



# 2012–2013 BULLETIN OF INFORMATION

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## University of Notre Dame Graduate Programs and Policies

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*The University reserves the right to change its admission, registration, and graduation requirements as necessary. The course offerings and requirements of the University of Notre Dame are continually under examination and revisions are expected. This Bulletin of Information is not a contract; it merely presents the offerings and requirements in effect at the time of publication and in no way guarantees that the offerings and requirements will remain the same. Every effort will be made to provide advance information of any changes.*

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UNIVERSITY OF  
NOTRE DAME

Volume 108 Number 3 August 2012





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# ACADEMIC CALENDAR 2012-2013

## Fall Semester 2012

### August

- 21: Classes begin;  
Mass—formal opening of school year
- 29: Last day for course changes

### October

- 13: Midsemester break begins
- 22: Classes resume
- 26: Last day for course discontinuance

### November

- 1: Application deadline for admission to the Graduate School for spring semester 2013
- 9: Dissertation and thesis formatting checks due
- 12: Registration for spring semester 2013 begins
- 21: Thanksgiving holiday begins
- 26: Classes resume
- 30: Last day for master's examinations and Ph.D. dissertation defenses for graduation in January 2013

### December

- 6: Last class day
- 7: Reading days begin;  
Last day for presenting completed theses and dissertations in the Graduate School office for graduation in January 2013
- 10: Final examinations begin
- 17: All grades submitted through insideND by 3:45 p.m.

### January

- 6: January official graduation date (no ceremony)

## Spring Semester 2013

### January

- 15: Classes begin
- 23: Last day for course changes

### February

- 1: Deadline for applying to the Graduate School for fall semester 2013 admission and financial aid

### March

- 9: Midsemester break begins
- 15: Dissertation and thesis formatting checks due
- 18: Classes resume
- 20: Registration for summer session 2013 begins
- 22: Last day for course discontinuance
- 29: Easter holiday begins

### April

- 2: Classes resume
- 12: Last day for master's examinations and Ph.D. dissertation defenses for graduation in May 2013
- 15: Registration for fall semester 2013 begins
- 19: Last day for presenting completed theses and dissertations in the Graduate School office for graduation in May 2013

### May

- 1: Last class day
- 2: Reading days begin
- 6: Final examinations begin
- 13: All grades submitted through insideND by 3:45 p.m.
- 17: Graduate School Commencement Ceremony

## Summer Session 2013

### June

- 17: Classes begin
- 21: Dissertation and thesis formatting checks due

### July

- 12: Last day for master's examinations and Ph.D. dissertation defenses for graduation in August 2013
- 19: Last day for presenting completed theses and dissertations in the Graduate School office for graduation in August 2013

### August

- 2: Last class day
- 7: August official graduation date (no ceremony)



# THE UNIVERSITY

## UNIVERSITY POLICIES

### Notice of Nondiscrimination

The University of Notre Dame does not discriminate on the basis of race, color, national or ethnic origin, sex, disability, veteran status, or age in the administration of any of its educational programs, admissions policies, scholarship and loan programs, athletic and other school-administered programs, or in employment.

The University has designated the director of its Office of Institutional Equity to handle all inquiries regarding its efforts to comply with and carry out its responsibilities under Title IX and under Section 504 of the Rehabilitation Act of 1973. The Title IX and Section 504 coordinator may be contacted as follows:

Director  
Office of Institutional Equity  
414 Grace Hall  
University of Notre Dame  
Notre Dame, IN 46556  
(574) 631-0444

### Policies on Harassment

Sexual and discriminatory harassment and harassment in general are prohibited by the University. Definitions and policies regarding all forms of harassment and other aspects of student life and behavior are described in *du Lac: A Guide to Student Life* (the student handbook). All policies, procedures, guidelines and codes of conduct that

establish the official parameters for student life at Notre Dame are contained in this handbook. Unless otherwise noted, the policies and procedures in the handbook apply to all graduate and professional students, whether the behavior occurs on or off campus. The handbook may be obtained from the Office of Residence Life and Housing, located at 305 Main Building, and is available from the Office of Residence Life and Housing Web site at <http://orlh.nd.edu>.

### Important Information about Campus Security and Fire Safety

The security of all members of the campus community is of paramount concern to the University of Notre Dame. The University publishes an annual report outlining security and fire safety information and crime statistics for campus. This document provides suggestions regarding crime prevention strategies and important policy information about emergency procedures, reporting of crimes, law enforcement services on campus, fire safety, and information about support services for victims of sexual assault. The brochure also contains information about the University's policy on alcohol and other drugs, the SafeWalk program and campus shuttle service. You may view the document on the web at: <http://ndsp.nd.edu/crime-information-and-clery-act/safety-brochure-clery-act>.

A printed copy of this brochure is available by sending an email request

to [ndsp@nd.edu](mailto:ndsp@nd.edu) or by writing to: Office of the Director, University Security Police, 204 Hammes Mowbray Hall, Notre Dame, IN 46556.

For more information on campus security, please visit the Notre Dame Security Police website at <http://ndsp.nd.edu/>.

## THE SPIRIT OF INCLUSION AT NOTRE DAME

*This statement was adopted by the Officers of the University on August 27, 1997, in conjunction with an open letter to the Notre Dame community.*

The University of Notre Dame strives for a spirit of inclusion among the members of this community for distinct reasons articulated in our Christian tradition. We prize the uniqueness of all persons as God's creatures. We welcome all people, regardless of color, gender, religion, ethnicity, sexual orientation, social or economic class, and nationality, for example, precisely because of Christ's calling to treat others as we desire to be treated. We value gay and lesbian members of this community as we value all members of this community. We condemn harassment of any kind, and University policies proscribe it. We consciously create an environment of mutual respect, hospi-



tality and warmth in which none are strangers and all may flourish.

One of the essential tests of social justice within any Christian community is its abiding spirit of inclusion. Scriptural accounts of Jesus provide a constant witness of this inclusiveness. Jesus sought out and welcomed all people into the Kingdom of God — the gentile as well as the Jew, women as well as men, the poor as well as the wealthy, the slave as well as the free, the infirm as well as the healthy. The social teachings of the Catholic Church promote a society founded on justice and love, in which all persons possess inherent dignity as children of God. The individual and collective experiences of Christians have also provided strong warrants for the inclusion of all persons of good will in their communal living. Christians have found their life together enriched by the different qualities of their many members, and they have sought to increase this richness by welcoming others who bring additional gifts, talents and backgrounds to the community.

The spirit of inclusion at Notre Dame flows from our character as a community of scholarship, teaching, learning and service founded upon Jesus Christ. As the Word through whom all things were made, Christ is the source of the order of all creation and of the moral law which is written in our hearts. As the incarnate Word, Christ taught the law of love of God and sent the Holy Spirit that we might live lives of love and receive the gift of eternal life. For Notre Dame, Christ is the law by which all other laws are to be judged. As a Catholic institution of higher learning, in the governance of our common life we look to the teaching of Christ, which is proclaimed in Sacred Scripture and tradition, authoritatively interpreted by Church teaching, articulated in normative understandings of the human person, and con-

tinually deepened by the wisdom born of inquiry and experience. The rich heritage of the Catholic faith informs and transforms our search for truth and our understanding of contemporary challenges in higher education.

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# THE GRADUATE SCHOOL

Notre Dame is the world's pre-eminent Catholic research university, a center of learning that embraces the intellectual ferment of academic enquiry and encourages its students and faculty to address ultimate questions, relationships among religion and the academic disciplines, and ethics. Quality is the hallmark of our graduate programs, which is reflected in the selectivity of our admissions, the comparatively small size of entering classes, and the close, personal mentoring that is possible in such an environment. World-class faculty and gifted graduate students share a vision of enquiry, dedication to scholarship and teaching, and service within and without the academic community.

Distinguished faculty, financial support for research, and ongoing investment in facilities invigorate graduate study at Notre Dame. Major construction projects continue to add new campus buildings and create environments that bring faculty, graduate students, and undergraduates together in cross-disciplinary research at the highest level.

## History of the Graduate School

Located north of the city of South Bend, Indiana, the University of Notre Dame was founded in 1842 by the Rev. Edward F. Sorin, a priest of the Congregation of Holy Cross. The state of Indiana chartered the University by a special act of the legislature. Combining the style of the French "college"

and the seminary where Father Sorin and his congregational fellows studied for the priesthood, Notre Dame began as both a secondary school and a four-year college offering the baccalaureate degree in the liberal arts. It soon adapted to the style and structure of the typical nineteenth-century American university, introducing a science curriculum in 1865, the first American Catholic law school in 1869, an engineering college in 1873, a graduate program in 1918, and a college of business in 1921. The North Central Association first accredited the University in 1913. Notre Dame first began to award advanced degrees in 1918; the Graduate School was instituted in 1944. Since 1990, it has been administered by a dean and several associate deans, and the Graduate Council. It has four divisions — humanities, social sciences, science, and engineering — and includes approximately 30 departments and programs that offer master's or doctoral degrees. There are about 10,000 undergraduates and 1,700 graduate students at Notre Dame, in addition to post-doctoral fellows, and another 1,500 in the law and business schools. Over 85% of graduate students receive some form of financial aid. They come from all fifty states and over 100 nations.

## Administration

Administered originally by a graduate committee of faculty members, the Graduate School was organized formally in 1944 with a graduate dean

and graduate council. In 1971, the newly created position of vice president for advanced studies underlined the University's intense focus on building quality in the graduate programs. The position's title was changed in 1990 to vice president for graduate studies and research, and several assistant and associate dean positions were created to assist the vice president. In 2007, the research office was separated from the Graduate School, and the new position of dean of the Graduate School, with exclusive responsibility for graduate studies, was created.

## The Graduate Council

Following is the Graduate Council membership for the 2012–2013 academic year.

### *Ex Officio Members*

Christine M. Maziar, Ph.D.  
Acting Dean, The Graduate School; Vice President and Senior Associate Provost; Council Chair

Robert J. Bernhard, Ph.D.  
Vice President for Research

Gregory P. Crawford, Ph.D.  
Dean of the College of Science

Peter K. Kilpatrick, Ph.D.  
Dean of the College of Engineering

Michael Lykoudis, M.Arch  
Dean of the School of Architecture

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 THE GRADUATE SCHOOL
 

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John T. McGreevy, Ph.D.  
I.A. O'Shaughnessy Dean of the  
College of Arts and Letters

Nell Jessup Newton, J.D.  
Joseph A. Matson Dean of the  
Law School and Professor of Law

Roger Huang, Ph.D.  
Interim Dean of the Mendoza  
College of Business and Kenneth  
R. Meyer Chair in Global Invest-  
ment Management

Diane Parr Walker  
Edward H. Arnold University  
Librarian, Hesburgh Libraries

#### ***Elected Members***

David Bennett, Ph.D.  
Research Professor of Physics

Cindy Bergeman, Ph.D.  
Professor of Psychology

Sunny Boyd, Ph.D.  
Professor of Biological Sciences

Jeremy Fein, Ph.D.  
Professor of Civil and Environ-  
mental Engineering and Earth  
Sciences

Gerald McKenny, Ph.D.  
Professor of Theology

#### ***Appointed Members***

Thomas Corke, Ph.D.  
Professor of Aerospace and Me-  
chanical Engineering

Mark Cummings, Ph.D.  
Professor of Psychology

Marvin Miller, Ph.D.  
Professor of Chemistry and Bio-  
chemistry

Margaret Meserve, Ph.D.  
Associate Professor of History

#### ***Representatives from the Academic Council***

Panos J. Antsaklis, Ph.D.  
H.C. and E.A. Brosey Professor of  
Electrical Engineering

Laura Carlson, Ph.D.  
Professor of Psychology and Asso-  
ciate Dean for Professional Devel-  
opment in the Graduate School

Margaret Doody, Ph.D.  
John and Barbara Glynn Family  
Chair in Literature, Professor of  
English

Dennis Doordan, Ph.D.  
Associate Dean of Research,  
Scholarship and Creative Work,  
School of Architecture

Umesh Garg, Ph.D.  
Professor of Physics

Alain Toumayan, Ph.D.  
Professor of French

#### ***Graduate Student Representatives***

Douglas Rice  
Chemistry and Biochemistry,  
President of the Graduate Student  
Union

Katherine Rueff  
Physics, Co-Vice President of the  
Graduate Student Union

#### ***Graduate Collegiate Deans***

Phillip Bess, M.Arch, M.T.S.  
Director of Graduate Studies and  
Professor of Architectures

Richard Garnett, J.D.  
Associate Dean for Faculty Re-  
search and Professor of Law

Mark McCready, Ph.D.  
Senior Associate Dean for Re-  
search and Graduate Studies and  
Professor of Chemical and Biomo-  
lecular Engineering

Mark Schurr, Ph.D.  
Associate Dean for the Social Sci-  
ences and Research and Professor  
of Anthropology

Richard Taylor, Ph.D.  
Associate Dean For Research and  
Professor of Chemistry and Bio-  
chemistry

#### ***Graduate School Representatives (Non-Voting)***

Brian Flaherty, MBA  
Associate Director of Budget and  
Operations

John Lubker, Ph.D.  
Associate Dean of Students

Nyrée McDonald, Ph.D.  
Associate Dean for Recruitment  
and Admissions

Brian M. Baker, Ph.D.  
Associate Dean for Academic  
Programs

#### **Graduate Student Union**

Through a council of elected officers, appointed committee chairs and representatives from the departments of its constituent colleges, the Graduate Student Union (GSU) provides a variety of services and represents its membership on several University councils and committees. In particular, it subsidizes graduate student travel to present original research, promotes excellence in graduate education, looks for the highest quality of life for graduate students, and maintains a liaison with the administration regarding pertinent issues. The GSU maintains a website with current events and resources for graduate students, provides listserv updates, conducts a graduate orientation program, and offers awards for outstanding teaching assistants and graduate instructors, in addition to providing various social, cultural, and intellectual activities. The GSU is the graduate students' official liaison with

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 THE GRADUATE SCHOOL
 

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the University administration and the Office of Student Activities.

The Graduate Student Union finances its operations and Conference Presentation Grant through contributions from the Graduate School and a yearly mandatory activity fee. Graduate Students are eligible to apply for the grant if they: (1) are enrolled in the Graduate School, and (2) pay the annual fee.

The Graduate Student Union maintains offices at Room 217 in the LaFortune Student Center; send e-mail inquiries to [frahn.2@nd.edu](mailto:frahn.2@nd.edu). Telephone: (574) 631-6963, Web: <http://gsu.nd.edu>.

### Graduate Degrees Granted

The Graduate School primarily awards master's and doctoral degrees in the divisions of Engineering, Humanities, Science, and Social Sciences.

Master of Arts in the following fields:

Art History, Design, and Studio Art  
Classics  
Economics  
Educational Administration  
English  
French and Francophone Studies  
History  
History and Philosophy of Science  
Iberian and Latin American Studies  
Italian Studies  
Peace Studies  
Philosophy  
Political Science  
Psychology  
Sociology  
Theology

Master of Divinity

Master of Engineering (only with J.D.)

Master of Engineering in Mechanical Engineering

Master of Fine Arts in the following fields:

Creative Writing  
Design  
Studio Art

Master of Medieval Studies

Master of Sacred Music

Master of Science in Aerospace Engineering

Master of Science in Applied Mathematics

Master of Science in Bioengineering

Master of Science in Chemical Engineering

Master of Science in Civil Engineering  
Master of Science in Computer Science and Engineering

Master of Science in Electrical Engineering

Master of Science in Environmental Engineering

Master of Science in Global Health

Master of Science in Mechanical Engineering

Master of Science in the following fields:

Applied and Computational Mathematics and Statistics  
Biochemistry  
Biological Sciences  
Chemistry  
Geological Sciences  
Mathematics  
Physics

Master of Theological Studies

Doctor of Philosophy in the following fields:

Aerospace and Mechanical Engineering  
Applied and Computational Mathematics and Statistics  
Biochemistry  
Bioengineering  
Biological Sciences  
Chemical and Biomolecular Engineering  
Chemistry  
Civil and Environmental Engineering and Earth Sciences  
Computer Science and Engineering  
Economics  
Electrical Engineering  
English  
History  
History and Philosophy of Science  
Literature  
Mathematics  
Medieval Studies  
Peace Studies  
Philosophy  
Physics  
Political Science  
Psychology  
Sociology  
Theology

Professional master's degrees granted through the Graduate School include:

Master of Education— limited to students in the Alliance for Catholic Education (ACE) program

Master of Educational Administration — limited to students in the Alliance for Catholic Education (ACE) program

Master of Science in Applied and Computational Mathematics and Statistics

Master of Science in Global Health

Master of Science in Patent Law

### Areas and Fields of Study

The University of Notre Dame offers graduate programs leading to master's and/or doctoral degrees in the following areas and fields of study.

Key:

- \* Master's programs only
- + Master's program and M.F.A. in studio art and design
- ++ M.F.A. in creative writing

#### *Aerospace and Mechanical Engineering*

Aerospace Sciences  
Biomechanics, Biomaterials, and Biofluid Mechanics  
Computational Mechanics  
Control Systems  
Flow Physics and Control  
Fluid Mechanics  
Manufacturing  
Materials Science  
Mechanical Systems and Design  
Orthopaedics and Biomedical Devices  
Solid Mechanics and Materials  
Thermal Sciences  
Tissue Engineering

#### *Applied and Computational Mathematics and Statistics*

Bioinformatics  
Computational Biology  
Computational Finance  
Computational Mathematics  
Dynamical Systems  
Multiscale Modeling  
Numerical Methods  
Predictive Analytics  
Statistics  
Stochastic Processes

#### *Art, Art History, and Design\**

Studio Art+  
Ceramics

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Painting  
 Photography  
 Printmaking  
 Sculpture  
 Art History\*  
   American  
   Ancient  
   Contemporary  
   Medieval  
   Modern European  
   Renaissance and Baroque  
 Design+  
   Graphic Design  
   Industrial Design

**Biological Sciences**

Animal Behavior  
 Aquatic Biology  
 Biochemistry  
 Biogeochemistry  
 Biotechnology  
 Cancer Biology  
 Cell and Molecular Biology  
 Developmental Biology  
 Ecology  
 Ecosystem Ecology  
 Endocrinology  
 Environmental Biology  
 Environmental Microbiology  
 Evolutionary Biology  
 Genetics and Bioinformatics  
 Genomics  
 Medical Entomology and Vector  
   Biology  
 Microbial Pathogenesis  
 Neurobiology  
 Nutritional Sciences  
 Parasitology and Infectious Diseases  
 Physiology  
 Plant Science  
 Population Biology

**Chemical and Biomolecular Engineering**

Applied Mathematics  
 Atomistic Simulation of Materials  
 BioFuels  
 Biomolecular Engineering  
 Biophysical Characterizations of  
   Macromolecules  
 Catalyst Synthesis and Characteriza-  
   tion  
 Chemical Sensing  
 Carbon Dioxide Capture  
 Combinatorial Materials Develop-  
   ment  
 Computational Heterogeneous  
   Catalysis

Density Functional Theory  
 Drug Delivery  
 Drug Design  
 Ecological and Environmental Model-  
   ing  
 Electrokinetics  
 Fuel Cell Technologies  
 Genetic Diagnostics  
 Heterogeneous Phase Change Simula-  
   tion  
 Ionic Liquids  
 Materials Science  
 Membranes  
 Micro and Nano-Fluidics  
 Multiphase Flow Dynamics  
 Nanomaterials  
 Optoelectronic Materials  
 Oscillatory Separations  
 Peptide Design and Synthesis  
 Phase Equilibrium  
 Process Systems Engineering  
 Soft Lithography  
 Suspension Mechanics  
 Sustainable Energy

**Chemistry and Biochemistry**

Analytical Chemistry  
 Biochemistry  
 Biophysics  
 Drug Design and Discovery  
 Energy Research  
 Environmental Chemistry  
 Inorganic Chemistry  
 Materials Chemistry  
 Molecular Medicine  
 Molecular and Cell Biology  
 Nanotechnology  
 Organic Chemistry  
 Physical/Analytical Chemistry  
 Radiation Chemistry  
 Structural Biology  
 Surface Science  
 Synthetic Chemistry  
 Theoretical and Computational  
   Chemistry

**Civil and Environmental Engineering and Earth Sciences**

Actinide Material Science  
 Aquatic Chemistry  
 Bioengineering  
 Biological Treatment of Hazardous  
   Waste  
 Computational Fluid Mechanics  
 Development Studies  
 Dynamics of Offshore Structures  
 Earthquake Engineering

Environmental Biotechnology  
 Environmental Engineering  
 Environmental Fluid Dynamics  
 Environmental Microbiology  
 Environmental Mineralogy  
 Environmental Nanoscience and  
   Technology  
 Environmental Sensors  
 Finite Element Modeling  
 Fire Effects on Structures  
 Groundwater Hydrology  
 High and Low Temperature Geo-  
   chemistry  
 Mantle Petrology  
 Materials Characterization and Du-  
   rability  
 Multiphase Flows  
 Natural and Man-made Hazard  
   Reduction  
 Paleontology  
 Progressive Collapse of Structural  
   Systems  
 Structural Dynamics  
 Structural Engineering  
 Structural Health Monitoring  
 Structural Mechanics and Design  
 Structural Reliability  
 Tall Buildings and Long-Span Bridges  
 Water and Wastewater Treatment  
 Wind Engineering

**Classics\***

Classical Studies  
 Early Christian Studies

**Computer Science and Engineering**

Algorithms and Theory  
 Artificial Intelligence  
 Complex Networks  
 Computational Biology  
 Computer Architecture  
 Computer Vision  
 Data Mining and Machine Learning  
 Human Health Biometrics  
 Human Machine Interaction  
 Robotics Bioinformatics  
 Security and Cryptography  
 Software Engineering and Software  
   Systems  
 Wireless, Mobile and Embedded  
   Systems

**Economics**

Development Economics  
 Environmental Economics  
 Industrial Organization  
 International Economics

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Labor Economics  
 Monetary and Macroeconomics  
 Public Economics

**Education\***

Educational Administration  
 Teaching

**Electrical Engineering**

Communication Systems and Net-  
 working  
 Control Systems  
 Integrated Circuits  
 Nano-biotechnology  
 Nanoelectronics  
 Optoelectronics  
 Semiconductor Materials and Devices  
 Signal and Image Processing  
 Wireless Networks

**English**

African American  
 Creative Writing++  
 Drama  
 Early American (to 1865)  
 Irish Studies  
 Latino/a Studies  
 Literary Theory  
 Middle American (from the Civil War  
 to 1930)  
 Modern British  
 Novel  
 Old and Middle English  
 Poetry  
 Post 1930 American Literature  
 Prose Fiction  
 Renaissance  
 Restoration and 18th Century  
 Romantic and Victorian

**Global Health\*****History**

Latin American History  
 Medieval History  
 Modern European History  
 United States History

**History and Philosophy of Science**

Analytic Philosophy of Science and  
 Epistemology  
 History of Astronomy and Physics  
 History and Philosophy of Biology  
 1700 to 1980  
 History and Philosophy of Economics

History and Philosophy of Math-  
 ematics  
 History of the Philosophy of Science  
 Intellectual History of Science 1600  
 to 1950  
 Medieval Natural Philosophy and  
 Medicine  
 Philosophy of Contemporary Physics  
 Philosophy of Mind and Neurosci-  
 ence  
 Science and Literature  
 Scientific Revolution Studies  
 Social History of Medicine and  
 Technology

**Literature**

Classics  
 East Asian Studies  
 French  
 German  
 Irish Studies  
 Italian  
 Spanish (Iberian and Latin American)  
 (Literatures can be studied in various  
 combinations)

**Mathematics**

Algebra  
 Algebraic Geometry  
 Complex Analysis  
 Differential Geometry  
 Logic  
 Partial Differential Equations  
 Mathematics in Science, Engineering,  
 and Economics  
 Topology

**Medieval Studies**

Art History  
 History  
 Language and Literatures  
 Manuscript Studies  
 Music  
 Philosophy  
 Theology

**Patent Law\*****Peace Studies**

Peace Studies and History  
 Peace Studies and Political Science  
 Peace Studies and Psychology  
 Peace Studies and Sociology  
 Peace Studies and Theology

**Philosophy**

Ancient Philosophy  
 Contemporary European Philosophy  
 Epistemology  
 Ethics  
 Logic  
 Medieval Philosophy  
 Metaphysics  
 Modern Philosophy  
 Philosophy of Language  
 Philosophy of Mathematics  
 Philosophy of Mind  
 Philosophy of Religion  
 Philosophy of Science  
 Political Philosophy

**Physics**

Astrophysics  
 Atomic Physics  
 Biophysics  
 Condensed Matter Physics  
 Elementary Particle Physics  
 Network Physics  
 Nuclear Physics  
 Statistical Physics  
 Theoretical Physics

**Political Science**

American Politics  
 Comparative Politics  
 Constitutional Studies  
 International Relations  
 Political Theory

**Psychology**

Cognition, Brain, and Behavior  
 Clinical Psychology  
 Developmental Psychology  
 Quantitative Psychology

**Romance Languages and Literatures\***

(See Literature for Ph.D. program)  
 Comparative Literatures  
 French and Francophone Studies—  
 Middle Ages, Renaissance, 17th-  
 century Classical, 18th-century  
 Enlightenment, 19th Century, 20th  
 Century  
 Italian Studies—Italian Literature:  
 Medieval, Renaissance, Modern;  
 Art History; Architectural History;  
 Film Studies; Translation; History;  
 Philosophy; Music  
 Iberian and Latin American Studies—  
 Medieval, Golden Age, Colonial  
 Spanish-American, Modern Spanish



Peninsular, Modern Spanish-American Periods; Gender Studies

### **Sacred Music\***

Choral-Vocal Concentration  
Organ Concentration

### **Sociology**

Cultural Sociology  
Education  
Political Sociology  
Religion  
Social Psychology  
Social Movements  
Social Stratification  
Theory

### **Theology**

Biblical Studies\*  
Christianity and Judaism in Antiquity—Hebrew Bible and Judaica, New Testament and Early Church  
Early Christian Studies\*  
History of Christianity—Early Church, Medieval Studies, Reformation Studies, Modern Studies  
Liturgical Studies  
Moral Theology/Christian Ethics  
Systematic Theology  
Professional Studies\*  
(Master of Divinity Program)  
Theological Studies\*

## **Admission to the Graduate School**

### **Degree Applicants**

Applicants for admission to a degree program in the Graduate School must hold a bachelor's degree or its equivalent from an accredited American college or university or from a foreign institution of acceptable standing by the time of graduate matriculation. If at that time an admitted applicant does not hold a bachelor's degree, the Graduate School admission is void. The applicant should have earned at least a B average (3.0 on a 4.0 G.P.A. scale) in her or his undergraduate major courses and should meet the level of academic achievement that implies a developed ability for advanced study and independent scholarship.

An applicant may seek admission to degree-seeking status in either a master's or doctoral program, or to non-degree status.

Admission to a graduate degree program is not equivalent to admission to candidacy for the degree. It should also be noted that admission to the master's program does not mean admission to the associated doctoral program upon completion of the master's program. A separate decision is required for admission into the doctoral program.

### **Admission to Multiple Degrees**

Students seeking admission to more than one program (whether they intend to enroll in only one or both programs) must submit separate applications for each program and be accepted by each. Admission to one program does not guarantee admission to another program. Applicants may seek admission to two programs prior to enrolling, or apply to an additional program after they have begun an initial program. It is pos-

sible for a student to enroll in two master's degree programs, a master's degree program and a Ph.D., or a program in the Graduate School and a professional degree in one of the other colleges or schools in the University. The Graduate School does not allow students to enroll in two Notre Dame doctoral programs simultaneously. The Graduate School will consider only applicants whose past academic performance indicates the potential for success in each of the programs. No more than nine credit hours of classes from any one master's degree may be counted toward any other graduate degree.

All funding arrangements and degree requirements must be approved in advance by the student's adviser (if he or she has one), the respective program administrators, and the Graduate School.

An applicant who seeks admission to more than one master's degree program in the Graduate School in order to earn two degrees, or an applicant who seeks admission to a degree program in the Graduate School concurrently with a degree program in another school in the University (i.e., Law School, the School of Architecture, Mendoza College of Business, or the ESTEEM Program) must submit a separate and complete application for each program. The applicant must also be accepted by each of the cooperating departments. The Graduate School will consider only applicants whose past academic performance indicates the potential for success in each of the programs. In consultation with the appropriate advisers from each unit, the applicant will select a plan of study acceptable to all units. The Graduate School must approve the written plan of study before the student may begin the program. No more than nine credit hours of classes from any one

## **ACADEMIC REGULATIONS**

Please note:

The following information represents the minimum standards established by the Graduate School. Individual departments may require higher standards. Students are expected to be fully cognizant of their department's requirements.

No exceptions to the following policies and procedures will be valid without the formal written approval of the Graduate School.

master's degree may be counted toward any other graduate degree.

### Admission to Joint Degree Programs

It is possible for a student to pursue a program of study combining two programs and leading to a joint degree. An applicant who seeks to earn a joint degree, either master's or Ph.D., must submit a separate and complete application to each program and be accepted by both. The relevant departments must agree upon a plan of study defining what will constitute the joint degree program, and the approved written plan must be on file with the Graduate School before the student may begin the program.

### Application Requirements

An applicant for admission to a degree program must complete all of the following:

1. Complete and electronically submit the online application
2. Submit a statement of intent through the online application system
3. Submit a curriculum vitae or resumé through the online application system
4. Arrange for three (3) letters of recommendation to be submitted through the online recommendation system associated with the online application
5. Submit unofficial transcripts from each post-secondary institution through the online application
6. Submit writing samples, if required by the department, through the online application system

7. Submit the application fee by credit card, check, or money order using the payment system associated with the online application system
8. Arrange for the submission of official Graduate Record Examination (GRE) General Test scores
9. Arrange for the submission of official GRE Subject Test scores if required by the program
10. Arrange for submission of official Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores if the applicant's native language or language of college instruction is not English

The online application may be accessed through the Graduate School's website at <http://graduateschool.nd.edu>. Students who have preliminary test scores are encouraged to upload them to the application to expedite the review process.

Students seeking admission to more than one program must submit separate applications for each program. Only one application fee is necessary.

The application fee must accompany the application. This fee is non-refundable, and may be paid by check, money order, or credit card (see online application for the current application fee).

Application deadlines range from December 1 to February 1 for admission to the fall semester. Applicants may visit the Graduate School's website to determine the deadline for individual programs. Unless otherwise specified, the application deadline for spring admission is November 1, though some departments have earlier deadlines. Applicants may visit the Gradu-

ate School's website to determine the deadline for individual programs. It should be noted that only a few departments offer spring admission. Therefore, applicants who wish to begin in the spring are advised to consult the department prior to submitting an application.

Beyond these Graduate School admission requirements for all graduate departments and programs, particular programs may require personal interviews and/or submission of special materials such as writing samples or portfolios. Applicants should consult the individual department or program to learn about additional requirements and submission procedures.

The Graduate Record Examination (GRE) is offered at sites in the United States and abroad. The annual schedules and other information about the GRE can be obtained online at <http://www.gre.org> or from Educational Testing Service (ETS), Graduate Record Examination, Box 6000, Princeton, NJ 08541-6000, USA. If you need to call about the GRE, telephone the Educational Testing Service at (609) 771-7670.

The Test of English as a Foreign Language (TOEFL) and the International English Language Testing System (IELTS) are offered several times each year at sites in the United States and abroad. Foreign students, except those noted above, must submit TOEFL or IELTS scores as part of their application to demonstrate a sufficient command of English to meet the requirements of their field. If not available locally, the annual schedules and other information about the TOEFL can be obtained online at <http://www.toefl.org> or from Educational Testing Service (ETS), TOEFL, Box 6151, Princeton, NJ 08541-6151, USA. If you need to call about the TOEFL, telephone the Educational Testing Service at (609) 771-7100. Information

on the IELTS can be obtained online at <http://ielts.org>.

### Non-Degree Applicants

An applicant for admission to a non-degree program must complete all of the following:

1. Complete and electronically submit the online application
2. Submit a statement of intent through the online application system
3. Submit a curriculum vitae or résumé through the online application system
4. Submit unofficial transcripts from each post-secondary institution through the online application
5. Submit the application fee by credit card, check, or money order using the payment system associated with the online application system

A non-degree applicant may seek admission as a departmental non-degree student or as an unclassified student in the Graduate School. A graduate student who is dismissed from his or her program of study for academic reasons cannot be admitted as a non-degree student.

A departmental non-degree student is one who has been admitted to a program but does not seek an advanced degree from the University. An applicant with degree intent who lacks one or more admission requirements may be admitted temporarily to this non-degree status at the discretion of the program and with the approval of the associate dean of recruitment and admissions. The student may register for one to 15 credit hours in any graduate courses for which he or she meets the course prerequisites. However, no

student initially admitted to non-degree status will be admitted to degree status until all admission requirements have been satisfied. No more than 12 credit hours earned by a student while in non-degree status may be counted toward a degree program. Admission as a departmental non-degree student does not guarantee later admission as a degree-seeking student.

An unclassified student is one who is admitted to the Graduate School in a non-degree status, but who is not a member of a particular department or program. Such a student may, with the approval of the Graduate School, take courses in any graduate program, subject to approval by the program. This category is usually open to non-degree-seeking students who wish to take courses in more than one program or students who have completed their degree programs but wish to continue at the University with graduate student status. No more than 12 credit hours earned by a student while in non-degree status may be counted toward a degree program. Admission as an unclassified non-degree student does not guarantee later admission as a degree-seeking student.

#### *Visiting Students, Research Visitors, and Auditors*

A visiting student is normally a degree-seeking student at another university who enrolls for credit in select courses at Notre Dame. Unless otherwise arranged by the home university and Notre Dame, the visiting student is considered a non-degree student at Notre Dame and follows the same application and enrollment procedures as a non-degree student.

A research visitor is normally a degree-seeking student in another university who comes to Notre Dame to conduct research with a faculty member, but does not register or enroll in any courses at Notre Dame. The researcher

is not a student at Notre Dame, and is therefore not required to apply to the Graduate School for admission. The appointment process is completed at the request of the program in which the supervising faculty member is appointed. Research visitors may receive a stipend, but are not eligible for benefits.

An auditor is a non-degree student who meets the course prerequisites but receives no academic credit. With the permission of the instructor and the program chair, a degree-seeking student may also audit courses. Audited courses may be recorded on a student's permanent record only if the student submits the proper request form and if he or she attends the course throughout the entire semester. A recorded audit is graded V. Incomplete audits are not recorded. The audit grade of V cannot be changed to a grade with credit.

In the academic year, full-time graduate students may audit courses without charge. Part-time graduate students who audit courses will be charged the normal audit fee of one-half the current credit hour fee.

In the summer session, there is no free audited course. Any course taken or audited in the summer session will be charged the full price.

### Acceptance

Official acceptance to programs in the Graduate School is granted only by the Graduate School. Applicants will be informed officially of the decision on their application by the Graduate School, through the online application system.

Applicants who intend to accept offers of admission are required to confirm their acceptance by returning the appropriately completed enrollment

form through the online application system.

### **Council of Graduate Schools Policy on Accepted Offers of Admission**

In accordance with a resolution passed by the Council of Graduate Schools in the United States, the following policy is in effect:

*By accepting an offer of financial aid (such as a graduate scholarship, fellowship, traineeship, or assistantship) for the next academic year, the enrolled or prospective graduate student completes an agreement that both the student and graduate school expect to honor. When a student accepts an offer before April 15 and subsequently desires to withdraw, the student may submit a written resignation for the appointment at any time through April 15. However, an acceptance given or left in force after April 15 commits the student not to accept another offer without first obtaining a written release from the institution to which a commitment has been made. Similarly, an offer made by an institution after April 15 is conditional on presentation by the student of a written release from any previously accepted offer. It is further agreed by the institutions and organizations subscribing to this resolution that a copy of the resolution should accompany every scholarship, fellowship, traineeship, and assistantship offer.*

## **Registration**

### **Enrollment in the University**

All degree and non-degree graduate students must both register and complete the ND Roll Call process each semester during the dates and times announced by the University Registrar. Any admitted student who fails to register and complete the ND Roll Call process for one semester or more must seek re-instatement from the

department and then from the Graduate School upon return.

### **Full-Time and Part-Time Status**

A full-time student is one who registers for at least nine credit hours per semester. All degree-seeking students are expected to maintain full-time status and to devote full time to graduate study. No degree student may be employed, on or off campus, without the express permission of his or her program and the Graduate School.

A non-degree student must register for at least nine credit hours per semester, or six in the summer session, to claim full-time status.

A student who registers for less than nine credit hours per semester will be considered part-time.

During the academic year, students who are enrolled in summer-only degree programs are considered full-time if they register for a course in the fall or spring semester.

### **Residency and Non-Residency Status**

Residency status is determined by a student's continual presence or non-presence on campus. If a student is on campus a majority of the days of a week or a majority of weeks per month, he or she will be considered in residence. If a student is not present on campus in this fashion, he or she will be considered a non-resident student. With the exception of library privileges, a student classified as a non-resident cannot use University services, such as meal plans, student housing, and athletic facilities. Resident status is initiated by the student when registering and verified by their program of study.

### **Continuous Registration**

To maintain their student status, all students must satisfy the continuous registration requirement by both registering for a graduate-level course relevant to the student's program and completing the ND Roll Call process. A student who is pursuing degrees in the Graduate School and in another school in the University concurrently meets the continuous enrollment requirement by registering in either program. Any exception to this rule, including a leave of absence, must be approved by the Graduate School.

Degree students who have completed the coursework requirement for their degree must register for at least nine credit hours per semester, including the final semester or summer session in which they receive their degree. These credit hours should consist of either resident or non-resident thesis or dissertation research within their department. Students registered for nine credit hours may be considered full-time students whether or not they are in residence. Students not in residence and taking nine credit hours pursuant to continuous enrollment requirements are charged a special registration fee.

Continuing students (i.e., degree-seeking students who are eligible to continue their studies in the fall semester) may have access to University facilities and services from May through August without completing the ND Roll Call process and registering for academic credit in the summer session.

### **Summer Registration Requirements**

Continuing students, i.e., degree-seeking students who are eligible to continue their studies in the fall semester, who are not receiving an academic stipend during the summer months may have access to University facilities

and services from May through August without registering for academic credit or completing the ND Roll Call process in the summer session. Students who are enrolled full-time during the academic year are considered full-time in the summer.

Graduate students receiving a summer stipend and conducting independent research must register for their program's zero-credit "Independent Summer Research" section. Registering for this course will ensure proper classification for tax purposes. Only those students both actively engaged in research and receiving a stipend are eligible for this course. The sections of this course will be coded to run through the entire summer term in order to align with each of the summer pay periods.

### Semester of Graduation

Degree students must register and complete the ND Roll Call process during the semester in which they plan to graduate, including the summer session.

### Maximal Registration

During each semester of the academic year, a graduate student should not register for more than 15 credit hours of graduate courses, i.e., 60000 through 90000-level courses.

In the summer session, a graduate student should not register for more than 10 credit hours.

Audited courses not taken for a grade do count toward the maximal credit hour limit.

## Courses

### Course Numbers

Courses numbered 60000 and above are typically taken by graduate students. Qualified advanced undergraduates may be admitted to these classes with the permission of the instructor and the approval of the chair.

Courses numbered 70000 and above are advanced graduate courses open only to students who have completed the prerequisites.

It is the expectation of the Graduate School that all full-time graduate students enroll in graduate-level coursework. Therefore, full-time students are expected to register for at least 3 hours of credit at the 60000 level or higher every semester that they are enrolled, except with the permission of the associate dean of students in the Graduate School.

The advanced undergraduate courses numbered 40000 – 59999 may, with the approval of the program chair or the director of graduate studies and the Graduate School, be taken to satisfy up to six hours of graduate credit requirements. Grades in these courses will count towards the student's G.P.A. Programs may place additional constraints on the use of 40000 – 59999 level courses to meet their degree requirements.

For purposes of progress within a graduate department or program of study or admission to degree candidacy, no graduate credit is allowed for courses below the 40000 level.

### Add/Drop Policy

A student may add courses through the first six class days of the semester. A student may add courses after this time only on the recommendation of

the program and with the approval of the Graduate School.

A student may drop courses at his or her discretion through the first six class days of the fall or spring semester. To drop a course after this period and up to the last day for course discontinuance (see the Graduate School calendar for the exact date), requires the approval of the chair or the director of graduate studies of the program offering the course, the student's adviser, and the Graduate School. A course may be dropped after the last day for course discontinuance only in cases of serious physical or mental illness incurred by the student or an immediate family member of that student. Courses dropped after this period will be posted on the student's permanent record with the grade of W.

A course taken for credit can be changed to an audit course after the last day for course discontinuance only in cases of serious physical or mental illness.

### Grades

Listed below are graduate grades and the corresponding number of quality points per credit hour. It is the expectation of the Graduate School that all courses taken at the graduate level will be graded by the level of the course, not by the status of the enrolled student.

Grade	Quality Points/Other
A	4.000
A-	3.667
B+	3.333
B	3.000
B-	2.667
C+	2.333
C	2.000
C-	1.667
D	1.000

## ACADEMIC REGULATIONS

Grade	Quality Points/Other
F	0.000
I	0.000 (until Incomplete is removed)
NR	Not reported
S	Satisfactory
U	Unsatisfactory
V	Auditor
W	Discontinued with permission

Grades of C- and D are awarded in the Graduate School and are used to calculate both semester and cumulative G.P.A.; however, they will not be accepted for completion of graduate degree requirements, specific required coursework, and/or total credit hours for completion of coursework. If a student receives lower than a grade of C in a required course, he or she must either retake the same course or its equivalent as determined by the program to fulfill the degree requirement.

Under exceptional circumstances, a student receives the temporary grade of I when he or she has not completed the requirements for a 60000 or higher-level graduate course within the semester or summer session. No grade of I can be given for courses below the 60000 level or to graduating students in the final semester or final summer session of a terminal degree program.

The grades of S and U (Satisfactory and Unsatisfactory) are used in courses without semester credit hours, as well as in research courses, departmental seminars, colloquia, workshops, directed studies, field education, and skills courses. These courses, if given the grade of S, do figure in a student's earned semester credit-hour total but do not figure in the computation of the G.P.A. No credit is given for a grade of U.

The grade of V (Auditor) does not have quality-points attached to it.

It is the only grade available to the registered auditor. The audit must be requested before the sixth class day of the semester. The audited class is made part of the student's permanent record, and the auditor should attend the course throughout the entire semester. The grade of V cannot be changed to a credit-earning grade. Normally, graduate students are limited to auditing a maximum of two courses per semester.

The grade of W (discontinued with permission) is given for a course that a student is allowed to drop after the mid semester point. Approval of the grade of W is granted by the associate dean of students in the Graduate School.

### Incomplete Coursework

Students should complete the work of graduate courses at the 60000-90000 level during the regular academic term in which they are taken. This expectation of students should also guide faculty members who teach graduate courses. That is, faculty are obligated to evaluate and grade graduate work by the end of the term in which the course is offered.

A grade of "Incomplete" (I) should be given only in exceptional circumstances when there are compelling reasons. When a student receives a grade of I, he or she has 30 days from when grades were due (for the semester in which the I was given) to complete the coursework for a grade. If the coursework is not completed by this date, the grade of I will be changed permanently to a grade of F. Extensions for Incompletes require formal approval from the associate dean of students in the Graduate School.

### Grade Point Average

Quality point values are used to compute the student's G.P.A. The G.P.A. is the ratio of accumulated earned

quality points to the accumulated attempted graded semester credit hours. Only courses taken at Notre Dame count towards a student's G.P.A.

Continuation in a graduate degree program, admission to degree candidacy, and graduation require maintenance of at least a 3.0 (B) cumulative grade point average (G.P.A.).

An adequate G.P.A. is only one factor taken into consideration in determining a student's qualifications for an advanced degree. Degree students should be aware of their program's performance criteria. The program and the Graduate School annually evaluate each graduate student's overall performance on the basis of these criteria.

### Transfer Credits

A program may accept coursework completed at another accredited university toward meeting its degree requirements. A student may transfer credits earned at another accredited university only if: (1) the student has degree-seeking status at Notre Dame; (2) the courses taken are graduate courses appropriate to the Notre Dame graduate program, and the student had graduate student status when he or she took these courses; (3) the courses were completed within a five-year period prior to admission to a graduate degree program at Notre Dame, or while enrolled in a graduate degree program at Notre Dame; (4) grades of B (3.0 on 4.0 scale) or better were achieved; and (5) the transfer is recommended by the program and approved by the Graduate School.

These five requirements also apply to the transfer of credits earned in another graduate program at Notre Dame.

A student transferring from an unfinished master's program may not transfer more than six semester credit hours

into either a Notre Dame master's or Ph.D. program.

If the student has completed a master's or Ph.D. program, he or she may transfer up to nine semester credit hours to a Notre Dame master's program and up to 24 semester-credit hours to a Notre Dame Ph.D. program.

Grades for transferred courses are not included in the student's Notre Dame G.P.A.

With advanced approval from the graduate program of study, a Notre Dame undergraduate who is registered for graduate courses at Notre Dame may use this coursework to meet graduate program requirements. These credits cannot be used to satisfy both undergraduate and graduate degree requirements.

## Graduate Student Status

### Access to Computing Services

The University of Notre Dame NetID accounts and related services are intended for faculty, staff, and currently registered students. A student who fails to register and complete the ND Roll Call process by the date announced by the Registrar will forfeit the right to access his or her NetID account and related services. University computing resources supplied by way of the NetID are normally available to a student for up to 60 days after his or her graduation date. A student granted a leave-of-absence would normally retain access to University computing services for up to two semesters. A student who is separated from the University due to an academic suspension, academic dismissal, or withdrawal will no longer have access to University computing services, unless an extension has been approved by the

dean of his or her college. A student attending Notre Dame for the summer only, with a non-degree seeking status, will normally retain access to University computing service for up to 60 days after the August graduation date. A student who is separated from the University for other reasons will no longer have access to University computing services.

### Leave of Absence

For exceptional reasons and on the recommendation of the program, a student in good academic standing may request a leave of absence for a maximum of two consecutive semesters. A request for a leave of absence must be made before the semester in which the leave is taken, and all leaves of absence must be approved by the Graduate School. If, for some urgent reason, a student is allowed to leave the University after the beginning of the semester, the withdrawal procedure must be followed. If the student does not return at the end of the leave of absence period, he or she is no longer considered a student at Notre Dame and must apply for readmission if he or she wishes to complete the program.

In the case of a medical leave of absence, clearance from the University Health Center or University Counseling Center is required prior to readmission.

### Medical Separation from Academic Duties

Students enrolled in the Notre Dame Graduate School who wish to temporarily interrupt their programs for medical reasons must make an official request to the Graduate School. Students are eligible under this policy if they have a "serious medical condition." For purposes of this policy, "serious medical condition" means a medical condition that (1) requires

multiple-day hospitalization OR (2) renders the student unable to engage in coursework and all other Graduate School-related duties for a period of at least ten (10) calendar days. Written certification by a physician that the student has a serious medical condition as defined in this policy must be submitted to the Graduate School as soon as the need is foreseen (for emergency requests). In situations involving childbirth or adoption, see the Childbirth and Adoption Accommodation Policy. In all cases, regardless of the nature of the medical condition, the duration of the separation will be as certified by the physician up to a maximum of six weeks. Students may utilize this medical separation policy two non-consecutive times during their graduate studies. Should students need more than six weeks at any one time, they must withdraw from the University. Leaves of absence for one semester or more for medical or other reasons are governed by the Graduate School.

### Childbirth and Adoption Accommodation Policy

The childbirth and adoption accommodation policy is intended to assist graduate students who are new parents. Unlike the medical separation policy that covers any medical condition, this accommodation policy addresses a single set of circumstances: new parenthood. It is not a leave of absence; it is an accommodation. Students maintain their standing as students, are provided relief from full-time responsibilities and academic deadlines for up to one semester, and are eligible for financial support.

Programs are encouraged to work out specific arrangements with students, on a case-by-case basis, within the broad framework of this policy.

For the full text of this policy, see the [appendix](#).

### **Withdrawal from the Program**

To withdraw from the University before the end of the semester, a student must inform the program and the Graduate School, and complete the Registrar's Separation from the University Form.

Upon approval of the withdrawal, grades of W are only given when a student withdraws after the mid-semester course discontinuance deadline has passed. If a student withdraws before this deadline, the courses in which the student was registered will not be recorded. If a student drops out of the University without following the procedure described above, a grade of F is recorded for each course.

To re-enter a program, the student must apply for re-admission. The credit for any course or examination will be forfeited if the student interrupts his or her program of study for five years or more.

The University reserves the right to require the withdrawal of any student when academic performance, health status, or general conduct may be judged clearly detrimental to the best interests of either the student or the University community).

### **Assessment of Student Progress**

All students should receive written feedback annually. This may come from the adviser, the area coordinator (or faculty member responsible for the area in which the student is working), or the director of graduate studies.

If an adviser has serious concerns about a student's academic performance or progress to degree, he or she should communicate this to the student in written form. This should

be copied or forwarded to the director of graduate studies. If the adviser's recommendation calls into question the student's suitability for the program, the director of graduate studies will issue a warning letter to the student that specifies the concerns and the steps necessary to correct the situation, as well as the consequences of continued substandard academic performance. If the student's adviser happens to be the director of graduate studies, this letter will be then initiated by the chair of the department. The warning letter should specify a specific date when the student's progress will be re-evaluated. A copy of the warning letter should be sent to the associate dean of students in the Graduate School.

If the student does not meet the stipulations outlined in the warning letter within the timeframe specified, the student will be either put on probation or dismissed from his or her program of study.

### **Graduate Student Status Designations**

There are two status designations available to graduate students: in good standing and on probation. A graduate student can only have one designation, per program, at any given time.

#### ***In Good Standing***

Graduate students who are enrolled and making satisfactory progress in their program of study are considered in good standing.

#### ***On Probation***

A student who does not meet the stipulations within the timeframe outlined in the warning letter may be placed on probation. On probation status is intended to offer a student a final opportunity to correct deficiencies in his or her academic progress. Normally, a

student will be on probation one or, at most, two semesters.

A student on probation must complete the stipulations outlined in the probation letter within the timeframe outlined or will be dismissed from his or her program of study.

Students on probation are ineligible for financial support from the Graduate School (stipend, full tuition, health subsidy, and professional development funds) except for a tuition scholarship that covers eight of the nine credit hours required to maintain full-time status. While on probation, if a student does meet the stipulations within the timeframe outlined in the probation letter, as decided by the program, the student will return to in good standing status the next semester of enrollment.

#### ***Probation Initiated by the Graduate School***

In addition to the probation letter initiated by the student's program of study, there are three ways in which a student may be placed on probation by the Graduate School. These are:

1. A cumulative grade point average below 3.0 in any two semesters;
2. A failure to pass candidacy exams by the end of the eighth semester;
3. Earning a U in research for two consecutive semesters.

Students who are placed on probation by the Graduate School will receive an official letter from the associate dean of students in the Graduate School that informs them of their status change.

### **Dismissal of a Student**

Failure of a student to meet the stipulations within the timeframe outlined in either the warning letter or the



probation letter may lead to dismissal from the program.

A student can be immediately dismissed from his or her program of study for the following reasons without a warning letter or a period of probationary status.

**Extreme Under-performance:** This dismissal will be applied to a student whose performance is deemed wholly unacceptable by the student's adviser, director of graduate studies, or program faculty. A G.P.A. below 2.5 in any single semester, or below 3.0 for two consecutive semesters; three consecutive U grades in research are examples of extreme underperformance.

**Inability to Secure a Laboratory/Adviser:** In some cases, a student may not be able to secure a laboratory and/or adviser. Normally, the student will be given funding for the remainder of the semester in which the student has registered. If the student and the director of graduate studies are unable to find an adviser, the student may be dismissed from the program.

**Threat to Health and/or Safety:** In rare circumstances, continued enrollment of a graduate student may constitute a serious disruption of the residential community or the academic environment. A student may be dismissed if: (a) The student poses a direct threat to the health or safety of himself or herself or others, or has seriously disrupted others in the student's residential community or academic environment; or (b) the student's behavior or threatening state is determined to be the result of a medical condition, or the student refuses to cooperate with efforts deemed necessary by the University Health Services and/or the University Counseling Center to evaluate the cause of the student's behavior or threatening state. In some circumstances, the level of care and accommodation recommended may exceed the resources or

appropriate staffing capabilities of the University or may be beyond the standard of care that University Health Services can be expected to provide or monitor.

The Graduate School is responsible for monitoring and assessing the academic progress of its students. However, there are other reasons for which a student can be disciplined, up to immediate dismissal from his or her program of study. For more details on these policies, please consult du Lac.

Students will be notified in writing, by the director of graduate studies, of the decision to dismiss them from their program of study for academic reasons. This notification will also be sent to the associate dean of students. The student may appeal the decision per the grievance and appeal procedures.

### **Grievance and Appeal Procedures**

Students follow the grievance and appeal procedures of the program in which they are studying. Appeals beyond the program are made directly to the dean of the Graduate School.

The purpose of this procedure is to afford graduate students at Notre Dame the opportunity to resolve complaints dealing with academic issues such as dismissal from graduate standing, placement on probationary status, denial of readmission to the same program (if the student was previously in good standing), and other program decisions that terminate or impede progress toward the degree.

This procedure is not to be used to address issues of sexual or discriminatory harassment (see grievance procedure available through the Office of Institutional Equity), of academic fraud (see the 'Academic Integrity' section of the *Graduate School Bulletin of Information*), or for disability-related grievances (see grievance procedure avail-

able through the Office of Disability Services).

### **Program Resolution Process**

Conflicts should be resolved at the lowest level, i.e., within the student's program, according to grievance procedures specified in the program's graduate student guide. Programs are required to develop a formal grievance procedure approved by the Graduate School.

For complaints originating in the student's program, the student must first attempt resolution within the program by following the program's grievance procedure. If a mutually satisfactory resolution cannot be reached at the program level, the complaint may be brought to the Graduate School.

### **Formal Appeal Procedure to the Dean of the Graduate School**

Complaints must be initiated by a written statement from the student to the associate dean of students in the Graduate School, indicating the nature of the problem, the date(s) the problem occurred, the grounds upon which the appeal is based, background information that the student considers important and the relief requested. The associate dean will request from the department chair (or chair of the program's appeal committee) a description of the results of the program's resolution process.

Grounds for formal appeal include procedural error, violation of official policy by academic or administrative personnel, or special mitigating circumstances beyond the student's control that were not properly taken into account in a decision affecting the student's academic progress.

The complaint must be sent to the Graduate School's associate dean of students within 30 calendar days of the department's resolution. The

associate dean will then convene a meeting of an ad hoc academic appeals committee, composed of three faculty members chosen by the associate dean, two of whom will be current members of the Graduate Council (one from the student's college and one from outside the student's college) and one of whom will be from the student's college but not a member of the Graduate Council. The committee will also include one non-voting graduate student. This student may either be one of the current Graduate Student Union representatives to the Graduate Council or a substitute from the appellant's college selected by the associate dean from a pool of students identified by the Graduate Student Union. The committee will be chaired by the associate dean, who does not vote. At the student's request or by request of the committee, the appeals committee will also meet with the student. The committee may also meet with other individuals involved.

The appeals committee will make a written recommendation to the dean of the Graduate School within 30 calendar days of receipt of the appeal. The dean may or may not accept this recommendation, but in either case, he or she will respond to the appeal in writing within 30 calendar days of receipt of the committee's recommendation. All deadlines may be extended in extenuating circumstances. The dean will send a copy of this letter to the department chair. The judgment of the dean of the Graduate School is final.

Students who have been dismissed from their program cannot register or complete the ND Roll Call process for subsequent semesters, including the summer session, during the appeal process.

### Academic Integrity

Integrity in scholarship and research is an essential characteristic of the

academic life and social structure in the University. Any activity that compromises the pursuit of truth and the advancement of knowledge besmirches the intellectual effort and may undermine confidence in the academic enterprise. A commitment to honesty is expected in all academic endeavors, and this should be continuously emphasized to students, research assistants, associates, and colleagues by mentors and academic leaders.

Violation of integrity in research/scholarship includes, but is not limited to: plagiarism; deliberate fabrication or falsification in proposing, performing, or reporting research; or other deliberate misrepresentation in proposing, conducting, reporting, or reviewing research. Misconduct in research/scholarship does not include errors of judgment; errors in recording, selection, or analysis of data; differences in opinions involving interpretation; or conduct unrelated to the research process. Misconduct includes practices that materially and adversely affect the integrity of scholarship and research.

Plagiarism is a form of misconduct. A person's words and ideas are his or her own; they belong to the individual and should be considered the individual's property. Those who appropriate the words and/or ideas of another, and who attempt to present them as their own without proper acknowledgement of the source, whether intentional or not, are committing plagiarism or intellectual theft. It is assumed that all work submitted by a student represents the student's own ideas and work. Verbatim copying, paraphrasing, adapting or summarizing the work of another, regardless of the source – whether books, journals, periodicals, websites, or other forms of media – must be properly cited. Any representation of the work of another that is not properly referenced is considered to be plagiarism. Ignorance of what

constitutes plagiarism is not a defense to an allegation of a violation of the academic integrity policy. It is the responsibility of students to familiarize themselves with this definition of plagiarism and to learn proper citation techniques.

Any student who is found in violation of integrity in research and/or scholarship can be dismissed from the University.

### Falsification of Academic Credentials

A student who has been admitted to a graduate degree program based in part upon a previously earned academic degree and is found to have intentionally misrepresented this information will be immediately dismissed from his or her program of study and will be barred from future graduate work at the university.

A current student or a student who has recently left the university without completing a degree who then claims to have earned said degree will be immediately dismissed from the program of study (if applicable) and barred from future graduate work at the university.

## Degree Requirements

### The Master's Degree

The goal of the University master's programs is to address all aspects of a student's development as he or she transitions from a student to a professional. To this end, the Graduate School expects that the student will become knowledgeable of the broad scope of the discipline. The student should also have the capacity to think through ethical issues raised by their coursework and/or research, and to weigh important implications within

value systems. Finally, students should be professionally prepared so that when they assume their careers, they can do so with confidence. These goals should be reflected in the requirements for the degree.

In addition to the following Graduate School requirements, individual programs may have higher standards. Students are expected to know their program requirements.

### ***Credit Hours***

At least thirty (30) credit hours are required for the master's degree. Some programs may require more. These credit hours are earned through a combination of coursework and/or research.

### ***Residency***

The minimum residency requirement for the master's degree is registration at full-time status for one semester during the academic year, or for one summer session.

### ***Foreign Language Requirement***

The Graduate School does not require foreign language reading proficiency for the master's degree. However, some programs do have this requirement. Students should consult their programs concerning this requirement.

### ***Time Limits***

All requirements for the master's degree must be completed within five years.

A master's program that is pursued during the summer and the academic year must also be completed within five years.

A student attending summer session only must complete all requirements within seven years.

### ***Comprehensive Examination***

By the end of the term following completion of the coursework required by the program, the degree candidate must have taken an oral and/or written master's examination demonstrating mastery in his or her field. Failure in either one or both parts of the examination results in automatic forfeiture of degree eligibility, unless the program recommends a retake. If a retake is recommended, it must be completed by the end of the following semester. The Graduate School allows only one retake of the master's examination.

Some programs have an equivalent requirement in lieu of the master's examination. Students are advised to be cognizant of their respective program requirements with regard to the master's examination or its substitute.

### ***Admission to Candidacy***

To qualify for admission to candidacy, a student must be in a master's degree program. He or she must be registered and enrolled in the program and must maintain a minimum cumulative G.P.A. of 3.0 in approved coursework. A student who seeks admission to candidacy in a research master's program must also demonstrate research capability and receive program approval of his or her thesis.

Admission to candidacy is a prerequisite to receiving any graduate degree. It is the student's responsibility to apply for admission by submitting the appropriate form to the Graduate School office through the program chair. The applicable deadline is published in the Graduate School calendar.

### ***Thesis Requirement***

The thesis is the distinctive requirement of the research master's degree. With the approval of his or her adviser, the student proposes a thesis topic for program approval. The approved topic

is researched and the results presented under the supervision of a thesis director.

### ***Submitting the Thesis***

To receive the degree at the next graduation, the master's candidate who is completing a thesis must submit it to the Graduate School on or before the deadline published in the Graduate School calendar. Candidates should be cognizant of deadlines for graduation established by the Graduate School and the program.

The format of the thesis should follow the guidelines established by the Graduate School. These guidelines can be found online at <http://graduate-school.nd.edu>. The Graduate School reserves the right to reject theses not properly formatted.

### ***The Doctor of Philosophy Degree***

The goal of the University in its Ph.D. programs is to address all aspects of a student's development as he or she transitions from a student to a professional. To this end, the Graduate School expects that the student become an expert in a specific area within her or his discipline. In addition, the student should also become fully competent in the broad scope of the discipline, and be able to engage with others in professional society meetings at a sophisticated level. The student should have the capacity to think through ethical issues raised by his or her research and to weigh important implications within value systems. Finally, students should be professionally prepared so that when they assume their careers, they can do so with confidence. These goals should be reflected in the requirements for the degree.

In addition to the following Graduate School requirements, individual programs may require higher standards.

Students are expected to know their program's requirements.

### ***Credit Hours***

At least sixty (60) credit hours, or a minimum of 30 credit hours beyond a previously awarded master's degree, are required for the Ph.D. Some programs may require more. These credit hours are earned through a combination of coursework and/or research.

### ***Residency***

The minimum residency requirement for the Ph.D. degree is normally full-time status for four consecutive semesters, and may include the summer session.

### ***Foreign Language Requirement***

The Graduate School does not have a foreign language requirement, but some programs do. Students should consult their program concerning this requirement.

### ***Responsible Conduct of Research and Ethics Training***

As part of its holistic approach to graduate education, the Graduate School requires all Ph.D. students to complete any and all training modules for the Responsible Conduct of Research and Ethics requirements. All students supported by federal grants must be certified in accordance with national guidelines and the policies of the Office of Research. For more information, please consult the Professional Development portion of the Graduate School website at <http://graduate-school.nd.edu>.

### ***Award of Master's Degree to Doctoral Students***

A doctoral student may receive the master's degree without taking the master's examination on the recommendation of the program and com-

pletion of: (a) the coursework required by the program for the master's degree, and (b) all written and oral parts of the doctoral candidacy or Ph.D. qualifying examination. Programs may have additional criteria, or may choose not to offer a master's degree in this manner; students should consult the program's guidelines.

### ***Time Limit***

The student must fulfill all doctoral requirements, including the dissertation, its defense, and the official submission within eight years from the time of matriculation, unless interrupted by approved medical leave(s) and/or approved childbirth accommodation(s). Failure to complete any of the Graduate School or program requirements within the prescribed period results in forfeiture of degree eligibility.

If, after the eighth year of study, a student has not fulfilled all doctoral requirements, he or she may apply for a one-year dissertation completion status. Students who are granted this status are considered part-time and must register each semester for the equivalent of one credit hour of resident tuition, payable by the student.

### ***Candidacy Examination***

The examination consists of two parts: a written component and an oral component. The written part of the examination normally precedes the oral part. It is designed, scheduled, and administered by the program. The oral part of the examination is normally taken after the completion of the coursework requirement. If the proposal defense is part of the oral, it should be a defense of a proposal and not of a completed dissertation.

Normally, the candidacy examination is passed, and the dissertation topic approved, by no later than the student's eighth semester of enroll-

ment. A student who fails to meet this deadline will be placed on probation and Graduate School funding will be discontinued.

### ***Admission to Candidacy***

Admission to candidacy is a prerequisite to receiving a doctoral degree. To qualify for admission to doctoral candidacy, a student must: be in a doctoral program, complete the program coursework requirement with a cumulative G.P.A. of 3.0 or better, pass the written and oral parts of the doctoral candidacy examination, and have the dissertation proposal approved (if this is not part of the candidacy exam).

It is the responsibility of the student to apply for candidacy admission by submitting the appropriate form to the Graduate School office through the program chair.

### ***The Dissertation***

In continuing consultation with the dissertation director, the candidate explores research areas in his or her field to formulate a dissertation proposal. The methods of approval of the dissertation proposal are determined by the individual programs.

### ***Defense of the Dissertation***

In defending the dissertation, the doctoral candidate supports its claims, procedures, and results. The defense is the traditional instrument that enables the candidate to explore with the dissertation committee the dissertation's substantive and methodological force. In this way, the candidate and the committee confirm the candidate's scholarly grasp of the chosen research area.

### ***Submitting the Dissertation***

To receive the degree at the next graduation, the doctoral candidate who has successfully defended his

or her dissertation must submit it to the Graduate School on or before the deadline published in the Graduate School calendar. Candidates should be cognizant of deadlines for graduation established by the Graduate School and the program.

The format of the dissertation should follow the guidelines established by the Graduate School. These guidelines can be found online at <http://graduate-school.nd.edu>. The Graduate School reserves the right to reject dissertations not properly formatted.

## FINANCIAL INFORMATION

### Tuition and Expenses

Please note: The following tuition, fees, housing, and living costs are for the academic year 2012–2013. Annual increases in costs should be anticipated.

#### Tuition

Full-time for a degree-seeking student is defined as nine credit hours per semester.

For the full-time graduate student, the tuition for the academic year 2012–2013 is \$42,350. Tuition for the part-time student is \$2,353 per semester credit hour. Non-resident tuition is \$500 per semester.

A full-time graduate student may audit courses without charge during the academic year. Any course taken or audited in the summer session will be charged the full price.

#### Academic Year Fees

- Technology Fee: \$250\*

- Health Center Access Fee: \$150\*\*
- Graduate Student Activity Fee: \$65\*\*\*

\* *The technology fee provides partial funding for the University's enterprise-wide technology infrastructure, which provides all students access to the Internet, e-mail, course ware, campus clusters, ResNet, and a wide array of the latest software. This fee provides for the growth in student services, such as course and degree requirements, Web Registration, and value-added Internet-related capabilities.*

\*\* *The health center access fee provides students access to all services at the University Health Center and University Counseling Center, including 24-hour medical care and counseling/mental health assistance, and alcohol and drug education programs, as well as health education and wellness programs.*

\*\*\* *The graduate student activity fee is the responsibility of the student. This fee, charged in the fall to all graduate students, covers the cost of graduate student activities, including but not limited to lectures/seminars, graduate student officer stipends, and office overhead. The fee also partially reimburses expenses that graduate students incur during travel to conferences and meetings to present work conducted in the students' major fields of study.*

#### Office of Student Accounts

Telephone: (574) 631-7113

E-mail: [stdacct@nd.edu](mailto:stdacct@nd.edu)

Web: <http://studentaccounts.edu>

Tuition and fees, as well as any required deposits, are payable in advance at the beginning of each semester. Please note that Notre Dame does not accept credit cards for payment of tuition and fees. Tuition and/or fees not

covered by scholarship are the responsibility of the student.

A student may not register for a new semester or receive transcripts, certificates, diploma, or any information regarding his or her academic record until the account has been settled in full.

#### Separation from the University

Any student who at any time within the school year wishes to withdraw from the University should contact the Office of the Registrar. To avoid failure in all classes for the semester and in order to receive any financial adjustment, the withdrawing student must obtain the appropriate clearance from the Dean of his or her college and from the Assistant Vice President for Residence Life.

On the first day of classes, a full tuition credit will be made. Following the first day of classes, the tuition fee is subject to a prorated adjustment/credit if the student (1) withdraws voluntarily for any reason on or before the last day for course discontinuance at the University, or (2) is suspended, dismissed, or involuntarily withdrawn by the University, for any reason, on or before the last day for course discontinuance at the University, or (3) is later obliged to withdraw because of protracted illness, or (4) withdraws involuntarily at any time because of military service, provided no credit is received for the classes from which the student is forced to withdraw.

Upon return of the student forced to withdraw for military service, the University will allow him or her credit for that portion of tuition charged for the semester in which he or she withdrew and did not receive academic credit.

Room and board charges will be adjusted/credited on a prorated basis throughout the entire semester.

## FINANCIAL INFORMATION

Students receiving University and/or Federal Title IV financial assistance who withdraw from the University within the first sixty percent (60%) of the semester are not entitled to the use or benefit of University and/or Federal Title IV funds beyond their withdraw date. Such funds shall be returned promptly to the entity that issued them, on a pro rata basis, and will be reflected on the student's University account.

This Withdrawal Regulation may change subject to federal regulations. Examples of the application of the tuition credit calculation are available from the Office of Student Accounts upon request.

### Housing

Phone: (574) 631-5878  
Web: <http://orlh.nd.edu>

University housing for married, families and single students is available on or adjacent to the campus.

Accommodations for students with families are available in University Village, a complex of 100 two-bedroom apartments (limited four-bedroom apartments) with washer/dryer, renting for \$520 - \$785 per month, excluding electricity. The Cripe Street Apartments, 24 one-bedroom units, are available from \$625 per month, excluding electricity. A deposit of one month's rent is required.

Accommodations for approximately 140 full-time, degree-seeking single graduate men and women are available in the 36-unit O'Hara-Grace Graduate Residence adjacent to the campus. Each apartment has a kitchen, one-and-one-half baths, living, and bedroom accommodations for four students, renting for \$490 a month (rent includes utilities, local phone and internet connection). Many general and departmental activities are held in

Wilson Commons, a center for graduate students located next to the townhouses. The Fischer Graduate Housing apartment complex offers apartments with a kitchen, one full bath, and living and bedroom accommodations for two single students, renting for \$595 a month (rent includes utilities, local phone and internet connection). A deposit equal to one month's rent is required. Deductions may be set up for any student receiving a stipend. This is handled at the Office of Student Accounts, 100 Main Building, (574) 631-7113.

### Health Insurance

Phone: (574) 631-6114  
Web: <http://uhs.nd.edu>

The student will be automatically enrolled in the University-sponsored plan, and the charge for the premium will be placed on the student's account prior to the start of the academic year. At the beginning of each academic year, the opportunity is provided to show proof of comparable health insurance coverage. If University Health Services accepts this coverage, the charge for the University sponsored-plan will be removed from the student's account by University Health Services.

Information regarding the University-sponsored plan is mailed to the student's home address in July. Additional information is available in University Health Services by contacting the Office of Insurance and Accounts at (574) 631-6114 or referring to the UHS website: <http://uhs.nd.edu>.

The cost of the student premium for the 2012–2013 academic year (effective August 15, 2012, to August 14, 2013) is \$1,886. The insurer for the student health insurance policy is Aetna.

Premium information for dependent coverage may be found on the University Health Services website.

The Office of Student Accounts will offer students receiving a stipend from the University the option of paying the premium through deductions from the academic year stipend payments.

### Health Insurance Subsidy Program

The Graduate School has a program to subsidize the student premium of University-sponsored student health insurance. The subsidy for 2012–2013 is \$1,410 for degree-seeking students on full stipend support for both the Fall 2012 and Spring 2013 semesters. Students will receive a \$705 subsidy if they are on full stipend support for only one semester. Eligible students who enroll in the University-sponsored student health insurance between August 15, 2012 and August 14, 2013 and are not charged the full \$1,886 will receive a subsidy pro-rated based on the premium amount.

### Eligibility

Doctoral students must be in their first eight years of study to be eligible for a health subsidy. Masters' students must be in their first five years of study to be eligible for a health subsidy. A full stipend is defined as the minimum department-based stipend for each program. Students should contact their academic department with questions about their subsidy eligibility or funding levels. The Graduate School provides the departments with the subsidy level and eligibility criteria each year.

### Procedure

No application for the subsidy is required. University Health Services, the Graduate School, Financial Aid and Student Accounts will automatically process the subsidy for eligible

students in October. An audit will be performed early in the spring semester to add or increase the subsidy for those students who were not eligible for the full subsidy at the beginning of the academic year.

### ***Tax Obligation***

Because students receiving a stipend are not classified as employees of the University, the health insurance subsidy is a taxable benefit. In this case, however, it is regarded as 'taxable but not reportable'. The University will not withhold income tax from a student's subsidy, nor will it report the subsidy to the Internal Revenue Service. Students who receive the subsidy are obligated to self-report the income on their individual income tax returns. Note that the health insurance subsidy may be subject to reporting and withholding if you are an international student

### ***Worker's Compensation Insurance***

Students injured while performing assigned duties in University laboratories are covered by worker's compensation insurance as if they were Notre Dame employees. During a period of temporary inability to perform duties as a result of such injuries, workers compensation provides for continuation of 66.6% (to state limits) of usual income after seven days have passed. Income beyond the limits set by workers compensation is subject to the discretion of department chairs where support is from funds allocated by the Graduate School. Income beyond workers compensation is subject to the discretion of principal investigators and the guidelines of external sponsors where support is from funds provided by research grants.

### ***Travel Accident Insurance***

Students injured while traveling to present at conferences or on other

University business which has been approved by the student's department chair are covered by Notre Dame travel accident insurance. Compensation in set amounts is available for death or loss of arms or legs. Medical expenses in excess of other insurance are paid up to a maximum dollar amount.

### **Travel Reimbursement**

Reimbursement is subject to University travel policy, which can be found on the Controller's website, under Policies and Procedures: <http://controller.nd.edu>

Applications for the following professional development funds can be found on the Resources for Current Students page on the Graduate School website: <http://graduateschool.nd.edu>.

- GSU Conference Presentation Grant Program
- Zahm Research Travel Fund
- Joseph F. Downes Memorial Fund
- Notebaert Professional Development Fund

### **Financial Support**

Exact amounts for the following aid will vary with the type of support and the department. Exact figures can be obtained from the particular department to which the student has been admitted. Initiation and continuation of financial support depends on the student's maintaining good academic standing.

Only full-time, degree-seeking students are eligible for support. Recipients of financial support such as assistantships or fellowships usually may not accept additional appointments. Rare exceptions are made only

on the recommendation of the respective department.

### **Categories of Support**

The University offers four types of support: fellowships, teaching and research assistantships, and tuition scholarships. Students may receive one type of support or a combination of types.

#### ***Fellowships***

Fellowships provide a tuition scholarship and a stipend for full-time study by students admitted to graduate programs. The department usually provides tuition and stipend support for the student in good standing once the fellowship expires.

Applicants for admission are automatically considered by their academic department for all of the following University, endowed, and awarded fellowships.

#### ***Select Fellowships***

The Graduate School awards 12-month Presidential, Premier, and Special Fellowships to highly qualified first-time applicants who are nominated for the awards by departmental admissions committees. Some fellowships require U.S. citizenship.

Descriptions for these fellowships can be found on the Graduate School website at <http://graduateschool.nd.edu/admissions/financial-support/prestigious-fellowships>.

#### ***Assistantships***

##### ***Graduate Assistantships***

Graduate assistantships are available for qualified students in all doctoral programs.

##### ***Research Assistantships***

Research assistantships provide support to qualified recipients under research

programs sponsored by government, industry, or private agencies.

Doctoral students are eligible for fellowships and assistantships from the Graduate School during their first six years of study. Masters' students are eligible for fellowships and assistantships from the Graduate School during their first three years of study. There is no eligibility limit for doctoral or masters' students receiving fellowships and assistantships funded from other sources.

### ***Tuition Scholarships***

The University offers full or partial tuition scholarships to students qualifying on the basis of merit.

Doctoral students are eligible for tuition scholarships during their first eight years of study. Masters' students are eligible for tuition scholarships during their first five years of study.

## **Financial Aid**

### **Office of Financial Aid**

Telephone: (574) 631-6436

E-mail: [finaid@nd.edu](mailto:finaid@nd.edu)

Web: <http://financialaid.nd.edu>

In addition to the student support programs described above, the Office of Financial Aid, located in 115 Main Building, administers federal and private financial aid programs to assist in the financing of your Notre Dame education.

### ***Applying for Federal Student Aid***

In order to be eligible for federal student assistance, a student must be a U.S. citizen, permanent resident, or eligible noncitizen. In general, students must be classified as degree seeking to participate in the federal aid programs and be enrolled at least half-time. The

Free Application for Federal Student Aid (FAFSA) is the annual application that must be completed and submitted to the processing center, listing Notre Dame (Federal School Code 001840) in the appropriate section. Priority processing consideration will be given for those applicants submitting the FAFSA by February 28 for the following fall semester.

### ***Academic Standing and Satisfactory Progress***

The U.S. Department of Education requires students to maintain satisfactory progress toward completing their degree in order to receive financial aid. Satisfactory academic progress requirements for financial aid recipients may not be the same as the University's requirements for academic good standing. Students are required to maintain a minimum cumulative grade point average, be on pace to graduate, and complete their degree within a maximum time frame. All semesters of enrollment are reviewed regardless of whether aid was received. Additional details may be obtained from the Office of Financial Aid website.

### ***Federal Direct Loan***

The terms of the non-need-based Unsubsidized Federal Direct Loan Program require that the borrower repay, with interest, this source of financial assistance. This program is referred to as "unsubsidized" because the federal government is not paying the in-school interest to the lender while the student is enrolled in school. Interest on Unsubsidized Direct Loans begins to accrue after disbursement of the loan funds; however, the student may choose to have the payment of the interest deferred during enrollment and later capitalized (added to the principal) at the time repayment begins. For a list of additional terms of the unsubsidized Direct Loan, visit the Office of Financial Aid website.

The amount a student may borrow from the Direct Loan Program may be limited by other financial assistance received by the student. Financial assistance includes, but is not limited to, the following: fellowships, assistantships, University scholarships, tuition remissions, all types of grants, residence hall appointments, campus employment, and any loan received under the auspices of the Higher Education Act as amended. Should a student's eligibility be impacted at any time during the loan period, the Direct Loan will be subject to adjustment. All eligibility changes will be reported to the student's lender.

### ***Federal Direct PLUS Loan***

Students who have a valid FAFSA on file and are enrolled at least half time may apply for the Direct PLUS Loan. The student must be a U.S. citizen or permanent resident. Direct PLUS Loan applications are subject to Department of Education credit review. (Note: The program is subject to federal legislative changes.) The maximum PLUS loan amount is the full cost of attendance minus all other financial aid. Repayment begins after the loan is fully disbursed or may be deferred while the student is enrolled in school. For a list of additional terms of the Direct PLUS Loan, visit the Office of Financial Aid website.

### ***Private Student Loans***

After exhausting the opportunities available from the federal aid programs, many students will consider private loan programs as a source of funding.

The terms and conditions of these credit-based loan programs vary, and as such, students are encouraged to review the details of the programs before selecting a private loan program. Private loans are not eligible for loan consolidation programs made available



FINANCIAL INFORMATION

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for federal student loans. Interest rates, fees (both at the time of borrowing and at repayment), credit checks, and annual and aggregate loan limits require careful evaluation by the student as a consumer.

# THE DIVISION OF ENGINEERING

## AEROSPACE AND MECHANICAL ENGINEERING

### Chair:

Gretar Tryggvason

### Director of Graduate Studies:

Timothy C. Ovaert

Telephone: (574) 631-5430

Fax: (574) 631-8341

Location: 365 Fitzpatrick Hall

E-mail: [amedept@nd.edu](mailto:amedept@nd.edu)

Web: <http://ame.nd.edu>

Current research efforts in the program in aerospace and mechanical engineering are within the areas of aerospace sciences, biomechanics, biofluid mechanics, biomaterials, mechanical systems, robotics and design, solid mechanics and materials, and thermal and fluid sciences.

The programs of study and research lead to the degrees of master of science in aerospace engineering (M.S.A.E.), master of science in mechanical engineering (M.S.M.E.), master of engineering in mechanical engineering (M.E.M.E.), and doctor of philosophy (Ph.D). In addition, a combination master of engineering/juris doctor degree program is available to Notre Dame law students.

Every degree-seeking student is required to participate in the academic

programs of the department by performing a teaching-related assignment.

For specific course, project and examination details required for each degree, refer to the program's graduate handbook.

### The Master of Science: Aerospace Engineering or Mechanical Engineering

Degree Requirements	
Courses	18 credits (research) 24 credits (non-research)
Total	30 credits
Other	Admission to candidacy
	Candidacy examinations
	Master's thesis or project

The master of science programs lead toward proficiency and creative talent in the application of basic and engineering sciences to relevant problems in the two engineering disciplines.

Students wishing to complete a research master's degree are required to submit a written thesis. Those wishing to complete a non-research, course work-only program are required to submit a research or design project with a project report. In general, students are encouraged to follow the research path.

### The Master of Engineering in Mechanical Engineering

Degree Requirements	
Courses	24 credits
Total	30 credits
Other	Admission to candidacy
	Candidacy examinations
	Research or design project & report

The master of engineering in mechanical engineering is a course work-only, non-research degree that combines both business and engineering course work. It is intended primarily for students who are working in industry or planning careers in engineering management.

Thirty credits are required, and up to six of credits can be independent study.

### The Doctor of Philosophy

Degree Requirements	
Courses	39 credits
Total	72 credits
Other	Admission to candidacy
	Candidacy examinations
	Doctoral dissertation

The doctoral program strives to prepare students for creative and pro-

ductive scholarship. It is designed to suit each student's interests and gives students the opportunity to conduct individual research under the supervision of the department faculty.

## Examinations

A written qualifying exam is administered at the end of the first year in residence. Passing the qualifying exam results in the formal admission of the student to the Ph.D. program. An oral candidacy exam is completed after approximately three years of study. Completion of the candidacy exam advances the student to the status of Ph.D. candidate.

## Faculty

Arezoo Ardekani, Assistant Professor  
 Hafiz Atassi, Viola D. Hank Professor  
 Stephen M. Batill, Professor  
 Joshua Cameron, Research Assistant Professor  
 Hsueh-Chia Chang, Concurrent Professor  
 Thomas C. Corke, Director of the Hessert Laboratory for Aerospace Research and Clark Equipment Professor  
 Sadeh Dabiri, Research Assistant Professor  
 Hyungrok Do, Assistant Professor  
 Patrick F. Dunn, Professor  
 Joseph Fernando, Concurrent Professor  
 David Go, Assistant Professor  
 J. William Goodwine, Associate Professor

Stanislav Gordeyev, Research Assistant Professor  
 Frank Incropera, the H. Clifford and Evelyn A. Brosey Professor of Mechanical Engineering  
 Eric J. Jumper, Professor  
 Tengfei Luo, Assistant Professor  
 Eric Matlis, Research Assistant Professor  
 Karel Matous, Associate Professor  
 Scott C. Morris, Associate Professor  
 Robert C. Nelson, Professor  
 Glen L. Niebur, Professor  
 Timothy C. Ovaert, Professor and Director of Graduate Studies  
 Samuel Paolucci, Professor  
 Joseph M. Powers, Professor  
 R. Mark Rennie, Research Assistant Professor  
 Ryan K. Roeder, Associate Professor  
 Steven R. Schmid, Associate Professor  
 James P. Schmiedeler, Associate Professor  
 Fabio Semperlotti, Assistant Professor  
 Mihir Sen, Professor  
 Michael M. Stanistic, Associate Professor  
 Philippe Sucusky, Assistant Professor  
 Flint O. Thomas, Professor  
 Gretar Tryggvason, Viola D. Hank Professor and Interim Department Chair  
 Diane R. Wagner, Assistant Professor  
 Meng Wang, Associate Professor

## BIOENGINEERING

**Interim Director:**  
 Glen L. Niebur

Telephone: (574) 631-5580  
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 Location: 182 Fitzpatrick Hall  
 E-mail: [bioeng@nd.edu](mailto:bioeng@nd.edu)  
 Web: <http://www.nd.edu/~bioeng>

Bioengineering lies at the intersection of the life sciences and the traditional disciplines of chemical, civil, computer, mechanical and electrical engineering.

Bioengineering research at Notre Dame includes biomedical applications, such as orthopaedic implants, miniature medical diagnostic devices, medical imaging and algorithms for radiation treatment as well non-medical applications such as analysis of genomic information, biological water treatment, bacteria-mineral interactions and bioremediation. For specific requirements regarding the course work required for each track, see the program handbook.

## The Doctor of Philosophy

Degree Requirements	
Courses	27 credits
Total	72 credits
Other	Admission to candidacy
	Candidacy examinations
	Doctoral dissertation

The Ph.D. program has been designed to emphasize depth of knowledge in a single traditional engineering discipline, while incorporating additional coursework to provide a strong

foundation in the biological sciences. At present, students may specialize in engineering science, biological science, or bioengineering.

Students complete a minimum of nine courses (27 credit hours). Degree plans are designed in cooperation with the student's adviser. The ideal plan of study ensures that the student will receive adequate instruction in both engineering and biological sciences, and also maintain a necessary flexibility in preparing the student for potential career paths.

A zero-credit bioengineering seminar during all semesters in residence, to explore recent advances across the spectrum of bioengineering research. One seminar each semester will be devoted to topics in bioethics with emphasis on contemporary questions in bioethics (e.g. stem cells, human subjects, and the use of animals in research).

### Examinations

After the second semester of residence, each student presents written and oral reports based on thesis research or project work. These reports, along with performance in courses, in research, and in teaching assistantship duties, constitute the comprehensive evaluation in chemical engineering. This allows the faculty to evaluate the student's grasp of bioengineering fundamentals and his or her ability to perform original, independent research. Students who pass the comprehensive evaluation may continue to the Ph.D. program.

Students generally take the oral candidacy examination before the end of the fifth semester in residence. This examination focuses on the progress achieved in dissertation-related work and on the proposed future research.

## CHEMICAL AND BIOMOLECULAR ENGINEERING

### Chair:

Edward J. Maginn

### Director of Graduate Studies:

Mark A. Stadtherr

Telephone: (574) 631-5580

Fax: (574) 631-8366

Location: 182 Fitzpatrick Hall

E-mail: [chegdept@nd.edu](mailto:chegdept@nd.edu)

Web: <http://cbe.nd.edu>

The department offers programs leading to the degrees master of science in chemical engineering (M.S.Ch.E.) and doctor of philosophy (Ph.D.). The aim of the graduate program is to prepare qualified candidates for research, development, teaching, and other professional careers in chemical and biomolecular engineering. Thus, the Ph.D. program is emphasized.

There is no foreign language requirement for either the M.S. or Ph.D.

All first- and second-year graduate students are assigned teaching assistant duties. These duties consist of conducting recitation sections for lecture courses, supervising laboratory courses, or grading homework.

For specific course requirements related to each degree, refer to the program handbook.

### The Master of Science: Chemical Engineering

Degree Requirements	
Courses	15 credits

Degree Requirements	
Total	30 credits
Other	Admission to candidacy
	Candidacy examinations
	Master's thesis

The master of science degree, with thesis, requires 15 credit hours of graduate course work (5 courses) with a minimum 3.0 grade point average, and 15 credit hours of thesis research and graduate seminar. The results of the research are presented as a Master's thesis and defended in a final oral defense.

A student pursuing the Ph.D. degree will be eligible to receive an M.S. degree after completing five semesters in the Ph.D. program, passing the Ph.D. candidacy exam, and preparing and submitting for publication a research paper in collaboration with the student's research adviser(s). This paper shall describe work in which the student has a primary (not supporting) role, be submitted to a research journal or to the proceedings of a technical conference, and be subject to peer review.

Full-time students with a background in chemical engineering ordinarily complete these requirements in 16 to 24 months.

### The Doctor of Philosophy

Degree Requirements	
Courses	30 credits
Total	72 credits
Other	Admission to candidacy
	Candidacy examinations
	Doctoral dissertation

The Ph.D. requires 30 credit hours of graduate course work (10 courses) with a minimum 3.3 grade point aver-

age, and 42 hours of thesis research and graduate seminar. Students entering with a M.S. degree, earned within five years of admission and from a recognized graduate institution, may transfer up to 24 credit hours, provided that the transferred credits satisfy departmental guidelines for course work distribution and grade point average.

The student is admitted to doctoral candidacy after completing 48 credit hours and passing the oral candidacy examination. This examination, ordinarily completed during the fifth semester in residence, consists of a written and oral presentation of thesis research to a faculty committee.

After reaching candidacy, the student devotes essentially all efforts to completing his or her thesis research. The results of the research are presented as a Ph.D. dissertation and orally defended before a faculty committee.

Full-time students normally complete the Ph.D. degree requirements in about four-and-a-half years beyond the bachelor's degree.

## Teaching and Research Faculty

Başar Bilgiçer, Assistant Professor

Paul W. Bohn, Schmitt Professor

Joan F. Brennecke, Keating-Crawford Professor of Chemical Engineering and Director of Notre Dame Center for Sustainable Energy at Notre Dame

Hsueh-Chia Chang, Bayer Corporation Professor of Chemical Engineering

Jason C. Hicks, Assistant Professor

Davide A. Hill, Associate Professor

Prashant Kamat, Concurrent Professor

Jeffrey C. Kantor, Professor

Peter Kilpatrick, McCloskey Dean of Engineering

David T. Leighton Jr., Professor

Edward J. Maginn, Chair and Professor

Mark J. McCready, Professor

Paul J. McGinn, Professor

William A. Phillip, Assistant Professor

William F. Schneider, Professor

Zachary D. Schultz, Concurrent Assistant Professor

Mark A. Stadtherr, Director of Graduate Studies and Keating-Crawford Professor of Chemical Engineering

Franklin Tao, Concurrent Assistant Professor

Eduardo E. Wolf, Professor

Y. Elaine Zhu, Associate Professor

## CIVIL AND ENVIRONMENTAL ENGINEERING AND EARTH SCIENCES

### Chair:

Johannes Westerink

### Director of Graduate Studies:

Robert Nerenberg

Telephone: (574) 631-5380

Fax: (574) 631-9236

Location: 156 Fitzpatrick Hall

E-mail: [cegeos@nd.edu](mailto:cegeos@nd.edu)

Web: <http://engineering.nd.edu/departments/ceees>

All students participate in the educational mission of the department by serving as teaching assistants for eight hours per week during their first year, four hours per week during their second year, and, for continuing students, four hours per week during one additional semester.

## The Master of Science<sup>1</sup>

Degree Requirements	
Courses	16 credits
Total	30 credits
Other	Admission to candidacy
	Candidacy examinations
	Master's thesis

The program in civil and environmental engineering and Earth sciences offers a master of science in biological engineering (M.S.Bio.E.), master of science in civil engineering (M.S.C.E.), master of science in environmental engineering (MS.Env.), and master of science in geological science (M.S.G.S.).

Students must spend a minimum of two semesters at the University and are expected to complete all degree requirements except defense of the thesis within three semesters. The M.S. degrees require 30 semester credit hours, including at least 16 to 24 credits of formal graduate course work, with the remaining credits earned through research.

An overall grade point average of at least 3.0 must be achieved for graduation.

<sup>1</sup> See text for specific master's degrees offered.

Although both research and non-research options are available to students seeking a master's degree, the research option is the preferred and normal route. The non-research option is allowed only in exceptional circumstances.

In the research option, 30 credit hours are required with six to 14 of these credits devoted to thesis research, depending on the program of study developed in conjunction with the department. The research option requires a completed master's thesis and an oral defense of that thesis. The master's research is commonly completed by the end of the fourth semester of enrollment.

## The Doctor of Philosophy

Degree Requirements	
Courses	18 credits
Total	72 credits
Other	Admission to candidacy
	Candidacy examinations
	Doctoral dissertation

To earn a Ph.D. in the program, students are expected to devote a minimum of three full academic years to study and research beyond the bachelor's degree. A total of 72 semester credit hours, with at least 18 credit hours of formal graduate course work, are required for the Ph.D. Students are expected to complete all degree requirements in approximately four years.

Course work requirements are established by a Ph.D. advisory committee assigned to each student. The course selections are in part determined by the student's area of interest, and students are encouraged to fulfill a portion of the course requirements in related disciplines outside the Depart-

ment of Civil and Environmental Engineering and Earth Sciences. For specific details regarding course requirements, see the program's handbook.

Students are required to pass a written examination demonstrating advanced skills in civil engineering or geological sciences and an oral candidacy examination in the student's major areas of study. The successful defense and submission of a written dissertation is the final requirement for the Ph.D.

## Teaching and Research Faculty

Thomas Albrecht-Schmitt, Professor

Diogo Bolster, Assistant Professor

Peter C. Burns, Henry J. Massman Jr.  
Professor of Civil Engineering and Geological Sciences

Jeremy B. Fein, Director of the Center for Environmental Science and Technology and Professor

Harinda J. Fernando, Wayne and Diana Murdy Endowed Professor of Engineering and Geosciences

Ahsan Kareem, the Robert M. Moran Professor of Civil Engineering and Geological Sciences

Andrew Kennedy, Assistant Professor

Kapil Khandelwal, Assistant Professor

Tracy Kijewski-Correa, the Leo E. and Patti Ruth Linbeck Collegiate Associate Professor and Associate Chair

David J. Kirkner, Associate Professor

Yahya C. Kurama, Professor

Patricia A. Maurice, Professor

Ralph Milliken, Assistant Professor

Chongzheng Na, Assistant Professor

Clive R. Neal, Professor

Robert Nerenberg, Director of Graduate Studies and Associate Professor

J. Keith Rigby Jr., Associate Professor

Joshua D. Shrouf, Associate Professor

Stephen E. Silliman, Professor and Associate Chair

Alexandros A. Taflanidis, Associate Professor

Ashley P. Thrall, Cardinal John O'Hara Assistant Professor

Joannes J. Westerink, Henry J. Massman Department Chair, Notre Dame Professor of Computational Hydraulics

## COMPUTER SCIENCE AND ENGINEERING

### Chair:

Kevin W. Bowyer

### Director of Graduate Studies:

Douglas Thain

Telephone: (574) 631-8802

Fax: (574) 631-9260

Location: 326 Cushing Hall

E-mail: [cse@cse.nd.edu](mailto:cse@cse.nd.edu)

Web: <http://www.cse.nd.edu>

The department offers programs of study and research leading to the degrees of master of science in computer science and engineering (MSCSE) and the doctor of philosophy (Ph.D.).

Students who show potential for the doctoral level work may be admitted to the Ph.D. program but are expected

to complete the master's degree requirements first.

Both M.S. and Ph.D. candidates are required to complete a teaching apprenticeship that involves teaching duties of one semester for M.S. candidates and two semesters for Ph.D. candidates.

## The Master of Science: Computer Science and Engineering

Degree Requirements	
Courses	24 credits
Total	30 credits
Other	Admission to candidacy
	Candidacy examinations
	Master's thesis

The master of science in computer science and engineering requires a minimum of 24 credit hours of course work beyond the bachelor's degree and a master's thesis. A full-time student can complete these requirements in three regular academic semesters plus the summer, although the majority of students take four semesters. The student must, upon the acceptance of the thesis, successfully pass an oral thesis defense examination.

## The Doctor of Philosophy

Degree Requirements	
Courses	36 credits
Total	60 credits
Other	Admission to candidacy
	Candidacy examinations
	Doctoral dissertation

Doctoral students are normally required to accumulate a minimum of 12 credit hours of satisfactory course work beyond the master's degree.

Students are encouraged to pursue course work outside the department whenever such studies support their program in the major field. For additional details regarding course requirements, see the program's handbook.

Students should expect to successfully complete the Ph.D. qualifying examination in the second spring semester after entering the program with a bachelor's degree. Those admitted with a master's degree are required to finish the courses for the Ph.D. qualifying examination by the end of the first spring after entering the program.

The candidacy examination, consisting of both written and oral exams, takes place after the completion of the formal course work. After passing the Ph.D. candidacy, which takes place after the completion of the formal course work, the student devotes essentially all efforts to completing his or her dissertation research, culminating in the successful defense and submission of the doctoral dissertation.

The doctoral program normally requires four to five years of full-time work.

## Teaching and Research Faculty

Panos J. Antsaklis, Director of the Center for Applied Mathematics, the H. C. and E. A. Brosey Professor of Electrical Engineering, and Concurrent Professor of Computer Science and Engineering

Albert-László Barabási, Adjunct Professor

Brian Blake, Professor and Associate Dean of Engineering for Research

Marina Blanton, Assistant Professor

Kevin W. Bowyer, Chair, the Schubmehl-Prein Professor, and Concurrent Professor of Electrical Engineering

Jay B. Brockman, Associate Professor and Concurrent Associate Professor of Electrical Engineering

Amitabh Chaudhary, Assistant Professor

Nitesh V. Chawla, Associate Professor

Danny Z. Chen, Professor

Frank H. Collins, Concurrent Professor and the George and Winifred Clark Professor of Biological Sciences

Sidney D'Mello, Assistant Professor

Scott Emrich, Assistant Professor

Patrick J. Flynn, Professor

Eugene Henry, Professor Emeritus

Xiaobo Sharon Hu, Director of Graduate Studies and Professor

Yih-Fang Huang, Professor of Electrical Engineering and Concurrent Professor of Computer Science and Engineering

Jesús A. Izaguirre, Associate Professor

Peter M. Kogge, the Ted H. McCourtney Professor of Computer Science and Engineering and Concurrent Professor of Electrical Engineering

Collin McMillan, Assistant Professor

Tijana Milenkovic, Assistant Professor

Jaroslav (Jarek) Nabrzyski, Concurrent Associate Professor and Direc-

tor of the Center for Research  
Computing

Michael Niemier, Assistant Professor

Christian Poellabauer, Associate Professor

Laurel Riek, Clare Boothe Luce Assistant Professor

Raul Santelices, Assistant Professor

Robert L. Stevenson, Professor of Electrical Engineering and Concurrent Professor of Computer Science and Engineering

John Stewman, Visiting Associate Professor

Aaron Striegel, Associate Professor

Douglas Thain, Associate Professor

Zoltan Toroczka, Concurrent Professor and Associate Professor of Physics

John J. Uhran Jr., Professor Emeritus and Professor Emeritus of Electrical Engineering

Joahannes Westerink, Concurrent Professor and Professor of Civil Engineering

The program in electrical engineering offers programs leading to the master of science in electrical engineering (MSEE) and the doctor of philosophy (Ph.D.).

## The Master of Science: Electrical Engineering

Degree Requirements	
Courses	18 credits (research) 30 credits (non-research)
Total	30 credits
Other	Admission to candidacy
	Qualifying examination
	Master's thesis

A research M.S. degree requires 30 credit hours beyond the B.S., with at least six credit hours coming from thesis research. A research M.S. also requires the completion and defense of a master's thesis.

A non-research M.S. degree requires 30 credit hours of course work. All students must take a written qualifying examination at the end of their second semester of graduate study; successful completion of the exam is required to receive an M.S. degree.

exam before the start of their third semester. Doctoral students must accumulate a minimum of 36 course credits beyond the B.S. degree, pass the qualifying and candidacy examinations, spend at least two years in resident study, and write and defend a Ph.D. dissertation.

## Teaching and Research Faculty

Panos J. Antsaklis, the H. C. and E. A. Brosey Professor of Electrical Engineering, and Concurrent Professor of Computer Science and Engineering

Peter H. Bauer, Professor

Gary H. Bernstein, Professor

Patrick J. Fay, Professor

Thomas E. Fuja, Chair and Professor

Vijay Gupta, Assistant Professor

Martin Haenggi, Professor

Douglas C. Hall, Associate Professor

Bernard Hochwald, Professor

Anthony Hoffman, Assistant Professor

Scott Howard, Assistant Professor

Yih-Fang Huang, Professor of Electrical Engineering and Concurrent Professor of Computer Science and Engineering

Debdeep Jena, Associate Professor

J. Nicholas Laneman, Associate Professor

Michael D. Lemmon, Professor

Craig S. Lent, the Frank M. Freimann Professor of Electrical Engineering

Hai Lin, Assistant Professor

## ELECTRICAL ENGINEERING

### Chair:

Thomas E. Fuja

### Director of Graduate Studies:

Gregory L. Snider

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Location: 275 Fitzpatrick Hall

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Web: <http://ee.nd.edu>

## The Doctor of Philosophy

Degree Requirements	
Courses	36 credits
Total	60 credits
Other	Admission to candidacy
	Qualifying examination
	Candidacy examinations
	Doctoral dissertation

To continue to the Ph.D. program, students must take an oral research



Christine M. Maziar, Vice President and Senior Associate Provost of the University and Professor of Electrical Engineering

Paolo Minero, Assistant Professor

Wolfgang Porod, Director of the Center for Nano Science and Technology and the Frank M. Freimann Professor of Electrical Engineering

Ken D. Sauer, Associate Professor

Alan C. Seabaugh, Director of the Midwest Institute for Nanoelectronics Discovery (MIND) and Professor

Gregory Snider, Director of Graduate Studies and Professor

Robert L. Stevenson, Professor of Electrical Engineering and Concurrent Professor of Computer Science and Engineering

Gregory Timp, Professor

Mark A. Wistey, Assistant Professor

Grace Xing, Associate Professor

ing careers in areas such as patent, environmental, telecommunications, or similar law specialties. To be eligible for the master of engineering degree, the candidate must have a B.S. in an A.B.E.T. accredited engineering or computer science program and must also be a candidate for the juris doctor degree in the Notre Dame Law School. The master's of engineering program is not available as an individual degree program.

To be awarded both degrees, the candidate must complete a minimum of 99 credit hours, 75 in law and 24 in the engineering program. The engineering degree awarded will be the master of engineering with a concentration in one of the engineering disciplines offered in Notre Dame's division of engineering. The course work-only master's program requires the completion of 24 credit hours of engineering, mathematics, or science courses acceptable to the appropriate engineering department; six credit hours of appropriate law courses; and a master's examination.

Courses for the M.Eng. will be chosen in consultation with an adviser in the student's engineering department. The recommended distribution of engineering courses in the Law School curriculum is one each semester during the first and third years of study and two each semester during the second year.

Notre Dame law students interested in obtaining the dual degree in engineering should contact the Graduate School's Office of Graduate Admissions for more information.

## ENGINEERING AND LAW DUAL DEGREE PROGRAM

Degree Requirements	
Courses	75 credits (law) 24 credits (STEM)
Total	99 credits
Other	Must be candidate for the juris doctor
	Admission to master's candidacy
	Master's examination

The dual degree program in engineering and law is designed for law students who are interested in pursu-

# THE DIVISION OF HUMANITIES

## ART, ART HISTORY, AND DESIGN

### Chair:

Charles Barber

### Director of Graduate Studies:

Robert Sedlack

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Location: 306 Riley Hall

E-mail: [art@nd.edu](mailto:art@nd.edu)

Web site: <http://www.nd.edu/~art>

The program in Art, Art History, and Design offers the master of fine arts (M.F.A.) degree in studio art and design and the master of arts (M.A.) degree in art history. In studio art and design, the department also awards the M.A. degree, but only to students who are not accepted to degree candidacy in the M.F.A. program.

Art studio and design students may concentrate in ceramics, graphic design, industrial design, painting, photography, printmaking, and sculpture, or in a combination of these disciplines. Art history students select from a range of course offerings to fulfill their professional interests. In addition to specific courses, graduate students may pursue an area of interest through a system of independent study with a faculty adviser and a graduate committee selected by the student. M.F.A.

students are expected to develop a personal direction that culminates in a professional exhibition of visual work or a research project in art history.

### The Master of Fine Arts

Degree Requirements	
Courses	30 credits
Total	60 credits
Other	Admission to candidacy
	Written thesis
	Exhibition of creative work

The M.F.A. at Notre Dame is for artists and designers with exceptional talent and strong academic skills. The program combines studio work with academic studies in art and design history and criticism. The College Art Association and most other professional institutions of higher education recognize the M.F.A. as the terminal degree for artists and designers. This degree has become the standard prerequisite for those who intend to teach at the college level. It is also appropriate for individuals seeking to further develop their professional careers as artists and designers.

The M.F.A. degree is a studio and research degree that requires three years or six semesters of study and 60 graduate credit hours with a B (3.0) or better average. Progress in the fine arts program is dependent upon admission

to M.F.A. candidacy, the successful completion of a written thesis approved by the student's thesis committee, and the completion of a thesis project — an exhibition of creative work that is approved by the entire art and design faculty.

For additional residency, course and seminar requirements, consult the program's handbook.

### The Master of Arts: Art History

Degree Requirements	
Courses	30 credits
Total	36 credits
Other	Admission to candidacy
	Written thesis
	Thesis presentation at spring symposium
	Foreign language requirement

The M.A. prepares the student for more advanced graduate work by providing him or her with the opportunity to solidify general and specialized art historical knowledge and to hone research skills. The degree may also serve as a foundation for employment or further study in fields such as museology, visual image management, and art dealing and investment. The M.A. in art history is not a terminal degree. A doctorate is normally required to teach at the collegiate level.

The M.A. in art history requires the completion of 36 credit hours of graduate study, including six credit hours of thesis research, with a B (3.0) or better average. Progress in the art history program is dependent upon the successful completion of a written thesis, which will be presented at the art history graduate symposium in the spring of the student's second year, and evidence of reading ability in one foreign language, either German, French, or another language approved by the graduate adviser. Reading ability is normally demonstrated by obtaining a passing grade on the appropriate Graduate Reading Examination administered by the University. This requirement must be fulfilled during the first year of graduate study.

For additional residency, course and seminar requirements, consult the program's handbook.

## The Master of Arts: Studio Art and Design

Degree Requirements	
Courses	30 credits
Total	40 credits
Other	Admission to candidacy

The non-research master of arts degree (M.A.) program in studio art and design is granted to M.F.A. students who either are not admitted to M.F.A. candidacy or choose to leave the M.F.A. program with an M.A. degree. The department does not regularly admit students to this program. The non-research M.A. degree requires 40 graduate credits.

For additional residency, course and seminar requirements, consult the program's handbook.

## Teaching and Research Faculty

Charles E. Barber, Chair and Professor

Robert R. Coleman, Associate Professor and Research Specialist in the Medieval Institute

Rev. Austin I. Collins, C.S.C., Professor

Jean A. Dibble, Associate Professor

Dennis P. Doordan, Concurrent Professor of Art, Art History, and Design and Professor of Architecture

Paul A. Down, Associate Professor

Gabrielle Gopinath, Assistant Professor

Richard Gray, Director, Center for Creative Computing and Associate Professor

Danielle B. Joyner, Assistant Professor

William J. Kremer, Professor

Martina Lopez, Professor

André Murnieks, Assistant Professor

Martin L. Nguyen, C.S.C., Associate Professor

Kathleen A. Pyne, Assistant Director of Graduate Studies for Art History and Professor

Robin F. Rhodes, Associate Professor and Concurrent Associate Professor of Classics

Charles M. Rosenberg, Professor

Robert P. Sedlack, Director of Graduate Studies and Associate Professor

Maria Tomasula, The Michael P. Grace II Chair in Arts and Letters (Collegiate Chair) and Professor

## CLASSICS

### Chair:

Elizabeth Forbis Mazurek

### Director of Graduate Studies:

Christopher A. Baron

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Email: [classics@nd.edu](mailto:classics@nd.edu)

Web: <http://classics.nd.edu/>

## The Master of Arts

Degree Requirements	
Courses	30 credits
Total	36 credits
Other	Admission to candidacy
	Foreign language requirement
	Preparation of reading list
	Candidacy examinations or a written thesis

Students must complete 36 credits over two years in the master of arts program. The curriculum is well-defined, but includes room for adjustment based on students' individual needs and interests. The details of any particular student's coursework will depend on the director of graduate studies in consultation with the graduate committee.

Students can choose from several areas of emphasis, including language and literature, history, late antiquity, and philosophy.

In addition to completing all course requirements, students will be expected to read a list of texts in preparation for their examinations and for further study in the field of classics. This reading list will be compiled with a view to the needs and interests of individual

students by the director of graduate studies and the graduate committee.

### Examinations

Students will be required to take examinations in Greek and/or Latin translation at the beginning of their fourth semester, with the possibility of taking the exam again in the spring. The exam will be based on a standard reading list of core texts, though some adjustment may be made according to individual needs.

Since German, French and Italian are of major importance for research, all students will be required to demonstrate reading proficiency in one of these languages by passing an appropriate examination.

Students choosing not to write a thesis will be required to take a comprehensive written and oral examination at the end of the fourth semester. Unlike the Greek and Latin examinations, the comprehensive examination will focus on broad topics pertaining to classical history, literature, and culture.

### Thesis

With program permission, students will have the option of writing a final master's thesis in a 3-credit or 6-credit version. Students intending to go on to a Ph.D. program are advised to exercise this option.

Students writing a thesis are not required to take the comprehensive examination.

## Teaching and Research Faculty

Joseph P. Amar, Professor of Classics and Concurrent Professor of Theology

Christopher A. Baron, Director of Graduate Studies and Assistant Professor of Classics

W. Martin Bloomer, Professor of Classics

Keith R. Bradley, Eli J and Helen Shaheen Professor of Classics

Li Guo, Associate Professor of Arabic Language and Literature

David Hernandez, Assistant Professor of Classics

Brian Krostenko, Associate Professor of Classics

David Ladouceur, Associate Professor of Classics

Blake Leyerle, John Cardinal O'Hara, C.S.C., Associate Professor of Theology

Elizabeth Forbis Mazurek, Chair and Associate Professor of Classics

Hildegund Müller, Associate Professor of Classics

David O'Connor, Associate Professor of Philosophy

Robin Francis Rhodes, Associate Professor of Art History

Catherine Schlegel, Associate Professor of Classics

Isabelle Torrance, Assistant Professor of Classics

## EARLY CHRISTIAN STUDIES

### Chairs:

Elizabeth Mazurek (Classics)  
J. Matthew Ashley (Theology)

### Director of Graduate Studies:

Robin Darling Young

Telephone: (574) 631-7195

Fax: (574) 631-2153

Location: 304 O'Shaughnessy

Email: [classics@nd.edu](mailto:classics@nd.edu)

Web: <http://classics.nd.edu>

## The Master of Arts

Degree Requirements	
Courses	42 credits
Total	42 credits
Other	Admission to candidacy
	Foreign language requirement
	Preparation of reading list
	Candidacy examinations or a written thesis

The two-year interdisciplinary M.A. program in early Christian studies is sponsored jointly by the Departments of Classics and Theology, with the participation of faculty in several other departments. It offers beginning graduate students basic training designed to help them gain success in the best doctoral programs in theology, religious studies, history, art history, and literary studies, already proficient in language study and basic training in the multiple fields of early Christian studies.

Students are expected to finish 42 credits of coursework to complete the program. Each student develops a curriculum to meet individual needs in consultation with a committee of faculty advisers. But all curricula are designed to ensure that students are equipped with the necessary language skills (at least two ancient Christian languages and literatures [Latin and/or Greek and/or Syriac] and one or more

contemporary research languages) and with a sturdy grasp of the intellectual, historical, and social contexts of the early church and the methods and resources for studying them.

New disciplinary and critical approaches to late antiquity, as well as a growing awareness of the importance of Christian origins for the present life of the churches, have made early Christian studies a vibrant and rapidly expanding field. Traditional expertise in philology, history, and theology remains fundamental, but these skills must now be supplemented by a broad range of interdisciplinary approaches. An unusually strong faculty presence makes Notre Dame the ideal place for pursuing this area. Students who come with a keen interest in the field, but limited formal training in it, may acquire the basic skills and knowledge necessary for advanced study. Those already adequately prepared in the basics can broaden their competency by studying the language and culture of Middle Eastern, Egyptian, and Byzantine Christianity, and of Rabbinic Judaism and early Islam.

## Teaching and Research Faculty

Joseph P. Amar, Professor of Classics and Concurrent Professor of Theology

Charles E. Barber, the Michael P. Grace Professor of Arts and Letters and Professor of Art, Art History, and Design

W. Martin Bloomer, Professor of Classics

Keith R. Bradley, Eli J and Helen Shaheen Professor of Classics, and Concurrent Professor of History

John C. Cavadini, Professor of Theology, and Executive Director of the Institute for Church Life

Brian E. Daley, S.J., the Catherine F. Huisling Professor of Theology

Blake Leyerle, The John Cardinal O'Hara, C.S.C., Associate Professor of Theology and Concurrent Associate Professor of Classics

Daniel J. Sheerin, Professor of Classics and Concurrent Professor of Theology, Emeritus

Robin Darling Young, Director of Graduate Studies and Associate Professor of Theology

## Associated Faculty

David E. Aune, Professor of Theology

Mary Rose D'Angelo, Associate Professor of Theology

Stephen E. Gersh, Professor of Medieval Studies

Maxwell E. Johnson, Professor of Theology

Mary M. Keys, Associate Professor of Political Science

Brian Krostenko, Associate Professor of Classics

David Ladouceur, Associate Professor of Classics

John P. Meier, the William K. Warren Professor of Catholic Theology

Hildegund Müller, Associate Professor of Classics

David K. O'Connor, Associate Professor of Philosophy and Concurrent Associate Professor of Classics

Gretchen J. Reydam-Schils, Professor and Chair, Program of Liberal

Studies and Fellow in the Nanovic Institute for European Studies

## ENGLISH

### Chair:

Valerie Sayers

### Director of Graduate Studies:

Elliott Visconsi

### Director of Creative Writing:

Orlando Menes

English

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Creative Writing

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E-mail: [creativewriting@nd.edu](mailto:creativewriting@nd.edu)

Web: <http://creative-writing.nd.edu>

## The Master of Arts: English and American Literature

Degree Requirements	
Courses	24–30 credits
Total	30 credits
Other	Admission to candidacy
	Foreign language requirement
	Written examination or thesis

The M.A. program is specifically designed for former Notre Dame or St. Mary's undergraduate English majors seeking advanced training before applying to a Ph.D. program at another

institution. This is a 30-credit-hour program, requiring either 30 credit hours of course work or 24 credit hours of course work and six credit hours of thesis research. Students must take one course in literary criticism or theory. Those seeking the research degree must also demonstrate proficiency in a language appropriate to their area of research. Near the conclusion of the program, the student takes a written examination covering three major literary texts and selected criticism, designed to test the student's capacity for critical study, or writes a master's thesis.

### The Master of Arts: English and Law

Degree Requirements	
Courses	21 credits of English 9 credits of Law
Total	30 credits (non-research) 36 credits (research)
Other	Admission to candidacy
	Written thesis (research)

This is a program open only to students already admitted to the Notre Dame Law School who also wish to obtain a Master of Arts degree in English. A student takes 21 hours of English courses and 9 hours of law courses. Normally, students pursue the nonresearch degree; those wishing to complete the research degree need to complete an additional six hours of thesis research. Current or matriculated NDLS students apply directly to the English Department.

### The Master of Fine Arts: Creative Writing

Degree Requirements	
Courses	24 credits
Total	36 credits
Other	Admission to candidacy
	Master's thesis

The graduate creative writing program is a four-semester program in which students take 36 credit hours of writing workshops, thesis preparation tutorials, and literature classes. Students may also choose to work as editorial assistants on our national literary magazine, *The Notre Dame Review*. Throughout the four semesters, all students work closely with an adviser on the thesis, which will ultimately be a publishable novel, collection of stories, volume of poetry, or work of literary nonfiction.

### The Doctor of Philosophy

Degree Requirements	
Courses	42 credits
Total	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

The Ph.D. program requires 42 credit hours of course work. Students must take the Introduction to Graduate Study, a historical distribution of courses, and at least one course in literary theory. In keeping with its policy of encouraging interdisciplinary study, the program permits the student to take up to 12 credit hours of course work in a field other than English.

### Foreign Language Requirement

By the end of the second year of full-time residency, the student must demonstrate proficiency in two languages or fluency in one language. Proficiency is demonstrated by successfully passing a language exam administered by the appropriate language department, or by passing an advanced undergraduate literature course in the language. Fluency is demonstrated by passing a graduate literature course in the language. The language(s) should be appropriate to the student's area of research.

### Candidacy (Comprehensive Three-Field) Examinations

The student takes examinations in one historical period selected from among Old English, Middle English, Renaissance, Restoration and 18th-century, 19th-century British, 20th-century British, early American literature (to 1865), middle American literature from the Civil War to 1930, and post-1930 American literature; either a second historical period or a special topic; and one examination in literary theory/methodology. One of these three fields, ordinarily the field in which the student intends to write his or her dissertation, is designated the major field. These examinations are intended to determine whether the student possesses the theoretical skills and specialized knowledge necessary for writing a dissertation and for teaching in his or her field. Special reading courses enable students to dedicate the majority of their last two semesters of course work to preparation for these examinations. The written part of the examination is followed by an oral component.

### Dissertation Proposal

In the fall of the fourth year, students produce a dissertation prospectus and preliminary draft of one part of the

dissertation (a chapter or substantial part of a chapter). Students then meet with the dissertation committee for advice on continuing and completing the project.

## Teaching and Research Faculty

Christopher Abram, Associate Professor

Mary Burgess, Assistant Professor

Joseph A. Buttigieg, William R. Kenan Jr. Professor of English, Director of the Ph.D. in Literature Program, and Director of the Office of International Studies

James M. Collins, Professor of Film, Television, and Theatre and Concurrent Professor of English

Margaret Doody, John and Barbara Glynn Family Professor of Literature

John Duffy, Associate Professor and Director, University Writing Center and College Seminar Program

Stephen M. Fallon, Cavanaugh Professor of Humanities and Professor of English

Christopher B. Fox, Professor, Director of the Keough Institute for Irish Studies, and Chair of Irish Language and Literature

Stephen A. Fredman, Professor

Dolores Warwick Frese, Professor

Johannes Goransson, Assistant Professor

Barbara J. Green, Associate Professor

Stuart Greene, Associate Professor

Sandra Gustafson, Professor

Susan Cannon Harris, Associate Professor and Concurrent Associate Professor in the Keough-Naughton Institute for Irish Studies

Peter Holland, McMeel Professor in Shakespeare Studies in the Department of Film, Television and Theatre, and Concurrent Professor in English

Romana Huk, Associate Professor

Cyraina Johnson-Roullier, Associate Professor

Kathryn Kerby-Fulton, Notre Dame Professor of English

Greg P. Kucich, Director of the London Program and Professor

Jesse M. Lander, Associate Professor

Jose Limon, Notre Dame Professor of American Literature

Sara Maurer, Associate Professor

Kate Marshall, Assistant Professor

Joyelle McSweeney, Associate Professor

Orlando Menes, Director of Creative Writing and Associate Professor

Susannah Monta, Associate Professor

Kinohi Nishikawa, Assistant Professor

William A. O'Rourke, Professor

Valerie Sayers, Chair and Professor

John Sitter, Mary Lee Duda Professor of Literature

Yasmin Solomonescu, Assistant Professor

David Wayne Thomas, Associate Professor

Steve Tomasula, Associate Professor

Azareen Van der Vliet Oloomi, Assistant Professor

Chris R. Vanden Bossche, Professor and Director of Undergraduate Studies

Elliott Visconsi, Director of Graduate Studies, Associate Professor, Concurrent Associate Professor of Law

Laura Dassow Walls, William P. and Hazel B. White Professor of English

Henry Weinfield, Professor of Liberal Studies and Concurrent Professor of English

Thomas A. Werge, Professor and Concurrent Professor in the Master of Education Program

Matthew Wilkens, Assistant Professor

Katherine Ziemann, Assistant Professor

## HISTORY

### Chair:

Patrick Griffin

### Director of Graduate Studies:

Edward N. Beatty

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Web: <http://www.nd.edu/~history>

The history programs accept only students planning to pursue the Ph.D. degree. Before completing their doctorates, students must satisfy the departmental requirements for the master's degree.

See the program handbook for specific details on the course work and language requirements in each field.

## The Master of Arts

Degree Requirements	
Courses	24 credits
Total	33 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations

Students may receive their master of arts after completing 33 credit hours of study, including one graduate-level seminar in history and 24 credit hours of graduate-level work (seminars, colloquia, directed readings, supplemental research, and readings) in history or related disciplines. The master's degree demands satisfactory completion of course work with a GPA of no less than 3.0, and students must demonstrate a reading knowledge of one modern foreign language by the end of their third semester in residence.

Students will normally receive their master's degree upon successful completion of their Ph.D. candidacy examinations.

### Master's Examinations

First-year examinations are oral examinations administered near the end of the student's second semester of residence. The first-year examination does not take the place of a master's exam.

The master's examination is normally the equivalent of two qualifying exam fields in the normal format—a written examination in each field, followed by an oral exam. There must be a gap of at least five working days between the final written exam and the oral exam.

Students who fail a candidacy examination may appeal to the director of graduate studies to retake the failed portion one time. A terminal master's degree may be awarded in cases where a student has completed all course

work, passed at least one language exam, and passed a master's examination.

Students entering Notre Dame with a master's degree in history from another institution normally have the same course work, writing, and examination requirements as those entering without such a degree. Normally, no more than three credits may be transferred and used to replace required courses in history.

See the program handbook for specific details on the course work and language requirements of each field.

## The Doctor of Philosophy

Degree Requirements	
Courses	42 credits
Total	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

To receive a Ph.D., a student must complete a total of 42 credit hours of study, including at least two graduate-level seminars.

In addition to completing prescribed course work, doctoral students must also pass Ph.D. candidacy examinations in their specialties, normally taken in the student's third year of residence. Students wishing to take candidacy examinations earlier than the third year of residence may do so with the consent of their academic advisers and the director of graduate studies.

Before being advanced to Ph.D. candidacy, students must submit to the department an approved dissertation proposal (see procedures outlined in

the program handbook). Within eight years of enrollment into the history graduate program, students must complete a satisfactory doctoral dissertation or risk the loss of their candidacy status.

## Teaching and Research Faculty

R. Scott Appleby, the John M. Regan Jr. Director of the Joan B. Kroc Institute for International Peace Studies, and Professor of History

Edward N. Beatty, Director of Graduate Studies and Associate Professor

Gail Bederman, Associate Professor

Rev. Thomas E. Blantz, C.S.C., Professor

Catherine Cangany, Assistant Professor

Jon T. Coleman, Professor

Olivia R. Constable, Professor and Director of the Medieval Institute

John Deak, Assistant Professor

Lauren Faulkner, Assistant Professor

Felipe Fernandez-Armesto, William P. Reynolds Professor

Karen Graubart, Carl E. Koch Associate Professor

Brad S. Gregory, Professor

Patrick Griffin, Chair and Madden Hennebry Professor of Irish American Studies

Christopher S. Hamlin, Professor

Asher Kaufman, Associate Professor

Thomas A. Kselman, Professor

Mikolaj Kunicki, Assistant Professor

Semion Lyandres, Associate Professor  
Sabine G. MacCormack,



Rev. Theodore Hesburgh, C.S.C.  
Professor of Arts and Letters

Alexander M. Martin, Associate Professor

John T. McGreevy, I.A. O'Shaughnessy  
Dean of the College of Arts and Letters, and Professor

Rebecca Tinio McKenna, Assistant Professor

Margaret Meserve, Associate Professor

Rev. Wilson D. Miscamble, C.S.C.,  
Professor

Dian Hechtner Murray, Professor

Thomas F. X. Noble, Professor

Mark Noll, the Francis A. McAnaney  
Professor of History

Paul Ocobock, Assistant Professor

Jaime Pensado, Assistant Professor

Richard B. Pierce, Associate Professor

Linda Przybyszewski, Associate Professor

Rory Rapple, Assistant Professor

Marc S. Rodriguez, Assistant Professor

Thomas J. Schlereth, Professor

Jayanta Sengupta, Assistant Professor

James Smyth, Professor

Robert E. Sullivan, Associate Professor

Julia Adeney Thomas, Associate Professor

Deborah Tor, Assistant Professor

James Turner, the Rev. John J. Cavanaugh, C.S.C., Professor of the Humanities

John H. Van Engen, Andrew V. Tackes  
Professor of History

Gil-li Vardi, P. J. Moran Family Collegiate Chair in Military History and Assistant Professor

## HISTORY AND PHILOSOPHY OF SCIENCE

### Program Director:

Katherine Brading

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HPS at Notre Dame is an interdepartmental program. Because the Ph.D. in HPS incorporates the requirements for a doctorate in a standard disciplinary department, either history or philosophy, the HPS degree program leads to a doctoral degree inclusive of, but broader in scope than, the departmental degree. For this reason it is defined as a five-year program, rather than the normal four. Thus students who take the doctoral degree in the HPS program can claim to have satisfied both the disciplinary degree requirements and also those of an HPS degree. This allows Notre Dame graduates to situate their work within traditional disciplinary contexts and enables them to qualify for academic positions in regular disciplinary departments.

### The Master of Arts

Degree Requirements	
Courses	36 credits
Total	36 credits
Other	Admission to candidacy

### Degree Requirements

	Foreign language requirement
	Candidacy examinations
	Research paper or master's thesis (terminal M.A. only)

The master of arts is not a terminal degree, although individuals concurrently enrolled in other doctoral graduate programs of the University may seek to earn a non-research HPS master's degree in order to complement their doctoral studies. Students whose primary enrollment is in HPS will be entitled to receive a master's degree once they have completed the written and oral examination for Ph.D. candidacy.

### The Non-Research M.A.

The nonresearch HPS M.A. degree requires the completion of 36 credit hours of course work. Three courses in history of science and three courses in philosophy of science form the core of this requirement. The student, in consultation with the HPS program director, selects the remaining courses. To be eligible for HPS credit, these courses must bear in significant ways on the concerns of history and philosophy of science. Students taking the nonresearch HPS M.A. concurrently with a Ph.D. in another Notre Dame program may count up to nine hours of course work toward both degree programs, subject to approval by the director of HPS and the director of graduate studies in the other program.

Reading knowledge in one foreign language (ordinarily French or German) is required. A one-hour oral comprehensive examination completes the requirements for this research M.A. degree.

A one-hour oral examination, based on course work, completes the requirements for the non-research M.A. degree.

## The Research M.A.

In the event that an admitted HPS student decides to leave the program or is subsequently discontinued by the HPS program or the disciplinary department, the student may pursue a research (or thesis) terminal M.A. degree.

Students taking the terminal HPS research M.A. will prepare an extended research paper or formal M.A. thesis under the direction of a faculty member, for which six hours of thesis credit will be awarded. A one-hour oral comprehensive examination completes the requirements for this research M.A. degree.

## The Doctor of Philosophy

Degree Requirements	
Courses	45 credits
Total	62 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

HPS students pursue the Ph.D. degree in either a history track or a philosophy track.

### History Track

Those who elect the history track toward the Ph.D. in history and philosophy of science must satisfy a required course distribution as defined by the program. For specific course requirements, consult the program handbook.

The basic language requirement for Ph.D. candidates on the history track is a reading knowledge of one modern foreign language. In addition, competence has to be shown either in a second language or in a technical

discipline bearing on the student's research work, such as one of the natural sciences.

In the spring of the third year, the student will prepare for the Ph.D. candidacy examination, taken in the late summer. This will consist of two parts, written and oral.

### Philosophy Track

Those who elect the philosophy track toward the Ph.D. in history and philosophy of science must satisfy a required course distribution as defined by the program. Students who elect the ethics of science and technology concentration will satisfy the philosophy-track course requirements, with some exceptions. For specific course requirements, consult the program handbook.

The language requirement for Ph.D. candidates in the philosophy track is a reading knowledge of two foreign languages.

No later than the summer after his or her second year, the philosophy-track student will take a written qualifying examination in the history of philosophy administered by the Philosophy Department. By the end of his or her third year, the student will also be expected to have two "qualifying" papers approved (see philosophy doctoral requirements). Normally in the first semester of the fourth year, the student will take an oral qualifying examination in the philosophy of science, with a special focus on the problem area in which he or she intends to write a dissertation.

### Theology and Science Track

Those who elect the theology and science track toward the Ph.D. in history and philosophy of science must satisfy a required course distribution as defined by the program. For specific

course requirements, consult the program handbook.

Ph.D. candidates on the theology and science track fulfill the foreign language requirements required by the Theology Department.

The written and oral candidacy examinations are usually taken in the second semester after the two-year residency and completion of the language requirements. Successful completion of the written examinations is required for admission to the oral examination.

### Dissertation Proposal

Once Ph.D. candidacy requirements have been completed, the student will begin preparation of a dissertation proposal under the guidance of a research director of his or her choice. The Graduate School requires that dissertation proposals be approved by the end of the eighth semester in order for one to be eligible for continued funding.

## Teaching and Research Faculty

J. Matthew Ashley, Associate Professor of Theology

Francesca Bordogna, Assistant Professor in the Program of Liberal Studies

Katherine A. Brading, Director of Graduate Studies and Associate Professor of Philosophy

Anjan Chakravartty, Professor of Philosophy

Jon Coleman, Professor of History

Michael Crowe, John J. Cavanaugh Professor in the Humanities, Professor in the Program of Liberal Studies, and Concurrent Professor of History, Emeritus

Celia Deane-Drummond, Professor of  
Theology

Christopher B. Fox, Professor of  
English

Robert D. Goulding, Associate Profes-  
sor in the Program of Liberal  
Studies

Gary M. Gutting, Professor of Phi-  
losophy

Christopher S. Hamlin, Professor of  
History

Don A. Howard, Professor of Philoso-  
phy

Lynn S. Joy, Professor of Philosophy

Janet Kourany, Associate Professor of  
Philosophy

A. Edward Manier, Professor of Phi-  
losophy, Emeritus

Kate Marshall, Assistant Professor of  
English

Vaughn R. McKim, Associate Profes-  
sor of Philosophy, Emeritus

Philip E. Mirowski, the Carl E. Koch  
Professor of Economics

Grant Ramsey, Assistant Professor of  
Philosophy

Kristin Shrader-Frechette, the F. J.  
and H. M. O'Neill Professor of  
Philosophy, Concurrent Professor  
of Biological Sciences

Phillip R. Sloan, Professor in the  
Program of Liberal Studies and  
Concurrent Professor of History,  
Emeritus

Thomas A. Stapleford, Associate Pro-  
fessor in the Program of Liberal  
Studies

James C. Turner, the Rev. John J. Ca-  
vanaugh, C.S.C., Professor of the  
Humanities

Laura Dassow Walls, William P. and  
Hazel B. White Professor of  
English

## PH.D. IN LITERATURE

### Program Director:

Joseph A. Buttigieg

Telephone: (574) 631-0481

Location: 336 O'Shaughnessy Hall

E-mail: [litprog@nd.edu](mailto:litprog@nd.edu)

Web: <http://phdliterature.nd.edu>

### The Doctor of Philosophy

Degree Requirements	
Courses	54 credits
Total	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Permission to proceed exam
	Candidacy examination
	Doctoral dissertation

The Ph.D. in Literature offers an innovative academic framework for the formation of future scholar-teachers in both the classical and modern languages and literatures. The program requires its students to complete a minimum of 54 credit hours from regular graduate courses. Students who have obtained credits for graduate courses taken after their undergraduate degree and prior to entering the program may be allowed to transfer a maximum of 6 credit hours. Students who have completed an M.A. before entering the program may be allowed to transfer a maximum of 24 credit hours. The transfer of credit hours is not automatic and requires the ap-

proval of the program's director and the Graduate School.

In both their second and third year of study students are required to enroll in the year-long course (1.5 credits per semester) "Learning the Profession." Students may opt to take this course on an S/U basis, in which case the credits earned will not count towards the 54 credits of coursework required by the program. For additional course work requirements, consult the program's handbook.

### Languages

All students in the Ph.D. in Literature Program are expected to be able to read and conduct research in at least two languages besides their own native language.

Students are minimally required to demonstrate near-native proficiency in the language of their major area of study and a scholarly reading knowledge in an additional language. The language skills required will vary according to the individualized program of study. Language requirements are designed to provide a rigorous base for in-depth study of two or more literary traditions and to ensure that students will successfully compete for placement in national literature departments as well as interdisciplinary programs.

### Examinations

The permission to proceed exam is administered during the week immediately before the beginning of classes in the spring semester of the student's second year in the program. The exact date is set by the program director at the start of each academic year. (After seeking the advice of the program director, a student may opt to take the exam earlier.)

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 PH.D. IN LITERATURE
 

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The Graduate School requires all doctoral candidates to complete their Ph. D. candidacy exam by the end of their fourth year of study. This deadline, however, represents nothing more than the utmost limit of acceptability. Students in the Ph.D. in Literature Program are strongly advised to organize and structure their coursework in a manner that permits them to sit for the candidacy exam in their third year.

### Participating Faculty

The following is a partial list of Notre Dame faculty who have worked closely with the Ph.D. in Literature Program. They form a core group of outstanding scholars who will be joined by numerous other faculty whose interests and expertise will enable students to craft doctoral degrees responsive to their own particular interests in world literatures. For a complete listing of participating faculty and their scholarly interests and current graduate students please visit our Web site at <http://phdliterature.nd.edu>.

### Associated Teaching and Research Faculty

Thomas F. Anderson, Professor of Romance Languages and Literatures

Zygmunt Baranski, Notre Dame Professor of Dante and Italian Studies, Department of Romance Languages and Literatures

Martin Bloomer, Professor of Classics

Tobias Boes, Assistant Professor, Department of German Language and Literature

Maureen Boulton, Professor of French, Department of Romance Languages and Literatures

Keith R. Bradley, the Eli J. and Helen Shaheen Professor of Classics and Concurrent Professor of History

Joseph A. Buttigieg, Director of the Ph.D. Program in Literature, the William R. Kenan Jr. Professor of English and Fellow in the Nanovic Institute for European Studies

Theodore J. Cachey Jr., Professor of Italian, Albert J. Ravarino Family Director of Dante and Italian Studies, and Chair, Department of Romance Languages and Literatures

James Collins, Professor, Department of Film, Television, and Theatre

JoAnn DellaNeva, Professor, Department of Romance Languages and Literatures Fellow, the Kaneb Center for Teaching and Learning Fellow, the Nanovic Institute

Margaret Doody, the John and Barbara Glynn Family Professor of Literature

Julia V. Douthwaite, Professor of French, Department of Romance Languages and Literatures

Christopher Fox, Director of the Keough Institute for Irish Studies, Professor of English and Chair of Irish Language and Literature

Stephen Gersh, Professor, Department of Philosophy

Ben A. Heller, Associate Professor, Department of Romance Languages and Literatures, Co-Director, Fernández Caribbean Initiative Fellow, Kellogg Institute for International Studies

Peter Holland, McMeel Family Professor in Shakespeare Studies, Department of Film, Television and Theatre

Vittorio Hösle, Paul G. Kimball Professor of Arts and Letters, Director, Notre Dame Institute for Advanced Study, and Professor of German

Kristine Ibsen, Professor of Spanish, Department of Romance Languages and Literatures

Carlos Jáuregui, Associate Professor of Spanish

Lionel M. Jensen, Associate Professor of East Asian Languages & Culture, Concurrent Associate Professor of History, and Fellow in the Helen Kellogg Institute for International Studies

Kathryn Kerby-Fulton, Professor of English

Brian Krostenko, Associate Professor, Classics

Declan Kiberd, Endowed Professor, Donald and Marilyn Keough Professor of Irish Studies

Silvia Li-chun Lin, Associate Professor, Department of East Asian Languages and Culture

Kate Marshall, Assistant Professor of English

Peter McQuillan, Associate Professor of Irish Language and Literature

Christian Moevs, Associate Professor, Department of Romance Languages and Literatures, and Fellow of the Medieval Institute

Vittorio Montemaggi, Assistant Professor of Religion and Literature, Department of Romance Languages and Literatures

Olivier Morel, Assistant Professor, Department of Romance Languages and Literatures and Film, Theatre and Television

Marisel Moreno-Anderson, Assistant Professor of Spanish, Department of Romance Languages and Literatures

Hildegund Müller, Associate Professor, Classics

Bríona Nic Dhiarmada, Endowed Professor, Notre Dame Chair in Irish Language and Literature

Robert E. Norton, Chair and Professor of German and Russian Languages and Literatures (German) and Fellow in the Nanovic Institute for European Studies

Brian Ó Conchubhair, Associate Professor of Irish Language and Literature

Diarmuid Ó Giolláin, Professor of Irish Language and Literature

Catherine Perry, Associate Professor of French, Department of Romance Languages and Literatures

Maria Rosa Olivera-Williams, Associate Professor, Department of Romance Languages and Literatures

Alison Rice, Associate Professor, Department of Romance Languages and Literatures

Mark W. Roche, The Rev. Edmund P. Joyce, C.S.C. Professor of German Language and Literature, Concurrent Professor of Philosophy

Dayle Seidenspinner-Núñez, Associate Dean; Professor of Spanish, Department of Romance Languages and Literatures

Steve Tomasula, Associate Professor, Department of English and Director of Graduate Studies in Creative Writing

Isabelle Torrance, Assistant Professor, Department of Classics

Alain Toumayan, Professor of French, Department of Romance Languages and Literatures, Director, Program in Philosophy and Literature and Fellow in the Nanovic Institute for European Studies

John Welle, Professor of Italian, Department of Romance Languages and Literatures

## MEDIEVAL STUDIES

### Director of Graduate Studies:

Olivia Remie Constable

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Location: 715 Hesburgh Library

E-mail: [medinst@nd.edu](mailto:medinst@nd.edu)

Web: <http://medieval.nd.edu>

### The Master of Medieval Studies

Degree Requirements	
Courses	31 credits
Total	31 credits
Other	Admission to candidacy
	Foreign language requirement
	Second-year project
	Colloquium presentation
	Candidacy examinations

The Medieval Institute offers a doctor of philosophy degree in medieval studies. After two years of course work, and completion of examinations in the third year, students earn a master of medieval studies (hereafter M.M.S.) degree and are approved for further work towards the Ph.D. The Institute does not accept candidates for a terminal master's degree.

### The Second Year Project

A general statement of topic for the second-year project, with signed adviser approval, is due on May 1st of a student's first year.

Completed projects are due in April of the second year. No incomplete grades are allowed, except in extraordinary circumstances. If the project is not complete and satisfactory, a student may not continue into the third year.

The Medieval Institute holds an annual public colloquium each April for second-year students to give formal presentations on their research projects to the Medieval Institute community.

### Language Requirements

The programs of the Medieval Institute are rigorous and interdisciplinary, and make high demands in terms of language skills.

Each student must pass a written exam in her/his primary medieval research language (Latin, Greek, or Arabic) before the end of the second year of study. This exam must be passed by the end of the fourth semester in order for a student to continue in the program.

A student should plan to take the exam in his/her medieval research language every semester until it is passed.

Students must pass written exams in two modern languages before taking their comprehensive exams in the third year (i.e., by the end of the fifth semester).

### Coursework

Consult the *Medieval Institute Graduate Handbook* for specific program details regarding course requirements, electives and academic milestones.

Students who enter the program with a completed M.A. degree may petition the DGS to transfer up to two courses

(six credits) from their M.A. program. Transferring credits allows more flexibility in our program and can slightly accelerate a student's progress.

## The Doctor of Philosophy

Degree Requirements	
Courses	48 credits
Total	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

The Ph.D. requires satisfactory completion of the master of medieval studies outlined above, successful completion of five written Ph.D. candidacy examinations, one oral Ph.D. candidacy examination, presentation of a dissertation proposal, and the presentation and defense of a satisfactory dissertation.

In early May each year the director and the graduate committee will review the accomplishments of the members of the third-year class. There will be three possible recommendations.

1. Permission to proceed to the dissertation proposal.
2. Requirement to re-take the Ph.D. examinations in the following September with the possibility at that time to recommend continuation or dismissal.
3. Dismissal with an M.M.S. degree.

The dissertation proposal is expected to be submitted no later than the first day of the fall semester of the student's fourth year. After acceptance of the dissertation proposal, most students will require three or four years to com-

plete the dissertation. It is not unusual for a satisfactory student to take six or seven years, from start to finish, to achieve the doctorate in Medieval Studies.

See the program handbook for additional details on the program's dissertation proposal and defense requirements.

## Faculty Fellows of in the Medieval Institute

Rev. Joseph P. Amar, Professor of Classics and Concurrent Professor of Theology

Ann Astell, Professor of Theology

Yrui Avvakumov, Assistant Professor of Theology

Zygmunt G. Baranski, Notre Dame Professor of Dante and Italian Studies

Charles E. Barber, Professor of Art, Art History, and Design

Alexander Blachly, Professor of Music

W. Martin Bloomer, Professor of Classics

D'Arcy Jonathan Boulton, Professor of the Practice of Medieval Studies

Maureen B. McCann Boulton, Professor of French Language and Literature

Keith R. Bradley, the Eli J. and Helen Shaheen Professor of Classics

Theodore J. Cachey Jr., Albert J. Ravarino Family Director of Dante and Italian Studies; Professor and Chair, Department of Romance Languages and Literatures

John C. Cavadini, Professor of Theology, and Director of the Institute for Church Life

Robert R. Coleman, Associate Professor of Art, Art History, and Design, and Research Specialist in the Medieval Institute

Olivia Remie Constable, Professor of History and Robert M. Conway Director of the Medieval Institute

Richard Cross, Rev. John A. O'Brien Professor in Philosophy and Chair, Department of Philosophy

Rev. Brian Daley, S.J., the Catherine F. Huisking Professor of Theology

JoAnn DellaNeva, Professor of French Language and Literature

Rev. Michael S. Driscoll, Associate Professor of Theology

Stephen D. Dumont, Professor of Philosophy

Kent Emery Jr., Professor in the Program of Liberal Studies

Margot Fassler, Keough-Hesburgh Professor of Music History and Liturgy

Felipe Fernandez-Armesto, William P. Reynolds Professor of History

Alfred Freddoso, John and Jean Oesterle Professor of Thomistic Studies

Dolores Warwick Frese, Professor of English

Stephen E. Gersh, Professor and Concurrent Professor of Philosophy

Robert Goulding, Associate Professor in the Program of Liberal Studies and the Program in the History and Philosophy of Science

Karen B. Graubart, Carl E. Koch Associate Professor of History

Brad S. Gregory, Professor

Li Guo, Associate Professor of Classics

- Thomas N. Hall, Professor of English.
- Peter Holland, McMeel Family Professor in Shakespeare Studies
- Peter Jeffrey, Michael P. Grace Chair in Medieval Studies and Professor of Music
- Rev. John I. Jenkins, C.S.C., President of the University and Professor of Philosophy
- Danielle B. Joyner, Assistant Professor of Art, Art History, and Design
- Encarnación Juárez-Almendros, Associate Professor of Spanish Language and Literature
- Kathryn Kerby-Fulton, Notre Dame Professor of English
- Mary M. Keys, Associate Professor of Political Science
- Brian Krostenko, Associate Professor of Classics
- Ian Kuijit, Professor of Anthropology
- Blake Leyerle, John Cardinal O'Hara, C.S.C., Associate Professor of Theology and Concurrent Associate Professor of Classics
- Sabine G. MacCormack, Rev. Theodore M. Hesburgh, C.S.C. Professor of Arts and Letters in History and Classics
- Julia Marvin, Associate Professor in the Program of Liberal Studies
- Peter McQuillan, Chair of the Department of Irish Language & Literature and Associate Professor of Irish Language & Literature
- Margaret H. Meserve, Associate Professor
- Christian R. Moevs, Associate Professor of Italian Language and Literature
- Vittorio Montemaggi, Assistant Professor of Religion and Literature
- Candida R. Moss, Professor of Theology
- Hildegund Müller, Associate Professor of Classics
- Thomas F. X. Noble, Professor of History
- David O'Connor, Associate Professor of Philosophy and Concurrent Associate Professor of Classics
- Mark C. Pilkinton, Professor of Film, Television, and Theatre
- Jean Porter, John A. O'Brien Professor of Theology
- Rory Rapple, Assistant Professor of History
- Gretchen J. Reydam-Schils, Professor in the Program of Liberal Studies
- Gabriel Said Reynolds, Associate Professor of Islamic Studies and Theology
- Robert E. Rodes, Jr., the Paul J. Schierl/Fort Howard Corporation Professor of Legal Ethics
- John Roos, Professor of Political Science
- Charles M. Rosenberg, Professor of Art, Art History, and Design
- Dayle Seidenspinner-Núñez, Professor of Spanish Language and Literature
- Susan Guise Sheridan, Associate Professor of Anthropology
- Deborah Tor, Assistant Professor of History
- John Van Engen, the Andrew V. Tackes Professor of History
- Joseph Wawrykow, Associate Professor of Theology
- Albert K. Wimmer, Associate Professor of German Language and Literature
- Robin Darling Young, Associate Professor of Theology
- Katherine G. Ziemann, Assistant Professor of English

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## PHILOSOPHY

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**Chair:**

Richard Cross

**Director of Graduate Studies:**

Sean Kelsey

Telephone: (574) 631-4278

Fax: (574) 631-0588

Location: 100 Malloy Hall

E-mail: [ndphilo@nd.edu](mailto:ndphilo@nd.edu)Web: <http://www.nd.edu/~ndphilo>**The Master of Arts**

Degree Requirements	
Courses	27 credits
Total	30 credits
Other	Admission to candidacy
	Candidacy examination

Students are admitted to the doctoral program in the philosophy program, but may receive a non-research M.A. upon successful completion of the written Ph.D. candidacy examination (history exam) and 27 credit hours of graduate course work.

The faculty as a whole periodically evaluates the progress of all students. Evaluations focus on students' performance in courses, in non-course requirements, and in their roles as teaching assistants and teachers. If

the faculty judge at any stage that a student's progress is unsatisfactory, the student may be required to terminate his or her graduate studies.

A student who does not receive permission to proceed to doctoral candidacy upon evaluation may receive a non-research M.A. degree in philosophy after finishing 27 credit hours of graduate course work and passing a special M.A. oral candidacy examination.

Degree Requirements	
Courses	42 credits
Total	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Qualifying papers
	Candidacy examinations
	Doctoral dissertation

For the doctorate a student must complete 42 credit hours of graduate course work. Students who enter the doctoral program with an M.A. are normally excused from 6 to 12 credit hours of graduate course work. Any philosophy graduate student is permitted to take up to 6 credit hours of approved undergraduate course work in philosophy and up to 6 credit hours of course work in related fields to satisfy the 42 credit hours. Those who choose to concentrate in such specialized fields as logic and philosophy of science may be required to take courses in other departments in support of their specialization. Students are expected to maintain a minimum B average in all of their course work.

In general, course requirements should be satisfied within the first two years, and must be satisfied within the first three years. For specific course and seminar requirements, see the program handbook.

## Candidacy Examination

At the end of the summer following the first year of coursework, students are required to take a written exam in the history of philosophy. The exam is given in two parts, with three hours covering ancient and medieval philosophy, and three hours covering modern philosophy.

Early in the third year, the student and his or her chosen adviser begin work on a program of independent reading in preparation for the oral comprehensive examination. This examination must be taken before the end of the sixth semester. See the program handbook for an updated list of areas of concentration available for examination and subsequent dissertation research.

This history examination and the oral comprehensive examination constitute the candidacy examination for the Ph.D.

## Qualifying Papers

Two qualifying papers, each evaluated by a faculty member chosen by the students with the approval of the DGS. The two papers must be evaluated by different faculty members. This requirement must be satisfied by the mid-point of the student's fourth semester.

## Language Requirements

Most students will require expertise in a foreign language, typically at least one of French, German, Greek, and Latin, in order to complete their research and to have the capacity for further scholarly work in their field. The dissertation director and director of graduate studies will determine in each case the level of expertise required, and the student will not be permitted to defend the dissertation until demonstrating that level of exper-

tise. The usual way of demonstrating sufficient expertise is by passage of the departmental translation exam by the end of the semester after the semester in which the dissertation proposal is approved. In individual cases, passage of the exam prior to approval of the dissertation proposal may be required.

## Dissertation Proposal and Completion

A dissertation proposal must be approved by the student's proposal committee by the end of the seventh semester. Once the dissertation proposal is approved, a meeting is scheduled for the student and the committee in order for the committee to provide guidance concerning the research and writing of the dissertation.

## Teaching and Research Faculty

Karl Ameriks, the McMahan-Hank Professor and Fellow in the Nanovic Institute for European Studies

Robert Audi, the John A. O'Brien Professor of Philosophy

Timothy Bays, Associate Professor

Patricia A. Blanchette, Professor

Katherine Brading, Director of Graduate Studies in History and Philosophy of Science and William J. and Dorothy K. O'Neill Associate Professor of Philosophy

Anjan Chakravartty, Professor

Richard Cross, Chair and the John A. O'Brien Professor of Philosophy

Cornelius F. Delaney, Professor

Michael R. De Paul, Professor



Michael Detlefsen, McMahon-Hank  
Professor of Philosophy

Stephen D. Dumont, Professor

Thomas P. Flint, Professor

Curtis Franks, Assistant Professor

Alfred J. Freddoso, the John and Jean  
Oesterle Professor of Thomistic  
Studies

Gary M. Gutting, Notre Dame Profes-  
sor of Philosophy and Fellow in  
the Nanovic Institute for Euro-  
pean Studies

Don A. Howard, Director of The  
Reilly Center for Science, Tech-  
nology and Values and Professor

Rev. John I. Jenkins, C.S.C., President  
of the University and Professor

Lynn Joy, Professor

Joseph Karbowski, Assistant Professor

Sean Kelsey, Director of Graduate  
Studies and Associate Professor

Janet Kourany, Associate Professor

Michael J. Loux, the George N.  
Shuster Professor of Philosophy  
Emeritus

Alasdair MacIntyre, Rev. John A.  
O'Brien Senior Research Professor  
of Philosophy Emeritus

Samuel Newlands, Associate Professor

John O'Callaghan, Associate Professor

David K. O'Connor, Associate Profes-  
sor of Philosophy and Concurrent  
Associate Professor of Classics

Alvin Plantinga, the John A. O'Brien  
Professor of Philosophy Emeritus

Grant Ramsey, Assistant Professor

Michael C. Rea, Director of the Cen-  
ter for Philosophy of Religion and  
Professor

Fred Rush, Associate Professor

Kenneth M. Sayre, Professor

Kristin Shrader-Frechette, the F. J.  
and H. M. O'Neill Professor of  
Philosophy, Concurrent Professor  
of Biological Sciences, and Fellow  
in the Joan B. Kroc Institute for  
International Peace Studies

William D. Solomon, Associate Profes-  
sor and the W. P. and H. B. White  
Director of the Center for Ethics  
and Culture

Jeffrey Speaks, John A. O'Brien Associ-  
ate Professor of Philosophy

James P. Sterba, Professor and Fellow  
in the Joan B. Kroc Institute for  
International Peace Studies

Leopold Stubenberg, Associate Profes-  
sor

Meghan Sullivan, Assistant Professor

Peter van Inwagen, the John Cardinal  
O'Hara Professor of Philosophy

Ted A. Warfield, Professor

Stephen H. Watson, Professor

Paul J. Weithman, Professor

## ROMANCE LANGUAGES AND LITERATURES

### Chair:

Theodore J. Cachey

### Director of Graduate Studies:

Alain P. Toumayan

Telephone: (574) 631-6886

Fax: (574) 631-3493

Location: 343 O'Shaughnessy

E-mail: [romlang@nd.edu](mailto:romlang@nd.edu)

Web: <http://romancelanguages.nd.edu/>

## The Master of Arts

Degree Requirements	
Courses	30 credits
Total	30 credits
Other	Admission to candidacy
	Qualifying examination
	Foreign language requirement
	Candidacy examination

The program in romance languages and literatures offers master's degrees in French and Francophone studies, Italian studies, and Iberian and Latin American studies. Each student is encouraged to work closely with his/her adviser to design a course of study to suit individual needs, interests, and future goals.

All candidates for an advanced degree are expected to take a minimum of 30 credit hours of courses in their field of specialization, including "Introduction to Literary Criticism" and a graduate course in comparative Romance literature. See the program handbook for additional details on course requirements.

During the second semester of the first year of graduate study, the student must pass an oral qualifying examination. The master's candidate will choose from a selection of texts and must demonstrate competency in analyzing a literary text in the target language before the graduate faculty. At this time, faculty members will discuss and evaluate the student's performance in the master's program.

Before taking the comprehensive written examination at the end of the second year, the student must demonstrate competency in a second foreign

language by passing a reading exam or through successful completion of appropriate course work. Additional details on the comprehensive examinations are available in the program handbook.

Students preparing for a career in teaching have the opportunity to teach several language courses before completion of the master's degree. A preliminary workshop, "Methods of Foreign Language Teaching" and "Practicum in Teaching" are required of all graduate teaching assistants.

### Combined B.A./M.A. Program

The Department of Romance Languages and Literatures offers its majors in French, Italian, and Spanish the opportunity to participate in its graduate program through a combination B.A./M.A. degree in the language of their major. This program requires students to complete a first major in a chosen language (i.e., at least 30 hours of course work) during the normal four-year undergraduate period, followed by a total of 30 credit hours of graduate courses taken during the fourth and fifth years in residence. Six credit hours will be counted toward both the undergraduate and the graduate degrees. During their senior year, participants in this program complete two graduate courses, take the qualifying exam given to all first-year graduate students, and apply to the Graduate School for admission during the spring semester. B.A./M.A. students are eligible for a teaching fellowship during their fifth year that includes a tuition waiver and a generous teaching stipend. Well-qualified students who are interested in this program should contact the director of graduate studies or the graduate coordinator in their chosen language at the beginning of their junior year.

## Teaching and Research Faculty

José Anadón, Professor of Spanish

Thomas F. Anderson, Professor of Spanish

Zygmunt Baranski, Notre Dame Professor of Dante and Italian Studies

Maureen B. McCann Boulton, Professor of French

Theodore J. Cachey Jr., Chair, Professor of Italian

JoAnn DellaNeva, Professor of French

Julia V. Douthwaite, Professor of French

Isabel Ferreira Gould, Assistant Professor of Portuguese and Brazilian Studies

Sabrina Ferri, Assistant Professor of Italian

Ben A. Heller, Associate Professor of Spanish

Kristine L. Ibsen, Professor of Spanish

Carlos Jerez-Farrán, Professor of Spanish Language and Literature

Carlos Jáuregui, Associate Professor of Spanish

Encarnación Juárez-Almendros, Associate Professor of Spanish

Louis A. MacKenzie Jr., Associate Professor of French

Christian R. Moevs, Associate Professor of Italian

Marisel Moreno-Anderson, Assistant Professor of Spanish

Vittorio Montemaggi, Assistant Professor of Religion and Literature

Maria Rosa Olivera-Williams, Associate Professor of Spanish

Catherine Perry, Associate Professor of French

Alison Rice, Associate Professor of French

Dayle Seidenspinner-Núñez, Associate Dean, College of Arts and Letters, and Professor of Spanish

Alain P. Toumayan, Director of Graduate Studies, Professor of French

Juan Vitulli, Assistant Professor of Spanish

John P. Welle, Professor of Italian

## THEOLOGY

### Chair:

J. Matthew Ashley

### Director of Ph.D. Program:

Joseph Wawrykow

### Director of M.A. Program:

Catherine Cavadini

### Director of M.Div. Program:

Rev. Msgr. Michael Heintz

### Director of M.S.M. Program:

Margot Fassler

### Director of M.T.S. Program:

David A. Clairmont

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Location: 130 Malloy Hall

E-mail: [theo.1@nd.edu](mailto:theo.1@nd.edu)

Web: <http://theology.nd.edu>

## The Master of Arts

Degree Requirements	
Courses	36 credits
Total	42 credits
Other	Admission to candidacy
	Candidacy examination

The master of arts (M.A.) in theology is a 42 credit-hour terminal degree for individuals who desire advanced theological training. Graduates of this program should be able to serve as theological resources in variety of settings. Recipients of this degree will have received instruction in the classical areas of theological inquiry while acquiring expertise in one.

There are several areas of concentration for the M.A. in theology: general studies, biblical studies, catechesis studies, history of Christianity, liturgical studies, moral theology, systematic theology, and studies in spirituality.

M.A. students may take courses during the summer and/or academic year for credit towards their degree. In addition to completing the course requirements, students are expected to pass a set of comprehensive exams, comprised of written and oral exams based on topics chosen by the student and bibliographies approved by the area adviser and the M.A. director.

Those needing a more general and flexible program of studies may pursue a general M.A. program, in which the course of study is planned in consultation with the director. The sole requirement is the inclusion of at least one course in each area of study. This may be of particular interest to those teaching theology in high school who wish to use the M.A. to enhance their effectiveness in teaching in a number of different areas.

For specific course, concentration and exam requirements, see the program handbook.

## The Master of Divinity

Degree Requirements	
Courses	60 credits
Total	83 credits
Other	Admission to candidacy
	Field education
	Candidacy examination

The master of divinity (M.Div.) is a professional theological degree designed to prepare students for learned and effective ministry in the Roman Catholic Church, either as priests or as professional lay ministers. The studies of Scripture, the history of Christian tradition, systematic theology, liturgy, and Christian ethics are joined to field experience, training in pastoral skills, and vocational formation to form a comprehensive ministerial curriculum. Thus, the M.Div. aims at a comprehensive, holistic integration of the intellectual, pastoral, human and spiritual dimensions.

### The Program of Studies

The program of studies leading to the M.Div. degree encompasses 83 semester credits and normally extends over six semesters.

For specific course and credit requirements, refer to the program handbook.

### Field Education

Field education serves as an integral component in the theological and pastoral education of ministry students, as well as to their spiritual formation and vocational preparation. It provides those preparing for ministry varied opportunities for acquiring ministerial

skills, for integrating their ministerial experiences through theological reflection, and ultimately for developing their ministerial identities. To make these opportunities possible, field education consists of the following:

- weekly service at a ministerial site during each of the three academic years in the M.Div. program;
- regular individual supervision with an experienced mentor at the ministry site;
- weekly seminars utilizing case study method and conversations about contemporary theological and ministerial issues.

### Formation

All M.Div. students participate in a program of human and spiritual formation suited to their particular vocational preparation, either as seminarians or as candidates for lay ministry. With the guidance of spiritual directors and formators, students are mentored in the life of faith, in their personal growth and in their vocational discernment. Regular joint formation events are held bringing all constituencies of the program together around shared issues and themes.

## The Master of Sacred Music

Degree Requirements	
Courses	48 credits
Total	48 credits
Other	Admission to candidacy
	Master's colloquium
	Recital(s) and/or candidacy examination
	Practicum

The Master of Sacred Music (M.S.M.) is a 48 credit-hour ministerial leadership program that prepares students for pastoral liturgical music ministry. The graduate program is administered in the Department of Theology and overseen by an interdepartmental committee (Music/ Theology); accreditation is granted through the Association of Theological Schools (A.T.S.). Following the principles of the document *Sing to the Lord* (USCCB, 2008), the program is multi-disciplinary, embracing in particular three dimensions: music, liturgy, and pastoral practice. The program strives to integrate these three dimensions, grounding the student professionally in liturgical music as a ministry.

Students are required to give two recitals or one recital and an oral comprehensive exam or the equivalent (to be administered in the final semester).

For specific course and credit requirements, refer to the program handbook.

### Master's Colloquium

Each year several master's colloquia address issues common to both liturgy and the sacred arts. These colloquia ground the interdisciplinary ethos of the programs, and draw the faculty and students into on-going dialogue. Attendance is mandatory for all M.S.M. students.

### Practicum

M.S.M. students will benefit from supervised pastoral placement for four semesters in the following places: Basilica of the Sacred Heart, local churches, or residence halls.

## The Master of Theological Studies

Degree Requirements	
Courses	48 credits
Total	48 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examination

The Master of Theological Studies (M.T.S.) program trains graduate students for future doctoral work in the various disciplines within the study of theology. The M.T.S. is a 48-credit-hour degree designed to give students exposure to the full range of theological studies while also allowing them to develop competence in an area of concentration and to improve their language abilities. Along with two years of full-time course work, the M.T.S. also includes participation in the master's colloquium, competency in one modern language, and the completion of a comprehensive oral exam to be given at the end of the second year of course work. The areas of Biblical studies and history of Christianity also have ancient language requirements.

In all there are five areas of concentration in the M.T.S. program. Students must take at least 15 credit hours in the area of their concentration, and may take Ph.D seminars, provided they first secure the permission of the course instructor and the M.T.S. director.

In order to introduce every M.T.S. student to a wide range of theological education, each area of study also involves requirements in other areas.

For specific course, concentration, language and exam requirements, see the program handbook.

## The Doctor of Philosophy

Degree Requirements	
Courses	42 credits
Total	60 credits
Other	Admission to candidacy
	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

The doctoral program requires 42 credit hours of course work. Students must specialize in one of six areas of concentration:

- Christianity and Judaism
- the history of Christianity
- liturgical studies
- moral theology/Christian ethics
- systematic theology,
- world religions and world Church

Within the program areas, students concentrate their course work in a major field. These major fields are defined as follows: Christianity and Judaism in antiquity, Hebrew Bible and Judaica, New Testament and early church, history of Christianity, early Church, medieval studies, Reformation and modern studies, liturgical studies, moral theology/Christian ethics, systematic theology, and world religions and world Church.

### Residency

Students are expected to take 14 courses during two years of residency: eight of these must be in the major field of study; three must be outside the major fields; and three are electives.

Those students who enter with a master's degree or its equivalent may seek immediate admission to residency.

## Language Requirement

Students are required to pass examinations in three languages, Greek or Latin, French, and German. Students in systematic theology may substitute Spanish for French or German.

For specific details on language requirements by area of study, see the program handbook.

The language requirement should be fulfilled as soon as possible and must be fulfilled by the fall of the third year.

## Independent Study

After the period of course work, students spend a period of time, normally nine months, of independent study organized around a series of topics. These topics are meant to expand the students' intellectual breadth and skills and involve matters of inquiry that extend beyond their course work. After consultation with the adviser, the student will propose a series of 10 topics, seven in the major field of study and three outside the major field. At least one of the topics in the major field will deal with the subject on which the student intends to write a dissertation. The program of independent study is approved by a committee and forms the basis for candidacy examinations.

## Candidacy Examinations

Offered in October and March, the examinations are usually taken in the second semester after the two-year residency and completion of the language requirements.

The exams consist of three days of written examinations and a 90-minute oral examination. Successful completion of the written examinations is required for admission to the oral examination.

## The Dissertation

The dissertation proposal is to be submitted by the beginning of the semester following oral candidacy examinations.

The completed dissertation must be defended and submitted within eight years of matriculation into the program.

## Ph.D. in Theology and Peace Studies Joint Program

In addition to the six major areas of concentration, the Department of Theology offers a Ph.D. in Theology and Peace Studies in partnership with Notre Dame's Kroc Institute for International Peace Studies. The degree includes a course of integrated studies so that graduates are fully credentialed in both theology and interdisciplinary peace research. The requirements for the Ph.D. in Theology and Peace Studies include the following: a minimum of 24 graded hours of credit in theology in one of the areas of concentration, and 18 graded hours in peace studies. Students will meet the theology department's minimal language requirements of two modern research languages (typically French and German) and one classical language (Latin or Greek).

## Teaching and Research Faculty

Gary Anderson, Professor

J. Matthew Ashley, Chair and Associate Professor

Ann W. Astell, Professor

David Aune, the Walter Professor of Theology

Yury Avvakumov, Assistant Professor

Rev. Paul F. Bradshaw, Professor

John C. Cavadini, Professor of Theology

David A. Clairmont, Director of the M.T.S. Program and Associate Professor

Lawrence S. Cunningham, the John A. O'Brien Professor of Theology

Rev. Brian Daley, S.J., the Catherine F. Huisking Professor of Theology

Mary Rose D'Angelo, Associate Professor

Rev. Michael S. Driscoll, Director of M.S.M. Program and Associate Professor

Celia Deane-Drummond, Professor

Rev. John S. Dunne, C.S.C., the John A. O'Brien Professor of Catholic Theology

Rev. Virgilio Elizondo, Notre Dame Professor of Pastoral and Hispanic Theology

David Fagerberg, Associate Professor

Margot Fassler, Keough-Hesburgh Professor of Music History and Liturgy; Co-Director of the MSM Program

Rev. Daniel G. Groody, C.S.C., Associate Professor

Rev. Gustavo Gutierrez, O.P., John Cardinal O'Hara Professor of Theology

M. Catherine Hilbert, O.P., Professor

Maxwell Johnson, Professor

M. Cathleen Kaveny, the John P. Murphy Foundation Professor of Law and Professor of Theology

Rev. Paul Kollman, C.S.C., Associate Professor

Robert A. Krieg, Professor

## THEOLOGY

Blake Leyerle, Associate Professor and Concurrent Associate Professor of Classics	James C. VanderKam, the John A. O'Brien Professor of Hebrew Scriptures
Bradley J. Malkovsky, Associate Professor	Joseph P. Wawrykow, Associate Professor
Timothy Matovina, Professor	Todd D. Whitmore, Associate Professor
Rev. Richard P. McBrien, the Crowley-O'Brien Professor of Theology	Abraham Winitzer, Professor
Gerald McKenny, Associate Professor	Robin Darling Young, Associate Professor
John Meier, Professor	Randall C. Zachman, Professor
Leon J. Mertensotto, C.S.C., Associate Professor	
Candida R. Moss, Professor	
Francesca Murphy, Professor	
Michael (Tzvi) Novick, Jordan Capson Chair in Jewish Studies and Assistant Professor	
Rev. Paulinus I. Odozor, C.S.Sp., Associate Professor	
Cyril O'Regan, the Catherine F. Huis-king Professor of Theology	
Rev. Hugh Rowland Page Jr., Dean of the First Year of Studies and Associate Professor	
Margaret R. Pfeil, Assistant Professor	
Jean Porter, the John A. O'Brien Professor of Moral Theology	
Gabriel Said Reynolds, Director of M.T.S. Program and Associate Professor	
Maura A. Ryan, Associate Dean of Arts and Letters and Associate Professor of Theology	
Lawrence E. Sullivan, Professor and Interim Director of Graduate Studies	
Eugene C. Ulrich, the Rev. John A. O'Brien Professor of Old Testament Studies	



# THE DIVISION OF SCIENCE

## APPLIED AND COMPUTATIONAL MATHEMATICS AND STATISTICS

### Chair:

Steven Buechler

### Director of Ph.D. Program:

Mark Alber

### Director of the M.S. Professional Program:

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## The Master of Science (Professional Degree)

Degree Requirements	
Courses	24 credits
Total	35 credits
Other	Project participation
	Admission to candidacy

The professional master of science degree in Applied and Computational Mathematics and Statistics trains

students in the mathematical, statistical and computational tools used in finance, computational biology or other technical fields. The intensive 10-month program combines coursework, projects in the student's chosen area of employment, and practical business training. Most students will seek employment immediately upon completion of this degree. A student applies specifically for admission to this program.

## The Master of Science (Ph.D. Track)

Degree Requirements	
Courses	21 credits
Total	30 credits
Other	Candidacy examinations or faculty recommendation

A student who is working toward a Ph.D. in the Applied and Computational Mathematics and Statistics (ACMS) program may qualify for a master of science degree along the way, if he or she has accumulated 30 credit hours, has passed the written candidacy examination, and has either passed the oral candidacy examination or (without passing) exhibited sufficient knowledge to obtain a positive recommendation from the examiners.

The program does not admit students directly to this degree.

## The Doctor of Philosophy

Degree Requirements	
Courses	18 credits
Total	60 credits
Other	Candidacy examinations
	Doctoral dissertation

Students in the doctoral program are required to complete at least 18 credits of ACMS courses at the graduate level in the first four semesters of study to remain in good standing. At the discretion of the DGS, at most six credits of graduate level courses transferred from another university may be counted toward the required ACMS course work, for a student without a completed master's degree. For a student with a completed master's degree, the DGS will determine the number of transferred credits applied to the required ACMS course work.

For additional course-related requirements, refer to the program handbook.

Written examinations are normally taken at the end of the fall semester of the first year, and must be completed by the end of the first year, except for students transferring from another program. The oral candidacy examination, taken after the written candidacy examinations are completed (and before the end of the second year), focuses on an "advanced" topic.



## Teaching and Research Faculty

Mark Alber, Director of Graduate Studies and Vincent J. Duncan Family Professor of Applied Mathematics

Steven Buechler, Department Chair and Professor

Bei Hu, Associate Dean for Undergraduate Studies and Professor

Jun Li, Assistant Professor

Jiahua Li, Assistant Professor

Fang Liu, Assistant Professor

Andrew Sommese, Vincent J. Duncan and Annamarie Micus Duncan Professor of Mathematics

Zhiliang Xu, Associate Professor

Yongtao Zhang, Director of Undergraduate Studies and Associate Professor

## BIOLOGICAL SCIENCES

### Chair:

Gary A. Lamberti

### Director of Graduate Studies:

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## The Master of Science

Degree Requirements	
Courses	15 credits
Total	30 credits
Other	Candidacy examinations
	Master's thesis

The master's degree is a 30-credit-hour program requiring the satisfactory completion of a minimum of 15 credit hours of course work, passing a research proposal review, and completing a suitable master's thesis. A student may include nine of the 30 credit hours in thesis research.

## The Doctor of Philosophy

Degree Requirements	
Courses	24 credits
Total	60 credits
Other	Candidacy examinations
	Doctoral dissertation

For the degree of doctor of philosophy, the student is expected to complete a 60-credit-hour requirement. This is composed of at least 24 credit hours of course work and the remainder as dissertation research. The student must pass a comprehensive examination consisting of both an oral and a written examination. After the student is admitted to candidacy, he or she must then defend and submit a written dissertation.

Students in the doctoral degree program must also fulfill a one-year teaching requirement that usually involves assisting in the instruction of undergraduate or graduate laboratory courses. This requirement may be automatically fulfilled if the student has a graduate assistantship for financial aid.

## Teaching and Research Faculty

Elizabeth Archie, Claire Luce Booth Assistant Professor

Gary E. Belovsky, Professor

Harvey A. Bender, Professor

Nora J. Besansky, Professor

Sunny K. Boyd, Assistant Chair, Director of Graduate Studies and Professor

Patricia Champion, Assistant Professor

Frank H. Collins, the George and Winifred Clark Professor of Biological Sciences

Crislyn D'Souza-Schorey, the Walther Cancer Institute Chair and Professor

Giles E. Duffield, Assistant Professor

John G. Duman, the Martin J. Gillen Professor of Biological Sciences

Jeffrey L. Feder, Professor

Michael T. Ferdig, Associate Professor

Malcolm J. Fraser Jr., Rev. Julius A. Nieuwland, C.S.C. Professor of Biological Sciences II

Paul R. Grimstad, Assistant Chair and Associate Professor

Kasturi Haldar, Julius Nieuwland, C.S.C. Professor of Biological Sciences

Ronald A. Hellenthal, Assistant Chair and Professor

Jessica J. Hellmann, Associate Professor

Hope Hollocher, Associate Professor

David R. Hyde, Professor

Stuart Jones, Assistant Professor

Charles F. Kulpa Jr., Professor  
 Gary A. Lamberti, Chair and Professor  
 Shaun Lee, Assistant Professor  
 Lei Li, Associate Professor  
 David M. Lodge, Ludmilla F. and  
 Stephen J. Galla Professor II  
 Mary Ann McDowell, Associate Pro-  
 fessor  
 Jason S. McLachlan, Assistant Profes-  
 sor  
 Edwin Michael, Professor  
 Miguel Morales, Assistant Professor  
 Joseph E. O'Tousa, Professor  
 Michael Pfrender, Associate Professor  
 Matthew J. Ravosa, Professor  
 Benjamin Ridenhour, Assistant Profes-  
 sor  
 Jeanne Romero-Severson, Associate  
 Professor  
 Zachary T. Schafer, Assistant Profes-  
 sor and Coleman Junior Chair in  
 Cancer Biology  
 Jeffrey S. Schorey, Professor  
 Robert A. Schulz, Professor and Notre  
 Dame Chair in Biological Sciences  
 David W. Severson, Professor  
 Zainulabeuddin Syed, Assistant Profes-  
 sor  
 Jennifer L. Tank, the Galla Professor of  
 Biological Sciences  
 Gregory Timp, Keough-Hesburgh  
 Chair in Electrical Engineer-  
 ing and Biological Sciences and  
 Professor  
 Kevin T. Vaughan, Associate Professor  
 Rebecca Wingert, Assistant Professor

## CHEMISTRY AND BIOCHEMISTRY

### Chair:

Kenneth W. Henderson

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## The Master of Science

Degree Requirements	
Courses	18 credits
Total	30 credits
Other	Academic and research progress examination
	Master's thesis (at adviser's discretion)

The program in chemistry and biochemistry does not admit students directly into a master of science (M.S.) program. However, students who have not passed the academic and research progress (ARP) examination in their third semester may be required to leave the Ph.D. program with a master's degree.

At the discretion of the adviser and only with the adviser's financial support, a student who fails the exam and is moved into the M.S. program may have the option of completing a thesis in the adviser's laboratory. In such a case, provided the adviser is willing and able to provide funding, the student may remain in the program until completion of the thesis or

the end of the fifth year, although the student may choose to leave with a non-research M.S. at any time.

If the adviser is unable or unwilling to act as the student's thesis director, a non-research M.S. degree is available, provided the student has completed the course work requirements and has attempted the ARP examination.

Following the recommendation of the student's adviser and committee, it may be possible for a student who has completed a thesis to re-enter the doctoral program, pending approval by the director of graduate studies or the department chair. A student who has re-entered the Ph.D. program will receive written confirmation from the director of graduate studies.

## The Doctor of Philosophy

Degree Requirements	
Courses	18 credits
Total	90 credits
Other	Academic and research progress examination
	Candidacy examination
	Doctoral dissertation

Graduate students pursuing a Ph.D. in chemistry or biochemistry must complete at least 18 credits of course work prior to the end of their third semester. A combined total of 90 credits are required; this total includes all courses taken, including not only instructional coursework, but research, seminars, directed readings, etc. The program may accept course work completed at another accredited university toward meeting the requirements for either doctoral degree.

To continue in the Ph.D. program, students must pass the academic and research progress (ARP) exam. The

ARP exam is taken during a student's third semester; to be eligible for the exam, the student must be in good academic standing in the department. The exam consists of a written document and an oral defense in front of the student's committee.

Admission to candidacy for the Ph.D. occurs after completion of written and oral examinations in the area of specialization. Once admitted to candidacy, the student must then write, defend and submit a doctoral dissertation to complete the degree requirements.

## Teaching and Research Faculty

Brandon Ashfeld, Assistant Professor

Brian M. Baker, Associate Professor

Paul Bohn, Arthur J. Schmitt Professor

Seth N. Brown, Professor

Ian C. Carmichael, Professor and Director of Radiation Laboratory

Francis J. Castellino, Dean Emeritus of Science, the Kleiderer-Pezold Professor of Biochemistry, and Director of the Keck Center for Transgene Research

Patricia L. Clark, Rev. John Cardinal O'Hara Associate Professor

Steven A. Corcelli, Associate Professor and Director of Graduate Studies

Xavier Creary, the Charles L. Huisling Sr. Professor of Chemistry

Norman Dovichi, Grace-Rupley Professor

Jennifer L. DuBois, Assistant Professor

Haifeng Gao, Assistant Professor

J. Daniel Gezelter, Associate Professor

Holly V. Goodson, Associate Professor

Gregory V. Hartland, Professor

Paul Helquist, Professor

Kenneth W. Henderson, Professor and Chair

Paul W. Huber, Professor

Amanda Hummon, the Walther Cancer Institute Assistant Professor of Biochemistry

Vlad M. Iluc, Assistant Professor

Prashant V. Kamat, Professor

S. Alex Kandel, Associate Professor

M. Kenneth Kuno, Associate Professor

A. Graham Lappin, Professor

Marya Lieberman, Associate Professor

Joseph P. Marino, Professor

Marvin J. Miller, the George and Winifred Clark Professor of Chemistry

Shahriar Mobashery, the Navari Family Professor in Life Sciences

Jeffrey W. Peng, Associate Professor

W. Robert Scheidt, the William K. Warren Professor of Chemistry and Biochemistry

Zachary Schultz, Assistant Professor

Anthony S. Serianni, Professor

Slavi C. Sevov, Professor

Bradley D. Smith, Professor

Sharon Stack, Professor

Franklin (Feng) Tao, Assistant Professor

Richard E. Taylor, Professor

Olaf G. Wiest, Professor

## INTEGRATED BIOMEDICAL SCIENCES

### Chair:

Richard Taylor

### Director of Graduate Studies:

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## The Doctor of Philosophy

Degree Requirements	
Courses	24 credits
Total	60 credits
Other	Laboratory rotations (3)
	Original research proposal exam
	Candidacy examinations
	Doctoral dissertation

The Integrated Biomedical Sciences Ph.D. is an interdisciplinary program that offers students the opportunity to participate in research that crosses home department boundaries. All IBMS students admitted to the program ultimately identify themselves with one of seven research and training clusters, depending on their interests.

During their first academic year (August through May), students are exempt from teaching assistant duties, and participate in three successive ten-week research rotations. The rotations, performed in laboratories chosen by the student, allow students to directly engage in research, contributing to the scientific investigations ongoing in each laboratory. The three rotations

expose students to a range of complementary biomedical research and allow students to learn a variety of experimental techniques.

IBMS students are expected to complete at least 24 credit hours of course work. During the first year, this includes general courses relevant to the general conduct of biomedical research as well as courses specific to each research and training cluster. After the first year, students take course work further tailored to their needs and interests, selected in consultation with their adviser. Biomedical research ethics is emphasized early in the program.

Most students will have completed their courses by the end of their second year, permitting dissertation research to proceed full-time.

Candidacy examinations and dissertation requirements follow the traditions and formats currently in place in the research director's home department.

## MASTER OF SCIENCE IN GLOBAL HEALTH

**Director of Global Health Training:**  
Joseph Bock

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## The Master of Science: Global Health (Professional Degree)

Degree Requirements	
Courses	30 credits
Total	30 credits
Other	6–8 weeks of field experience
	Master's research project

The master of science in global health (MSGH) professional degree is normally completed within one calendar year. The program requires course work to be completed over two semesters, followed by 6–8 weeks of field experience in a resource-poor location where access to health care is limited. Finally, students are required to submit and present a master's research project, which is a scholarly report based on original research or literature-based research.

## MASTER OF SCIENCE IN PATENT LAW

**Director of Graduate Studies:**  
Karen Deak

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## The Master of Science: Patent Law (Professional Degree)

Degree Requirements	
Courses	30 credits
Total	30 credits
Other	Capstone project
	Mock Patent Bar examination

Prior to working as a registered patent agent, one's legal knowledge is assessed by the Patent Bar examination, administered by the United States Patent and Trademark Office (USPTO). However, the USPTO does not offer a course to prepare an individual to pass the Patent Bar. Notre Dame's Master of Science in Patent Law program provides students with a science or engineering background the legal skills necessary to pass the Patent Bar and to succeed as a patent agent.

An interdisciplinary mix of patent law and rigorous science and/or engineering courses, the one-year program's curriculum incorporates both graduate-level continuing education within a student's scientific or engineering specialty, and a complete patent legal education.

Classes are modularly designed, and convey the skills necessary to pass the Patent Bar administered by the USPTO, while also providing students with the research, writing, and professional skills critical to their success in the practice of patent law. For specific details on curriculum requirements, refer to the program handbook.

As part of their course work, students complete a capstone project in two stages. Utilizing concepts taught in the course work, students research, analyze, and evaluate a seed idea in their technical field. The final project for the fall semester is a written summary of the analysis, in the form of a legal corporate deliverable, summarizing the disclosed invention, the related art that the student identified, potential issues with the technology, and strategies for overcoming any obstacles. In the spring the semester, the student drafts a complete, fileable patent application based on the technology.

After completion and successful defense of the capstone project, students

will take part in a mock Patent Bar examination

Degree Requirements	
Total	60 credits
Other	Candidacy examinations
	Doctoral dissertation

## MATHEMATICS

### Chair:

Matthew Gursky

### Director of Graduate Studies:

Julia Knight

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## The Master of Science

Degree Requirements	
Courses	30 credits
Total	30 credits
Other	Candidacy examinations

A student who is working toward a Ph.D. in mathematics may qualify for a master of science degree along the way, if he or she has accumulated 30 credit hours, has passed the written candidacy examination, and has either passed the oral candidacy examination or (without passing) exhibited sufficient knowledge to obtain a positive recommendation from the examiners.

Students are not normally admitted directly to the master's program.

## The Doctor of Philosophy

Degree Requirements	
Courses	36 credits (basics and topics)

Students in the doctoral program are expected to complete at least 36 credit hours of course work and four consecutive semesters of full-time study. Accordingly, first-year students have no teaching duties.

The written candidacy examinations are taken by the beginning of the second year. The oral candidacy examination is taken during the second year.

Once the student is admitted to degree candidacy, he or she must write, defend and successfully submit a doctoral dissertation to complete the requirements for the Ph.D.

Most students complete the program within five years; some finish in four years.

For more information on course and program requirements, see the program handbook.

## Teaching and Research Faculty

Katrina D. Barron, Assistant Professor

Nero Budur, H.J. Kenna Assistant Professor

Peter Cholak, Professor

Francis X. Connolly, Professor

Jeffrey Diller, Professor

William G. Dwyer, the William J. Hank Family Professor of Mathematics

Matthew J. Dyer, Associate Professor

Samuel Evens, Associate Professor

Leonid Faybusovich, Professor

David Galvin, Assistant Professor

Michael Gekhtman, Professor

Karsten Grove, the Rev. Howard J. Kenna, C.S.C Professor

Matthew Gursky, Chair and Professor

Alexander J. Hahn, Director of the Kaneb Center for Teaching and Learning and Professor

Brian Hall, Professor

Qing Han, Professor

A. Alexandrou Himonas, Professor

Richard Hind, Associate Professor

Julia F. Knight, Director of Graduate Studies and the Charles L. Huisking Professor of Mathematics

François Ledrappier, the John and Margaret McAndrew Professor of Mathematics

Arthur Lim, Associate Professor

Xiaobo Liu, Professor

Juan C. Migliore, Professor

Gerard K. Misiolek, Professor

Liviu Nicolaescu, Professor

Anne Pilkington, Associate Professor

Claudia Polini, Rev. John Cardinal O'Hara, C.S.C. Professor of Mathematics

Mei-Chi Shaw, Professor

Brian Smyth, Professor

Dennis M. Snow, Professor

Nancy K. Stanton, Professor

Sergei Starchenko, Professor

Stephan A. Stolz, Professor

Gábor Székelyhidi, Assistant Professor

Laurence R. Taylor, Professor

E. Bruce Williams, Professor

Frederico J. Xavier, Professor

## M.D./PH.D. JOINT DEGREE PROGRAM

### Director:

Rudolph M. Navari, M.D., Ph.D.

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### The Program of Studies

The University of Notre Dame Graduate School and the Indiana University School of Medicine – South Bend (IUSM – SB) offer a joint M.D./Ph.D. degree for exceptional students interested in academic medicine.

To earn the joint degree, students complete the first two years of medical school at IUSM – SB and continue at Notre Dame for three more years to pursue the University's doctoral degree through the Graduate School. The last two years of medical school then will be completed at the Indiana University School of Medicine's South Bend campus or any other School of Medicine campus throughout the state which offers the 3rd and 4th year. Since it is now possible to complete all four years of medical school in South Bend, the traditional schedule outlined above may be modified to pursue both the M.D. and the Ph.D. over a 6–7 year period.

Program descriptions and requirements for all of Notre Dame's doctoral programs, may be found elsewhere in this *Bulletin*. Students in the M.D./Ph.D. program may pursue the doctoral degree in any of these disciplines.

Admission to the program requires separate applications to the Notre Dame Graduate School and the Indiana University School of Medicine. The Graduate School will accept MCAT scores in place of the GRE scores required of all applicants. The parallel applications are coordinated and tracked by the IUSM – SB which serves as the central office for the combined degree program. Representatives from Notre Dame and the I.U. School of Medicine monitor and oversee the program.

### Teaching and Research Faculty

Suzanne S. Bohlson, Assistant Professor

Karen Cowden Dahl, Assistant Professor

Richard Dahl, Assistant Professor

Rudolph M. Navari, Professor

Jenifer Prosperi, Assistant Professor

Molly Duman Scheel, Assistant Professor

Patrick Sheets, Assistant Professor

Robert V. Stahelin, Associate Professor

Tracy Vargo-Gogola, Assistant Professor

Peter Velazquez, Assistant Professor

## PHYSICS

### Chair:

Christopher F. Kolda

### Director of Graduate Studies:

Kathie E. Newman

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### The Master of Science

Degree Requirements	
Courses	30 credits
Total	30 credits
Other	Candidacy examinations

The graduate program is primarily a doctoral program, leading to the degree of doctor of philosophy. The department ordinarily will not accept students who intend to complete only the master's degree. However, a program leading to the degree of master of science is available; it involves satisfactory completion of graduate course work without any thesis requirement.

The master of science non-research program requires 30 credit hours of approved course work and the passing of an oral master's examination. Each program of course work is chosen in consultation with a faculty adviser.

### The Doctor of Philosophy

Degree Requirements	
Courses	33 credits
Total	60 credits

## PHYSICS

Degree Requirements	
Other	Qualifying examination
	Candidacy examinations
	Doctoral dissertation

Requirements for the Ph.D. include a total of 60 credit hours in courses and research. For specific course requirements, see the program handbook.

There is no foreign language requirement for a Ph.D. in physics.

In addition to course work, there are three examinations to be passed for a Ph.D., a written qualifying examination on undergraduate physics, a written and oral Ph.D. candidacy examination, and an oral Ph.D. dissertation defense. Students first take the qualifying exam in the fall of their first year, and must pass it by the end of the second year. The candidacy examination is typically taken in the third year, after course work is complete.

To remain in good standing, students are required to: maintain a 3.0 grade point average, pass the qualifying examination by the end of the second year, pass the candidacy exams by the end of the fourth year, and defend and submit a doctoral dissertation by the end of the eighth year.

The minimum residence requirement for the Ph.D. degree is four consecutive semesters and may include summer session.

## Teaching and Research Faculty

Mark Alber, Concurrent Professor

Ani Aprahamian, Frank M. Freimann Professor of Physics

Gerald B. Arnold, Professor

Dinshaw Balsara, Associate Professor

H. Gordon Berry, Professor

Ikaros I. Bigi, the Grace-Rupley II Professor of Physics

Howard A. Blackstead, Professor

Bruce A. Bunker, Professor

Mark A. Caprio, Assistant Professor

Philippe A. Collon, Associate Professor

Gregory P. Crawford, the W.K. Warren II Professor of Physics and Dean of the College of Science

Antonio Delgado, Assistant Professor

Malgorzata Dobrowolska-Furdyna, Rev. John Cardinal O'Hara, C.S.C. Professor of Physics

Morten R. Eskildsen, Associate Professor

Stefan G. Frauendorf, Professor

Jacek K. Furdyna, the Aurora and Tom Marquez Professor of Physics and Fellow of the Nanovic Institute for European Studies

Umesh Garg, Professor

Peter M. Garnavich, Professor

Michael D. Hildreth, Professor

Jay Christopher Howk, Associate Professor

Anthony K. Hyder, Professor and Associate Chair and Director of Undergraduate Studies

Boldizsár Jankó, Professor and Director of the Institute for Theoretical Sciences

Colin P. Jessop, Professor

James J. Kolata, Professor

Christopher F. Kolda, Professor

Kevin A. Lannon, Assistant Professor

A. Eugene Livingston, Professor

John M. LoSecco, Professor

Grant J. Mathews, Professor and Director of the Center for Astrophysics

Kathie E. Newman, Professor, Associate Chair and Director of Graduate Studies

Jeffrey W. Peng, Concurrent Associate Professor

Sylwia Ptasińska, Assistant Professor

Terrence W. Rettig, Professor

Randal C. Ruchti, Professor

Steven T. Ruggiero, Professor

Jonathan R. Sapirstein, Professor

Xiao-Dong Tang, Assistant Professor

Carol E. Tanner, Professor

Zoltán Toroczkai, Professor and Director of the Interdisciplinary Center for Network Science and Applications

Mitchell R. Wayne, Chair and Professor

Michael C. F. Wiescher, the Frank M. Freimann Professor of Physics, Director of the Joint Institute for Nuclear Astrophysics, and Director of the Institute for Structure and Nuclear Astrophysics

# THE DIVISION OF SOCIAL SCIENCES

## ECONOMICS

### Chair:

Richard A. Jensen

### Director of Graduate Studies:

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## The Master of Arts

Degree Requirements	
Courses	24 credits
Total	30 credits
Other	Comprehensive examinations

The economics program does not administer a stand-alone master of arts (M.A.) program, but allows students to apply for an M.A. should they choose to terminate their study in the Ph.D. program. The M.A. degree is awarded to those who successfully complete the core courses, pass the comprehensive exams at the M.A. level or better, and meet University requirements for the M.A.

## The Doctor of Philosophy

Degree Requirements	
Courses	36 credits
Total	60 credits
Other	Comprehensive examinations
	Candidacy examinations
	Doctoral dissertation

Students in the doctoral program in economics are expected to complete a minimum of 36 credit hours of approved course work at the graduate level to obtain the Ph.D. Satisfactory performance requires a grade of B- or better in each and every graduate course with a cumulative GPA of at least 3.0 (corresponding to the grade B).

There is no foreign language requirement for graduate students in economics.

Students commence their studies with a "core" group of required courses that should be completed the first year. During the second year, students begin to develop their field specializations through continued course work, and complete a research paper. From the fourth semester on (spring semester of the second year), the student will be required to participate in a research seminar in his or her chosen fields. Participation means presenting updates of the student's own research and critically analyzing that of others.

For additional information regarding course work and project requirements, consult the program handbook.

To complete the requirements for the Ph.D., students must defend and submit a written doctoral dissertation. The expected time to completion of the Ph.D. is five years.

### Examinations

Shortly after completing the core, students take comprehensive written exams in microeconomic and macroeconomic theory to assess the students' command of the essential concepts and methods necessary to read the literature and to perform research at the disciplinary frontier. Possible outcomes of the comprehensive exams are (a) Ph.D. pass, (b) M.A. pass, (c) fail. Students who do not attain a Ph.D. pass in either examination have one opportunity for a retake later that summer, typically in August. Failure to pass both exams at the Ph.D. level results in dismissal from the program.

Students must be admitted to candidacy by the end of the fourth year by passing the candidacy exam which consists of written and oral components. The written part precedes the oral part and is satisfied by either a dissertation proposal or a paper that will become a chapter of the dissertation. The oral part can be taken no later than one calendar year prior to defense of the dissertation.



## Teaching and Research Faculty

Simeon Alder, Assistant Professor  
 Wyatt Brooks, Assistant Professor  
 Kasey Buckles, Assistant Professor  
 Kirk B. Doran, Assistant Professor  
 William N. Evans, the Keough-Hesburgh Professor of Economics  
 Robert Flood, Professor  
 Timothy Fuerst, the William and Dorothy O'Neill Professor of Economics  
 Antoine Gervais, Assistant Professor  
 Thomas A. Gresik, Professor  
 Andreas Hagemann, Assistant Professor  
 Daniel M. Hungerman, the Stepan Family Associate Professor of Economics  
 Terrence Johnson, Assistant Professor  
 Richard A. Jensen, Chair and the Gilbert Schaefer Professor of Economics  
 Joseph Kaboski, the David F. and Erin M. Seng Foundation Associate Professor of Economics  
 Steven Lugauer, Assistant Professor  
 William H. Leahy, Professor  
 Byung-Joo Lee, Associate Professor  
 Nelson C. Mark, the DeCrane Professor of International Economics  
 Michael J. Pries, Associate Professor and Director of Graduate Studies  
 Kali P. Rath, Associate Professor  
 Eric Sims, the Michael P. Grace II Assistant Professor of Economics

James X. Sullivan, Associate Professor  
 Jeffrey Thurk, Assistant Professor  
 Christopher J. Waller, Professor  
 Abigail Wozniak, Assistant Professor

## EDUCATION

### Director of the M.A. Program:

Rev. Ronald J. Nuzzi

### Director of the M.Ed. Program:

Thomas L. Doyle

### Director of Graduate Studies:

Joyce Johnstone

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## The Master of Arts

Degree Requirements	
Courses	42 credits
Total	42 credits
Other	Administrative internship
	Program portfolio
	School Leaders Licensure Assessment

The master of arts (M.A.) program prepares, educates, and supports selected Catholic school teachers to continue their service to K-12 schools through administrative formation in the Mary Ann Remick Leadership Program in the Alliance for Catholic Education (ACE). All program participants experience a graduate pro-

gram culminating in a master's degree in educational administration and state licensure, as well as regular opportunities to interact with a national community of scholars in Catholic education.

The Mary Ann Remick Leadership Program is designed to prepare participants for service as school principals and to meet the professional standards for the principalship as defined by the Interstate School Leaders Licensure Consortium (ISSLC) and the Indiana Professional Standards Board (IPSB). The program is, therefore, standards-based, and all course activities and requirements are designed with this in mind. Between the second and third summers, participants are required to sit for and pass the School Leaders Licensure Assessment (SLLA).

M.A. students attend core courses primarily during the summer. A total of 42-credit hours of course work over a 26-month span are required, with an overall grade point of at least 3.0. For specific details regarding course requirements, consult the program handbook.

During the academic years between the first two summer sessions, each student travels to the K-12 school at which he or she has been accepted as an administrative intern and serves as a full-time teacher-administrator during the regular school year. In addition to their duties with the school, students will participate in distance learning courses directed at the areas of curricular instruction and professional supervision. Throughout the two school years, faculty and program directors provide on-line support and occasional site visits.

## The Master of Education

Degree Requirements	
Courses	37 credits 41 credits (elementary focus)
Total	37 credits 41 credits (elementary focus)
Other	Supervised teaching
	Teaching portfolio

The master of education (M.Ed.) program is available only to students enrolled in the Alliance for Catholic Education's Service Through Teaching program. Students in this program work toward licensure, consistent with the standards in the state of Indiana, in each of the following areas: middle childhood (elementary education), early adolescence (middle school), adolescence and young adulthood (high school), English language arts, social studies, science, mathematics, and foreign languages. Like most teacher accreditation programs at the master's level, content-area courses must be completed before entering the master's program, which provides education course work only.

A total of 37 (41 for elementary) credit hours of course work and teaching experience are required, with an overall grade point of at least 3.0. Half of the course work will occur in two summer sessions, with 10 to 12 credits earned in each.

For specific details regarding course requirements, consult the program handbook.

M.Ed students must complete two years of service in teaching with supervised teaching grades of not less than 3.0. The teaching portfolio is evaluated by both University faculty and master teachers, who provide recommendations for continued development. Students will acquire teaching practice both in South Bend-area elementary

and secondary schools and at an assigned Catholic school in the southern United States. Throughout the two years, supervision is accomplished by measuring students against professional performance indicators while students build a teaching portfolio documenting their progress in developing as a teacher.

## PEACE STUDIES

### Director of Doctoral Studies:

Asher Kaufman

### Director of the Master's Program:

Susan St. Ville

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## The Master of Arts

Degree Requirements	
Courses	36 credits
Total	42 credits
Other	Foreign language requirement
	Field experience or master's thesis

The interdisciplinary master of arts (M.A.) degree program in peace studies is a rigorous academic program offered through the Joan B. Kroc Institute for International Peace Studies. Students are expected to complete at least 36 credits of course work in pursuit of the M.A., and must select a professional track: conflict analysis and transformation; policy analysis and political change; or organizational management and leadership.

A key component of the Kroc M.A. program is the five-month field experience in which students integrate theories of peacebuilding with work in non-governmental organizations and other institutions concerned with conflict resolution, peace studies, economic development, human rights or justice. Only students who are unable to leave the United States because of visa or travel restrictions beyond their control are allowed to complete their field experience in the United States.

A small number of students choose to write a master's thesis instead of pursuing an international internship. These students remain on campus during both academic years and research and write a peace studies thesis under the supervision of a thesis director in their second year.

All students enroll in the Master's Colloquium on Effective Peacebuilding after returning from the field in their final semester. Conducted as a seminar, the colloquium provides the opportunity to reflect on the field experience in light of peace studies theory. Students work on their culminating master's projects as part of the colloquium.

## The Doctor of Philosophy

The Kroc Institute for International Peace Studies at the University of Notre Dame offers a Ph.D. in peace studies in partnership with Notre Dame's departments of history, political science, psychology, sociology, and theology. This program grows out of an acute awareness of the need for more rigorous interdisciplinary study of peace and war and for deeper understanding of how peacebuilding can effectively address political, ethnic, and religious violence throughout the world. Graduates of the Kroc Institute peace studies program will be fully cre-

dentialed in one of the five associated disciplines, plus be fully acquainted with the research questions and findings of interdisciplinary peace research.

### Ph.D. in History and Peace Studies

Degree Requirements	
Courses	48 credits
Total	96 credits
Other	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

The requirements for the Ph.D. in History and Peace Studies include: a minimum of 48 course credits; proficiency in English and one or two other languages (depending on the specialty within history); two history research seminar papers; a master's paper of publishable quality (not necessarily an official master's thesis); comprehensive exams in five areas; and a dissertation of original research.

For specific details regarding course requirements, consult the program handbook.

Students take five comprehensive exams, three in history and two in peace studies; alternately, one of the five exam fields may be a crossover field involving both disciplines and directed by a history professor who is a Kroc fellow. Of the primary history fields, two must be in the student's major area (United States, modern Europe, Latin America, or medieval), and the third will be created by the student in consultation with and approval of the two directors of graduate studies. At least one of the two peace studies fields will be based on one of the peace studies foundational courses.

### Ph.D. in Political Science and Peace Studies

Degree Requirements	
Courses	60 credits
Total	99 credits
Other	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

In this program, basic requirements include a minimum of 60 course credits; proficiency in English and one other language; a master's paper of publishable quality (although this would not necessarily be an official master's thesis); a comprehensive examination in two areas plus a third area of course work; and a dissertation of original research.

Students complete all existing regular political science requirements, take peace studies courses as the third area of specialization, plus three additional peace studies courses.

For specific details regarding course requirements, consult the program handbook.

### Ph.D. in Psychology and Peace Studies

Degree Requirements	
Courses	60 credits
Total	93 credits
Other	Foreign language requirement
	Candidacy examinations
	Master's thesis
	Doctoral dissertation

In this program, basic requirements normally include: a minimum of 60 course credits; proficiency in English and one other language; an empirical master's thesis; a comprehensive examination in developmental psychology

(or other mutually agreed upon field in the department); and a dissertation of original research.

For specific details regarding course requirements, consult the program handbook.

### Ph.D. in Sociology and Peace Studies

Degree Requirements	
Courses	57 credits
Total	96 credits
Other	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

Students must earn a minimum of 57 course credits; demonstrate proficiency in English and one other language; write a master's paper of publishable quality; pass comprehensive examinations in two specialty areas (one of which must be a substantive area in sociology—which does not include the methods and statistics area or the theory area); and write a dissertation of original research.

For specific details regarding course requirements, consult the program handbook.

### Ph.D. in Theology and Peace Studies

Degree Requirements	
Courses	42 credits
Total	96 credits
Other	Foreign language requirement
	Candidacy examinations
	Doctoral dissertation

The combined theology and peace studies program includes a course of integrated studies so that graduates are fully credentialed in both theology and

interdisciplinary peace research. The requirements for the Ph.D. include: a minimum of 42 course credits; and proficiency in two modern research languages (typically French and German) and one classical language (Latin or Greek).

For specific details regarding course requirements, consult the program handbook.

## Core Faculty

Scott Appleby, John M. Regan Jr. Director; Professor of History

Catherine Bolten, Assistant Professor of Anthropology and Peace Studies

David Cortright, Director of Policy Studies

Hal Culbertson, Executive Director

Larissa Fast, Assistant Professor of Conflict Resolution

Pamina Firchow, Associate Director of Doctoral Studies

Gary Goertz, Professor of Political Science and Peace Studies

Robert C. Johansen, Professor Emeritus of Political Science

Madhav Joshi, Research Assistant Professor, Associate Director of the Peace Accords Matrix

Emmanuel Katongole, Associate Professor of Theology and Peace Studies

Asher Kaufman, Director of the Ph.D. Program and Associate Professor of History and Peace Studies

John Paul Lederach, Professor of International Peacebuilding

George A. Lopez, Rev. Theodore M. Hesburgh, C.S.C., Professor of Peace Studies

Julie Macfarlane, Adjunct Professor of the Practice

Bernie Mayer, Adjunct Professor of the Practice

Erik Melander, Senior Research Fellow

Mary Ellen O'Connell, Research Professor of International Dispute Resolution

A. Rashied Omar, Research Scholar of Islamic Studies and Peacebuilding

Atalia Omer, Assistant Professor of Religion, Conflict, and Peace Studies

Daniel Philpott, Associate Professor of Political Science

Gerard F. Powers, Director of Catholic Peacebuilding Studies

Patrick Regan, Professor of Political Science and Peace Studies

Jason A. Springs, Assistant Professor of Religion, Ethics and Peace Studies

Susan M. St. Ville, Director of the Master's Program

Ernesto Verdeja, Assistant Professor of Political Science and Peace Studies

Peter Wallensteen, Richard G. Starmann Sr. Research Professor of Peace Studies

Web: <http://politicalscience.nd.edu>

The primary aim of the graduate program in political science is to train qualified candidates for research and teaching. The department offers five major subfields for the master of arts (M.A.) and doctor of philosophy (Ph.D.) degrees:

- American politics;
- comparative politics;
- constitutionalism, law, and politics;
- international relations;
- political theory.

## The Master of Arts

Degree Requirements	
Courses	30 credits
Total	30 credits
Other	Candidacy examinations
	Master's thesis (research only)

The Political Science Department does not normally admit students to the master of arts program; however, students do have the option to complete the requirements for a non-research or research master of arts (M.A.) degree along the way to the Ph.D.

To obtain the non-research M.A., students must complete a minimum of 30 hours in course credits and must pass a comprehensive written examination in their major field. A minimum of 12 hours of course work is required in the major field, and a minimum of nine in a second field.

For the research M.A., students must complete all of the non-research degree requirements and submit a written master's thesis.

## POLITICAL SCIENCE

### Chair:

Ruth Abbey

### Director of Graduate Studies:

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## The Doctor of Philosophy

Degree Requirements	
Courses	48 credits
Total	60 credits
Other	Candidacy examinations
	Foreign language requirement
	Doctoral dissertation

Ph.D. students are expected to complete at least 48 credit hours of coursework. For specific course and seminar requirements, consult the program handbook.

In addition, political science candidates must successfully pass a reading exam in one foreign language or two additional courses in quantitative methods (ESL students are exempted), and are expected to submit two papers to scholarly journals. A major grant application may substitute for one submission.

During their time in residency, students should expect to provide four semesters of service to the program, usually as a teaching assistant.

To complete the degree requirements, each student must defend and submit a doctoral dissertation.

## Teaching and Research Faculty

Ruth Abbey, John Cardinal O'Hara, C.S.C. Associate Professor and Interim Chair

Peri E. Arnold, Professor

Sotirios A. Barber, Professor

Jaimie Bleck, Assistant Professor

Eileen M. Hunt Botting, Associate Professor

David E. Campbell, Professor

Michael Coppedge, Professor

Darren Davis, Professor

Patrick Deneen, Associate Professor

Michael Desch, Professor and Chair

Rev. Robert Dowd, C.S.C., Assistant Professor

Amitava Krishna Dutt, Professor

Gary Goertz, Professor

Andrew Gould, Associate Professor

Alexandra Guisinger, Assistant Professor

Tin-bor Victoria Hui, Associate Professor

Debra Javeline, Associate Professor

Robert Johansen, Professor Emeritus

Mary M. Keys, Associate Professor

Geoffrey C. Layman, Professor and Director of Graduate Studies

Dan Lindley, Associate Professor

George A. Lopez, Theodore M. Hesburgh, C.S.C. Chair in Peace Studies and Professor

Scott Mainwaring, Eugene Conley Professor of Political Science and Director of the Kellogg Institute for International Studies

A. James McAdams, William M. Scholl Professor of International Affairs

Rev. Sean McGraw, C.S.C., Assistant Professor

Peter R. Moody, Jr., Professor

Vincent Phillip Munoz, Associate Professor

Monika Nalepa, Assistant Professor

David Nickerson, Associate Professor

Dianne Pinderhughes, President's Distinguished Professor and Full Professor in the Department of Africana Studies

Daniel Philpott, Associate Professor

Emilia Powell, Assistant Professor

Benjamin Radcliff, Professor

Ricardo Ramirez, Associate Professor

Patrick Regan, Professor

John Roos, Professor Emeritus

Sebastian Rosato, Associate Professor

Rev. Timothy R. Scully, C.S.C., Professor

Naunihal Singh, Assistant Professor

Guillermo Trejo, Associate Professor

Dana Villa, Packey J. Dee Professor of Political Theory

Ernesto Verdeja, Assistant Professor

Christina Wolbrecht, Associate Professor

Catherine H. Zuckert, Nancy Reeves Dreux Professor

Michael P. Zuckert, Nancy Reeves Dreux Professor

## PSYCHOLOGY

### Chair:

Daniel K. Lapsley

### Director of Graduate Studies:

James Brockmole

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 Web: <http://www.nd.edu/~psych>

The graduate program in psychology is divided into doctoral graduate program areas: cognition, brain, and behavior; clinical; counseling; developmental; and quantitative. The counseling and clinical programs are accredited by the American Psychological Association (APA).

## The Master of Arts

Degree Requirements	
Courses	24 credits
Total	30 credits
Other	Candidacy examinations
	Master's thesis

The graduate program in psychology is primarily oriented toward the doctoral degree and consists of two stages. The first requires a minimum of 24 hours of course work and completing and defending a research-based master's thesis.

For specific course requirements, consult the program's handbook.

## The Doctor of Philosophy

Degree Requirements	
Courses	30 credits
Total	60 credits
Other	Candidacy examinations
	Practicum (as appropriate)
	Doctoral dissertation
	Internship (counseling and clinical programs)

The second stage of the program ordinarily involves additional course work, research activity, practicum (where

appropriate), and preparation for the doctoral preliminary examinations, followed by work on the dissertation and internship (in the counseling and clinical programs).

To fulfill the doctoral degree requirements, students must complete a total of 55 or more credit hours. Preliminary examinations and the oral dissertation proposal defense are ordinarily completed during the third or fourth year.

To complete the requirements for the Ph.D., students must defend and submit a doctoral dissertation. In the counseling and clinical programs, students are also required to complete an internship.

For additional details regarding courses and area-specific requirements, consult the program handbook.

## Teaching and Research Faculty

### Cognition, Brain, and Behavior Program

James R. Brockmole, Associate Professor and Director of Graduate Studies

Laura A. Carlson, Professor and Associate Dean for Professional Development in the Graduate School

Charles R. Crowell, Associate Professor

Kathleen M. Eberhard, Associate Professor and Director of the Cognition, Brain, and Behavior Program

Bradley S. Gibson, Associate Professor

Jill Lany, Assistant Professor

Nicole M. McNeil, Associate Professor

Gabriel A. Radvansky, Professor

Michelle M. Wirth, Assistant Professor

### Clinical Program

Thomas G. Burish, Professor and Provost

Lee Anna Clark, the William J. & Dorothy K. O'Neill Professor in Psychology

Joshua J. Diehl, the William J. Shaw Center for Children and Families Assistant Professor of Psychology

Gerald J. Haefel, Associate Professor

George S. Howard, Professor, and Fellow in the Joan B. Kroc Institute for International Peace Studies

Anita E. Kelly, Professor

Thomas V. Merluzzi, Professor and Director of the Institute for Scholarship in the Liberal Arts

Scott M. Monroe, the William K. Warren Foundation Professor of Psychology and Director of Clinical Training

Irene J. Kim Park, Assistant Professor

Jessica Payne, Assistant Professor and the Nancy O'Neill Collegiate Chair in Psychology

Donald Pope-Davis, Vice President and Associate Provost, Professor of Psychology, Fellow in the Center for Social Concerns, and Fellow in the Institute for Educational Initiatives

Anne D. Simmons, Professor

David A. Smith, Professor

Kristin Valentino, the William J. Shaw Center for Children and Families Assistant Professor of Psychology

David Watson, the Andrew J. McKenna Family Professor of Psychology

**Developmental Program**

Cindy S. Bergeman, Professor

John G. Borkowski, the McKenna Family Professor of Psychology and Fellow in the Institute for Educational Initiatives

Julia M. Braungart-Rieker, Professor and Mary Hesburgh Flaherty and James F. Flaherty Collegiate Chair, Director for Center for Children and Families

Mark Cummings, Professor and the Notre Dame Chair in Psychology, and Fellow in the Joan B. Kroc Institute for International Peace Studies

Jeanne D. Day, Professor

Joshua J. Diehl, the William J. Shaw Center for Children and Families Assistant Professor of Psychology

Dawn M. Gondoli, Associate Professor and Director of the Developmental Program

Jill Lany, Assistant Professor

Daniel K. Lapsley, Professor and Department Chair, and Fellow of the Institute for Educational Initiatives and of the Center for Social Concerns

Nicole M. McNeil, Associate Professor

Darcia Narváez, Professor and Fellow of the Institute for Educational Initiatives, Institute of Latino Studies, the John J. Reilly Center for Science, Technology and Values, and of the Joan B. Kroc Institute for International Peace Studies

Julianne C. Turner, Associate Professor and Concurrent Associate Professor in the Institute for Educational Initiatives

Kristin Valentino, the William J. Shaw Center for Children and Families Assistant Professor of Psychology

Thomas L. Whitman, Professor Emeritus

**Quantitative Program**

Ying (Alison) Cheng, Assistant Professor

Gitta H. Lubke, the John Cardinal O'Hara, C.S.C. Associate Professor of Psychology and Director of the Quantitative Program

Scott E. Maxwell, Professor and the Matthew A. Fitzsimons Chair

Lijuan (Peggy) Wang, Assistant Professor

Ke-Hai Yuan, Professor

Guangjian Zhang, Assistant Professor

**SOCIOLOGY****Chair:**

Rory McVeigh

**Director of Graduate Studies:**

William Carbonaro

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**The Master of Arts**

Degree Requirements	
Courses	24 credits
Total	30 credits
Other	Candidacy examinations

**Degree Requirements**

Master's thesis
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The master of arts (M.A.) degree requires 30 hours of credit, of which six credit hours may be earned for the master's thesis. All students must complete and defend a research thesis for the master's degree.

For specific details regarding course and candidacy requirements, consult the program handbook.

**The Doctor of Philosophy****Degree Requirements**

Courses	35 credits
Total	60 credits
Other	Candidacy examinations
	Doctoral dissertation

The doctoral program normally occupies six years of full-time work for students with the bachelor's degree. Core requirements must be fulfilled in the first two years, according to scheduled sequencing. It is expected that the student will have completed all but the dissertation requirement by the conclusion of the fourth year of graduate study.

To fulfill the training and research requirements, each candidate must select two specialty areas and pass a comprehensive examination in each.

**Teaching and Research Faculty**

Joan Aldous, William R. Kenan Professor of Sociology

Megan Andrew, Assistant Professor

SOCIOLOGY
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<p>Mark Berends, Professor and Director of the Center for Research on Educational Opportunity</p> <p>Kraig Beyerlein, Assistant Professor</p> <p>Jorge A. Bustamante, Eugene Conley Professor of Sociology</p> <p>William J. Carbonaro, Director of Graduate Studies and Associate Professor</p> <p>Gilberto Cardenas, Professor, Assistant Provost and Director of the Institute for Latino Studies</p> <p>Kevin J. Christiano, Associate Professor</p> <p>Jessica Collett, Associate Professor</p> <p>Larissa Fast, Assistant Professor</p> <p>Robert Fishman, Professor</p> <p>David S. Hachen, Jr., Associate Professor</p> <p>Maureen Hallinan, the William P. and Hazel B. White Professor of Sociology</p> <p>Eugene Halton, Professor</p> <p>Sean Kelly, Assistant Professor</p> <p>Mary Ellen Konieczny, Assistant Professor</p> <p>Amy Langenkamp, Assistant Professor</p> <p>Omar Lizardo, Associate Professor</p> <p>Elizabeth McClintock, Assistant Professor</p> <p>Erin McDonnell, Assistant Professor</p> <p>Terence McDonnell, Assistant Professor</p> <p>Rory M. McVeigh, Chair and Professor</p> <p>Daniel J. Myers, Professor and Associate Provost for Faculty Affairs</p>	<p>David Sikkink, Associate Professor</p> <p>Christian Smith, Professor and Director, Center for the Study of Religion and Society</p> <p>Lynette Spillman, Associate Professor</p> <p>Jason Springs, Assistant Professor</p> <p>Erika M. Summers-Effler, Associate Professor</p> <p>J. Samuel Valenzuela, Professor</p> <p>Andrew J. Weigert, Professor</p> <p>Michael R. Welch, Professor</p> <p>Richard Williams, Associate Professor</p>
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# APPENDIX: GRADUATE SCHOOL POLICIES (FULL TEXT)

## CHILDBIRTH AND ADOPTION ACCOMMODATION POLICY

### Rationale

The following policy is intended to assist graduate students who are new parents. It is a supplement to the six week medical separation policy. Unlike the medical separation policy that covers any medical condition, this accommodation policy addresses a single set of circumstances: new parenthood. It is not a leave of absence; it is an accommodation. Students maintain their standing as students and are eligible for financial support.

Departments are encouraged to work out specific arrangements with students, on a case-by-case basis, within the broad framework of this policy.

### Eligibility

All full-time students in good academic standing who are primary and full-time caregivers of a newborn child or a child less than 5 years old newly placed in the home are eligible. Students must have completed one semester and have been registered and enrolled for at least another semester prior to the request. Students may make use of the policy up to two times provided that at least one semester of full-time enrollment occurs between requests. Parents who are not the primary and full-time caregiver may apply for a leave of absence,

but are not eligible for accommodation.

### Accommodation in Comparison to Leave

This accommodation is intended to provide relief from full-time responsibilities while providing continuing financial support. It differs from a leave of absence in three ways.

First, in a leave of absence students are relieved of all responsibilities. If a student wishes to devote **full-time** care to a newborn or a newly adopted child, the student should request a leave of absence. Under this accommodation, students are relieved of full-time graduate studies/duties (such as teaching and research), of official academic exams (e.g., oral candidacy exams, master's comprehensives, etc), and of coursework deadlines for **one semester** (16 weeks) during or immediately following the semester in which the birth or adoption occurs.<sup>1</sup> The choice of the semester is the student's. Students are expected to register and enroll full time and to remain engaged, if at a reduced level. Departments are encouraged to be as flexible as possible with the student seeking accommodation. This student's assignments should allow for maximum flexibility in his/her schedule during the first 6 weeks after the child arrives. The amount of engagement and reduction in work-

1. Students may take incompletes in courses or take a reduced course load; departments may still define these students as full-time, despite the credit hour reduction.

load during the entire accommodation period (both prior to and after the birth or adoption of a child) should be specified **in writing** prior to the onset of the accommodation period.

*This agreement should then be approved and signed by the student, the student's adviser, the departmental DGS and the chair or the graduate studies committee, and sent to the associate dean of students in the Graduate School for review. In the event that the student and department cannot reach a decision about an appropriate workload, the associate dean of students in the Graduate School should be consulted. The details of the agreement may be re-assessed and revised after childbirth or adoption.* Accommodated students should submit a brief written progress report to their advisers at the end of the accommodation period.

Second, a leave of absence stops the student's eligibility clock; the accommodation extends it. In the case of a leave, a student still has eight years to fulfill all requirements and must meet all of the normal program and Graduate School deadlines. In the case of accommodation the student's academic eligibility clock is extended by a semester, effectively adding a semester to the student's eligible time to meet all degree requirements.

Third, students who elect to take a leave of absence forego financial support from the University. Students who elect to take accommodation will continue to receive financial support

(see below) and the health insurance subsidy.

If, after the end of the accommodation period, the student wishes to have more time, he/she can apply for a leave of absence. The clock will stop, but so will funding. Students on leave may still enroll in the health insurance plan at their own expense.

## Funding

Students who are fully-funded and who have not yet completed their 5th year of study will continue to be supported financially. They will continue to receive a stipend at the same level for the length of the accommodation (see below for possible exceptions), receive a tuition scholarship, and receive the health insurance subsidy from the Graduate School. Terminal master's students, and students who have completed their 5th year of study, are eligible for the accommodation only, not for funding under this policy. Departments and advisers may provide funding in these cases if there are available resources.

There are two important limits: the total number of years of funding will not be extended and funding is for the academic year only.

- Teaching assistants will be relieved of all teaching duties.<sup>2</sup> As stated above, they must continue to be intellectually engaged in the activities of the department and their research. Details of this engagement should be worked out in writing between the student and the department prior to the start of the accommodation.
- Students on research grants who wish to continue to receive full

funding must follow the following guidelines. If the student is funded by a grant, the level of support is determined by the granting agency. If the student is expected to devote 50% or 75% of his/her former working hours to his/her research, the grant will pay 50% or 75% of her former stipend, assuming he/she works at full capacity during those reduced hours. The Graduate School will make up the difference between what the grant pays and the former stipend, up to 50% of the former stipend. If the grant funding is reduced below 50%, the Graduate School will still pay 50%.

Details of the final arrangement should be worked out in writing between the student and the department prior to the start of the accommodation.

- If a student is funded by an external fellowship, the level of support is determined by the foundation. If the fellowship is reduced or eliminated as a result of a new child, the Graduate School will fund up to 50% of the student's former stipend under the fellowship. Questions should be directed to the Graduate School.

Parental relief cannot be combined with other funding.

**Notification:** Eligible students must notify their adviser, director of graduate studies and the associate dean of students in the Graduate School of their intent to use the accommodation policy at least 60 days prior to the expected date of childbirth or adoption. A form is available on the Graduate School website for this purpose.

## POLICY FOR PREGNANT GRADUATE STUDENTS IN LABS

Exposure to certain chemicals, biological agents and radiation has proven harmful to fetuses, especially in the first three months. For those pregnant graduate students whose research requires them to be present in laboratories where there is a potential biological, chemical or radiation risk to her unborn child, the Graduate School strongly recommends that they immediately inform their advisers of their pregnancy, and then contact the Office of Risk Management. This Office is dedicated to providing professional advice in the areas of safety, occupational health, environmental protection and risk management. Safety professionals can advise the student (and the adviser) about the effects of harmful materials on the development of the fetus, particularly in the critical first three months, and recommend that the woman avoid the laboratory for a certain period of time.

## STUDENT PROCEDURE OVERVIEWS

### Defense of the Doctoral Dissertation

The purpose of a dissertation defense is to offer the doctoral candidate an opportunity to support the claims, procedures, and results of the dissertation. The defense is the traditional instrument that enables the candidate to explore with the committee the dissertation's substantive and methodological force. In this way, the candidate and the committee confirm

2. Those students for whom serving as a TA is a requirement must fulfill the requirement in a later semester.

the candidate's scholarly grasp of the chosen research area and original contribution to knowledge.

Dissertation defenses will not be allowed to proceed until all reader's reports have been received in the Graduate School at least two business days before the defense takes place.

Prior to the defense, committees should review departmental regulations for the conduct of the exam, the process of the exam, and voting procedures. Before the exam begins, they should inform the candidate of the process of the defense. After completion of the examination, the candidate should be asked to leave the room. Discussion of the candidate's performance should then commence, with the committee ultimately voting on whether that performance merits a passing or failing grade. On a board of three, two votes are required to pass. On a board of four, three votes are required to pass. If a department chooses to have five members, four votes are required to pass. A written report of the results of the voting is sent immediately to the Graduate School by a member of the committee, normally the adviser.

In case of failure, the department chair, on the recommendation of a majority of the examiners, may authorize a retake of the defense if this is permitted by departmental regulations. An authorization for retake must be approved by the Graduate School. A second failure results in forfeiture of degree eligibility and is recorded on the candidate's permanent record.

A candidate has the right to appeal the result of the defense to the Dean of the Graduate School on procedural grounds only, not on its substance or on his/her performance. If a retake is granted, an outside monitor appointed by the Graduate School must be present.

## Oral Candidacy Examination

The oral candidacy examination may serve several purposes. In part, it tests the candidate's readiness for advanced research in the more specialized area(s) of his/her field. It may also be comprehensive. Successful passage indicates that, in the judgment of the committee, the candidate has an adequate knowledge of the basic literature, problems, and methods of his/her field to proceed to a dissertation. If the proposal defense is part of the oral exam, it should be a defense of a proposal and not of a completed dissertation.

Prior to the examination, committees should review departmental regulations for the conduct of the exam, the process of the exam, and voting procedures. Before the exam begins, they should inform the candidate of the process of the exam. After completion of the examination, the candidate should be asked to leave the room. Discussion of the candidate's performance should then commence, with the committee ultimately voting on whether that performance merits a passing or failing grade. On a board of three, two votes are required to pass. On a board of four, three votes are required to pass. If a department chooses to have five members, four votes are required to pass. A written report of the results of the voting is sent immediately to the Graduate School by a member of the committee, normally the adviser.

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