing Degree Completion
Anesthesia: Nurse Anesthetist
Family Nursing: Family Nurse Practitioner

ADMISSION REQUIREMENTS
• Minimum of BS in Nursing degree from a regionally accredited institution
• RN licensure in State of Illinois
• GPA of 3.0/4.0 (baccalaureate OR graduate cumulative)
• Official GRE scores of at least 1000 and 4.0 on writing portion (Institution Code: 1165) if undergraduate GPA is below 3.2 (cumulative) on a 4.0 scale
• TOEFL of 590 (PBT) or 96 (iBT) if non-native English speaker
• Organic chemistry completed within the last five years
• Personal Statement (1-2 pages)
• Online application (www.depaul.edu/apply) and $40 application fee

For students entering the Nurse Anesthesia track, additional requirements include:
• Minimum of one year employment in ICU.
**Required Core Courses:**
**Required of all graduate nursing students (24-28 credits)**
- NSG 400 Theoretical Components of Nursing
- NSG 401 Nursing Research I (3)
- NSG 402 Nursing Research II (3)
- NSG 430 Legal-Political Issues in Health Care (2)
- NSG 433 Nursing & Biomedical Ethics (2)
- NSG 480 Statistical Methods for the Health Sciences
- NSG 482 Epidemiology (2)

**One 4-credit Health Systems Elective** (Nurse Anesthetists choose one 2-credit course). Students may choose any course in the university focusing on health care organizations, management, and economics or from the following courses in the nursing department:
- NSG 425: Finance and Costing in Health Care
- NSG 450: Special Topics
- NSG 451: Introduction to Nursing Administration and Leadership
- NSG 452: Organizational and Financial Management in Health Care
- NSG 453: Case Management and the Managed Care Environment

*Requirement may be met with required course in major area of study*

**One Final Project from the following courses:**
- NSG 598: Graduate Synthesis (2)
- NSG 599: Nursing Thesis

**Required Courses: Nurse Anesthetist (48 credits)**
- NSG 500: Chemistry and Physics
- NSG 501: Anatomy & Physiology I
- NSG 502: Anatomy & Physiology II
- NSG 503: Pathophysiology
- NSG 504: Principles of Anesthesia Practice I
- NSG 505: Principles of Anesthesia Practice II
- NSG 506: Principles of Anesthesia Practice III
- NSG 507: Pharmacology I
- NSG 508: Pharmacology II
- NSG 509: Advanced Physical Assessment for Nurse Anesthetists
- NSG 510: Anesthesia Practicum I
- NSG 511: Anesthesia Practicum II
- NSG 512: Anesthesia Practicum III
- NSG 513: Anesthesia Practicum IV
- NSG 514: Anesthesia Practicum V
- NSG 515: Anesthesia Practicum VI
- NSG 516: Anesthesia Practicum VII

**Required Advanced Practice Core Courses for Nurse Practitioner Role Concentrations - 16 credits**
- NSG 422: Applied Physiology
- NSG 424: Advanced Physiology & Pathophysiology
- NSG 432: Family & Health Theories Across the Lifespan
- NSG 484: Advanced Pharmacology

**Required Courses: Adult Nurse Practitioner - 28 credits**
- NSG 460: Advanced Health Assessment Across the Lifespan (3)
- NSG 462: Advanced Women's Health Assessment (2)
- NSG 474: Primary Care of the Adult (2)
- NSG 478: Clinical Management of Acute and Chronic Illness (3)
- NSG 483: Practicum in Population-Based Nursing Practice I (3)
- NSG 487: Practicum in Population-Based Nursing Practice II (3)
- NSG 488: Issues & Research in Population-Based Nursing Practice (2)
- NSG 490: Practicum in Population-Based Nursing Practice III (4)
- NSG 492: Clinical Decision-Making for Advanced Practice Nursing I (2)
- NSG 493: Clinical Decision-Making for Advanced Practice Nursing II (2)
- NSG 494: Clinical Decision-Making for Advanced Practice Nursing III (2)

**Required Courses: Family Nurse Practitioner - 34 credits**
- NSG 460: Advanced Health Assessment Across the Lifespan (3)
- NSG 461: Advanced Pediatric Health Assessment (3)
- NSG 473: Primary Care of the Infant & Child (2)
- NSG 474: Primary Care of the Adult (2)
- NSG 475: Clinical Management of Pregnancy and Childbearing (3)
College of Science and Health - Graduate Studies Programs of Study Nursing Special Programs

Special Programs

POST-GRADUATE ADVANCED PRACTICE NURSING CERTIFICATE PROGRAM

PROGRAM AREAS

- Adult Nursing: Adult Nurse Practitioner
- Anesthesia: Nurse Anesthetist
- Family Nursing: Family Nurse Practitioner

SPECIAL ADMISSION REQUIREMENTS

Graduate Application
Registered Nurse in the state of Illinois
Masters degree in nursing
Professional Liability insurance
GPA of 3.0/4.0
Basic statistics course or equivalent
Two letters of reference (one from a nursing faculty member and one from a current work supervisor)
Goal statement (1 - 2 pages)
Portfolio Evaluation (for candidates with a doctorate in nursing or significant teaching experience - special fee required)
Completion of advance physiology, pathophysiology, and epidemiology
Online application (www.depaul.edu/apply) and $40 application fee

Required Advanced Practice Core Courses for Nurse Practitioner Role Concentrations:

NSG 422: Applied Physiology
NSG 424: Advanced Physiology & Pathophysiology
NSG 484: Advanced Pharmacology
NSG 460: Advanced Physical Assessment Across the Lifespan

Required Courses: Adult Nurse Practitioner:

NSG 462: Advanced Women's Health Assessment (2)
NSG 474: Primary Care of the Adult (2)
NSG 478: Clinical Management of Acute and Chronic Illness (3)
NSG 483: Practicum in Population-Based Nursing Practice I (3)
NSG 487: Practicum in Population-Based Nursing Practice II (3)
NSG 488: Issues & Research in Population-Based Nursing Practice (2)
NSG 490: Practicum in Population-Based Nursing Practice III (4)
NSG 492: Clinical Decision-Making for Advanced Practice Nursing I (2)
NSG 493: Clinical Decision-Making for Advanced Practice Nursing II (2)
NSG 494: Clinical Decision-Making for Advanced Practice Nursing III (2)

Required Courses: Family Nurse Practitioner:

NSG 461: Advanced Pediatric Health Assessment (3)
NSG 473: Primary Care of the Infant & Child (2)
NSG 474: Primary Care of the Adult (2)
NSG 475: Clinical Management of Pregnancy and Childbearing (3)
NSG 478: Clinical Management of Acute and Chronic Illness (3)
NSG 483: Practicum in Population-Based Nursing Practice I (3)
NSG 487: Practicum in Population-Based Nursing Practice II (3)
NSG 488: Issues & Research in Population-Based Nursing Practice (2)
NSG 490: Practicum in Population-Based Nursing Practice III (4)
NSG 492: Clinical Decision-Making for Advanced Practice Nursing I (2)
NSG 493: Clinical Decision-Making for Advanced Practice Nursing II (2)
Student Handbook

A complete list of policies specific to the nursing programs of study is contained in the Nursing Student Handbook that is updated regularly on the department website.

Probation: Graduate students must maintain a cumulative grade point average of at least 3.0 in all academic work at the University. Students who drop below the required cumulative GPA will be placed on probationary status. Graduate students who receive less than a B- in any nursing course are placed on probation for a minimum of one quarter.

Dismissal: Graduate students who receive more than one grade below a B- in any required nursing course or less than a C in any one required course will be dismissed from the program. A grade of C or better is required in all allied field course requirements. A student may withdraw from a core nursing course not in good standing (with a second C or lower) only once during their program of study. A second such withdrawal will result in dismissal from the program. If a student fails to achieve the above criteria, that student is NOT eligible to continue in the program and will be dismissed. Students who have less than the required GPA for two quarters will be dismissed from the program.

Readmission: If a student leaves the program for any reason they must reapply to the program.

Transfer credit: Graduate credit taken prior to enrolling at DePaul University may be eligible for transfer credit. Students who wish to have coursework evaluated by the department must submit a complete syllabus and other requested materials upon admission to the program. A maximum of 3 courses may be transferred to DePaul University only with written permission of the department chair.

Undergraduate credit: Students can earn graduate credit for some undergraduate courses and can also take graduate courses as an undergraduate which will apply to the undergrad and grad degrees. Check with your academic advisor for details.

Graduation requirements: A Master of Science degree in nursing requires a minimum of 48 credit hours. All of the programs require significantly more coursework beyond the minimum credit hour requirement. Students are held responsible for degree requirements as outlined in the university course catalog in effect at time of admission. The student is responsible for completing the application for degree conferral and commencement by the deadline posted in the academic calendar.

Graduation with distinction: Graduation "with distinction" is awarded with a cumulative graduating GPA of 3.75 or completion of a thesis "with distinction."

Time Limit: The degree is expected to be completed in a maximum of six years.

Courses

Please visit Campus Connection at https://campusconnect.depaul.edu for current course information. If you do not have a password for Campus Connection you may log on as a guest. Once you are on Campus Connection please select Course Descriptions followed by the department.

Physics
Introduction

Purpose
The Graduate Physics program is intended to serve the needs of students who wish to enhance their preparation for a doctoral degree in physics or applied science, students who wish to obtain a terminal masters degree in order to work in a physics or engineering related industry, and students who wish to enhance their teaching of physics at the secondary level. To fulfill these purposes, the department offers a degree program: Master of Science in Physics.

The M.S. in Physics program is built around a core of five graduate courses and a selection of applied courses in the faculty’s areas of expertise that are designed to tie into current areas of research and interest within both academia and industry.

In order to maximize the availability of our offerings, graduate courses in our program are taught in the evening.

Faculty

JESUS PANDO
Associate Professor and Chair
University of Arizona

GEORGO CORSO, Ph.D.
Instructor
Northwestern University

SUSAN M. FISCHER, Ph.D.
Associate Professor
University of Notre Dame

CHRISTOPHER G. GOEDDE, Ph.D.
Professor
University of California, Berkeley

JOHN GOLDMAN, M.S.
Instructor
Pennsylvania State University

GABRIELA GONZALEZ-AVILES, Ph.D.
Assistant Professor
Northwestern University

ERIC C. LANDAHL, Ph.D.
Assistant Professor
University of California, Davis

W. ROBERT MATSON, Ph.D.
Assistant Professor
Oklahoma State University

GABI MIHALCEA, M.S.
Laboratory Coordinator
Kansas State University

ANUJ P. SARMA, Ph.D.
Associate Professor
University of Kentucky

Associated Faculty
ANTHONY F. BEHOF, Ph.D.
Associate Professor Emeritus
University of Notre Dame
M.S. in Physics

MASTER OF SCIENCE:
Applied Physics
Teaching of Physics

MASTER OF SCIENCE: PHYSICS

ADMISSION REQUIREMENTS
For full admission, students must have the following:
- Bachelor's degree: satisfactory completion of a suitable
program in physics or a closely related field. Candidates having a less
extensive background in physics should consult with the chairperson of
the departmental graduate committee about possible prerequisite(s) to
graduate study.
- Two letters of recommendation are strongly recommended for all
applicants and required for a graduate teaching assistantship.

DEGREE REQUIREMENTS
Courses: a minimum of 44 quarter hours of graduate credit (11 courses), including:
PHY 411 Electrodynamics I
PHY 412 Quantum Mechanics I
PHY 420 Electrodynamics II
PHY 440 Classical Mechanics
PHY 460 Quantum Mechanics II
PHY 480 Thesis Research

Five courses selected from the following:
PHY 410 Chaos in Physical Systems
PHY 425 Laser Physics
PHY 442 Computational Physics
PHY 450 Phase Transitions and Critical Phenomena
PHY 454 Fourier Optics
PHY 456 Fiber Optics
PHY 466 Radiation Physics
PHY 478 Topics in Applied Physics
PHY 480 Thesis Research
PHY 490 Solid State Physics I
PHY 491 Solid State Physics II
Courses at the 300 or 400 level in biology, chemistry, mathematics, physics, computer science or other related fields can be substituted for up to two of these five courses with the written approval of the departmental graduate committee.

THESIS REQUIREMENT
A 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 with permission from the Graduate Committee. As a rule, one course credit of 4 quarter-hours in PHY 480 is applicable to the thesis research. An additional course credit (4 credit 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.

Students are advanced to candidacy upon the written approval of their thesis proposal by the graduate committee, subject to the rules and conditions given below. An oral examination on the thesis is required, eligibility and rules are given below.

THESIS PROCEDURES AND TIMELINES
(1) A committee with the advisor as Chair and two other members of the DePaul Physics department must be constituted three months prior to the M.S. Thesis Defense. Committee members (from outside the Physics Department, or outside DePaul) are allowed by permission of the Graduate Director, but cannot function as Committee Chairs.

(2) A written report on the thesis project must be furnished to the Committee three months prior to the planned M.S. Thesis Defense. The written report should include: Title of the thesis project, abstract of the research, a 1-page update on what work has been accomplished so far, and what work remains to be done. The committee members reserve the right to meet with the student and seek clarification and information orally at this time.

(3) Following submission of the written report described in (2) above, the committee members will sign the LAS Approval of Proposal for Final Project form. A signature on this form does not constitute permission to defend in another three months, nor does it make any judgment in this regard. Instead, the signatures attest to the fact that the committee has been constituted, and that the committee members have received a written report on the thesis project described in (2) above from the student.

(4) The signed LAS Approval of Proposal for Final Project form will then be submitted to the Graduate Director who will, upon receipt of this form, make known to the thesis advisor and student the earliest date on which they are eligible to schedule a thesis defense if (5) and (6) below are satisfactorily fulfilled.

(5) A written version of the thesis that is in reasonably final form must be furnished to all the three members of the committee by the student two weeks prior to the planned M.S. Thesis Defense. No exceptions will be granted on this rule.

(6) Within a week of having received the thesis mentioned in (5) above, that is, one week prior to the planned thesis defense, all committee members must sign the Physics Department Approval of Scheduling of Thesis Defense form giving the student permission to proceed with the thesis defense. A signature on this form does not reflect a judgement on, or acceptance of, the thesis; it constitutes only an approval for the date of the defense. If the committee members feel that the student is not ready to defend, based on their reading of the thesis (which case may be either because the thesis is not written in a satisfactory manner, or because they feel more work needs to be done on the project), they can choose to withhold their signature; the committee member(s) withholding his/her signature(s) must provide a written explanation of why they did not sign, and what changes and corrections, if any, would be required to obtain their signature. This will automatically mean that the student cannot defend during the next week. In such a case, the cycle will start from (5) again, whenever the advisor and student feel they have addressed satisfactorily the concerns of their committee member(s).

(7) The signed Approval of Scheduling of Thesis Defense form will then be submitted to the Graduate Director who will, upon receipt of this form, make known to the thesis advisor and student the earliest date on which they are eligible to schedule a thesis defense.

(8) Following the thesis defense, the committee members will render a decision as to the outcome of the defense in one of the two following ways:

(a) If they believe the student has satisfactorily defended his/her thesis and the thesis requires no modifications or only minor modifications, meaning that they wish to pass the student immediately, they will sign the LAS Graduate Final Requirements Report form.

(b) In all other cases, they will sign the Physics Department Interim Thesis Defense Report form. Further action will be determined by the actions recommended in this form.

(9) The signed form (Final Requirements Report or Physics Department Interim Thesis Defense Report)
The signed form (Final Requirements Report or Physics Department Interim Thesis Defense Report) should be forwarded to the Graduate Director, the former for forwarding to the Graduate School, the latter for record keeping purposes.

(10) If, at any time during this period, the student and/or advisor reconstitute a committee by changing the committee members, the process will restart from (1) above. The only exception to this rule will be if a committee member (but not the Committee Chair) takes an emergency leave of absence or is otherwise unable to discharge their duties, in which case the process may be allowed to restart from (5) above with permission from the Graduate Committee.

### Student Handbook

#### Probation:
A graduate student in the Physics department is subject to probation as soon as his/her graduate GPA falls below 2.75. The student remains on probation until four more courses are taken, at which time another evaluation is made. If, at that time, the student has failed to raise his/her GPA to the required level of 2.75 the student may be dismissed for poor scholarship, and prohibited from registering for additional course work.

#### Dismissal:
A graduate student who is not making satisfactory progress toward the degree may be dismissed upon the recommendation of the Graduate Committee of the Physics Department. Instances of not making satisfactory progress toward the degree include being placed on probation for more than two consecutive quarters or four courses, whichever is later, failing grades in two or more graduate courses, or any other situation that has been deemed by a majority of the Graduate Committee to constitute an instance of not making satisfactory progress toward the degree.

#### Readmission:
A student who has been dismissed may, after a period of time, petition for reinstatement. The petition, addressed to the Dean of the College of Arts & Sciences, would provide information that would demonstrate a change in the students circumstances to an extent that would support successful completion of the students degree program. The Deans decision, based upon the merits of the petition and the recommendation of the Graduate Committee of the Physics department, may, if favorable, stipulate conditions of reinstatement.

#### Transfer credit:
A maximum of 3 courses may be transferred from another university, subject to the following: The determination of whether or not a particular course is deemed suitable for transfer will be made by the Graduate Director who may, at his/her discretion, consult the Graduate Committee for assistance in making this decision.

#### Undergraduate courses:
Students who are deemed to have inadequate undergraduate preparation in physics may be required to take undergraduate courses in Physics. Such courses will be specified by the Graduate Director in consultation with the Graduate Committee. A maximum of two such courses may be counted toward the graduate degree, but undergraduate courses cannot substitute for any required (core) courses in the graduate program.

#### Graduation requirements:
The university minimum GPA is 2.0. The M.S. in Applied Physics at DePaul University requires a minimum of 44 quarter hours of graduate credit (11 courses) and a thesis.

#### Thesis
A thesis based on independent research in theoretical or experimental physics is generally required. An oral examination on the thesis is also required. The thesis and the defense will be evaluated by a committee consisting of three faculty members from the Physics department at DePaul, who may judge the thesis and/or oral examination to be satisfactory or may require the student to submit changes to the thesis, and go through more cycles of oral examination. Committee members from outside the Physics department (whether DePaul faculty, or external to DePaul) are allowed only by consent of the Graduate Director.

**Thesis Proposal:** A proposal (minimum 1 page) stating the broad outlines of the project, and signed by both the thesis advisor (deemed Thesis Committee Chair) and the student must be completed per the schedule below. A copy of this signed proposal, together with a copy of the Approval of Proposal for Final Project must be kept on file in the Physics department for reference. The thesis advisor may, at his/her discretion, prepare a longer, more comprehensive proposal.

| Student plans oral defense of thesis | Student must submit Thesis |
The thesis proposal is a document that records the broad outline of the project only. The determination of when a student has completed the necessary work to be able to finish and defend the thesis will rest solely with the advisor, and the thesis proposal cannot be used as a basis for determining the same. Changes to the thesis proposal may be carried out at the discretion of the thesis advisor. Changes proposed by the student will only be allowed if the thesis advisor agrees to make those changes.

**Graduation with distinction:**
A graduating student will be deemed to have graduated with distinction if they have a minimum GPA of 3.5 and their thesis committee declares their project to have been completed with distinction (as evidenced by their signature on the Final Requirements Report form).

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**Courses**

Please visit Campus Connection at [https://campusconnect.depaul.edu](https://campusconnect.depaul.edu) for current course information. If you do not have a password for Campus Connection you may log on as a guest. Once you are on Campus Connection please select Course Descriptions followed by the department.

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**Psychology**

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 help the student develop an 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.

The Department of Psychology offers graduate work leading to the degrees of Master of Science, Master of Arts and Doctor of Philosophy. The M.S. is a terminal degree in general psychology. The five-year B.A./M.S. is a terminal degree in Industrial/Organizational Psychology and is available only to DePaul students. The M.A. is not a terminal degree; it leads directly to the Ph.D. Students who are interested in a terminal masters degree might also consider DePaul's Master of Science in Human Resources. Although formally housed in the Kellstadt Graduate School of Business, the program is interdisciplinary in nature; see details on the curriculum in the Kellstadt Course Catalog. Students are not admitted for the M.A. program only.

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**Faculty**

DAVID ALLBRITTON, Ph.D.

*Associate Professor*

Yale University

SUZANNE BELL, Ph.D.
Associate Professor
Texas A & M University
KAREN S. BUDD, Ph.D.
  Professor
  University of Kansas
LINDA A. CAMRAS, Ph.D.
  Professor
  University of Pennsylvania
JOCELYN S. CARTER, Ph.D.
  Assistant Professor
  Vanderbilt University
DOUGLAS CELLAR, Ph.D.
  Associate Professor
  University of Akron
JESSICA M. CHIOPLIN, Ph.D.
  Assistant Professor
  University of California, Los Angeles
JERRY CLELAND, Ph.D.
  Professor and Chair
  Loyola University
SHELDON COTLER, Ph.D.
  Professor
  Southern Illinois University
RALPH ERBER, Ph.D.
  Professor and Associate Dean
  Carnegie Mellon University
JOSEPH R. FERRARI, Ph.D.
  Professor
  Adelphi University
PATRICK FOWLER, Ph.D.
  Assistant Professor
  Wayne State University
PABLO GOMEZ, Ph.D.
  Associate Professor
  Northwestern University
KATHRYN E. GRANT, Ph.D.
  Professor
  University of Vermont
JANE A. HALPERT, Ph.D.
  Professor
  Wayne State University
GARY W. HARPER, Ph.D.
  Professor
  Purdue University
FREDERICK H. HEILIZER, Ph.D.
  Associate Professor
  University of Rochester
P. J. HENRY, Ph.D.
  Associate Professor
  University of California, Los Angeles
LEONARD A. JASON, Ph.D.
  Professor
  University of Rochester
CHRISTOPHER B. KEYS, Ph.D.
  Professor
  University of Cincinnati
YAN LI, Ph.D.
  Assistant Professor
  Duke University
THERESA LUHRS, Ph.D.
  Long-Term Teaching Professional
  DePaul University
SUSAN D. MCMAHON, Ph.D.
  Professor
  DePaul University
JOSEPH A. MIKELS, Ph.D.
  Assistant Professor
  University of Michigan
ANTONIO POLO, Ph.D.
  Assistant Professor
  University of California, Los Angeles
CHRISTINE REYNA, Ph.D.
M.S. in Psychology

MASTER OF SCIENCE
This program offers a terminal Master of Science degree which prepares the student for a range of occupations in business, government, and human services, but excludes the provision of clinical services. In addition, it provides the student with the basic knowledge and skills appropriate for a graduate education which may serve as a foundation for programs offering doctoral training.

The Master's program has two goals. The first is to provide the student with sufficient breadth in the methodology and content of psychology to demonstrate competence in two major areas: (1) Core areas of the discipline of psychology; and (2) Methods of the discipline of psychology. A second goal of the program is to provide the student with sufficient information and skills to apply the knowledge of the discipline competently in their daily lives and careers. This includes course work in the theory and techniques of the application of psychological principles, and also includes a thorough grounding in ethical and professional standards of psychologists. Although the program builds upon a core of basic courses, it provides some flexibility for
students (with the approval of their advisors) to shape their course of study to fit special interests and needs.

ADMISSION REQUIREMENTS
The department accepts as graduate students only those who show definite promise for completing the requirements for this advanced degree. Preference is given to those applicants who have a well-balanced background of psychology courses and some background in science and mathematics. Students who do not have an undergraduate major in psychology but who otherwise satisfy the following requirements may apply.

- Completeness of Credentials: Applications must be completed by May 1.
- Grade Point Average: Satisfactory undergraduate scholastic average.
- Undergraduate Preparation: A minimum of six courses in psychology, including a four quarter hour (three semester hour) elementary statistics course, as well as a course in research methods or experimental psychology. The student judged to be deficient in prerequisites will be required to take, without graduate credit, such courses as are necessary to remedy any deficiencies before entering graduate school.
- Graduate Record Examination: official results of the General test and the Subject test in Psychology.
- Letters of Recommendation: The three required letters should be from persons who are in a position to evaluate the applicant's academic background and achievements.
- Minority Status: Applications from minority students are encouraged.
- Students with Disabilities: Applications from students with disabilities are encouraged.

DEGREE REQUIREMENTS
Formal requirements for the M.S. degree include satisfactory completion of 48 quarter hours and maintaining a 3.00 cumulative GPA. In addition, program requirements include two mechanisms for demonstrating successful completion of the program: 1) a traditional Master's thesis, perhaps involving an empirical study; or 2) a research study or program evaluation Capstone project based upon the student's internship or employment experience. Upon completion of course work, students are required to maintain active student registration status until graduation. All degree requirements must be successfully completed within a six-year period.

Core Courses:
- PSY 404 Learning and Cognition
- PSY 406 Physiological Psychology
- PSY 410 Advanced Statistics I
- PSY 411 Advanced Statistics II
- PSY 420 Advanced Research Methods
- PSY 430 Advanced Social Psychology
- PSY 461 History and Systems (unless waived by passing a special exam in this area or the equivalent undergraduate course)

Diversity Core Courses (one course required, may substitute a non-psychology course with Program Directors approval):
- PSY 345 Cultural Issues in Psychology
- PSY 462 Psychology of Bilingualism
- PSY 520 Principles of Diversity
- PSY 521 Psychology of the African-American Child (when taught by faculty)
- PSY 561 Advanced Psychology of Women

Quantitative Core Courses (one course required, may substitute a non-psychology course with Program Directors approval):
- PSY 343 Introduction to Psychological Measurement
- PSY 416 Qualitative Methods
- PSY 418 Multivariate Statistical Analysis
- PSY 419 Factor Analysis
- PSY 422 Computing for the Behavioral Scientist
- PSY 450 Psychological Measurement

Graduate Capstone (one course required):
- PSY 597 Masters Thesis
- PSY 592 Capstone Project

Sample Psychology Elective Courses (may substitute a non-psychology course with Program Directors approval):
- PSY 354 Community Psychology
- PSY 363 Alcoholism, Drug Addiction and Recovery
- PSY 364 Health Psychology and Stress Management
- PSY 383 Human Factors
- PSY 402 Perceptual Processes
- PSY 435 Interpersonal Relations
M.A./Ph.D. in Psychology - Admission Information

MASTER OF ARTS/DOCTOR OF PHILOSOPHY
Clinical Psychology (Clinical Child and Clinical Community)
Community Psychology
Experimental Psychology
Industrial/Organizational Psychology

(Application materials for Psychology graduate programs may be obtained at:
http://www.depaul.edu/admission/types_of_admission/graduate/psychology/index.asp
or by contacting the 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 standards or having extensive undergraduate course work in psychology does not guarantee acceptance, since the number of applicants who can be admitted is limited. Preference is given to those applicants who have a well-balanced background of psychology courses and some background in science and mathematics. Students who do not have an undergraduate major in psychology but who otherwise satisfy these requirements may apply.

For consideration for admission, the applicant must have the following:

- Bachelor’s degree (official transcript(s) required to verify degree).
- Satisfactory undergraduate scholastic average
- Minimum of 32 quarter hours (24 semester hours) in psychology. This total should include a three semester hour (four quarter hour) elementary statistics course as well as a course in experimental psychology. A course in History and Systems is also desirable.
- 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.
- REQUIRED: Official Graduate Record Examination results of the Verbal and Quantitative tests. It is highly recommended that you also submit scores from the Subject Test in Psychology, although it is not required.
- Three letters of recommendation from academic sources.
- Vita/Resume

Students considering application to the M.A.-Ph.D. programs in Clinical Psychology should be aware of the following:
Approximately 300 students applied to the doctoral program in clinical psychology last year. Of the applicants, 6 students were offered admission. Students apply to either the child track or the community track and committees are established in each of these tracks to review applications. 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 application is rejected. Approximately one applicant in seven is rejected on this basis. Application materials should be complete by December 1.
**GRE scores and Grade Point Average:** Combined Verbal and Quantitative GRE scores of about 1200 are expected of applicants to the doctoral program. Typically, successful applicants to our program have an undergraduate GPA of at least 3.5 (B+) 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. A course in history and systems is also suggested. A total of eight undergraduate courses in psychology is required.

**Prior graduate study:** The program considers students with prior graduate study in clinical psychology or closely related fields. Minimal transfer credit is available for prior graduate work, but waiver of requirements is often possible. Each student's previous academic record is individually reviewed.

**Interests:** The clinical program emphasizes training in Clinical-Child and Clinical-Community Psychology. Obviously those who have no special interest in those areas would be better served elsewhere. Further, we accept only those applicants who intend to work toward the doctorate and do not consider applicants for a terminal masters degree.

**Diversity:** The Clinical faculty strongly encourages applications from minority students. About one-third of the graduate students in clinical psychology admitted in the last three years were members of minority groups.

**Students considering application to the M.A.Ph.D. program in Industrial/Organizational Psychology should be aware of the following:**

Each year, this program can accept three to four new students. Approximately 100 students apply for these entrance spaces. The I/O faculty wishes applicants to know that all application materials are carefully evaluated, with emphasis on the following criteria.

**Completeness of credentials:** Applicant files that are not complete by the January 5th deadline cannot be evaluated, and thus those applicants must be rejected. GRE scores and grade point average: While numerical standards are not followed rigidly, doctoral applicants are expected to have combined Verbal and Quantitative GRE scores of about 1200 or better, with an undergraduate GPA well above 3.4.

**Preparation:** Students are expected to have had courses in statistics, experimental psychology, and other core areas of psychology. While an undergraduate class in I/O psychology is not required, such a class (or one in business or management) is helpful. The department considers students with prior graduate study in I/O psychology or closely related fields, but most of our students enter the program without other advanced degrees. Transfer credit for prior graduate work is severely limited.

**Interests:** Successful applicants in the past have been those whose personal statements reflect an understanding of the nature and content of the field of I/O psychology, and goals which are compatible with that field. We accept only those applicants who intend to work toward the doctoral degree. Students who desire a terminal masters degree are not admitted.

**Diversity:** The I/O faculty strongly encourages applications from minority students.

**Students considering application to the M.A.Ph.D. program in Community Psychology should be aware of the following:**

Each year, the community psychology program can accept three or four new students. All application materials are carefully evaluated, with emphasis on the following criteria.

**Completeness of credentials:** Applicant files that are not complete by the January 5th deadline cannot be evaluated, and thus those applicants must be rejected. GRE scores and grade point average: While numerical standards are not followed rigidly, it is desirable for students to have a combined Verbal and Quantitative GRE scores of about 1200 or above, with an undergraduate GPA of 3.5 or above.

**Preparation:** Students are expected to have had courses in statistics, experimental psychology, and other core areas of psychology. While an undergraduate class in community psychology is not required, such a class is helpful. Strong research skills and experience are highly recommended, and field experience is also considered a plus. Credit for students entering with a masters degree in Community Psychology or a related field is considered on a case-by-case basis.

**Diversity:** The Community faculty strongly encourages applications from minority students.

**Interests:** The community psychology program has an ecological-community orientation that emphasizes a public health model rather than a clinical or medical model. Those having interests in traditional clinical work would not find the community program a good fit. Students accepted in the community program are ineligible
to transfer into the clinical psychology program. Successful applicants have been those whose personal statements reflect an understanding of the nature and content of the field, compatible goals, strong GREs and GPAs, sound research skills, and very good letters of recommendation. We accept only those applicants who intend to work toward the doctoral degree. Students who desire a terminal masters degree are not admitted.

College of Science and Health - Graduate Studies ▶ Programs of Study ▶ Psychology ▶ M.A. in Psychology

**M.A. in Psychology**

Please note these are not considered terminal degrees and students are not admitted for the M.A. program only.

**MASTER OF ARTS: CLINICAL PSYCHOLOGY**

**DEGREE REQUIREMENTS (THIS IS NOT CONSIDERED A TERMINAL DEGREE)**
Minimum of 72 quarter hours including four quarter hours of thesis credit, but not including credit for pre-practicum or practicum courses. (Note: Students are expected to carry a minimum of 12 hours per quarter.)

**Core Courses**:  
PSY 404 Learning and Cognitive Processes  
PSY 406 Physiological Processes  
PSY 430 Advanced Social Psychology  
PSY 439 Advanced Developmental Psychology

**Statistics and Methodology Courses**:  
PSY 410 Advanced Statistics  
PSY 411 Advanced Statistics II  
PSY 418 Multivariate Statistical Analysis OR PSY 419 Factor Analysis and Path Modeling  
PSY 420 Advanced Research Methodology

**Additional Courses**:  
PSY 481 Intelligence Testing  
PSY 482 Personality Assessment  
PSY 484 Behavioral Assessment  
PSY 486 Advanced Psychopathology  
PSY 488 Principles of Psychotherapy  
PSY 493 Principles of Community Psychology  
PSY 500 Professional Ethics  
PSY 520 Principles of Human Diversity  
PSY 577-579 Practicum (3 quarters)  
PSY 590 Thesis Seminar  
Two Additional 4 credit hour courses

**Degree Candidacy**: During the Winter quarter of the second year of graduate study, 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, and have had a masters thesis defense, will be advanced. Students denied candidacy will be required to withdraw from the program or withdraw after completion of the M.A.

**Research Thesis**: Complete a thesis on a topic approved by the department.

**Thesis Examination**: The examination, in the field of the graduate student, may be, but is not necessarily, limited to a defense of the students thesis.

**Clinical Practicum**: Three quarters of clinical practicum need to be successfully completed. The director of clinical training must approve the practicum placement in advance.

**MASTER OF ARTS: COMMUNITY PSYCHOLOGY**

**DEGREE REQUIREMENTS (THIS IS NOT CONSIDERED A TERMINAL DEGREE)**
Minimum of 48 quarter hours including four quarter hours of thesis credit. (Note: Students are expected to carry a minimum of 12 hours per quarter.)

**Core Courses**:  
PSY 492: Principles of Consultation  
PSY 493: Principles of Community Psychology  
PSY 565: Empowerment OR PSY 511: Health Psychology
Degree Candidacy: Admission to the doctoral program is dependent upon satisfactory evaluations in each of the following three (3) areas: 1) coursework performance, 2) Master’s Thesis defense and 3) Successful completion of the Comprehensive Exam or Comprehensive Alternative Project. If the student has been involved in an outside practicum or fieldwork, appropriate persons at that site may be asked to contribute to the student’s evaluation. Academic performance is based on a student’s grade point average, incomplete, and comments made by faculty who have worked with the student in a classroom setting. A 3.0 GPA is the minimal expectation for good-standing status in the program. Assessment of research performance is based on evaluations by the professor(s) for whom the student is working or has worked.

Research Thesis: Complete a thesis on a topic approved by the department.

Thesis Examination: The examination, in the field of the graduate student, may be, but is not necessarily, limited to a defense of the students thesis.

MASTER OF ARTS: EXPERIMENTAL PSYCHOLOGY

DEGREE REQUIREMENTS (THIS IS NOT CONSIDERED A TERMINAL DEGREE)
Minimum of 48 quarter hours including four quarter hours thesis credit. (Note: Students are expected to carry a minimum of 12 hours per quarter.)

Core Courses:
PSY 404 Learning Processes OR PSY 557 Seminar in Learning and Cognitive Processes
PSY 406 Physiological Processes OR PSY 552 Seminar in Neuropsychology
PSY 430 Advanced Social Psychology OR PSY 556 Seminar in Social Psychology
PSY 439 Advanced Developmental Psychology OR PSY 554 Seminar in Developmental Psychology

Statistics and Methodology Courses:
PSY 410 Advanced Statistics
PSY 411 Advanced Statistics II
PSY 418 Multivariate Statistical Analysis
PSY 420 Advanced Research Methodology

Degree Candidacy: during the Winter quarter of the second year of graduate study, 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 or oral examinations to fulfill this requirement. Students denied candidacy will be required to strengthen areas of scholastic weakness before continuing in the Ph.D. program.

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

Thesis 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 students thesis.

MASTER OF ARTS: INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

DEGREE REQUIREMENTS (THIS IS NOT CONSIDERED A TERMINAL DEGREE)
Minimum of 72 quarter hours including four quarter hours thesis credit. (Note: Students are expected to carry a minimum of 12 hours per quarter.)

Core Courses:
PSY 404 Learning Processes
PSY 430 Advanced Social Psychology

Statistics and Methodology Courses:
PSY 410 Advanced Statistics I
PSY 411 Advanced Statistics II
PSY 418 Multivariate Statistical Analysis
OR PSY 419 Factor Analysis & SEM
PSY 420 Advanced Research Methodology

**Industrial Psychology Core Courses (six courses required, selected from the following):**
- PSY 440 Psychology of Work and Motivation
- PSY 441 Psychology of Leadership
- PSY 442 Personnel Psychology
- PSY 444 Performance Appraisal
- PSY 445 Advanced Training and Development in Organizations
- PSY 446 Psychological Theories of Organizations
- PSY 447 Organizational Consultation
- PSY 448 Concepts, Methods, and Ethics in Industrial/Organizational Psychology
- PSY 559 Seminar in Industrial/Organizational Psychology

**Other Required Courses**: Additional courses are required to attain the 72 hours, including PSY 597 Thesis Research. These courses should be taken with the consent of the student's advisor.

**Degree Candidacy**: During the Winter quarter of the second year of graduate study, 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, and have had a research proposal for the masters thesis approved, will be advanced. The department reserves the right to require the student to take special or oral examinations to fulfill this requirement. Students denied candidacy will be required to withdraw from the program or withdraw after completion of the M.A.

**Research Thesis**: Complete a thesis on a topic approved by the department.

**Thesis 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 students thesis.

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**Ph.D. in Psychology**

**DOCTOR OF PHILOSOPHY: PSYCHOLOGY**

The department offers doctoral programs in Clinical, Community, Experimental, and Industrial/Organizational Psychology. The Clinical program offers special emphasis in Clinical Community or Clinical Child Psychology. Within the Experimental program, an integrated approach to cognition, emotion, personality, social and developmental psychology is emphasized. An innovative course of study can be developed in consultation with an advisor.

**ADMISSION REQUIREMENTS** Students holding a bachelor's degree are not admitted directly into doctoral programs. During the Winter quarter of the students second year, an evaluation of the students progress in meeting course and degree requirements is made by the faculty. Assuming such progress is satisfactory, the student is formally admitted into the doctoral program.

**DOCTOR OF PHILOSOPHY: CLINICAL PSYCHOLOGY**

**DEGREE REQUIREMENTS**

Minimum of 106 quarter hours beyond the bachelor's degree, including the following:

**Core Courses:**
- PSY 404 Learning and Cognitive Processes
- PSY 406 Physiological Processes
- PSY 430 Advanced Social Psychology
- PSY 439 Advanced Developmental Psychology
- PSY 461 History and Systems (or passing special exam in this area)
- PSY 481 Intelligence Testing
- PSY 482 Personality Assessment
- PSY 484 Behavioral Assessment
- PSY 486 Advanced Psychopathology
- PSY 488 Principles of Psychotherapy
- PSY 493 Principles of Community Psychology
- PSY 500 Professional Ethics (2 hours)
- PSY 520 Principles of Human Diversity
- PSY 590 Thesis Seminar (0 hours)
- PSY 596 Internship (0 hours)
- PSY 597 Masters Thesis Research (4 hours)
- PSY 598 Dissertation Seminar (0 hours)
- PSY 599 Dissertation Research (4 hours)
Statistics and Methodology Courses:
PSY 410 Advanced Statistics I
PSY 411 Advanced Statistics II
PSY 418 Multivariate Statistical Analysis OR PSY 419 Factor Analysis & Path Modeling
PSY 420 Advanced Research Methodology

Note: The student is required to take additional courses consistent with an area of specialization in Clinical-Child or Clinical-Community Psychology.

CLINICAL-CHILD ADDITIONAL REQUIRED COURSES / CLINICAL COMMUNITY ELECTIVES

PSY 454 Behavior Modification
PSY 491 Treatment Methods With Children
PSY 562 Seminar in Family Therapy
PSY 570 Seminar in Psychotherapy Research (4 hours)

CLINICAL-COMMUNITY ADDITIONAL REQUIRED COURSES / CLINICAL-CHILD ELECTIVES

PSY 492 Principles of Consultation
PSY 495 Grant Writing
PSY 569 Seminar in Program Evaluation
PSY 585 Fieldwork

GENERAL ELECTIVES

PSY 416 Qualitative Methods
PSY 473 Judgment and Decision Making
PSY 483 Advanced Psychodiagnosics
PSY 489 Group Therapy
PSY 511 Health Psychology
PSY 550 Teaching Seminar (0 credits)
PSY 561 Psychology of Women
PSY 567 Empowerment
PSY 568 Prevention and Intervention

OTHER PROGRAM REQUIREMENTS

Clinical Practica: Nine quarters of clinical practicum need to be completed. The director of clinical training must approve the practicum placement in advance.

Doctoral Candidacy Examination: Designed to assess the student's general knowledge of clinical psychology and the student's area of specialization (child or community). The examination is given in two sections. One section consists of an examination in the areas represented by the required courses in Clinical Psychology. A second section consists of an examination in the students area of clinical child or clinical community specialization.

An alternative to the Doctoral Candidacy Examination is to complete a major comprehensive review paper based on the literature within an area relevant to the field of Clinical Psychology. This paper must be submitted for publication in a peer-reviewed Clinical Psychology journal.

Admission to Doctoral Candidacy: Formally given to the student who has successfully passed the Doctoral Candidacy Examination; the student has no more than five years from this date to complete requirements for the doctorate or they will be dismissed from the program.

Candidacy Continuation: Registration in course(s) or candidacy continuation required each quarter between admission to candidacy and graduation.

Internship: One-year internship in a facility approved by the director of clinical training. Students fifth or sixth year in the 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 of the dissertation.

Time Limitations: 1) Between admission to the doctoral program and admission to doctoral candidacy: not more than four years; 2) Between admission to candidacy and the final doctoral oral examination: not less than eight months and not more than five years, or dismissal from program ensues.
MASTER OF ARTS/DOCTOR OF PHILOSOPHY: COMMUNITY PSYCHOLOGY
The Community program seeks to achieve four inter-related goals in training, specifically:

Goal 1: Provide students with a breadth of knowledge theoretical and applied in community psychology.
Goal 2: Provide statistical and methodological foundations in general psychology to demonstrate competence in core areas within the discipline.
Goal 3: Provide skills to engage communities and contribute to new developments in the field of community psychology.
Goal 4: Provide for the specific needs of the students and the communities they will serve.

DEGREE REQUIREMENTS
Students will achieve the successful completion of a minimum of 92 quarter hours of graduate credit beyond the bachelor's degree and will complete a traditional Master's Thesis and a Doctoral Dissertation. A typical course is 4 quarter hours.

Core Courses:
PSY 492 Principles of Consultation
PSY 493 Principles of Community Psychology
PSY 495 Grant Writing
PSY 511 Health Psychology
PSY 567 Empowerment
PSY 568 Seminar in Prevention and Intervention
PSY 569 Seminar in Program Evaluation
PSY 585 Field Work in Community Settings (0 credit hours)
PSY 654 Community Psychology

Statistics and Methodology:
PSY 410 Advanced Statistics I
PSY 411 Advanced Statistics II
PSY 420 Advanced Research Methods

TWO OF THESE FOUR:
PSY 416 Methods in Qualitative Research
PSY 418 Multivariate Statistical Analysis
PSY 419 Factor Analysis and Path Modeling
PSY 558 Advanced Seminar in Statistics

PSY 597 Masters Thesis Research
PSY 599 Dissertation Research (4 hours)

Other Psychology and Interdisciplinary Courses:
ONE OF THESE TWO:
PSY 430 Advanced Social Psychology
PSY 520 Principles of Human Diversity

PSY 550 Teaching Seminar (3 quarters)
PSY 561 Advanced Psychology of Women
MPS One 500-level course or SOC One 400-level course

OTHER PROGRAM REQUIREMENTS
Although an applicant is accepted into the M.A./Ph.D. community program, formal acceptance and admission to doctoral candidacy depends upon the student's satisfactory progress in meeting the various demands of graduate education and professional training.

Field Work and Practicum: All students develop an applied community-based fieldwork project. They develop relationships with community organizations, design a project based on mutual interests, and receive individual and group supervision to implement the project they design. Metropolitan Chicago has a large population of community sites to draw upon as resources for assisting in placing students in practica and job-related sites.

Master's Thesis: It is expected that the student's proposal for the Master's Thesis will be approved by November 15th of the second year in the program. The student's final Thesis is due by February 1st of third year in program.

Doctoral Comprehensive Exams or Project: The student is expected to take doctoral comprehensive examinations in the area of community psychology in the Fall of the fourth year in the program. These examinations cannot be taken until the student has completed the master's thesis. As an alternative to comprehensive exams, with prior approval of the program director, the student may submit an empirical paper, review paper, or grant application. The project proposal is due by May 1st of third year (or within 3 months of completing thesis). The final comprehensive project is due by May 1st of the fourth year (or within 1 year of proposal acceptance.
**Dissertation:** For the dissertation, 4 hours of PSY 599 (Dissertation Research) are required. The student should form a dissertation committee and begin work on the dissertation proposal during the third or fourth year. The dissertation proposal should be accepted by November 15th of the 5th year. The final dissertation defense should be complete by May 1st of the 6th year in program.

**Oral Examination:** Student is to defend his or her dissertation and to show competence in the general field of psychology and in the area of specialization.

**Time Limitation:** 1) Between admission to the doctoral program and admission to doctoral candidacy: not more than four years; 2) Between admission to candidacy and the final examination: not less than eight months and not more than five years.

**DOCTOR OF PHILOSOPHY: EXPERIMENTAL PSYCHOLOGY**

**AREAS OF SPECIALIZATION**
The Experimental faculty consists of members from each of the following major experimental areas: cognition, cognitive neuroscience, child and adult development, emotion and social psychology. Students may specialize in an area in which a faculty member has expertise.

Research experience is considered an integral part of the training and will begin in the first year. Students are expected to begin directed research during their first year under the supervision of an advisor. During their second year, students are expected to plan, conduct research and complete their masters thesis. Research experience during the third year might involve a continuation of the line of research initiated in the thesis project. Alternatively, students may begin to develop a new line of research in preparation for their dissertation, which is usually conducted during the fourth year. The program incorporates research skills within a major content area in psychology, and thereby prepares students for future employment in a wide variety of scientific, academic, and applied settings.

**DEGREE REQUIREMENTS**
Minimum of 76 quarter hours beyond the bachelors degree, including the following:

**Core Courses:**
- PSY 404 Learning Processes OR PSY 557 Seminar in Learning and Cognitive Processes
- PSY 406 Physiological Processes OR PSY 552 Seminar in Neuropsychology
- PSY 430 Advanced Social Psychology OR PSY 556 Seminar in Social Psychology
- PSY 439 Advanced Developmental Psychology OR PSY 554 Seminar in Developmental Psychology
- PSY 588 Topics in Experimental Psychology
- PSY 589 Topics in Experimental Psychology II
- PSY 597 Master’s Thesis Research (4 hours)
- PSY 593 Pre-doctoral Research (0 credit hours - for 3 quarters, 3rd year)
- PSY 599 Dissertation Research (4 hours)

**Statistics and Methodology Courses:**
- PSY 410 Advanced Statistics I
- PSY 411 Advanced Statistics II
- PSY 418 Multivariate Statistical Analysis
- PSY 419 Factor Analysis and Path Modeling
- PSY 420 Advanced Research Methodology

**Other Recommended Courses:**
- PSY 422 Computing for the Behavioral Scientist
- PSY 435 Psychology of Interpersonal Relationships
- PSY 473 Psychology of Judgment and Decision-Making
- PSY 555 Social and Emotional Development
- PSY 560 Social Cognition
- PSY 561 Advanced Psychology of Women

**Electives:**
- PSY 413 Analysis of Longitudinal Data
- PSY 414 Categorical Data Analysis
- PSY 426 Psychology of Bilingualism
- PSY 437 Advanced Personality
- PSY 450 Psychological Measurement
- PSY 520 Principles of Human Diversity
- PSY 558 Seminar in Advanced Statistics
- PSY 592 Directed Research
- PSY 594 Psychological Research
CSC 480 Foundations of Artificial Intelligence
CSC 587 Cognitive Science
HCI 440 Introduction to Human-Computer Interaction
ITS 427 Information Processing Models of Learning
ITS 584 Artificial Intelligence in Learning Environments
MKT 545 Consumer Behavior
MPS 557 Need Assessment and Program Evaluation
WRD 520 Writing in the Professions
WRD 521 Technical Writing

OTHER PROGRAM REQUIREMENTS

Doctoral Candidacy Examination: Designed to assess the students' knowledge of experimental psychology and the students' area of specialization. These are taken after the student has completed the thesis and before work has begun on the dissertation.

Admission to Doctoral Candidacy: Formally given to the student who has successfully passed the Doctoral Candidacy Examination; the student has no more than 5 years from that date to complete requirements for the doctorate.

Candidacy Continuation: Registration in course(s) or for resident or nonresident 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. 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; 2) Between admission to candidacy and the final examination: not less than eight months and not more than five years.

DOCTOR OF PHILOSOPHY: INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY

DEGREE REQUIREMENTS
Minimum of 96 hours beyond the bachelor's degree, including 4 dissertation hours. In addition to those courses required for the M.A., the following courses must be completed.


Industrial Psychology Courses: Core courses in the I/O area: Psychology 440, 441, 442, 444, 445, 446, 447, 448, 559 (taken twice).

Electives: Additional courses with consent of the students' advisor to attain the required credit hours.

OTHER PROGRAM REQUIREMENTS

Doctoral Candidacy Examination: Designed to assess the students' knowledge of psychology and the students' area of specialization. The examination is given in two sections. A section consists of an examination in the areas represented by the required courses in industrial/organizational psychology. The second section is an oral examination in the area of I/O psychology.

Admission to Doctoral Candidacy: Formally given to the student who has successfully passed the Doctoral Candidacy Examination; the student has no more than 5 years from that date to complete requirements for the doctorate.

Candidacy Continuation: Course(s) or candidacy continuation registration 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. Research for the dissertation should normally be completed during the students' 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; 2) Between admission to candidacy and the final examination: not less than eight months and not more than five years.
Special Programs

CERTIFICATE IN COMMUNITY DEVELOPMENT (CCD)

CERTIFICATE REQUIREMENTS

This program puts community development specialists on the cutting-edge of organization planning, leadership development, and program evaluation. The program allows established and emerging professionals to broaden their perspective on urban-development programs in an inter-disciplinary learning environment by including knowledge from psychology, public service, and sociology.

Students must successfully complete a minimum of 16-quarter hours of graduate credit. Each course carries four-quarter hours. Students then must participate in a non-credit research colloquium. Each participant of the colloquium makes a presentation before a small group of students and faculty members. No more than two courses earned toward the certificate shall come from one department. Please note that the list of courses is subject to change.

Required Course

MPS 571 Metropolitan Planning

Elective Courses

Select three (3) from the following:

MPS 526 Local Government Administration
MPS 572 Urban Poverty Seminar
MPS 573 Urban and Community Analysis
MPS 574 Community Organizations and Urban Development
PSY 654 Community Psychology
PSY 680 Introduction to Industrial-Organization Psychology
SOC 426 Policies and Urban Development
SOC 422 Urban and Community Analysis
SOC 424 Sociology of Housing

Students may also enroll in the following elective courses, with permission of the program director and often the approval of the instructor. Generally, participants will be limited to one (1) of these courses:

MPS 529 Strategic Planning
PSY 495 Grant Writing
PSY 520 Principles of Diversity
PSY 567 Special Topics Seminar: Empowerment
PSY 569 Seminar in Program Evaluation
SOC 423 Urban Cultural Areas (MLS 455)
SOC 432 Social Service in Contemporary Society
SOC 444 Law Enforcement and Community Relations

FIVE YEAR B.A./M.S.

This program is intended for DePaul undergraduate students who desire to extend their education for an additional year in order to engage in graduate training in Industrial/Organizational Psychology. Students apply in the spring of their junior year. If accepted, they take graduate-level courses in the senior year, earning a B.A. at the end of that year. In the fifth year they take more graduate coursework and complete a masters thesis, earning the M.S. at the end of the year.

Preparation for this program involves a modification of the normal undergraduate course track. Interested students should contact an I/O faculty member as early in their college career as possible.

Courses

Please visit Campus Connection at https://campusconnect.depaul.edu for current course information. If you do not have a
Science Education

College of Science and Health - Graduate Studies □ Programs of Study □ Science Education

Introduction

The Master of Science in Science Education program provides a broad content-based science curriculum for the preparation of master teachers of science, grades 6 through 9. The program is focused on contemporary, inquiry-based science content and integrates the most current research findings on how students learn science. It encourages and models the skills of scientific inquiry, as well as the curiosity, openness to new ideas, and skepticism that characterize science. Some of the unique features of the program include a strong emphasis on contemporary science content; an emphasis on earth and space science; the use of inquiry-based learning; the integration of mathematics and technology; and attention to approaches for teaching science to special needs students.

The Program requires 12 courses (48 credit hours) and draws upon faculty in both the College of Science and Health and the College of Education. The first two courses, Foundations of Physical Science I, Foundations of Physical Science II, are foundational and are intended to be taken early in the program. These courses explore the nature of scientific inquiry from both a historical and contemporary perspective, and they introduce key quantitative concepts and methods in science. The following eight courses, focusing on specific scientific disciplines, can be taken in any order. Reflecting increased emphasis on earth and space science in state and national science standards in the grades 6-9, this set of courses include Astronomy, Astrobiology, Geology and Planetary Science, Environmental Science, Heat and Energy, and Weather and Climate in addition to the core subjects of Physics, Chemistry, and Biology. A capstone course in the teaching of science specifically focusing on national and state standards for science and on the latest research in science teaching and learning concludes the program. The capstone course includes action research in the classroom.

The MSSE was designed to help currently certified teachers advance toward endorsement in Middle School General Science and NCLB "highly qualified" status in the State of Illinois (see: http://www.isbe.net/certification/ for more information). Endorsement is based on a transcript evaluation of university level work in science and education.

The program provides a supportive environment for all teachers, including members of groups traditionally underrepresented in science, and encourages a broad perspective on science and its continuing important role in our society.

M.S. in Science Education

ADMISSION REQUIREMENTS

For full admission, students must have a Bachelors degree with evidence of excellent undergraduate performance.

All applicants must provide the following materials in the application process:

(1) a completed University on-line graduate application
(2) an MSSE application form which can be obtained from the DePaul University Interdisciplinary Science and Technology Center (990 W. Fullerton Suite 4400, Chicago, IL, 60614, http://www.depaul.edu/~msse )

DEGREE REQUIREMENTS

Courses: a minimum of 48 quarter hours of graduate credit (12 courses) including
SDV 411, Foundations of Physical Science I
SDV 412, Foundations of Physical Science II
SDV 490, Science Teaching Capstone

With nine courses selected from the following:
SDV 413, Light and Waves
SDV 420, Chemistry for Teachers
SDV 421, Biology for Teachers
SDV 422, Evolution and Ecology for Teachers
SDV 423, Plant and Animal Biology for Teachers
SDV 430, Astrobiology for Teachers
SDV 431, Astronomy for Teachers
SDV 432, Geology and Planetary Science for Teachers
SDV 440, Heat and Energy for Teachers
SDV 441, Weather and Climate for Teachers
SDV 442, Environmental Science for Teachers

Student Handbook

Probation and Dismissal: A student is subject to probation as soon as his/her graduate GPA falls below 2.500. The student remains on probation until four more courses are taken, at which time another evaluation is made. If, at that time, the student has failed to raise his/her GPA to the required level of 2.500 the student may be dismissed for poor scholarship, and prohibited from registering for additional course work.

A student who has been dismissed may, after a period of time, petition for reinstatement. The petition, addressed to the dean of the college, would provide information that would demonstrate a change in the students circumstances to an extent that would support successful completion of the students degree program. The deans decision, based upon the merits of the petition and the recommendation of program director, may, if favorable, stipulate conditions of reinstatement.

Readmission: If you were 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, but not more than four calendar years, you must file a Readmission Application. (If more than four years have elapsed since you have been in attendance, you must file a new application.) The form must be submitted at least two weeks prior to the day of registration for the term in which you expect to resume your studies. Official copies of transcripts recording scholastic work taken while not enrolled at DePaul University must be submitted. As a policy, students are held to the degree requirements that are in force at the time of readmission.

Transfer credit: In general, it is not encouraged that students seek to transfer in credit for the MSSE program. In exceptional cases, a maximum of eight quarter hours (or six semester system courses) may be transferred from another institution to count toward the graduate degree. Requests to transfer courses must be approved by the program directors. Students may not substitute any other course for the capstone requirement.

Undergraduate courses: No undergraduate-level courses or credit may count toward MSSE graduate course requirements.

Graduation requirements: You must have successfully completed all of the general and specific degree requirements as listed in departmental or program sections of the catalog under which you were admitted. Students need to achieve a minimum grade point average of 2.500 to graduate.

Graduation with distinction: To graduate with distinction from the MSSE program students must have earned a cumulative 3.75 GPA or higher for program course work.

Program Time Limitation: Graduate students in masters programs are expected to complete their program degree requirements within a six-year period from the first registration date for a course in the program. When a graduate student fails to finish before the end of the sixth year, the department or program director may recommend, on receipt of the students petition, in writing, an extension of time with or without additional courses, examinations, or other conditions.

Courses

Please visit Campus Connection at https://campusconnect.depaul.edu for current course information. If you do not have a
password for Campus Connection you may log on as a guest. In Campus Connection, select Course Descriptions, then search for Subject Area SDV.
Introduction

In addition to the DePaul University Graduate Student Handbook, the College of Science and Health Graduate Student Handbook includes requirements, rules and regulations for its graduate programs. Additional academic information and regulations applicable to specific graduate programs can be found via the program links below.

Upon admission to a graduate program, a student is to follow the catalog requirements in effect at the time of entrance. A student who is readmitted or who changes his or her program or enrollment status is subject to the terms of the catalog in effect at the time of readmission or status change.

As a graduate student you assume the responsibility to know and meet both the general and particular regulations, procedures, policies, and deadlines set forth in this catalog and handbook. This catalog does not constitute a contract between the student and the University. Every effort has been made to provide accurate and firm information. The University reserves the right to revise the content of its catalogs and schedules, and to change policies, programs, requirements, rules, regulations, procedures, calendars and schedule of tuition and fees; to establish and modify admission and registration criteria; to cancel or change courses or programs and their content and prerequisites; to limit and restrict enrollment; to cancel, divide or change time or location or staffing of classes; or to make any other necessary changes.

Additionally, all students are expected to adhere to the Student Code of Responsibility found in the Student Handbook.

The following graduate programs have specific handbook policies:
- Biological Sciences
- Chemistry
- Mathematical Sciences
- Nursing
- Physics
- Science Education

Academic Advising

Academic advising helps to insure successful completion of graduate studies. If you are a degree-seeking student, contact your faculty advisor. If you are a non-degree seeking student or a student-at-large, contact either your graduate division office, or the appropriate department or program director.

Courses and Credit

No one is permitted to attend a class for which he or she has not been properly registered. Credit is accumulated on the basis of quarter hours. The unit of credit is one quarter hour granted for 45 minutes of classroom work a week. The normal class extends over a ten-week period (or an accelerated five-week period in the summer). All courses carry four quarter hours of credit (2 2/3 semester hours), unless otherwise noted.
For students fully employed, registration for no more than eight credit hours in a term is the suggested maximum.

Courses numbered 300 through 399 are advanced undergraduate courses. If listed in this catalog, they may be accepted for graduate credit within the limitations stipulated by the specific departmental chair or program director.

Grades, Minimum Requirements

A student must earn a grade of B or higher to receive graduate credit for any upper-level undergraduate course (300 level) that has been accepted for graduate credit. A student must achieve a minimum grade point average of 2.500 to graduate. Some programs may have a higher minimum graduation grade point average. A grade of D+ or D is unacceptable for graduate credit, and if earned in a required course, the course must be repeated or substituted as directed by the chair of the area of concentration. D+ or D grades remain on the academic record and are calculated into the cumulative grade point average.

Graduation

MEETING DEGREE REQUIREMENTS
You must successfully complete all of the general and specific degree requirements as listed in departmental or program sections of the catalog under which you were admitted. All requirements must be completed by the grading deadline of the degree conferral quarter.

EARNING DEGREES WITH DISTINCTION
Requirements for earning a degree with distinction vary by program. Unless otherwise indicated, the minimum cumulative grade point average for distinction is 3.75. Additional criteria need to be met in many programs, such as passing a comprehensive examination or writing a thesis with distinction. Refer to your program information for any differing or specific requirements on minimum grade point average or additional criteria.

DEGREE CONFERRAL
Applying for degree conferral requires the anticipated completion by the stated deadline of all program requirements including completion of all course work plus any of the following that apply: program standards, field experiences, thesis and/or dissertation requirements, qualifying or comprehensive exams, language proficiency, and the minimum GPA requirement for graduation. Submitting the on-line degree conferral application does not guarantee the conferral (granting) of a degree from DePaul University. Degree requirements are reviewed at the end of the expected completion term indicated.

In order to have your degree conferred, you may not have any outstanding incomplete grades, transfer credit, grade changes, substitutes, or waivers. All exams must be completed and graded, and theses/dissertations or other capstone projects must be graded and submitted. Failure to have these items complete by the end of degree conferral term will prompt the Graduate Office to deny degree conferral. If you wish to postpone your degree conferral or are ineligible to graduate, you must reapply.

If you meet all requirements, your degree will be conferred within 30 days of the end of the term. Diplomas are mailed to graduates without financial holds, by the Student Records Office, generally within 45-60 days after the end of the term.

DePaul reports degree information to the National Student Clearinghouse monthly. Many companies and agencies use this service to verify awarded degrees. Your degree will only be verified by the Clearinghouse if your Privacy Settings in Campus Connect indicate this as releasable information at the time your degree is conferred. Please verify your Privacy Settings before the end of your completion term.

COMMENCEMENT
The graduation ceremony is symbolic. It is held in June of each year. June and August degree audits occur after the ceremony, therefore these candidates may not be accurately recognized as having earned a degree. Likewise, graduation with distinction may not be able to be announced at the ceremony, but will appear on the transcript and diploma.

**DEADLINES FOR DEGREE CONFERRAL AND COMMENCEMENT PARTICIPATION**
The University confers graduate degrees four times per year, after the autumn, winter, spring, and summer terms. The deadlines for applying for degree conferral are posted on the Graduate Office website: http://las.depaul.edu/StudentServices/AcademicAdvising/DegreeConferral.asp, The deadline for applying for the June commencement ceremony is February 1 of that academic year.

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**Probation and Dismissal**
Each program may have its own probation and dismissal policies. Please consult with your program first and if there are no program-specific policies then the following applies.

A student is subject to probation as soon as his/her graduate GPA falls below 2.500. The student remains on probation until four more courses are taken, at which time another evaluation is made. If, at that time, the student has failed to raise his/her GPA to the required level of 2.500 the student may be dismissed for poor scholarship, and prohibited from registering for additional course work.

A student who has been dismissed may, after a period of time, petition for reinstatement. The petition, addressed to the dean of the college, would provide information that would demonstrate a change in the students circumstances to an extent that would support successful completion of the students degree program. The deans decision, based upon the merits of the petition and the recommendation of the faculty of the students department, may, if favorable, stipulate conditions of reinstatement.

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**Registration Procedures**
Students enrolled at any time during the previous calendar year are eligible to register. Continuing students register via Campus Connection.

**REGISTRATION IN COURSES IN OTHER COLLEGES OR SCHOOLS**
Graduate students may be permitted to register for courses offered in other colleges or schools of the University. Contact the Graduate Office for specifics.

**RESIDENCE REGISTRATION**
Whether in residence or not, all admitted graduate students, masters 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 Descriptions

Please visit Campus Connection at https://campusconnect.depaul.edu for current course information. If you do not have a password for Campus Connection you may log on as a guest. Once you are on Campus Connection please select Course Descriptions followed by the department.