

# SAINT LOUIS UNIVERSITY

## CATALOG GRADUATE EDUCATION 2015 - 2016

# TABLE OF CONTENTS

---

*Click on links below to direct you to the appropriate section*

<b>SAINT LOUIS UNIVERSITY</b> .....	<b>1</b>
Table Of Contents.....	2
<b>General Information</b> .....	<b>3</b>
Introduction.....	3
History .....	3
Mission.....	4
Accreditation .....	4
Objectives.....	4
Organization and Governance .....	4
Graduate Education Contacts.....	5
<b>Campus Resources and Services</b> .....	<b>7</b>
Academic Support Resources.....	7
Financial Resources.....	10
Student Life and Services .....	12
<b>Academic Policies and Procedures</b> .....	<b>15</b>
General Policies .....	15
Academic Standards.....	18
Admission Policies .....	22
Matriculation Policies .....	24
Registration.....	26
Graduation Requirements and Policies .....	29
Consortiums .....	34
Dual-Degree Programs.....	35
Certificate Programs .....	36
Minor in Research Methodology.....	36
<b>Curricula and Courses</b> .....	<b>37</b>
Introduction.....	37
College of Arts and Sciences .....	38
School Of Law .....	89
School Of Medicine.....	92
John Cook School Of Business .....	102
Parks College of Engineering, Aviation, and Technology .....	109
School of Nursing .....	115
Doisy College of Health Sciences.....	123
College for Public Health and Social Justice .....	141
School for Professional Studies .....	163
School of Education .....	169
Albert Gnaegi Center For Health Care Ethics .....	175
Center For Advanced Dental Education (CADE) .....	180
Center For Sustainability .....	184
Center For Outcomes Research (SLUCOR) .....	188

# General Information

## INTRODUCTION

---

The programs of Saint Louis University are open to all without regard to race, color, sex, age, national origin, religion, sexual orientation, disability, or veteran status. All University policies, practices, and procedures are administered in a manner consistent with its Catholic and Jesuit identity. Programs and activities located in facilities not easily accessible to disabled persons will be made accessible through relocation or other means upon request. For general information, call 314.977.2222.

The 504 and ADA Coordinator, the University's Affirmative Action Officer, is located in DuBourg Hall, Room 36; Telephone 314.977.3838.

Visit the [website](#) of the Office of Institutional Equity and Diversity for information on Saint Louis University's non-discrimination and equal opportunity policies. The office reviews complaints that allege violation of Saint Louis University's policies.

This catalog is for information purposes and does not constitute a contract. Although the Catalog was prepared with the latest information available at the time of publication, the statements concerning fees, courses, admission and graduation requirements, general regulations and curricula are subject to change.

Please refer to your college, school, center or program handbook for additional information, policies and procedures of your program.

## HISTORY

---

Saint Louis University, a private university under Catholic and Jesuit auspices, traces its history to the foundation of the Saint Louis Academy by the Right Reverend Louis William DuBourg, Bishop of Louisiana, in 1818. At Bishop DuBourg's request, the Society of Jesus assumed the direction of the school in 1827. This small Jesuit College received its charter as Saint Louis University in 1832, becoming the first university established west of the Mississippi River. The University settled at its present site on Grand Boulevard in 1888.

Saint Louis University has two campuses: The St. Louis, Missouri campus and the Madrid, Spain campus. The St. Louis campus is physically divided into the Frost Campus, located in the Grand Avenue midtown area, and the Medical Center, located one mile to the south.

Saint Louis University is classified as a Research University: High Research Activity by the Carnegie Foundation for the Advancement of Teaching. The University enrolls more than 14,000 full- and part-time students including a significant number from countries around the world.

The University is presently composed of the following colleges, schools and centers offering post-baccalaureate programs.

- College of Arts and Sciences (established in 1818)
- School of Law (1842)
- College of Philosophy and Letters (1898)
- School of Medicine (1903)
- John Cook School of Business (1910)
- Parks College of Engineering, Aviation, and Technology (1927)
- School of Nursing (1928)
- Madrid, Spain Campus (1967)
- Doisy College of Health Sciences (1979)
- College for Public Health and Social Justice (1991)
- School for Professional Studies (1996)
- School of Education (1998)
- Albert Gnaegi Center for Health Care Ethics (1979)
- Center for Advanced Dental Education (1994)
- Center for Sustainability (2010)
- Center for Outcomes Research (SLUCOR) (2012)

# MISSION

---

The Mission of Saint Louis University's Graduate Education is to advance the frontiers of knowledge and technical expertise and to prepare students to make their own contributions to such advances in their disciplines and professions by helping them carry out their responsibilities in an ethical and professional manner.

In realizing this mission, Graduate Education at Saint Louis University is committed to specific goals and objectives:

- To articulate a vision of excellence for the post-baccalaureate community
- To bring an institution-wide perspective to all post-baccalaureate endeavors
- To maintain high academic standards across all academic disciplines
- To promote the ideals of a Catholic, Jesuit education
- To promote the research mission of the University
- To enhance the community of scholars among both post-baccalaureate students and faculty
- To develop strategies for post-baccalaureate education that contribute to and enhance undergraduate education
- To serve as an advocate for post-baccalaureate education
- To emphasize the institution-wide importance of educating future college, university and high school teachers, and professionals in a variety of fields
- To serve as an advocate for issues and constituencies critical to the success of post-baccalaureate education
- To support and further the non-academic interests and needs of post-baccalaureate students

# ACCREDITATION

---

Saint Louis University is accredited by the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools (NCA), and has been continuously accredited since 1916. Inquiries on accreditation may be made to the Higher Learning Commission of the North Central Association of Colleges and Schools, 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1411, (800) 621-7440

Some colleges, schools and programs have also attained individual accreditation from professional disciplinary associations.

# OBJECTIVES

---

In keeping with its mission as a Jesuit institution dedicated to striving for excellence under the inspiration of the Catholic faith, Saint Louis University seeks to establish a collegial environment in which those of diverse cultural backgrounds and religious beliefs can participate in the community in a spirit of cooperation and mutual respect.

Based on the conception of the person as a free and responsible agent capable of making a difference for good or ill in the world, the University directs its educational efforts to help students develop as critically reflective and socially responsible persons, capable of exercising leadership in advancing the cause of human good in the world, through service to others.

The University's commitment to academic excellence is evident in its post-baccalaureate programs, which have a twofold purpose: to advance the frontiers of knowledge and technical expertise in their disciplines and professions, and to prepare students to make their own contributions to such advancement by helping them carry out their responsibilities in an ethical and professional manner.

# ORGANIZATION AND GOVERNANCE

---

The Associate Provost for Graduate Education coordinates university-wide post-baccalaureate activities, including candidacy and graduation. Deans and Directors are responsible for the post-baccalaureate programs that fall under their particular school, college or center. In most units, an Associate Dean or Director for Graduate Education or Center Director is charged with overseeing the day-to-day operations of their respective post-baccalaureate programs. Finally, a Graduate Academic Affairs Committee (GAAC) is concerned with the development, improvement, quality control, and policy of post-baccalaureate education at Saint Louis University.

# GRADUATE EDUCATION CONTACTS

---

Collins O. Airhihenuwa, Ph.D., M.P.H.  
*Dean (Spring 2016), College for Public Health & Social Justice*  
publichealth@slu.edu, 314.977.2745

Philip O. Alderson, M.D.  
*Dean, Vice President, Medical Affairs, School of Medicine*  
palderso@slu.edu, 314.977.9801

Mark Arnold, Ph.D.  
*Senior Associate Dean, John Cook School of Business*  
cvanslyk@slu.edu, 314.977.2476

Janet Barber, Ph.D.  
*Associate Dean, College of Arts and Sciences*  
barberjc@slu.edu, 314.977.2973

Jon Baris, J.D.  
*Assistant Dean for Student Services, School of Law*  
jbaris@slu.edu, 314.977.3675

Diana Bartelli Carlin, Ph.D.  
*Associate Provost for Graduate & Global Education (Fall 2015)*  
dcarlin1@slu.edu, 314.977.3718

Jeffrey Bishop, M.D., Ph.D.  
*Director of the Gnaegi Center for Health Care Ethics*  
jbisho12@slu.edu, 314.977.1060

Steve Buckner, Ph.D.  
*Interim Dean, Parks College of Engineering, Aviation and Technology*  
buckner@slu.edu, 314.977.2850

Thomas E. Burroughs, Ph.D.  
*Executive Director for the Center for Outcomes Research (SLUCOR)*  
burroute@slu.edu, 314.977.9420

Christopher Duncan, Ph.D.  
*Dean, College of Arts and Sciences*  
cmduncan@slu.edu, 314.977.2244

Beth Winfrey Freeburg, Ph.D.  
*Dean, School for Professional Studies*  
freeburgew@slu.edu, 314.977.2634

Elizabeth Gockel-Blessing, Ph.D.  
*Associate Dean for Graduate Education, Doisy College of Health Sciences*  
eblessin@slu.edu, 314.977.8691

John F. Hatton, D.M.D.,  
*Executive Director of the Center for Advanced Dental Education*  
hattonjf@slu.edu, 314.977.8353

Mark Higgins, Ph.D.  
*Dean, John Cook School of Business*  
markhiggins@slu.edu, 314.977.3833

Riyadh Hindi, Ph.D., P. Eng.  
*Director of Graduate Programs, Parks College of Engineering, Aviation and Technology*  
rhindi@slu.edu, 314.977.8547

Leslie Hinyard, Ph.D.  
*Associate Director for Academic Affairs, SLUCOR*  
hinyardl@slu.edu, 314.977.9473

Donald Linhorst, Ph.D.  
*Interim Dean (Fall 2015), College for Public Health & Social Justice*  
linhorsd@slu.edu, 314.977.2745

Teri A. Murray, Ph.D., R.N.  
*Dean, School of Nursing*  
tmurray4@slu.edu, 314.977.8909

Elizabeth Pendo, Ph.D.  
*Associate Dean for Academic Affairs, School of Law*  
ependo@slu.edu, 314.977.2767

Michal Rozbicki, Ph.D.  
*Director of the Center for Intercultural Studies*  
rozbicmj@slu.edu, 314.977.2910

Ann Rule, Ph.D.  
*Interim Dean, School of Education*  
ruleam@slu.edu, 314.977.2479

Erica Salter, Ph.D.  
*Director of the Ph.D. Program, Gnaegi Center for Health Care Ethics*  
esalter@slu.edu, 314.977.1060

Willis Samson, Ph.D.  
*Associate Dean of Graduate Education, School of Medicine*  
samsonwk@slu.edu, 314.977.8677

Darcell Scharff, Ph.D.  
*Associate Dean for Academic Affairs, College for Public Health & Social Justice*  
scharffd@slu.edu, 314.977.4009

Joanne K. Schneider, Ph.D., R.N.  
*Ph.D. Program Director, School of Nursing*  
schneijk@slu.edu, 314.977.8937

Mario Schootman, Ph.D.  
*Associate Dean for Research, School of Public Health and Social Justice*  
schootm@slu.edu, 314.977.8133

Joanne L. Thanavaro, Ph.D.  
*Associate Dean for Graduate Education, School of Nursing*  
jthanava@slu.edu, 314.977.8908

Terry Tomazic, Ph.D.  
*Interim Associate Provost for Graduate Education*  
tomazictj@slu.edu, 314.977.2533

Paul Vita, Ph.D.  
*Academic Dean, Madrid Campus*  
*vitap@slu.edu, (+34) 91 554 5858*

Mardell Wilson, Ed.D., RD, LDN  
*Dean, Doisy College of Health Sciences*  
*ruebling@slu.edu, 314.977.8540*

Michael Wolff, J.D.  
*Dean, School of Law*  
*mwoff3@slu.edu, 314.977.2774*

John Wooschlager, Ph.D.  
*Executive Director of the Center for Sustainability*  
*jwoosch@slu.edu, 314.977.5152*

Alex Wulff, Ph.D.  
*Director, University Writing Services*  
*wulffam@slu.edu, 314.977.3484*

Hongxin (John) Zhao, Ph.D.  
*Director of Ph.D. Program, John Cook School of Business*  
*zhaox@slu.edu, 314.977.3834*

# Campus Resources and Services

## ACADEMIC SUPPORT RESOURCES

---

### Academic Support

Academic Support, a unit housed within the Student Success Center, strives to enhance the pursuit of lifelong learning, intellectual inquiry, and communication by fostering students' academic success and encouraging self-advocacy. While many services within Academic Support are targeted towards undergraduate learners, this unit assists post-baccalaureate students in the area(s) of academic coaching and tutoring for students in specific accelerated and/or professional programs (i.e. Physical Therapy, Occupational Therapy, Athletic Training and Accelerated Nursing).

### Bookstores

Bookstores serving the University are located in the Busch Student Center on the Frost Campus, in the School of Medicine Building (Schwitalla Hall) on the Medical Center, and in Padre Rubio Hall on the Madrid Campus. Each bookstore stocks required and recommended textbooks, general reading materials, study aids, school supplies, clothing, gift items, and snacks.

### Career Services

Career Services helps students and alumni explore meaningful careers over their lifetimes. They offer career counseling and career assessments to help students gain self-knowledge as it relates to the world of work. Career Services also helps students conduct an effective job search by critiquing resumes and cover letters, conducting mock interviews, helping students construct a job search plan, and teaching them how to use social media when searching for a job. They offer a variety of events throughout the academic year to connect students with employers, including their bi-annual Career and Graduate School Fair. CareerLink is the database that houses part-time and full-time jobs as well as on-campus jobs. All post-baccalaureate students are encouraged to connect with Career Services during their first year.

### Disability Services

Saint Louis University is committed to supporting students and providing educational experiences through the facilitation of academic accommodations and services.

Disability Services partners with students, faculty, academic departments and service providers to facilitate equal access to and the opportunity for all students to participate in University programs, services and experiences. We coordinate auxiliary aids and services to meet the needs of students with disabilities. Our goal is to create a safe and supportive campus community for students with disabilities. All inquiries about the availability of reasonable university-related accommodations are kept confidential, and should be addressed to Disability Services.

Students, faculty and staff are welcome to visit or contact us to receive information regarding services available, procedures, documentation, and best practices. Students with documented clinical or medical disabilities who anticipate needs for accommodations are encouraged to contact Disability Services at the earliest opportunity and must do so in order for the university to officially consider and recognize the need for reasonable accommodations.

All inquiries about the availability of reasonable university-related accommodations are kept confidential, and should be addressed to: [disability\\_services@slu.edu](mailto:disability_services@slu.edu), 314-977-3484, Fax: 314-977-3486, Busch Student Center, Suite 331, 20 North Grand Boulevard, St. Louis, MO 63103

Information about accommodations available for Madrid Campus students with disabilities is available at: [counselingcenter-madrid@slu.edu](mailto:counselingcenter-madrid@slu.edu).

### English as a Second Language

The University offers programs that serve international students in their transition to the English language, North American culture, and higher education. SLU's English as a Second Language (ESL) program provides instruction at the high intermediate/advanced levels for students needing to improve their language skills in preparation for post-baccalaureate study.

In addition, the ESL program offers instruction in research and writing for post-baccalaureate students. The program also evaluates English-language proficiency of all international students new to the University and recommends appropriate English instruction or skill-building activities as needed to support an academic program.

## Instructional Technology

The Instructional Media Center, located in Xavier Hall Annex on the Frost Campus, provides the University with classroom presentation equipment, student video-viewing cubicles, distance-learning support, and assistance for the production of audio-visual instructional materials in a “do-it-yourself” laboratory.

The Instructional Technology Center, located in the Caroline building on the Medical Center, also offers self-service multimedia viewing and materials production to students and faculty.

## International Services, Office of

The Office of International Services has the goal of enriching the academic experience of the Saint Louis University campus in St. Louis and community through the promotion of a global perspective in the University’s education programs and through the development of international education and exchange opportunities.

Services provided through International Services include assistance with applications and admissions, advising on immigration/visa concerns, support services for international student and scholars, study abroad programs and international student/scholar advocacy. The Center’s services also include cultural and social activities and information on university policies and procedures. Orientation programs, the International Student Ambassador program, and the host family program ease the transition for international students and scholars arriving at Saint Louis University.

## Registrar, Office of the University

The Office of the University Registrar maintains the official academic records of Saint Louis University, including course registrations, grades, transcripts and diplomas. It also administers institutional academic policies and procedures related to academic records and classroom scheduling. In relation to the above functions the Office of the University Registrar processes all enrollment, degree and Veteran Administration certifications.

## The Reinert Center for Transformative Teaching and Learning

The Reinert Center for Transformative Teaching and Learning (CTTL), located on the second floor of Pius XII Library, was established on July 1, 1997, to reinforce Saint Louis University’s commitment to quality teaching.

The Center provides a supportive learning environment for post-baccalaureate students and faculty to develop their instructional skills and individual pedagogical styles. Among the services offered by the Center are one-on-one teaching consultations, classroom observations, workshops and seminars on various teaching topics, and a portfolio retreat for full-time faculty. In collaboration with Graduate Education, the Center conducts the annual Graduate Assistant Orientation in August. A major activity of the Center continues to be the Certificate in University Teaching Skills, designed to help post-baccalaureate students develop as educators. Selected mentors and the Center staff guide participants through the program.

## Student Success Center (SSC)

The Student Success Center, housed within the Division of Student Development, aids students in fulfilling their individual academic and career-related goals by providing intentional, developmentally appropriate opportunities for self-reflection and discovery, encouraging experiential learning, and supporting students' discernment in vocational, personal and academic choices. With two convenient locations on campus (Busch Student Center, 331 and the School of Nursing Building, 114), students are able to meet with experienced staff skilled in the areas of promoting academic and career related success.

The SSC provides services that support the entire student population and alumni as they progress toward academic and professional goals, including academic coaching, career services, academic advising, writing services, tutoring and Supplemental Instruction, disability services, and more. As educators focused on the holistic development of students, we integrate the core values - vocational discernment; commitment to lifelong learning; experiential learning; personal responsibility; meaningful relationships - into each student interaction and into the design of each service or program.



# University Libraries

Saint Louis University is home to four libraries: the Omer Poos Law Library, the Medical Center Library, the Pius XII Memorial Library, and the Vatican Film Library. A library also resides on the Madrid Campus. SLU-affiliated students and faculty have access to over 40,000 online databases, e-books, and other information in electronic format -- both within each library and remotely. Faculty, students, and staff can use all libraries. Each library has wireless access both within and outside each building.

## **Pius XII Memorial Library**

## **Medical Center Library**

## **Vincent C. Immel Law Library**

## **Madrid Library**

## **Special Collections**

The world renowned Vatican Film Library and the University Archives, both located in Pius Library, provide extensive resources for research and study. The Archives focus on University history, Catholic and Jesuit history as it relates to the University, and the role of the University in the life and development of the St. Louis region. The Vatican Microfilm Collection consists of copies of most of the manuscript collection of the Vatican Library in Rome. Other special collections are available, both online and in print.

# University Writing Services

University Writing Services is available to all students. We are committed to improving student writing through one-on-one peer consultation, online writing consultations, writing workshops, writing groups, and Dissertation Writing Retreats. We want to help improve the culture of writing on SLU's campus and to help students identify themselves as writers within their respective disciplines. It is recommended that students make an appointment to see a writing consultant early in their careers to discuss writing goals and writing strategies. Longer writing projects require more support and University Writing Services can help students build an individualized writing plan, or form a writing group. Once students have an approved dissertation topic, our Dissertation Writing Retreats are a great way to build positive writing habits while writing a section of your dissertation.

# FINANCIAL RESOURCES

---

## Fellowships, Assistantships, and Scholarships

Saint Louis University's fellowship, assistantship, and scholarship programs are made possible through University resources, grants, individual donors, corporations, foundations, and alumni.

All graduate students holding appointments as Fellows, Trainees or Graduate Assistants are considered full-time regardless of the number of credits enrolled (i.e., a student can have fewer than 6 credits while being fully funded). This means that a student does not have to use the full 18 or 21 credits allocated on an assistantship if the student does not need all of those credits. Dissertation, thesis, and project guidance credits can be divided into multiple semesters to reach the required credits. International students on assistantships, fellowships or traineeships do not have to be enrolled 6 credits to meet visa requirements.

### *Graduate Assistantships*

Saint Louis University in St. Louis offers three categories of post baccalaureate assistantships. The assistantships offered include a range of stipends, tuition scholarships, and health insurance coverage depending upon the degree level, the field of study, and the length of the appointment. Assistants spend at least 15 but no more than 20 hours per week performing assigned duties. All Assistants must be Classified post-baccalaureate students and remain in good standing. Assistants are expected to maintain a cumulative grade-point average of 3.00 during the academic year of appointment. If students' grade point average falls below a 3.00 during any portion of the academic year, the student must forfeit the assistantship until they are in good standing. Students may also be removed from an assistantship for failure to meet expectations or violating policies (university, federal, etc) prior to the end of a contract term. Assistants are to be evaluated annually before renewal of the assistantship. The evaluations are conducted based on school/college/center criteria.

Normally, the maximum number of years that students may hold an assistantship is two years while pursuing a Master's degree and five years in a Doctoral program, including summers. In the case of students pursuing the Master's and Doctoral degree in the same major field, eligibility for funding is also normally limited to five years. A third year of funding for the Master's (thesis option only) or a sixth year for the Doctoral degree is possible provided funding, through the department in question, is available and the criteria established by the respective college, school, or center are met. Appeals for extraordinary funding must be submitted by the student's department during the spring semester of the second year of funding for the Master's or of the fifth year for the Doctorate to the Associate Dean for Graduate Education or the equivalent administrator of the particular college, school, or center. Refer to the Graduate Assistant Handbook for complete information on all assistantship and fellowship policies.

A *Graduate Teaching Assistant* may work with students in small groups, lead class discussions, monitor examinations and grade papers, help prepare lectures, conduct laboratory sessions, or even be responsible for a course as the primary instructor. Under the close supervision of the faculty, teaching assistants concurrently develop teaching skills and a deeper understanding of the discipline.

A *Graduate Research Assistant* may be funded by the University or by an externally funded research project. In either case, students are assigned a range of duties such as library searches, field work, laboratory experiments, and preparation of grant applications and proposals so as to gain professional skills in research which complement post-baccalaureate education.

A *Graduate Assistant* performs other duties that are not primarily teaching or research. These duties may include clinical, advising, or administrative responsibilities that are inherently related to students' educational and career objectives.

All first-time Graduate Assistants must attend the Graduate Assistantship Orientation, which is offered before the beginning of the fall and spring semesters.

### *Madrid Campus Assistantships*

Madrid Campus graduate assistantships take the form of tuition discounts only. These assistantships enable students to gain experience in areas of professional responsibility related to their field of study.

In all cases, students on an assistantship are required to perform some form of duties for the department in which they are assigned. An assistantship is not an open scholarship.

### *Presidential Fellowships*

Presidential fellowship candidates are nominated by their programs and are awarded to newly accepted Master's or Doctoral level students who demonstrate outstanding scholastic achievement and potential for success in post-baccalaureate studies or to students in their first year of graduate studies. These fellowships include a stipend for an eleven-month appointment as well as stipends for 21 credits of tuition scholarship and health insurance. These are open to both domestic and international students.

## ***Diversity Fellowships***

Diversity Fellowships are designed to assist in achieving a more diverse population of students. This initiative is consistent with SLU's Mission Statement and with its commitment to making post-baccalaureate education more accessible to an inclusive variety of applicants. The Diversity Fellowship is awarded to a newly accepted Master's or Doctoral student who has demonstrated outstanding scholastic achievement and potential for success in a program or to students in their first year of graduate study. These fellowships include a stipend for an eleven-month appointment as well as stipends for 21 credits of tuition scholarship and health insurance. Only domestic students or students with permanent residency status are eligible.

## ***Dissertation Fellowships***

Dissertation Fellowships are awarded via annual competitions to selected Doctoral candidates. These fellowships include a stipend for an eleven-month appointment as well as stipends for 12 credits of tuition scholarship and health insurance.

## ***External Fellowships***

Individual departments or programs may receive funding from sources external to the University that includes support for students. For more information click [here](#). From such grants, students may be appointed to fellowships or traineeships consisting of stipends and full tuition scholarships with the academic approval of the Dean or Director of the particular college, school, or center. Trainees will be required to participate in training experiences as demanded by the grantor.

## ***Health Sciences Graduate Fellowships***

Awards made in the medical sciences include stipends and tuition scholarships. These appointments are usually made for one year, but satisfactory progress toward the degree may lead to reappointment.

## ***Private Source Fellowships***

Other fellowships are available from various agencies, professional organizations, foundations and corporations. Most of these awards may be taken by students to the institution where admission is granted. Listings of such awards may be found in a variety of reference materials published by, for example, the Superintendent of Documents, the National Science Foundation, the Department of Education, the Council of Graduate Schools in Washington, DC, the National Institutes of Health in Bethesda, MD, and Peterson's Guides in Princeton, NJ and on the Graduate Education website.

## ***Tuition Scholarships***

Many programs have a limited number of tuition scholarships available for students. These scholarships are frequently reserved for students with serious financial need.

## **Student Loans**

To learn about financial aid, visit the Student Financial Services website.

## ***Federal and Bank-Funded Loan Programs***

The Office of Student Financial Services administers federal and alternative bank-funded loan programs. Such programs are a cost-effective way to finance educational and living expenses. Most of these loans have low interest rates, and all defer repayment until after the completion of students' program of study. The Office of Student Financial Services encourages early application to better ensure funds availability for the academic terms for which the financial assistance is sought and the completion of FAFSA application.

## ***Short-Term Loan Fund***

The USX Foundation has provided a loan fund to particularly help students meet expenses at the beginning of an academic term, for travel to scholarly meetings, or to provide assistance in emergencies. The maximum amount to be borrowed is \$1,200, and, if repaid in 90 days, the loan is interest free. These funds are available on a first-come, first-serve basis to Classified students who are U.S. citizens or permanent residents and in academic good standing. Ordinarily, these loans will be granted a maximum of three times provided the previous ones have been repaid.

# STUDENT LIFE AND SERVICES

---

## Athletics

Saint Louis University is a member of the National Collegiate Athletic Association (NCAA Division 1) and a member of the Atlantic 10 (A-10) Conference. Tickets are necessary for men's and women's basketball, men's and women's soccer, and volleyball games. Free tickets and reduced price tickets are available for students.

## Billiken Bucks

Billiken Bucks is a debit account program that allows students to deposit money on account with Parking and Card Services. When purchases are made at campus dining facilities, coffee shops, convenience store, the bookstore and libraries students' ID cards are swiped, and the amount of the purchase is deducted from the account (Please note that the Billiken Bucks system is not available in Madrid).

## Campus Ministry

Campus Ministry focuses on promoting the religious life of the University through liturgies, special events, retreats, service opportunities and sacramental preparation. Several programs are dedicated to post-baccalaureate students.

The Frost Campus offices are located in the Eckelkamp Center for Campus Ministry, immediately northwest of the Clock Tower. Priests and ministers of several denominations are available for spiritual direction and pastoral counseling including marriage counseling. Madrid's Campus Ministry is housed in the Office of Student Life, Padre Rubio Hall.

## Dining Services

Saint Louis University contracts with an external vendor to provide University dining services to the staff, faculty, and students on the Frost Campus and Medical Center. Bannister House, located at 3824 Lindell, also provides breakfast, lunch, and catered meetings to faculty, staff, and alumni. The Frost Campus offers seven dining locations, and the Medical Center provides two locations. Fresh Gatherings, located in the Doisy College of Health Sciences building on the Medical Center, is run by the Department of Nutrition and Dietetics and offers locally grown, sustainable fare at a reasonable cost. Residence Dining Centers, located in Griesedieck, DeMattias, and Reinert Halls, feature an all-you-care-to-eat format.

University Dining Services offers a wide variety of flexible meal plans as an easy and convenient way to enjoy dining on campus. After purchasing a Meal Plan, the meal card may be used at any one of the three all-you-care-to-eat residence-dining locations and in the flex-dollars portion at any campus dining facility. The Commuter Plan is designed specifically for the non-residential students who want the convenience of an on-campus meal-plan.

Madrid's dining services, operated by Sodexo, includes the Unity cafeteria, located in San Ignacio Hall.

## Graduate Student Association

The Graduate Student Association (GSA) represents all full-time and part-time students at Saint Louis University enrolled in post-baccalaureate programs whose departments are in good standing with the GSA as per the GSA Bylaws. Elected officers govern the GSA, and its General Assembly consists of one representative from each degree program. In this way, the GSA is able to recognize interests and concerns across the wide spectrum of disciplines and serve as the focal point for the program's student concerns.

The GSA sponsors the annual Graduate Student Research Symposium that showcases student research, in paper and poster formats, throughout the University. Students may also apply for awards from the GSA for conference presentation and attendance, publication assistance, exam preparation, and summer research support towards thesis and dissertation preparation.

The GSA is affiliated with the National Association of Graduate and Professional Students (NAGPS) and is also a chartered member of the national graduate and professional student honor society, Alpha Epsilon Lambda. The Associate Provost for Graduate Education serves as the faculty advisor to the GSA.

## Housing and Residential Life

The Department of Housing and Residence Life (HRL) assists students in locating off-campus houses. The department maintains a listing of off-campus realtors, landlords and agencies within short distances of the University's campuses. Contact HRL at: [reslife@slu.edu](mailto:reslife@slu.edu). Graduate student apartments are located in Robert May Hall.

The Office of Student Life at the Madrid Campus facilitates the placement of students in university-sponsored host families and provides information for those seeking other housing opportunities in Madrid. Contact Madrid Housing at: [housing-madrid@slu.edu](mailto:housing-madrid@slu.edu)

## Parking and Campus Travel

Parking facilities are provided at the Frost Campus and Medical Center for a fee. The Billiken Bus Line provides transportation within and between the Frost Campus and Medical Center while classes are in session (the bus does not operate during the summer term). Vans and buses are available for private charter to students and faculty organizations.

## Recreational Facilities

The Simon Recreational Center located in Frost Campus features a wide range of sport and recreation facilities, services, and programs. In addition, there is another weight and cardiovascular room located on the lower level of Salus Center on the Medical Center. All currently enrolled students are automatically members.

Outdoor recreational facilities include a softball field, a sand-volleyball court, three swimming pools, and a multipurpose intramural field. The park area at Compton and Laclede features a gazebo, walking path, and a lake for the enjoyment of the Saint Louis University community.

The new Medical Center Stadium, completed in 2011, is the on-campus home of SLU's Division I track and field team.

In Madrid, the Office of Student Life offers students fitness and recreational activities, from American football to scuba diving, including club sports, in which students are integrated into Madrid's community athletic leagues.

## Student Health and Counseling Center

The Student Health and Counseling Center, located in Marchetti Towers East, is dedicated to maintaining and improving the overall health of the student community in St. Louis. This is accomplished through a broad spectrum of primary health services: medical, diagnostic, and clinical procedures, as well as a variety of educational and wellness programs. All Saint Louis University students are eligible to utilize the Student Health Center.

Should students need more extensive medical attention than can be given at the Student Health Center, they will be referred to SLUCare. Students in need of urgent care will be transported to Saint Louis University Hospital's Emergency Room, where a full range of medical services are available.

The Madrid Campus provides students registered for one or more credits with SANITAS Multi medical care during the length of each term. Coverage is extended to all cities and towns where SANITAS has duly authorized centers and/or participating physicians. When services included in the contract are not available in a given area, students are entitled to receive them in another area upon authorization from SANITAS.

Counseling services are available to all students in the Student Counseling Center also located in Marchetti Towers East. Counseling services are also available to all students in Madrid. Individual, group, and couples counseling are offered. Students may seek help for a variety of concerns including important decisions about personal life, dealing with depression or stress, coping with traumas such as divorce or death, physical, emotional or sexual abuse, date rape or rape, and dealing with alcohol, drug, or eating concerns. Counseling services are confidential.

## University Health Plan

Saint Louis University requires full-time students to have basic health insurance. Students may meet this requirement by either 1) enrolling in the University Health Plan (UHP), the student health plan sponsored by Saint Louis University, or 2) waiving the UHP coverage by providing proof of other (non-UHP) coverage.

Graduate Assistants and Fellowships may be offered health insurance coverage for the term of their contract provided through the University Health Plan (UHP), and are responsible for payments when not under contract. One should contact their department administrator to confirm the availability and extent of health insurance support. Students must enroll in the UHP to take advantage of

any health insurance support offered. All applicable charges for the UHP coverage will be billed to one's student account. Departmental support will be applied as a credit once UHP enrollment is completed.

Please note that departments provide health insurance for students but not for one's spouse nor dependent(s). As well, health coverage support may be offered for only portion of a semester or academic year in which one is required to carry health insurance coverage. Students are responsible for UHP charges remaining after departmental support is credited.

Aetna Student Health assists with administration of the UHP. UHP enrollment and waiving may be completed through the Aetna website.

Additional details regarding the UHP can be found at the UHP website.

Students at the Madrid Campus are not covered under the UHP, nor are they charged for coverage. The Madrid Campus provides students registered for one or more credits with SANITAS medical care during the length of each term. Those registered in 0-credit courses should arrange for health insurance with the Finance Office in Madrid.

# Academic Policies and Procedures

## GENERAL POLICIES

---

Students must become familiar with the regulations of the college, school, center, department, and program in which they are enrolled. Students must accept responsibility for compliance with these regulations and for the consequences associated with noncompliance.

The University reserves the right to modify policies at any time to conform to changes in professional practice.

### Categories of Students

**Classified** students have been admitted and matriculated through their particular college, school, or center to pursue advanced degrees and are advised by academic departments or their equivalents.

**Unclassified** students are not formally pursuing a graduate degree. The unclassified status is appropriate for students who (1) take prerequisites or enhance academic potential before making an application for Classified status; who (2) decide to enroll too late to initiate a degree seeking application; who (3) pursue a graduate degree elsewhere and plan to transfer SLU credits into programs at their home institutions; or who (4) want to explore graduate courses for personal growth, career advancement, or to determine interest in graduate education. In order to be admitted as an unclassified student, the student must qualify to take courses through a review by the program(s). Persons who are not United States citizens, permanent residents or refugees will not be admitted to unclassified status.

**Probationary** students are applicants for Classified admission who are temporarily assigned to this status because of deficits in their academic backgrounds. Under some circumstances it can be used for students with GPAs under 3.0 who are close to the required GPA or for students who have been out of school for an extended period of time but have other indicators of potential success. Time in Probationary status may not exceed twelve credits or one calendar year. Once students have advanced to Classified status, they may petition that coursework completed while in Probationary status, exclusive of eliminating any prerequisite deficiencies, may be accepted toward partial fulfillment of degree requirements. Students must receive permission from the program to take courses and consult with the program regarding courses to take. A student may not take more than 6 hours at the master's level and 9 hours at the doctoral level as an unclassified student. These are the maximum number of hours that will count toward a degree should the student later decide to pursue one. Students admitted under Probationary status are not eligible for University assistantships or fellowships. This option is not available for international students.

**Conditional Classified** students are informally admitted, which permits them to initiate coursework prior to full approval of Classified status. Students are classified as Conditional when a required document which would complete the Classified application is missing. Ordinarily, students may remain in Conditional status for only one academic term. The coursework completed during that term may subsequently apply toward a degree. Students admitted conditionally may be offered an assistantship or fellowship but they must be advanced to classified status prior to the start date of their contract. A student who lacks a final transcript cannot start an assistantship.

**Certificate** students either have been admitted directly into a certificate program or are already seeking an advanced degree and are pursuing a certificate concurrently. Students and their department, program, or faculty must understand that, although some completed, advanced, academic work will partially fulfill requirements for both certificate and degree, and some elective credits within the degree program may be assigned to the certificate, full completion of both sets of requirements may total credits in an amount greater than that required to earn the degree alone.

**Auditors** are students admitted into Unclassified status in a program and who enroll in non-academic credit coursework. Auditors are formally registered with the Office of the University Registrar in order to have audits on their transcripts. They are expected to attend classes regularly but may not be responsible for assignments or examinations outlined in the petition for course audit. Email, library, and other privileges associated with classified status are granted to auditors. It is the decision of the college, schools and centers whether it is appropriate to permit their classified students to audit classes. In any case, students are permitted to audit a maximum of one course per semester, with a two-course audit limit within a degree program.

**Visitors** are students temporarily admitted for the Summer Sessions at the Frost Campus. Visitors must secure department or program permission for entry into desired courses. Visitors are not required to formally apply, but the Dean or Director of their particular college, school, or center must admit them.

**Faculty** of Saint Louis University may be admitted and register as Unclassified students. Faculty holding the rank of Assistant Professor or higher, except librarians with equivalent rank, will ordinarily not be granted Classified status toward pursuit of advanced degrees. Requests for exceptions to this regulation must be initiated with the Associate Dean or Director for Graduate Education or Center Director of the particular college, school, or center.

**Full-time status** is defined as six or more semester hours in formal (for-credit) courses and/or the following criteria for establishing status. (This definition excludes Juris Doctor (JD) and Master of Laws (LLM) students in the School of Law and Doctor of Medicine (MD) students in the School of Medicine). All graduate students holding appointments as Fellows, Trainees or Graduate Assistants are considered full-time regardless of the number of hours enrolled, (i.e., a student can have fewer than 6 hours while being fully funded). This means that a student does not have to use the full 18 or 21 hours allocated on an assistantship if the student does not need all of those hours. Dissertation, thesis, and project guidance hours can be divided into multiple semesters to reach the required hours. All graduate students registered for Special Study for Examinations are considered full-time. All graduate students registered in thesis, dissertation research or project guidance (5960/5990/6960/6990) are considered full-time. Graduate Education policy requires that students be enrolled in at least one hour of dissertation credit upon completion of coursework or achievement of Doctoral candidacy until completion of 12 hours. After completing 12 hours students may enroll in zero credits, unless otherwise directed (e.g. additional credits while on extensions). For thesis and project guidance, after completing the required hours students may enroll in zero credits, unless otherwise directed (e.g. additional credits while on extensions). Students in credit-hour only degree programs, who are within the final hours of their program and need fewer than 6 hours to complete the degree, are considered full-time.

## Immunization Policy

All Classified students at the Frost Campus and Medical Center must comply with the University's immunization policy. All incoming students must complete and submit the Student Immunization Record form, which is located on the Graduate Admission Website.

## Multidisciplinary Master's Option

After having been formally and unconditionally admitted into an existing Master's degree program and initiating Master's studies, the Classified students may decide to petition for transfer into the Multidisciplinary Master's option. The availability of academic resources to support a multidisciplinary program must be critically investigated and reviewed, and the Associate Dean or Center Director reserves final approval of this option.

To begin the transfer process, students prepare a draft of a proposal that describes the multidisciplinary program envisioned. The title of the multidisciplinary program must be distinctly different from the departments and major fields of Master's study at Saint Louis University. In particular, the draft must contain the rationale for the transfer, the full complement of applicable, post-baccalaureate academic work proposed, i.e. work already completed as well as the work yet to be taken, and the general area of capstone/thesis research. With the proposal draft in hand, students proceed to select a minimum five members of the Graduate Faculty to serve as a committee that, in effect, becomes the department or major field. Service on the committee is an invited faculty member's option. A proposed chairperson of the committee is designated. All members need to have graduate faculty status.

A formal petition to transfer into the option, signed individually by all of the proposed committee members, must be submitted to the Associate Dean(s) and/or Center Director(s) and the Associate Provost for Graduate Education. The petition with appropriate supporting documentation from the student's academic file is then transmitted to the proposed committee chairperson for evaluation of the student's preparedness for and potential for academic success in the envisioned program. By this time the proposal draft should have been critiqued by the committee and subsequently revised to reflect their evaluative comments.

If the recommendation from the proposed committee chairperson for approval of the transfer is positive, the petition (including the proposal) is reviewed by the Graduate Academic Affair Committee (GAAC). The Associate Provost for Graduate Education is the liaison to GAAC on behalf of students, who should meet with the liaison at least once before GAAC considers the petition and proposal. The entire course of study will be reviewed for approval by the Associate Provost for Graduate Education. GAAC may annually review each multidisciplinary Master's program and the progress therein, and make recommendations to the Associate Provost for Graduate Education. In addition to coursework, the program must include some type of capstone – project, thesis, or exam.

## Multidisciplinary Doctoral Option

After having been formally and unconditionally admitted into an existing Ph.D. degree program and initiating Doctoral studies, the Classified students may decide to petition for transfer into the Multidisciplinary Doctoral Option. Because the availability of academic resources to support a multidisciplinary program must be critically investigated and reviewed, and the Associate Dean or Center Director reserves final approval of this option.

To begin the transfer process, students prepare a draft of a proposal that describes the multidisciplinary program envisioned. The title of the multidisciplinary program must be distinctly different from the departments and major fields of Doctoral study at Saint Louis University. In particular, the draft must contain the rationale for the transfer, the full complement of applicable, post-baccalaureate academic work proposed, i.e. work already completed as well as the work yet to be taken, and the general area of dissertation research. With the proposal draft in hand, students proceed to select a minimum five members of the Graduate Faculty to serve as a committee that, in effect, becomes the department or major field. To serve on the committee or not is the invited faculty member's option. A



proposed chairperson of the committee is designated. At least one, and preferably a minimum of two, members of the committee must have authorization to direct Doctoral dissertations (i.e. Mentor Status).

A formal petition to transfer into the option, signed individually by all of the proposed committee members, must be submitted to the Associate Dean(s) and/or Center Director(s) and the Associate Provost for Graduate Education. The petition with appropriate supporting documentation from the student's academic file is then transmitted to the proposed committee chairperson for evaluation of the student's preparedness for and potential for academic success in the envisioned program. By this time the proposal draft should have been critiqued by the committee and subsequently revised to reflect their evaluative comments.

If the recommendation from the proposed committee chairperson for approval of the transfer is positive, the petition (including the proposal) is reviewed by the Graduate Academic Affair Committee (GAAC). The Associate Provost for Graduate Education is the liaison to GAAC on behalf of students, who should meet with the liaison at least once before GAAC considers the petition and proposal. The entire course of study will be reviewed for approval by the Associate Provost for Graduate Education. GAAC may annually review each multidisciplinary Doctoral program and the progress therein, and make recommendations to the Associate Provost for Graduate Education.

In addition to coursework, the program must include written and oral preliminary degree examinations to be administered by the committee in accordance with Graduate Education policy and regulations. Research-tool requirements are to be set as appropriate. The rules and regulations for advancement to candidacy also must be followed by students pursuing this Doctoral option.

## Payment of Tuition and Fees

Tuition and fees are subject to change. Please see the complete list of tuition, fees and Study Abroad rates for the 2014-2015 academic year listed on the Office of Student Financial Services [webpage](#).

Payment of tuition, fees, and deposits (not covered by financial aid awards) must be made after registration for classes. Initial billing statements are mailed to students' permanent address by the [Office of Student Financial Services](#). Subsequent billing statements will be mailed to students' local address, or, if specified, the permanent billing address. For additional information about payment arrangements see Office of Student Financial Services.

For the schedule of Madrid Campus tuition, fees, payment and refund information.

## Student Financial Responsibility

Students are not officially registered until payment or a satisfactory arrangement for payment has been made. All in debt to the University must be cleared promptly. Student account balances that are past due result in electronic "holds" that block future registrations and deny the issuance of official transcripts. No refund or reduction is allowed for absences.

# ACADEMIC STANDARDS

---

## Academic Appeals

As a general policy, appeals to academic decisions should first be made to the faculty member or faculty committee involved and, if necessary thereafter, to the department or program chairperson, the Associate Dean or Center Director of the particular college, school, or center, and the Dean, in that order. Should students wish to pursue an additional level of appeal, the case is taken to the Associate Provost for Graduate Education who reviews the file to determine if the process was followed. The Associate Provost does not overturn a decision, but may send the case back to the college, school, or center if process was not followed.

## Academic Integrity/Ethical Behavior

Saint Louis University is a community of learning in which integrity and mutual trust are vital. Since the mission of the University is "the pursuit of truth for the greater glory of God and for the service of humanity," acts of falsehood violate its very reason for existence. They also demean and compromise the activities of teaching, research, health care and community service that are its primary mission. Since the University seeks to prepare students and faculty for lives of integrity and occupations of trust, it regards all acts of academic dishonesty as matters of serious concern. Such dishonesty also undermines the academic assessment process, which in turn impairs the ability of the University to certify to the outside world the skills and attainments of its graduates. Such dishonesty allows those who engage in it to take unfair advantage of their peers and undermines moral character and self-respect. The Academic Integrity Policy detailed below sets out principles that are implicit in the ethos of the University but that call for explicit formulation to guide the practice of the entire institution. In establishing necessary definitions and minimal procedures to be followed in adjudicating violations, it also allows academic units to set forth the details of their own honesty policies in ways appropriate to their disciplines. Academic integrity is honest, truthful and responsible conduct in all academic endeavors.

Please [click here](#) for a full explanation of the policy, responsibilities of members of the community, reporting and adjudicating violations of academic integrity, violations of academic integrity, and submitting and conducting an appeal.

[Click here](#) for SLU's latest Codes of Student Conduct.

## Academic Progress/Ordinary Time Periods to Degree

The ordinary time period to degree for Classified students begins at the start of the academic term when the first course is taken to be included in the degree program. Accordingly, revision of the start of the time period is possible after matriculation if a course taken in Unclassified status becomes part of the degree program through a successful petition to do so.

For students pursuing a Master's degree, the ordinary time period to the degree is five years, and eight for the doctorate directly from the baccalaureate. Students who petition into the Doctoral program after completing a SLU Master's degree will have a total of eight years to complete both degrees. For students pursuing the doctorate, having previously been awarded a Master's degree in the same or a comparable major field, the ordinary time-period to degree is seven years. A maximum of two extensions beyond the ordinary time to degree will be allowed. Students who were still within normal time to degree at the start of 2014-15 academic year were moved to the new policy.

## Academic Record

A transcript is a copy of the permanent record, certified by the Office of the University Registrar. The permanent record at the University shows the courses taken, grades received, cumulative grade point average, academic work taken elsewhere that has been approved for transfer into a degree program, and/or all degrees and certificates earned.

## Academic Work

Academic work designated by course numbering 5000 through 9000 is, by definition, offered for "post-baccalaureate credit." To the extent applicable, students may obtain credit toward degrees for limited numbers of credits in courses numbered 4000 (upper-division, undergraduate) courses. Limitations are given in the subsequent section on "Graduation Requirements."

## Annual Reviews

All Master's and Doctoral students (excluding law and medicine) must undergo an annual review of their progress, although a department or program may require reviews on a more frequent basis. The manner in which the review is conducted is determined by a student's department or program. Departments and programs are required to file a copy of their review process with their appropriate Graduate Dean or Director and with the Office of Graduate Education. Copies of individual student reviews will be kept in the department or program office. A summary report of the results of annual reviews of all students in each department and program must be submitted to the appropriate dean or director of the college, school, or center.

## Change of Grade

All changes of assigned grades are subject to a statute of limitations of one year from the end of the term in which the course was completed. The student and faculty involved must make appeals of this statute of limitations in writing to the Associate Dean for Graduate Education or Faculty Director of a college, school, or center. The appeal must provide substantive documentation of the reasons for the grade change.

## Course Extension (Incomplete Course)

To receive additional time to complete a course, students must:

1. Submit completed Petition for Course Completion Extension from the [Registrar's website](#).
2. Receive approval by the instructor.

Students must complete the course work by the approved deadline, which cannot be longer than one year after the course's final grades were due.

Two exceptions are:

1. Incomplete courses in prerequisite courses must be completed and graded prior to the first meeting for which the course is a prerequisite.
2. Incomplete courses for graduating students must be completed and graded 30 calendar days after the conferral date.

An Incomplete Course will be awarded a grade of "F", by the Office of the University Registrar, if the course is not completed by the approved deadline.

## Good Academic Standing and Academic Probation

Classified students are in good academic standing when they are making progress toward a degree within the time period established for that degree by the University. Students will not be advanced to candidacy or be eligible to graduate or continue an assistantship while not in good academic standing. Candidacy is achieved after passing the oral exam, regardless of whether the prospectus is part of the exam.

Students are not in good standing if any of the following conditions are true:

- They are on academic probation
- Their transcripts reflect more than 2 incomplete grades
- Their time to degree has expired
- They have been placed under temporary suspension for academic deficiencies or misconduct
- They have been formally dismissed from the University

If the cumulative grade point average of Classified students falls below 3.00 (on the four-point scale, "B" = 3.0), students are automatically placed on academic probation (not to be confused with Probationary admission). To continue degree pursuit, students must progress toward a 3.00 cumulative average and are expected to emerge from academic probation within nine credits or two successive academic terms during which coursework registrations are recorded. Students may not be advanced to candidacy status while on academic probation.

In general, Doctoral students are expected to complete academic work at the "B+" level. A limited number of credits in which the grade of "C" or "D" is earned may or may not be accepted toward a degree at the discretion of the individual department or program. The Classified student's cumulative grade point average in academic work presented to fulfill degree requirements must be at least 3.0.

Each college, school, and center is responsible for establishing specific policies and procedures regarding the placement of, monitoring of and subsequent dismissals associated with Academic Probation at the program and university levels.

## Grade Point Average (GPA)

The School of Law students' cumulative grade point average (GPA) is determined by dividing the total quality points earned by the total grade point average credits attempted, and truncating at three digits to the right of the decimal point.

All other post-baccalaureate (non-School of Law) students' cumulative grade point average (GPA) is determined by dividing the total quality points earned by the total grade point average credits attempted, and rounding at two digits to the right of the decimal point.

All grades for which quality points are indicated in the "Grading Scale" are included in the cumulative grade point average, except grades for excluded repeat courses; see the Repeating Course Policy for additional information.

Note: Courses transferred from other colleges/universities do not have quality points assigned; therefore do not apply toward students' grade point average.

## Grade Reports

Students may access their final grades through Banner Self-Service via [MySLU.slu.edu](http://MySLU.slu.edu). In addition to grades for each course, the report shows cumulative quality data for the term and for all post-baccalaureate work taken to date. Post-baccalaureate students typically do not receive mid-term grades.

## Grading Scale

The post-baccalaureate grading scale follows a 0 - 4.00 point scale.

Quality Points for grades are assigned as follows:

A+	4.00 (School of Law Only)
A	4.00
A-	3.70
B+	3.30
B	3.00
B-	2.70
C+	2.30
C	2.00
C-	1.70
D	1.00
F	0.00

The following grades are not awarded quality points and therefore are not calculated in students' cumulative grade point average.

NP	No Pass
P	Pass
S	Satisfactory
U	Unsatisfactory

The following course statuses are recorded on the academic transcript, but are not grades. There are no quality points associated with the statuses below and therefore have no impact on students' cumulative grade point average.

AU	Audit. (See Course Audit policy for additional information)
I	Course Work Incomplete (See Incomplete Course policy for additional information).
IP	In Progress (See Special Grading policy for additional information)
W	Withdrawal (Please see Withdrawal policy for additional information).

For Thesis Research, Dissertation Research, or Project Guidance course, the grades of "S" or "U" are assigned only in the final academic semester. For the grade of "S" students must have completed both the credit requirement and the thesis/dissertation/project itself. All prior registration will be marked with a status of "IP". The In Progress "IP" status is valid only for field-based courses and individualized study courses as defined below:

Field-based Courses:

- Clerkship
- Clinical
- Internship
- Externship
- Practicum
- Preceptorship

#### Individualized Study Courses:

- Directed Study
- Independent Study
- Independent Research
- Thesis
- Dissertation
- Masters Project
- Doctoral Project

## Repeating Courses

All repeated courses and grades will be recorded on the academic transcript. The following courses are excluded from the Repeating Courses policy listed below: All School of Law courses, Special Topics, Independent Studies, Internships, and Clinical Learning Experiences.

Only the most recent course grade will be included in the grade point average and noted as “Included”.

Previous courses will be noted as “Excluded” and will:

1. Not be awarded quality points and therefore not be calculated in students’ cumulative grade point average;
2. Not be included in cumulative earned credit totals;
3. Not apply toward graduation requirements.

Note: Students receiving financial aid need to verify with the Office of Student Financial Services whether repeating a course will affect their eligibility status.

Federal law limits the number of times students may repeat a course and receive Title IV financial aid for that course.

- Students may receive Title IV aid when repeating a course that was previously failed (i.e., they received a 0.0 or No pass), regardless of the number of times the course was attempted and failed.
- Students may receive Title IV aid to repeat a previously passed course one additional time.
- Once students have completed any course twice with a passing grade, they are no longer eligible to receive Title IV aid for that course.
- If students repeat a course that is not Title IV aid eligible, a recalculation of Title IV aid is done to exclude the credits for the repeated course.
- This rule applies whether or not students received aid for earlier enrollments in the course.

## Suspension/Dismissal

Students who are judged guilty of an act of serious academic dishonesty may be suspended for a specified time period or dismissed altogether. Suspension or dismissal may also be warranted for other reasons not listed above, e.g., unauthorized solicitation or distribution of controlled substances, endangering one’s self or another person, or abusing alcohol or illicit drugs. Reports of such actions may come from nonacademic staff, faculty, administrators, or other students. Such reports are to be directed to the Dean, Associate Deans or Center Director of the particular college, school, or center. Each college, school, and center is responsible for establishing specific policies and procedures regarding the placement and monitoring of suspensions/dismissals at the program and university levels.

## Degree Conferral

Saint Louis University will award a degree if all requirements are met and needed documentation received, within 30 calendar days of the semester’s published conferral date. Beyond 30 calendar days, awarding of the degree will be deferred to the next published conferral date.

The awarding of a degree will be deferred to the next published conferral date if any requirements are fulfilled by a course that either begins or ends after published conferral date. The one exception is, per the Incomplete Course policy, courses with approved extensions for a graduating student must be completed and graded within 30 calendar days of the published conferral date.

The official conferral dates for 2015-16 are the following:

#### Fall 2015

Fall Degree Conferral #1- October 16, 2015  
Fall Degree Conferral #2- December 19, 2015

#### Spring 2016

Spring Degree Conferral #1- March 11, 2016  
Spring Degree Conferral #2- May 16, 2016

#### Summer 2016

Summer Degree Conferral #1- June 10, 2016  
Summer Degree Conferral #2- July 1, 2016  
Summer Degree Conferral #3- July 29, 2016  
Summer Degree Conferral #4- August 12, 2016

# ADMISSION POLICIES

---

A viable applicant must possess, minimally, a baccalaureate degree or the equivalent from a regionally accredited, recognized college or university at the time of matriculation. The prerequisite expected by a discipline is the equivalent of an undergraduate area of concentration as understood at Saint Louis University: a sequence of eighteen or more credits of upper-division (advanced undergraduate) courses. In disciplines where no corresponding undergraduate major exists, the prerequisite requirement may be expressed in an alternative manner.

Decisions regarding acceptance into a program will not be made on the basis of the length of the degree program students have completed, but rather on the applicant's preparation to pursue post-baccalaureate work in the discipline.

## Admission Procedures

Applications for all classified programs must be submitted electronically.

The following application documents are required:

1. Application form with accompanying application fee
2. Official transcripts from all colleges and universities attended
3. If the GRE score is required, students must have an official score submitted by Educational Testing Service (ETS). Certain programs also accept: GMAT, LSAT, MAT, or MCAT.
4. Three letters of recommendation (preferably from recent instructors)
5. Resume or Curriculum Vitae (C.V.)
6. Professional goal statement
7. Possibly other specific documents, as required by the major field

If Classified or Certificate status is sought, the desired major field or program must be indicated. An area of concentration or specialization may be requested.

The completed Classified or Certificate application form with the application fee must be submitted before the deadline set by the department or program. If an earlier date is not specified, the general deadlines are as follows: Summer: April 1; Fall: July 1; Spring: November 1.

Each application for Classified status is evaluated initially by an admissions committee in the proposed major field. The Associate Dean or Director for Graduate Education of the particular college, school, or center receives the recommendation(s) of the committee(s) and is responsible for making the final decision.

**NOTE:** Academic records, in English translation, of students who have undertaken postsecondary studies outside the United States must include the courses taken and/or lectures attended, hours of practical laboratory work, the maximum and minimum grades attainable, the grades earned or the results of all end-of-term examinations, and any honors or degrees received. WES and ECE transcripts are accepted as well.

## International Applicants

All international applicants must submit to SLU an English proficiency exam score from one of the following: Test of English as a Foreign Language (TOEFL); International English Language Testing System (IELTS); or Pearson's Test of English (PTE). Exemptions are: English is the official language of the applicant's country and the applicant has a degree from an English speaking institution

Saint Louis University recommends the following minimum scores:

- 550 on the paper-based TOEFL (PBT);
- 80 on the computer-based TOEFL (IBT);
- 6.5 on the IELTS; or
- 54 on the PTE.

This policy emphasizes that the scores listed above indicate a minimum level of English and do not guarantee the applicant will have a command of spoken and written English; therefore international students enrolling at Saint Louis University will be required to take the Saint Louis University Writing Evaluation (SLUWE) during International Orientation. The admitting department may make exemptions to the SLUWE requirement.

Students scoring a 4+ on the SLUWE meet all English proficiency requirements. Students not scoring a 4+ are required to follow the recommendations by the English as a Second Language department. These recommendations may range from exemption from ESL courses, to concurrent enrollment in ESL and a program, or full-time enrollment in ESL with no registration in graduate-level work until the desired level of English has been achieved. Individual programs may decide to set higher minimums based on the level of English proficiency needed for their respective course of studies.

Ordinarily, international applicants may not be admitted to Unclassified status. Documents are required of them that present evidence of visa eligibility and certification of financial support for the full period of study. The Office of International Services provides assistance for international applicants.

## Re-application

Accepted Classified applicants must register for degree work at Saint Louis University within two calendar years (less in some fields) of the original acceptance. If Classified students have registered at least once for coursework, and if more than two years have elapsed since the last registration, students will be required to re-apply for admission. The fee for re-application is \$20.00.

## Transfer of Credit

Classified students are expected to complete most degree requirements through SLU courses, but some advanced work taken elsewhere may be transferred, subject to specific university, college, school, or center restrictions. Students must initiate a petition and have an official transcript of the work proposed for transfer forwarded to their college, school, or center. The advisor and department make a recommendation on the petition form, and the final decision rests with the Associate Dean, Director for Graduate Education or Center Director of the particular college, school, or center. Such a petition will not receive consideration until students have completed a minimum of six credits toward their program.

Ordinarily, work completed elsewhere more than five years prior to the beginning of the current program will not be approved for transfer into the current program. For a course to qualify for transfer, the course must be applicable for inclusion in the advanced degree program and in the present discipline at the accredited institution where it was taken. The grade received must have been B (3.00 on a 4.00 scale) or higher. Courses taken on a Credit/No Credit or Pass/Fail basis ordinarily will not be considered for transfer. The Office of the University Registrar documents final approvals of transfer of credit in the permanent record.

Master's students must complete a minimum of 80% of the advanced work through SLU. For example, within a 30-credit Master's program, a maximum of six credits of work (20%) may be approved for transfer toward fulfillment of degree requirements. Course work that was part of a Master's degree program completed elsewhere will not be approved for transfer, i.e., the same course may not be "double counted" in two separate Master's degree programs. Similarly, a post-baccalaureate course taken in partial fulfillment of undergraduate degree requirements may not also be included in a post-baccalaureate degree program unless specified otherwise by a college, school, center, or program.

## Advanced Standing for Doctoral Students

Ph.D. students must also complete a minimum of 80% or, if matriculating as post-Master's students, at least 24 credits of post-baccalaureate work through SLU in preparation for and in anticipation of preliminary degree examinations. Ed.D. students must complete at least 38 credits of credit through SLU. Students admitted for Doctoral study, having previously completed a Master's degree in the same or a comparable major field, may expect at least a portion of that prior work to be recognized as contributing to the overall advanced preparation for the doctorate, giving students Advanced Standing. Courses approved for Advanced Standing are entered on the form 'Evaluation of Advanced Standing of a Doctoral Student'.

## CADE Admission Deposit

All incoming students in the Center for Advanced Dental Education programs are required to make a deposit of \$1,000, applicable toward tuition for the first one-half year, to hold places in the classes.

# MATRICULATION POLICIES

---

## Continuous Enrollment

Matriculated Classified students must maintain continuous enrollment during each nine-month academic year until graduation. The academic department determines whether or not students must also enroll each summer. Alternatively, students in summers-only programs must register every summer until degree requirements are fully completed. Students violating the mandatory continuous-enrollment policy must pay a fee/penalty determined by the number of consecutive semesters not enrolled. If students do not enroll for a period of two years or longer, a new application for admission will be required along with a \$20 application fee.

Classified students may formalize an interruption in progress towards a degree by petitioning for a leave of absence (see leave of absence policy).

## Leave of Absence

School of Law students must submit requests for a leave of absence in writing to the Dean of Students in the School of Law.

For all other students (non-School of Law) to be placed on a leave of absence they must:

1. Submit completed Petition for Leave of Absence and
2. Receive approval by their college, school, or center.

During the leave of absence, students:

1. Retain the graduation requirements from the Graduate Education Catalog of their year of admission;
2. Retain their SLU.EDU email account, access to mySLU.slu.edu and access to the libraries;
3. Do not violate the continuous enrollment policy;
4. Do not have enrollment status for purposes of health insurance or federal loan deferment;
5. Are not eligible to reside on campus or attend classes.

A leave of absence may be requested only for future terms. Students withdrawing from the current term after the add/drop period should refer to the Withdrawal Policy.

International students must consult with the Office of International Services concerning conditions of their visas.

Unless approved, students attending another institution will have their leave of absence revoked and therefore will be required to reapply to Saint Louis University in order to return.

## Changing Program

Classified students may petition to change the degree sought or concentration. The Petition to Amend the Graduate Program is the proper document for such a request. Note that a new classified application is generally required to change major fields. Students may also petition to continue Doctoral study immediately upon completion of a Master's degree in the same major field. The Petition for Admission into a Doctoral Degree Program is required in this instance. Petitions are made to the college, school, or center.

## Parental Leave Policy

The Parental Leave Policy provides relief of all full-time duties including research, teaching responsibilities, and comprehensive or candidacy examinations for 6 weeks following childbirth or adoption. It is mandatory for students on an approved parental leave to maintain continuous enrollment during the leave period. The nature of the coursework is to be determined in consultation with the advisor.

Should students require additional relief of duties beyond the approved parental leave period, students must petition for a leave of absence, as described in the Leave of Absence policy. Students on an approved parental leave will continue to have access to University resources (e.g., e-mail, library privileges).

To be eligible for this benefit, students must be enrolled as full-time post-baccalaureate students in either a Master's or Doctoral program; be in good standing with their academic department; and be the primary caregiver to a newborn or adopted child. If both parents are eligible students, only one parent (the primary caregiver) may apply for the parental leave.



Students must submit a Petition for Graduate Student Parental Leave to their advisor at least 60 days prior to the expected start of the leave period; exceptions to the rule will only be made in cases of exceptional circumstances. Students on an assistantship or fellowship must submit an additional document that details the impact of and accommodations needed for the leave. Students are required to be enrolled during a leave period in order to receive benefits. Parental leaves must be approved by the student's mentor or advisor, the academic department chair, the appropriate college, school, or center administrator (e.g. Associate Dean for Graduate Education), and the Associate Provost for Graduate Education.

### ***Students Receiving University Funding Support***

Students receiving University support for health insurance will continue to receive full insurance coverage paid by the University throughout the duration of the parental leave period.

Tuition scholarships for students on an approved parental leave will be continued during the leave period as necessary.

Students receiving an assistantship stipend will be guaranteed the continuation of their stipend for the first 6 weeks of the leave period, provided those weeks fall within the contracted period of the assistantship. Thereafter, continued funding during the leave period will be at the discretion of the department chair and dean, in consultation with students' advisor.

Students receiving a University fellowship will be guaranteed the continuation of their stipend for the 6 weeks of the leave period, provided those weeks fall within the contracted period of the fellowship. Thereafter, continued funding during the leave period will be at the discretion of the Associate Provost for Graduate Education, in consultation with students' advisor.

# REGISTRATION

---

Registration periods for courses and other academic work are scheduled by the Office of the University Registrar. Students are expected to self-register for all needed courses during the appropriate registration period.

Students enrolling during this period and thereafter are expected to complete the entire process, including the making of financial arrangements with the Office of Student Financial Services.

## Changes in Registrations

No fee is assessed for a change in registration. Generally, academic work for the term or session may not be added to or substituted within a program subsequent to the second full week of classes for the semester. More stringent timelines exist during the Summer Sessions.

The deadline for dropping a class without a “W” appearing on the transcript will be Friday of the second week of the semester for a full-semester course.

Students who fail to complete a Change of Registration form, and withdraw without authorization from a course or the University will be graded based on the grading procedures listed in the course syllabus.

## Course Audit

Classified students must be approved to audit a course by the academic unit offering the course and the student’s home department. A petition for course audit (Registrar’s Form #3), available from the Office of the University Registrar, must be completed for each such enrollment. The tuition charge for auditing a course in the School of Law is the standard tuition rate while the tuition rate for all other colleges/schools/centers is \$50 per credit. Students will not receive academic credit for a course taken on an audit basis and therefore the course will not count toward attempted credits, earned credits or graduation requirements. Enrollment in audit courses will be indicated on academic transcripts as a grade of ‘AU’.

If the conditions authorized in the Petition for Course Audit are not met, the instructor may request an authorized withdrawal. A course registered for credit may be changed to audit only through the second week of class. A course registered for audit may be changed to credit only through the second week of class.

## Late Registration

Late registration begins on the first day of classes and extends through the end of the first week of the semester. Students registering for the first time during or after the late registration period will incur a late registration fee of \$50.

Course registration made during the registration period will be canceled if there is a balance due and financial arrangements are not made.

## Holds on Registration

The University may block the registration of matriculated students by placing an academic hold on their record for one of several reasons (e.g. non-payment of tuition, library books not returned, violation of the mandatory continuous-enrollment requirement, expiration of time to degree, etc).

## Research-Phase Registrations

Toward completion of requirements for a research degree, Master’s level students must enroll in six credits of Thesis Research. Accumulation of these credits may begin after students have completed the equivalent of one full-time semester. Ph.D. students must accumulate 12 credits of Dissertation Research, Ed.D. students 3 credits of Project Guidance, and D.N.P. students 3 credits of Clinical & Capstone project. Students are encouraged to distribute research registrations over several academic terms, taking numbers of credits per term commensurate with the anticipated intensity of research involvement.

Ordinarily, the minimum research registration for an academic term is 1 credit. Zero credit registrations in Thesis, Dissertation Research, Project Guidance, or Clinical & Capstone project are allowed only after the required credits have been accumulated (within the ordinary or extended time-to-degree period).

If a student's research-degree degree program becomes protracted such that an extension of the ordinary time-to-degree period is necessary, approval of the extension ordinarily will include a requirement for enrollment in additional research credits (or additional Project Guidance credits for students pursuing Ed.D. degrees).

Students may not take additional research credits unless they are required.

## Zero-Credit Registrations

Classified students may include in the program for the academic term one or more zero credit registrations. Often a journal club or colloquia registration, and in some instances practicum or internship enrollments, may be for zero credit. Students may be preparing for language or degree examination(s), or may have taken the required total number of credits of Thesis or Dissertation Research within the ordinary time period to complete all degree requirements. Students may be completing the requirements for coursework that was initiated during a previous academic term. Some zero-credit registrations, coded by 5950 and 6950, are each permitted no more than twice during a degree program. Any registration, even if for zero credits, enables students to have access to the academic resources of the University.

## Registrations of Undergraduates in Graduate Coursework

SLU undergraduate, degree-seeking students may be permitted to enroll in 5000 or 6000 level coursework provided that specific conditions are met. First, the student must hold senior standing and have the majority of the major requirements already fulfilled. Second, prerequisites for each course in question must have been completed. Third, the student's cumulative GPA must be minimally 2.7 on a 4-point scale. Fourth, the total enrollment for the semester (or summer session) may not exceed 15 (six) credits with not more than six (three) credits in 5000 or 6000 level work. To be granted permission to take graduate coursework, the undergraduate must complete a formal petitioning process during which approvals of the course instructor, the student's major advisor, the undergraduate Dean, and the Associate Dean or Director for Graduate Education of the particular school/college/center are obtained.

As part of the petitioning process, the student must indicate that the graduate coursework is to be taken either to partially fulfill requirements for the baccalaureate degree or for "advanced graduate credit." In the latter case, all major requirements must have been fulfilled. Approval to take and successful completion of the coursework do not guarantee the student admission into the applicable advanced degree program or in any way amend the ordinary process of applying for Classified status.

## Withdrawing from a Course, Term Work, or the University

Students are responsible for formal withdrawals from individual courses or other registrations.

Refunds: Fall and Spring Semesters

<b>Time of Withdrawal as approved by the college, school, or center administrator</b>	<b>Percentage of Tuition</b>
First Week of Classes	100%
Second Week of Classes	100%
Third Week of Classes	90%
Fourth Week of Classes	80%
Fifth Week of Classes	70%
After Fifth Week of Classes	0%

For withdrawal/refund policies for the following programs, please contact the following:

School of Medicine: (314) 977-9840,

School For Professional Studies: (314) 977-2330,

Madrid Campus:

If students and/or students' parents are receiving federal financial aid for the term of enrollment, a prorated refund schedule applies. Consult the Office of Student Financial Services for information.

Fees are not refunded in the case of withdrawal for any reason. Residence Hall charges will be refunded in accordance with the residence contract.

Withdrawal from an individual course (Registrar's Form #8) or from the entire program of studies for an academic term (Registrar's Form #9) must be undertaken formally by students and requires completion of the appropriate withdrawal petition and a change of registration form to drop enrollment(s); all forms are available on the Office of the University Registrar's Forms [page](#). Formalization of a withdrawal may entitle students to a partial refund of tuition paid. Separate policies exist for students developing substantial physical or mental health problems or who are called to active U.S. military duty during the academic term. Those policy statements are available from the Office of the University Registrar.

Depending upon the reason for or the date of withdrawal, the registration(s) in question may be erased from the permanent record or a withdrawal indicator ("W") may be placed in the grade field(s) in their record. Ordinarily, withdrawals are not permitted after mid-term.

In addition to filing the Registrar's form, students on an assistantship appointment must submit a letter of resignation through the academic unit to which service is rendered to the Associate Dean for Graduate Education or center Director of the particular college, school, or center. Classified students withdrawing entirely (or taking a formal leave of absence) from a program are required to submit a letter of resignation (or a petition for a leave), routing the letter or petition through the major field and to the Associate Dean for Graduate Education or Center Director of the particular college, school, or center.

# GRADUATION REQUIREMENTS AND POLICIES

---

The mere literal fulfillment of coursework requirements does not automatically guarantee advancement to candidate status in a particular program.

## Master's Degree

The general and minimum requirements for Master's degree study are explained below. For some Master's degree programs the requirements are more extensive and are explained in the Curricula and Courses section of this catalog and in their program handbook.

### *Courses*

A minimum of 30 credits of academic work is required. For students pursuing the research option, 6 of the total credits to the degree must be in Thesis Research. The program of studies must form a united and coordinated whole, embracing a major field subject.

In research-degree programs, no less than half of the total credits required (exclusive of Thesis Research) must be in the major field. All of the work must be of distinctly advanced character. The University will permit some 4000 level undergraduate courses to be included in the degree program. However, the maximum allowable total credits of such coursework are ten. Also, at least half of the work in the major field (again, exclusive of Thesis Research) must be strictly post-baccalaureate (5000-9000) level.

Non-research degree programs may be planned with somewhat greater flexibility. A minimum of 30% of the credits must be in the major field and half of the total program must be directly related to the major field. Again, no more than ten credits in total may be taken at the 4000 level.

Ordinarily, no Master's degree program may include more than six credits in Research Topics (5970) or Graduate Reading (5980), or a combination thereof. Master's degree students may not enroll in tutorials carrying the course-numbers 4970 or 4980.

### *Research-Tools Requirement*

Individual Master's degree programs may have a requirement of translation proficiency in a foreign language, statistics, computer literacy, or the like. Students seeking translation skills are encouraged to enroll in courses in the Department of Languages, Literatures, and Cultures designed specifically for them. Research-tool proficiency may be demonstrated through examination if permitted by the major field. Arrangements for administration of such an exam are the responsibility of the major field.

### *Graduation Requirements*

Master's degree students anticipating the final academic term at SLU must file an application for degree. The application must be completed, by a set date in that final term. Subsequently, students receive a degree audit that includes information to be reviewed and checked by students and their advisor. If a research degree is sought, the thesis proposal must be prepared, receive major-field approval, and be filed with the Master's Candidacy Advisor as part of this process.

### *Thesis*

Graduate Education requires the formal appointments of three Graduate Faculty readers of the thesis, one of whom is the students' mentor. All three readers must approve the acceptable thesis. Students ordinarily may not circulate the thesis among the approved faculty readers during the summer months. Likewise, students should not expect conferral of a research Master's degree during or at the end of the Summer Sessions. Exceptions may be granted on individual bases, but only with prior approval of the committee chairperson.

The written work must follow a composition format within guidelines established by the major field and the *Formatting Guide*. The Master's Candidacy Advisor completes a format evaluation of the thesis and abstract by appointment. Students will then submit the abstract and thesis to ProQuest/UMI.

### *Comprehensive Degree Examination*

Because there is variation among Master's programs and policies regarding comprehensive exams and capstone requirements, students should refer to individual program requirements and handbooks. Individual programs based on disciplinary practices determine final degree requirements.

## ***Ordinary Time to Degree***

The entire Master's degree program, exclusive of prerequisites, is expected to be completed within a five-year time period, beginning with the academic term of the first course applicable to the degree. Students pursuing degrees by attendance only during the Summer Sessions are expected to complete all requirements for their non-research degrees within a period of six consecutive summers. Students who petition into the Doctoral program after completing a SLU Master's degree will have a total of eight years to complete both degrees.

Should the five years (or six summers) pass without completing all degree requirements, students cease to be in good academic standing unless they petition for an extension to be approved by the Associate Dean or Center Director of the particular college, school, or center and the Associate Provost for Graduate Education. Extensions are usually granted for no longer than one calendar year at a time. Ordinarily, for students pursuing a research degree, each extension carries with it the requirement of registration for one additional credit (beyond the required six credits) of Thesis Research. Students completing a non-research Master's degree and exceeding the time-to-degree limit must also petition for an extension and are required to take an additional credit per year until completion.

## ***Additional Departmental Requirements***

In addition to these general requirements, each department or major field may set additional requirements that are pertinent to the particular area of study. These specific requirements are found in the Courses and Curriculum section of this catalog.

## **The Specialist in Education Degree**

The Specialist in Education (Ed.S.) program is designed for the educator/practitioner seeking administrative certification at the elementary, middle, junior high, senior high, or school district level. For additional descriptive information about this program, see the Courses and Curricula section of the catalog under the School of Education.

## **The Doctor of Education Degree**

The Doctor of Education (Ed.D) program is preparation for educational leadership roles through broadly based coursework and an extensive project focusing on practical needs within the major field. The degree includes research preparation, practica, and internship experiences. For additional descriptive information about this program, see the Courses and Curricula section of the catalog under the School of Education.

## **The Doctor of Philosophy Degree**

Applicants having superior previous academic records and showing strong potential for continued academic study and research may be admitted to pursue the Ph.D. degree. In some major fields, applicants possessing the Bachelor's degree may be admitted for direct study toward the doctorate. In others, requirements for the appropriate Master's degree must have been completed.

## ***Coursework***

For admitted students holding an appropriate Master's degree, the additional preparation for preliminary degree examinations generally will be approximately 24-30 credits. After students have been enrolled for an academic term, they may petition for "advanced standing" and formal recognition of the applicability to the Doctoral program of that academic work completed elsewhere. If the Master's degree was obtained at Saint Louis University, this is not necessary. Additional graduate-level academic work, not part of any earned advanced degree, may be formally transferred into the Doctoral program, but a minimum of 24 credits of advanced academic work, prior to the research phase of the program, must be completed as a Doctoral student.

For students admitted to pursue a Ph.D. directly from the baccalaureate, the total credits required prior to preliminary degree exams may be as few as 48. See the Courses and Curricula section of the catalog and the program handbook for requirements in specific fields.

If students pursue a certificate, it ordinarily requires completion of minimally 15 credits, but a portion of those credits may also partially satisfy requirements for the degree sought.

Ordinarily, no more than 20% of the coursework in any Doctoral program may consist of preparation for preliminary degree exams: research topics (6970) or graduate reading (6980), or a combination thereof. Students are not permitted to take 4000 level tutorials (identified by the course number 4970 or 4980).

## ***Research-Tools Requirements***

Such requirements are not imposed as a whole because of variable needs across major fields. Most Doctoral programs prescribe levels of competence to be attained in foreign language translation, statistics, computer literacy, or other tools of research. Students seeking translation skills are encouraged to enroll in courses in the Department of Languages, Literatures, and Cultures designed specifically for them. All research-tool competencies are generally to be developed in addition to the ordinary academic work required for the degree and may be demonstrated through examination if permitted by the major field.

## ***Preliminary Degree Examinations***

Each Doctoral program will administer a written degree examination consistent with the expectations of the academic discipline. In some programs, a qualifying examination will be administered relatively early in the Doctoral studies. In other programs, the written examination is structured to assess comprehensive knowledge of the discipline after all or nearly all of the academic work has been completed. If students' performance is satisfactory, the department chairperson recommends a committee of five members of the Graduate Faculty to administer the oral examination.

## ***Committees for Oral Examination/Proposal Defense and Dissertation Defense***

The chair of a Doctoral Committee must be from the student's program and a member of the current Saint Louis University faculty. All committee members must hold Graduate Faculty status. An emeritus professor, a non-Saint Louis University faculty member or someone outside of the major field may serve as a co-chair of students' Doctoral Committee. In order for a non-Saint Louis University faculty member to serve on a Doctoral committee, the person must have a terminal degree in the field and/or have significant expertise or experience of particular relevance to students' dissertation. Such committee members must be appointed on an ad hoc basis to the Graduate Faculty. The associate dean or director of the college, school, or center upon written request by the committee chair may make ad hoc appointments. The proposed member's CV must accompany the request.

## ***Oral Examination/Proposal Defense***

An oral examination/proposal defense is scheduled in advance of the formalized research phase of a program and after the Associate Dean for Graduate Education or Center Director approves the examination committee. This examination may evaluate broad knowledge of the field or it may be largely focused on the dissertation proposal if the program written preliminary degree exam was comprehensive. To schedule the exam/proposal defense, students must complete the "[Doctoral Oral Examination Form](#)"; the form must be received by the Doctoral candidacy advisor at least two weeks prior to the date of the exam. Upon receipt of the form, the Doctoral candidacy advisor will send a decision result form to the committee chairperson prior to the exam or defense. Each program will determine the manner in which a vote for the exam or proposal defense is taken. The only information transmitted to the Office of Graduate Education is the final decision, including any notation of passing with distinction. If students fail the exam/proposal defense, the oral exam may be repeated once upon authorization by the Associate Dean. An outside committee member (a Saint Louis University faculty member from another program) will be present at the second exam/proposal defense. Ordinarily, the second attempt should not be scheduled within the same academic term as the first. Should the outcome of the second examination be unsatisfactory, a third exam is rarely approved.

## ***Advancement to Candidacy: Research Phase***

Doctoral Candidate status will be given to students after the passage of the comprehensive oral exam regardless of whether it includes the dissertation proposal. Graduate Education policy requires that students be enrolled in at least one hour of dissertation credit upon achieving candidacy until completion of 12 credits.

## ***Dissertation***

The Candidate for a Ph.D. must write a dissertation and present and defend this original and independent research. Twelve credits of Dissertation Research are required of students pursuing the Ph.D. within the ordinary time period to the degree.

The written work must follow a composition format within guidelines established by the major field and the Formatting Guide. Two special dissertation options are allowed as alternatives to the traditional dissertation in some degree programs: the three-article dissertation format and the non-traditional dissertation format. Students must be sure to check with their departments before pursuing either of the special dissertation options. Further details about these special dissertation options can be found in Section 3 of the [Formatting Guide](#).

The three-article dissertation format permits the doctoral candidate the option of compiling three (or more) related articles that have been published or approved for publication in one or more peer-review scholarly journals. The articles are related to a central theme. Each article becomes a chapter within the dissertation.

The non-traditional dissertation format is somewhat different. The body of the nontraditional format consists of at least three thematically related original article-length manuscripts, with the dissertation normally consisting of at least five chapters, including introductory and summary chapters. The student must be the first (or sole) author on at least two of these manuscripts, but may be the second author on one manuscript. Two of the manuscripts must have been fully accepted for publication in a high-impact journal, and the third must be under review before the dissertation defense can be scheduled. That is, the journals must have Institute for Scientific Information (ISI) impact factors of 0.75 or greater.

The Doctoral Candidacy Advisor completes a format evaluation of the dissertation and abstract by appointment. Students will then submit the abstract and dissertation to ProQuest/UMI.

## ***Public Presentation and Defense of the Dissertation***

Across all major fields, Graduate Education requires a public oral presentation and defense of the dissertation. The presentation should be scheduled after all Graduate Faculty readers have approved the general content of the dissertation. A Notification of Readiness form must be received by the Doctoral Candidacy Advisor a minimum of two weeks prior to the defense date. Candidates anticipating May graduation must submit the Notification of Readiness no later than the date set in the Graduate Education Calendar of Deadlines supplement to the University Calendar. Following the public presentation, the Doctoral candidate should expect questions from the readers and the assembled audience. The dissertation committee chairperson serves as the moderator for the defense.

Each program will determine the manner in which a vote for any type of exam or defense is taken. The only information transmitted to the Office of Graduate Education is the final decision, including any awards of distinction. The result forms will be sent to committee chairperson prior to the exam or defense. There will be separate votes for the Doctoral Oral Defense of the Dissertation and the Written Dissertation. A vote of pass is required from a majority of the committee members for students to pass the Doctoral Oral Defense of the Dissertation and the Written Dissertation. The written dissertation vote can wait until each committee member fully approves the written dissertation. A category of passing with distinction will be an option for each program for the Doctoral defense and the dissertation.

## ***Time Period to Degree and Extensions of Time***

If the time in the degree program exceeds the seven or eight years and Doctoral requirements remain, students must successfully petition for an extension of the ordinary time period to remain in good standing. The petition must be submitted prior to the expiration of the time to degree and must be accompanied by a letter describing the justification for the extension and a detailed plan and dated schedule for completion of all remaining requirements. The Provost, research mentor, and major-field chairperson or program director, Associate Dean or Center Director, and the Associate Provost for Graduate Education must approve the petition. A maximum of two extensions beyond the normal time to degree will be permitted. Generally, when such petitions are approved, extensions are granted for one calendar year, but can be given for less if the student is only missing a defense or exam date. In part because such petitions typically occur during the research phase of the degree program, approval is also accompanied by the requirement of enrollment in one additional Dissertation Research credit (beyond twelve, which should have already been taken). Extensions are a contract between the program and the student and all consequences of failing to meet the conditions of the extension such as dismissal from the program. Furthermore, if the time period has been exceeded to the extent that more than five calendar years have elapsed since preliminary degree examinations were passed, to remain active in the Doctoral program students will be required to retake the preliminary examinations to demonstrate currency in the major field.

## **Thesis and Dissertation**

### ***Proprietary Research***

A goal of the program activities for any department is generation of new knowledge through research activities, and public dissemination of that knowledge by means of publications and presentations. The posted guidelines (see Guidelines for Proprietary Research) are intended to address the use of restricted-access and confidential or proprietary information as part of a student's thesis and dissertation activities. Specific conduct, however, may be dictated by the terms and conditions of applicable confidentiality agreement or non-disclosure agreements. To further the University's goals as a research institution and to support research and scholarly activities within the University community, some component of the defense of the thesis or dissertation must be public.



## ***ProQuest/UMI Dissertation Publishing***

After the Format Review appointment with the Candidacy Advisor, students submit their thesis or dissertation to ProQuest/UMI for digital archiving and publication via Dissertation Abstracts International. This must be done before degree conferral can be received. During the submission process students will need to make a series of decisions concerning what kind of accessibility (restricted or open) would be appropriate and whether or not an embargo is needed.

### ***Embargo***

At the time of electronic submission of the thesis/dissertation (ETD) authors can choose to block access by delaying publication in order to protect the work for patent and/or proprietary purposes for up to two years. At the expiration of an embargo, the work will default to whichever publishing method was selected. If there is a need to delay publication beyond the embargo period, a request must be made in writing to the chairperson of the author's committee explaining the rationale for an extension and the additional time requested. The committee chair and the department chair must approve the request. If approved, the author then contacts ProQuest/UMI to notify them of the extension.

# CONSORTIUMS

---

## Inter-University Exchange

The Inter-University Exchange is a consortium agreement that allows students to take courses at other Saint Louis area institutions but have the course and the grade applied to their Saint Louis University transcript. Students pay Saint Louis University tuition just as though they were taking the course on our campus but attend the course at the cooperating institution.

Cooperating institutions:

- Concordia Seminary
- Fontbonne University
- Harris Stowe State University
- University of Missouri-St. Louis
- Washington University in St. Louis

Students may be permitted to enroll in courses offered at these locations for SLU credit. A maximum of the equivalent of one three-credit course may be taken at the “visited” institution per academic term, and not more than six credits per degree program.

Saint Louis University students may cross-register for Post-Baccalaureate Courses (5000 or 6000 level) at other institutions included in the Inter-University agreements under the following conditions:

1. They are full-time and in good academic standing.
2. The course is not available at Saint Louis University.
3. The course is required or recommended for their program (including prerequisites).
4. The course is approved by the Saint Louis University advisor, department chair and dean.
5. Tuition for the course is paid to Saint Louis University at its rates.
6. Grades earned under these conditions will be computed into semester and cumulative grade point averages.

Students will be responsible for any additional course fees assessed by the “visited” institution.

Both Saint Louis University students and students from other institutions, must obtain permission to participate in this program by completing an Inter-University Program - Registration Form. This form requires the signatures of their Dean at their home institution, and the signature of the instructor or department at the university where the course is offered. When this form is completed it should be returned to the Office of the University Registrar at the home institution, who will complete the registration process for students.

**Note:** Some colleges/schools within the participating universities may not be available in this program. Check with the Registrar’s Office at the institution you wish to visit.

Through special arrangements with the University, Aquinas Institute's (AI) graduate courses are directly accessible to students. Enrollments by students in AI coursework should be limited, the transfer-of-credit guidelines apply, and such registrations are to be monitored by the major fields.

## Midwest Catholic Graduate Schools Consortium

The Midwest Catholic Graduate Schools Consortium was created to foster cooperative endeavors in post-baccalaureate education and research among four universities: Loyola University-Chicago, Marquette University, University of Notre Dame, and Saint Louis University. The Consortium has established a visitation program for students and from time to time investigates joint research applications. Students should check with their major field departments for details.

# DUAL-DEGREE PROGRAMS

---

There are a number of formally established, advanced dual-degree programs. Within such a program, students pursue two post-baccalaureate degrees concurrently. Separate applications must be made for the individual degree programs, and admission to pursue one of the degrees does not guarantee admission to the dual-degree program.

A practical reason for students to pursue a specific pair of advanced degrees concurrently is the sharing of some coursework requirements. The applicant should apply to the more competitive of the two programs first. The individual major-field components of a dual-degree program must be initiated reasonably close together in time such that appropriate integration of the individual programs takes place. The Directors of the two programs determine the necessary proximity of start dates in individual instances.

Health Administration and Business Administration	M.H.A.   M.B.A.
Law and Business Administration	J.D.   M.B.A.
Law and Health Administration	J.D.   M.H.A.
Law and Health Care Ethics	J.D.   Ph.D.
Law and Health Outcomes Research	J.D.   M.S.
Law and Political Science	J.D.   M.A.
Law and Public Administration	J.D.   M.P.A.
Law and Public Health	J.D.   M.P.H.
Law and Public Health (Health Policy concentration)	J.D.   M.P.H.
Law and Social Work	J.D.   M.S.W.
Law and Sociology and Anthropology	J.D.   M.A.
Law and Urban Planning and Development	J.D.   M.A.
Medicine and Basic Biomedical Sciences	M.D.   Ph.D.
Medicine and Business Administration	M.D.   M.B.A.
Medicine and Health Care Ethics	M.D.   Ph.D.
Medicine and Public Health	M.D.   M.P.H.
Public Health and Clinical Psychology	M.S.P.H.   Ph.D.
Public Health and Nutrition and Dietetics	M.P.H.   M.S.
Public Health and Social Work	M.P.H.   M.S.W.
Public Administration and Political Science	M.P.A.   M.S.
Public Administration and Social Work	M.P.A.   M.S.W.
Social Work and Pastoral Studies	M.S.W.   M.A.P.S.
Social Work and Master of Divinity at Concordia Seminary	M.S.W.   M.Div.
Social Work and Theology at Concordia Seminary	M.S.W.   M.A.Th.
Social Work and Deaconess Studies at Concordia Seminary	M.S.W.   M.Deac.
Sustainability and Business Administration	M.A.   M.B.A.
Theology and Health Care Ethics	M.A.   Ph.D.
French and French at the University of Poitiers, France	M.A.   M.A.

Students accepted into a dual degree program must have both degrees awarded simultaneously, unless granted special permission by the Associate Dean and Center Director.

Applicants or current students interested in a dual-degree program should contact the administrative personnel in the two individual degree programs for additional information and advice, or refer to the brief summaries of the dual-degree programs found in the Curricula and Courses section of this catalog.

# CERTIFICATE PROGRAMS

---

There are several categories of post-baccalaureate certificate programs. For example, nursing or counseling professionals with a Master's degree may seek academic qualification in an additional specialty or for licensure via post-Master's certificate programs. Specific application protocols, not unlike those for Classified status, are in place. The requirements for these certificates may be found in the Curricula and Courses section of this catalog. A Certificate in University Teaching Skills may be earned by students through the Reinert Center for Transformative Teaching and Learning.

There are also opportunities for Classified students to pursue a certificate concurrent with and parallel to seeking a post-baccalaureate degree. The objective is to improve students' competencies through inclusion of a series of courses that collectively focus on a particular area of study related to the broader degree. Admission to a parallel certificate requires a formal petition.

The certificate generally demands satisfactory completion of a minimum of 15 credits, and the program culminates with a capstone requirement. The majority of the certificate coursework may also partially fulfill requirements for the degree.

Several such specific certificate programs have been developed.

## MINOR IN RESEARCH METHODOLOGY

---

A formal University-wide, minor in Research Methodology is offered and administered through the Department of Sociology and Anthropology. The minor is designed to provide students with a background in advanced analysis and methods. This minor is open to all students and can be tailored to meet students' own disciplinary program needs. Elements of the minor are developed by consensus between students, their advisor/mentor and the Graduate Director in the Department of Sociology & Anthropology. Essentially the minor consists of (with Prerequisites) five courses: a basic, quantitative statistics/analysis course; two advanced quantitative analysis courses; and two advanced research methodology courses. A listing of the courses offered across the University that will fulfill the requirements can be found on the Graduate Education website. Students may petition for the inclusion of additional courses by submitting a copy of the syllabus for such courses. Upon approval, these courses can also be included in the minor.

### **Process**

To be admitted, students must be admitted to a degree-seeking program at Saint Louis University. For a minor, students must first make an application through the Department of Sociology and Anthropology. Then, in consultation with the department's Graduate Director and their advisor/mentor, the minor is developed by determining selections from the three clusters of courses: basic quantitative analysis; advanced methodological design; and advanced statistics/analysis. Once all academic plan forms are signed and courses completed, a petition to amend the minor field is submitted to the Associate Graduate Dean/Director of the college, school, or center appropriate for students, who will sign and file the form with the Registrar. Upon completion, it will be noted as a "Minor in Research Methodology" on the academic transcript.

Students are encouraged to discuss the possibilities of the minor with their advisor/mentor or they can contact the Graduate Director in Sociology and Anthropology. In this way, students can build a minor that is best suited for his/her own needs and the goals in their major program. The minor is designed to be flexible and broad enough to support students across the University.

# Curricula and Courses

## INTRODUCTION

---

This part of the Catalog is divided into the individual colleges, schools and centers. Within each collegiate unit the post-baccalaureate programs are individually described. There are additional requirements for each available degree, and a listing in numerical order of the 5000 through 8000 level courses that students may take for post-baccalaureate credit. In general, not every requirement for the degree is indicated within each program description. The requirements not given are those common to all programs and required by Graduate Education (and detailed in the General Requirements section of this catalog).

The University's course code has a three-part structure: 1) the subject abbreviation; 2) the course number; and 3) the section number. Post-baccalaureate credit may be earned upon completion of specific individual courses numbered 4000 through 8999.

Graduate Education permits, subject to approval by the Graduate Academic Affairs Committee (GAAC), the double-numbering of courses involving two levels of academic work. A course may exist at both the 4000 and 5000 levels or at both the 5000 and 6000 levels. For such a course, the requirements and expectations differ with the course level. Post-baccalaureate students may not enroll in it at the 4000 level. Doctoral students might register for a 5000/6000 level course under the 6000 numbers, whereas students seeking a Master's degree would likely take it at the 5000 level.

Numbers in the 900s at the 5000 and 6000 levels refer to generic forms of academic work at the Master's and Doctoral levels. Specifically, the numbers, generic titles, and credits are as follows:

- 5910-6910: Internships (non-Clinical)
- 5930-6930: Special Topics (1-3)
- 5940-6940: Portfolio Review (0-6)
- 5950-6950: Special Study for Examinations (0)
- 5960-6960: Capstone/Master's Project (0-3)
- 5970-6970: Research Topics (1-3)
- 5980-6980: Independent Studies/Graduate Reading Course (1-3)
- 5990: Thesis Research (0-6)
- 6990: Dissertation Research (0-6)

# COLLEGE OF ARTS AND SCIENCES

---

**Christopher Duncan, Ph.D.**

*Dean*

**Janet Barber, Ph.D.**

*Associate Dean, Graduate Education*

Established in 1818, the College of Arts and Sciences is the oldest academic division of the University. The College comprises seventeen departments spanning the humanities, social sciences and natural sciences; fifteen of these departments offer programs of post-baccalaureate study leading to Master's and/or Doctoral degrees. The goal of post-baccalaureate education in the College is to educate leaders who have mastered the knowledge and skills of their disciplines, contributed to the discovery of new knowledge through original research, and who will continue that quest consistent with Jesuit values.

## AMERICAN STUDIES

---

**Heidi Ardizzone, Ph.D.**

*Department Chairperson*

The Department of the American Studies provides a systematic interdisciplinary approach to the historical study of the cultures of the United States, and to the critical analysis of their ongoing evolution. Within the framework of the great Jesuit humanist tradition, the American Studies Department trains students in the skills of clear thinking, writing and speaking, as well as the abilities associated with interpreting literary texts, evaluating historical documents and artifacts, applying humanistic and social science methods and theoretical approaches, and reflecting morally about the problems and issues they address in the classroom. The Department's mission includes advancing knowledge in the field through significant research and publication as well as training future scholars and teachers. The Department also educates scholars for professional futures in education, government, business, law, and other areas and for participation as thoughtful citizens in the multicultural nation and world in which they will live and work.

### Master of Arts (Non-thesis option)

**Prerequisites**

Undergraduate degree or equivalent in a humanities or social science area; additional prerequisite work may be required at the discretion of the Department.

**Required Courses**

ASTD.5000 Perspectives in American Studies

At least one reading seminar offered by the Department

At least one research seminar offered by the Department

*A formal minor is not permitted.*

### Master of Arts (Thesis option)

**Prerequisites**

Undergraduate degree or equivalent in a humanities or social science area; additional prerequisite work may be required at the discretion of the Department.

**Required Courses**

ASTD.5000 Perspectives in American Studies

At least one reading seminar offered by the Department

At least one research seminar offered by the Department

Six credits of ASTD.5990 Thesis Research

*A formal minor is not permitted.*

# Doctor of Philosophy

## Prerequisites

Undergraduate degree or equivalent in a humanities or social science area; additional prerequisite work may be required at the discretion of the Department.

## Required Courses

ASTD.5000 Perspectives in American Studies;  
ASTD.5900 The Practice of American Studies; and  
ASTD.6100 Dissertation Colloquium  
At least two reading seminars offered by the Department  
At least two research seminars offered by the Department

## Additional Requirements

Reading proficiency in one foreign language

## Post-Baccalaureate Courses

ASTD.5000 Perspectives in American Studies (3)  
ASTD.5100 American Photography (3)  
ASTD.5300 Cultures of the American South (3)  
ASTD.5400 Tocqueville's America (3)  
ASTD.5500 Memoir and Life Writing in American Culture (3)  
ASTD.5700 Metropolitan America (3)  
ASTD.5800 Workshop in the American Metropolis (3)  
ASTD.5900 The Practice of American Studies (3)  
ASTD.5020 Cross-Cultural Encounters of the American Frontier (3)  
ASTD.5030 Women's Lives (3)  
ASTD.5010 African American Politics, Culture, and Identity (3)  
ASTD.5930 Special Topics in American Studies (3)  
ASTD.5910 Graduate Internship (1-3)  
ASTD.5950 Special Study for Examinations (0)  
ASTD.5980 Graduate Reading Course (1-3)  
ASTD.5990 Thesis Research (0-6)  
ASTD.6000 Mythbusting and Mythmaking in Recent American Studies Scholarship (3)  
ASTD.6100 Dissertation Colloquium (1-3)

ASTD.6200 Visual Culture Theory (3)  
ASTD.6300 Jazz and American Culture (3)  
ASTD.6400 Transnational America (3)  
ASTD.6500 Visions of U.S. Empire  
ASTD.6600 Topics in American Urbanism (3)  
ASTD.6700 From Satchmo to Strangelove: Cold War Cultural Politics and the "American Century" (3)  
ASTD.6800 Edibles are Fun to Think With: Food and American Culture (3)  
ASTD.6900 Public Art and Memory (3)  
ASTD.6010 American Studies Interdisciplinary Seminar (3)  
ASTD.6020 American Political Thought (3)  
ASTD.6030 Leadership and Culture (3)  
ASTD.6930 Special Topics in American Studies (3)  
ASTD.6910 Graduate Internship (1-3)  
ASTD.6950 Special Study for Examinations (0)  
ASTD.6980 Graduate Reading Course (1-3)  
ASTD.6990 Dissertation Research (0-6)

# BIOLOGY

---

**Robert M. Wood, Ph.D.**

*Department Chairperson*

**John C. Kennell, Ph.D.**

*Associate Chair*

**Susan Spencer, Ph.D.**

*Graduate Coordinator*

The Department of Biology offers post-baccalaureate degree study in a variety of areas, including Genetics, Genomics, Evolution, Cell Biology, Physiology, Microbiology, Ecology, Systematics, and Science Pedagogy. In addition to resources on the Frost Campus, the Department makes use of facilities at the Missouri Botanical Garden, the St. Louis Zoological Park, the Danforth Plant Science Center, Washington University and Saint Louis University Medical School. The Department also operates Reis Biological Station in the Missouri Ozarks which serves as a center for education and environmental research.

## Master of Arts

### Prerequisites

Suggested courses include: Biology (a minimum of eighteen, upper-division credits); Chemistry (a minimum of eight, upper-division credits including two semesters of organic chemistry or one semester of organic chemistry and the other of biochemistry); Physics (two semesters); Mathematics (through a course in Calculus). *A formal minor is not permitted.*

### Required Courses

The program for the Master of Arts degree requires a minimum of 30 credits of structured coursework. No thesis is required for the degree. Courses may be chosen from upper level electives within the Department of Biology or related departments in consultation with students' advisors.

BIOL.5820 Graduate Seminar: Cellular and Molecular Regulation (at least one semester) OR

BIOL.5840 Graduate Seminar: Ecology, Evolution, and Systematics (at least one semester)

BIOL.5810 Departmental Seminar (every semester)

## Master of Science

### Prerequisites

The same suggested Biology, Chemistry, Mathematics, and Physics prerequisites as listed previously for the Master of Arts degree. For students interested in Ecology, Evolution or Systematics, additional coursework in some of the following areas is also recommended: genetics, general ecology, evolution, introductory statistics, general botany, and a taxonomically oriented course. For students interested in Cell or Molecular biology, additional coursework in some of the following areas is recommended: genetics, biochemistry, cell biology, physiology, molecular biology, microbiology or immunology.

The program for the Master of Science degree requires a minimum of 30 credits, including 24 credits of structured coursework and 6 credits of Thesis Research. Courses may be chosen from upper level electives within the Department of Biology or related departments; coursework may be tailored to the research interests in consultation with advisory committees of students.

### Required Courses

BIOL.5820 Graduate Seminar: Cellular and Molecular Regulation (minimum of two credits) OR

BIOL.5840 Graduate Seminar: Ecology, Evolution, and Systematics (minimum of two credits)

BIOL.5860 Scientific Communication in Biology Practicum (one credit)

BIOL.5800 Research Colloquium (one credit)

BIOL.5810 Departmental Seminar (every semester)



# Doctor of Philosophy

## Prerequisites

The same suggested Biology, Chemistry, Mathematics, and Physics prerequisites as listed previously for the Master of Arts degree. For students interested in Ecology, Evolution or Systematics, additional coursework in some of the following areas is also recommended: genetics, general ecology, evolution, introductory statistics, general botany, and a taxonomically oriented course. For students interested in Cell or Molecular Biology, additional coursework in some of the following areas is recommended: genetics, biochemistry, cell biology, physiology, molecular biology, microbiology or immunology.

The program for the Doctor of Philosophy degree requires a minimum of 36 credits, when pursued from the baccalaureate, including 24 credits of structured coursework and 12 credits of Dissertation Research. Courses may be chosen from upper level electives within the Department of Biology or related departments; coursework may be tailored to the research interests in consultation with the advisory committees of students.

New Ph.D. degree students who enter the program with a B.S. or B.A. degree may take the written preliminary exam the first or second Spring semester they are in the program. New Ph.D. students who enter the program with a Master's degree are required to take the written preliminary exam the first Spring semester they are at SLU.

*A formal minor is not permitted.*

## Required Courses

BIOL.5820 Graduate Seminar: Cellular and Molecular Regulation (minimum of two credits) OR  
BIOL.5840 Graduate Seminar: Ecology, Evolution, and Systematics (minimum of two credits)  
BIOL.5860 Scientific Communication in Biology Practicum (one credit)  
BIOL.5800 Research Colloquium (one credit)  
BIOL.6810 Departmental Seminar (every semester)

## Post-Baccalaureate Courses

BIOL.4020 Vertebrate Reproductive Physiology (3)  
BIOL.4040 Pollination Biology (3)  
BIOL.4090 Plant Ecology (3)  
BIOL.4100 Natural History of the Vertebrates (4)  
BIOL.4110 Natural History (1)  
BIOL.4120 Field Botany (5)  
BIOL.4130 Field Mammalogy (5)  
BIOL.4140 Field Ornithology (5)  
BIOL.4150 Nerve Cell Mechanisms in Behavior (3)  
BIOL.4160 Microbial Ecology (4)  
BIOL.4200 Aquatic Ecology (4)  
BIOL.4210 Biology and Classification of Orchids (3)  
BIOL.4260 Biology of Amphibians and Reptiles (4)  
BIOL.4280 Biology of Fishes (4)  
BIOL.4310 Biology of Birds (4)  
BIOL.4320 Cave Biology (4)  
BIOL.4330 Spring Flora of the Ozarks (4)  
BIOL.4340 Systematic Biology (3)  
BIOL.4350 Biology of Parasitic Organisms (4)  
BIOL.4360 Animal Behavior (3)  
BIOL.4370 Animal Behavior Laboratory (1)  
BIOL.4380 Biology of Mammals (4)  
BIOL.4400 Applied Ecology (3)  
BIOL.4410 Comparative Animal Physiology (3)  
BIOL.4440 Vertebrate Histology (4)  
BIOL.4480 Conservation Biology (3)  
BIOL.4500 Introductory Endocrinology (3)  
BIOL.4510 Behavioral Endocrinology (3)  
BIOL.4540 Human Cellular Physiology (3)  
IBOL.4610 Developmental Biology Laboratory (2)  
BIOL.4640 General Microbiology (3)  
BIOL.4650 Microbiology Lab (2)  
BIOL.4720 Cancer Biology (3)  
BIOL.4910 Internship in Conservation (3)  
BIOL.4911 Integrative Bioinformatics Internship (0-3)  
BIOL.4912 Internship in Plant Science (3)  
BIOL.5000 Problems in Vertebrate Morphology (2-3)  
BIOL.5010 Ecology of Vertebrate Reproduction (3)  
BIOL.5020 Comparative Vertebrate Reproduction (3)  
BIOL.5030 Genomics (3)  
BIOL.5050 Molecular Techniques Laboratory (2)  
BIOL.5070 Advanced Biological Chemistry (3)  
BIOL.5080 Advanced Cell Biology (3)  
BIOL.5090 Biometry (4)  
BIOL.5100 Cellular and Molecular Genetics (3)  
BIOL.5120 Signal Transduction (3)  
BIOL.5170 Introduction to GIS (3)  
BIOL.5180 Intermediate GIS (3)  
BIOL.5190 GIS in Biology (3)  
BIOL.5300 Problems in Vertebrate Physiology (2-4)  
BIOL.5340 Problems in Cell Biology (1-2)  
BIOL.5350 Current Topics in Cell Biology (2)  
BIOL.5400 Problems in Genetics (1-4)  
BIOL.5410 Ecological Genetics (3)  
BIOL.5420 Problems in Evolutionary Biology (1-4)  
BIOL.5450 Biogeography (3)  
BIOL.5480 Conservation Biology (3)  
BIOL.5500 Problems in Ecology (2-4)  
BIOL.5550 Advanced Ecology (3)  
BIOL.5560 Advanced Evolution (3)  
BIOL.5580 Applied Population Genetics (3)  
BIOL.5610 Principles of Developmental Biology (3)

BIOL.5630 Concepts of Immunology (3)  
BIOL.5640 Advanced Microbiology (3)  
BIOL.5670 Advanced Population Biology (3)  
BIOL.5700 Advanced Molecular Biology (3)  
BIOL.5760 Problems in Botany (2-4)  
BIOL.5780 Molecular Phylogenetic Analysis (3)  
BIOL.5820 Grad. Seminar: Cellular and Molecular Regulation (1-2)  
BIOL.5840 Grad. Seminar: Ecology, Evolution, and Systematics (2)  
BIOL.5800 Research Colloquium (0-1)  
BIOL.5810 Department Seminar (0-1)  
BIOL.5860 Scientific Communication Practicum (1)  
BIOL.5950 Special Study For Exams (0)

BIOL.5970 Research Topics (Master's only; 1-3)  
BIOL.5980 Graduate Reading Course (Master's only; 1-3)  
BIOL.5990 Thesis Research (0-6)  
BIOL.6040 Current Topics in Developmental Biology (3)  
BIOL.6150 Neural Basis of Behavior (3)  
BIOL.6300 Special Studies in Comparative Physiology (1-4)  
BIOL.6810 Departmental Seminar (0-1)  
BIOL.6950 Special Study for Examinations (0)  
BIOL.6970 Research Topics (Ph.D. only; 1-3)  
BIOL.6980 Graduate Reading Course (Ph.D. only; 1-3)  
BIOL.6990 Dissertation Research (0-6)

# BIOINFORMATICS & COMPUTATIONAL BIOLOGY

---

**David Letscher, Ph.D.**

*Graduate Program Director*

## Master of Science

The Master of Science program in Bioinformatics and Computational Biology utilizes interdisciplinary approaches to solve computationally intensive problems in the life sciences. The program pulls together the expertise of the Departments of Biology, Chemistry and Mathematics & Computer Science to prepare students for careers in the biotechnology, pharmaceutical, health care and software industries.

The use of computational techniques and information systems has revolutionized research in the biological sciences, from the analysis of DNA sequences, to the understanding of gene expression and regulation, to the structural modeling of proteins and RNAs, to the evolutionary relationship between species. The fields of bioinformatics and computational biology have become important areas for advanced study and the basis for success in biotechnology industries. This graduate program draws upon this industry in the local region. Metropolitan St. Louis has a reputation as the “BioBelt,” and is home to a cluster of 350 plant and life science enterprises with 17,000 employees. The community provides the program with ample opportunity for internships, which is a requirement of the program, and with employment opportunities for graduates.

### Prerequisites

Successful applicants to the program should have, or be completing, a bachelor’s degree, most typically in Biology, Biochemistry, Computer Science, Mathematics, Statistics, or closely related field. Previous courses should include the following (Saint Louis University equivalent listed in parentheses):

#### *Physical Sciences*

Principles of Biology I & II (e.g., BIOL.1040/1060)

General Chemistry I & II (e.g., CHEM 1650-1680)

Molecular & Cellular Biology (e.g., BIOL.3020 or 3040)

Genetics (e.g., BIOL.3030).

#### *Computer Science*

Introduction to Programming (e.g., CSCI.1500)

Data Structures (e.g., CSCI.1800)

#### *Mathematics*

Calculus I & II (e.g., MATH 1420/1430)

Discrete Mathematics (e.g., MATH.1350)

Introduction to Statistics (e.g., MATH.1300, 4020, or 4030)

Students who have most, but not all, of the above prerequisite courses may be admitted probationally to the program and take appropriate prerequisite courses during the first semester, alongside introductory graduate course work.

### Required Courses

The graduate curriculum consists of 30 credit hours, beginning with the following required courses:

BCB.5520 Introduction to Bioinformatics I

BCB.5530 Introduction to Bioinformatics II

BCB.5540 Algorithms in Computational Biology

BCB.5030 Genomics

### Internship/Research

BIOL.4810 Integrated Bioinformatics Internship

BCB.5810 Internship in Bioinformatics

BIOL.5970 Research Topics

BCB.5970 Research Topics

CHEM.5970 Research Topics  
CSCI.5970 Research Topics  
IAS.6970 Research Topics (with approved topic)

**Biology**

BIOL.5100 Cellular and Molecular Genetics  
BIOL.4700/5700 Advanced Molecular Biology  
BIOL.5780 Molecular Phylogenetic Analysis

**Computing**

CSCI.5100 Cellular and Molecular Genetics  
CSCI.4700/5700 Advanced Molecular Biology  
CSCI.5780 Molecular Phylogenetic Analysis

**Department Seminars**

BCB.5910 Seminar in Bioinformatics  
BIOL.5820 Seminar in Cellular and Molecular Biology  
BIOL.5840 Seminar in Ecology, Evolution, and Systematics  
BIOL.5910 Department Seminar  
CHEM.5910 Chemistry Research Seminar  
CHEM.6910 Chemistry Seminar

**Other Electives**

BCB.5930 Topics in Bioinformatics  
BHCM.6280 Introduction to Genomics and Bioinformatics  
BIOL.5050 Molecular Technique Lab  
BIOL.5060 Advanced Topics in Molecular Biology  
BIOL.5070 Advanced Biological Chemistry  
BIOL.4790/5090 Biometry  
BIOL/IAS.5170 Introduction to GIS  
BIOL/IAS.5180 Intermediate GIS  
BIOL.5190 GIS in Biology  
BIOL.5410 Ecological Genetics  
BIOL.5420 Problems in Evolutionary Biology  
BIOL.5560 Advanced Evolution  
BIOL.5580 Applied Population Genetics  
CHEM.4620/4630 Biochemistry I + lab  
CHEM.4640/4650 Biochemistry II + lab  
CHEM.5370 Computational Chemistry  
CSCI.4620 Artificial Intelligence  
CSCI.5010 Advanced Scripting for the Life Sciences  
CSCI.5160 Computational Geometry  
CSCI.5660 Image Processing  
CSCI.5010 Topics in Computer Science  
MATH.4020 Introduction to Mathematical Statistics

# CHEMISTRY

---

**R. Scott Martin, Ph.D.**

*Department Chairperson*

**Dana A. Baum, Ph.D.**

*Graduate Program Director*

The Department of Chemistry offers M.A., M.S. and Ph.D. degrees. The thesis-based Master of Science degree program is typically for full-time research students who want a stand-alone M.S. degree. The non-thesis-based M.A. degree is for full-time research students who want to transition into the Ph.D. program after year 2 in the department. Both degrees offer specialization in the fields of analytical, chemical biology, inorganic, organic, or physical chemistry. This program includes a core curriculum of 12 credits consisting of a minimum of two courses from each of the two specified areas, with the remaining 12 credits coming from electives. Both degrees allow for a broad coverage of chemistry coursework, while permitting students to specialize in their field of interest.

The Department of Chemistry also offers a Doctor of Philosophy degree. This degree program requires a total of 39 credits of lecture coursework and research classes (including 12 credits of dissertation research).

These programs are designed to allow students to specialize in one of the five areas: analytical, chemical biology, inorganic, organic, or physical chemistry.

## Master of Arts (Non-thesis option)

### **Prerequisites**

In addition to 18 credits in advanced undergraduate Chemistry courses or the equivalent, a background in mathematics which includes at least two courses in calculus and a minimum of one year of physics are required.

### **Required Courses**

Students must take 24 credits of coursework in the Department. CHEM.5500 (Advanced Inorganic Chemistry) and CHEM.5200 (Analytical Chemistry 2, Instrumental Analysis) must be taken unless they or their equivalents have already been taken for undergraduate credit. Full-time research students usually take 3 credits of Introduction to Research in a CHEM.5x99 course in addition to 3 credits of CHEM.5970 Research Topics.

*A formal minor is not permitted.*

## Master of Science (Thesis option)

### **Prerequisites**

In addition to 18 credits in advanced undergraduate Chemistry courses or the equivalent, a background in mathematics which includes at least two courses in calculus and a minimum of one year of physics are required.

### **Research Component**

Students are required to complete 6 credits of Thesis Research, culminating in an oral presentation of their research work.

### **Required Courses (Core)**

Students must take 12 credits of course courses, with 6 credits from (1) *Synthesis & Materials Chemistry* courses and 6 credits from (2) *Analytical & Physical Methods*. The remaining 6 credits can come from either area.

*A formal minor not permitted.*

## Doctor of Philosophy

### **Prerequisites**

In addition to 18 credits in advanced undergraduate chemistry courses or the equivalent, a background in mathematics which includes at least two courses in calculus and a minimum of one year of physics are required.

### **Research Component**

Students are required to complete 3 credits of Introduction to Research in a CHEM.5x99 courses in addition to 12 credits of Dissertation Research, CHEM.6990; 3 credits of CHEM.5970 Research Topics; and 3 credits of Proposal Writing CHEM.6900; culminating in an oral presentation of their research work.

### Required Courses (Core)

Students must take 12 credits of core courses, with 6 credits from (1) *Synthesis & Materials Chemistry* courses and 6 credits from (2) *Analytical & Physical Methods*. The remaining 6 credits can come from either area.

*A formal minor not permitted.*

### Post-Baccalaureate Courses

All Post-Baccalaureate Courses are typically offered every other year unless otherwise specified. Some of the courses listed below may be offered in the summer session. Information on summer offerings is available from the Graduate Program Director or Department Chairperson.

- |   |  |
|---|--|
| CHEM.5000 Introduction to Chemical Research (1)                     | CHEM.5460 Synthetic Organic Chemistry (3)                            |
| CHEM.5150 Statistical Methods for Physical Scientists (3)           | CHEM.5470 Principles of Medicinal Chemistry (3)                      |
| CHEM.5160 Advances in Synthetic Chemistry (3)                       | CHEM.5499 Introduction to Organic Research (1-3)                     |
| CHEM.5170 Advances in Analysis and Modeling of Chemical Systems (3) | CHEM.5500 Inorganic Chemistry (3)                                    |
| CHEM.5200 Instrumental Analysis (3)                                 | CHEM.5550 Organometallic Chemistry (3)                               |
| CHEM.5230 Mass Spectrometry (3)                                     | CHEM.5560 Solid State Chemistry (3)                                  |
| CHEM.5250 Bioanalytical Methods of Analysis (3)                     | CHEM.5570 Chemical Applications of Group Theory and Spectroscopy (3) |
| CHEM.5260 Analytical Separations (3)                                | CHEM.5590 Special Topics in Inorganic Chemistry (3)                  |
| CHEM.5270 Electroanalytical Chemistry (3)                           | CHEM.5599 Introduction to Inorganic Research (1-3)                   |
| CHEM.5280 Chemical Sensors (3)                                      | CHEM.5700 Environmental Chemistry (3)                                |
| CHEM.5290 Special Topics in Analytical Chemistry (3)                | CHEM.5800 Fundamentals & Design of Nanoarchitectures (3)             |
| CHEM.5299 Introduction to Analytical Research (1-3)                 | CHEM.5850 Polymer Chemistry (3)                                      |
| CHEM.5330 Advanced Physical Chemistry (3)                           | CHEM.5920 Research Seminar (0-1)                                     |
| CHEM.5340 Advanced Thermodynamics (3)                               | CHEM.5950 Special Study for Examinations (0)                         |
| CHEM.5350 Elements of Surface and Colloid Science (3)               | CHEM.5970 Research Topics (1-3)                                      |
| CHEM.5370 Computational Chemistry (3)                               | CHEM.5980 Graduate Reading Course (1-3)                              |
| CHEM.5390 Special Topics in Physical Chemistry (3)                  | CHEM.5990 Thesis Research (0-6)                                      |
| CHEM.5399 Introduction to Physical Research (1-3)                   | CHEM.6900 Intro to Proposal Writing & Oral Presentations (3)         |
| CHEM.5400 Organic Spectroscopy (3)                                  | CHEM.6990 Dissertation Research (0-12)                               |
| CHEM.5440 Bioorganic Chemistry (3)                                  |  |
| CHEM.5450 Advanced Organic Chemistry (3)                            |  |

# COMMUNICATION

---

**April Trees, Ph.D.**

*Department Chairperson*

**Dan Kozlowski, Ph.D.,**

*Graduate Program Director*

The Department of Communication offers a Master of Arts degree designed to teach students to be conscientious thinkers and leaders who communicate effectively in a diverse world and who understand the social implications of media and communication technology. Coursework options allow students to deepen their understandings of communication theory, research, criticism, and ethics within a variety of areas of study, including health communication, intercultural communication, interpersonal communication, media studies, organizational communication, rhetoric and public dialogue, and strategic communication. Working professionals and those seeking careers as organizational practitioners may be more attracted to the applied project or the comprehensive exam degree completion options, while students anticipating research-based careers or who might progress to Doctoral programs should consider the thesis degree completion option.

Students choosing the comprehensive exam option for the M.A. degree take 30 credits of coursework plus comprehensive written and oral examinations. The applied project degree completion option includes 27 credits of coursework plus an applied project (3 credits of CMM.5890, Applied Project) and a final oral examination. The thesis degree completion option consists of 24 credits of coursework plus a Master's thesis (6 credits of CMM.5990, Thesis Research) and a final oral examination. The department requires all students to take at least 21 credits of graduate-level courses in Communication, including 9 credits of required courses. For their additional coursework, students may choose up to a total of 9 credits in the following areas: 4000 level courses in Communication, post-baccalaureate coursework outside of the department, or independent studies. Unless circumstances mandate otherwise, no more than 6 of these 9 credits may be taken in 4000 level courses in Communication or post-baccalaureate coursework outside of the department. No more than 3 of these credits may be taken as independent studies.

## Master of Arts

### Prerequisites

Undergraduate Communication degree or a degree in a related discipline with possible prerequisites in Communication Research.

### Required Courses

CMM.5000 Graduate Study of Communication

CMM.5800 Research Methods in Communication

CMM.5010 Reading Foundations in Communication Theory

### Additional Requirements

Students choose one of three degree completion options: **1)** M.A. Comprehensive Exam option with written and oral degree examinations (0 credits), **2)** M.A. Applied Project option with final oral defense (3 credits), or **3)** M.A. Thesis option with final oral defense (6 credits). For the M.A. Thesis option, an additional research methods course is strongly recommended.

### Upper-Division Undergraduate Courses

CMM.4000 Family Communication (3)

CMM.4050 Theories of Persuasion (3)

CMM.4100 Multiplatform Journalism (3)

CMM.4160 Editing (3)

CMM.4200 Leadership and Teams (3)

CMM.4210 Organizational Culture (3)

CMM.4220 Conflict, Mediation and Negotiation (3)

CMM.4240 Training and Development (3)

CMM.4300 Gender and Communication (3)

CMM.4320 Communicating Across Racial Divisions (3)

CMM.4350 Stereotyping and Bias in the Mass Media (3)

CMM.4410 Critical Perspectives on Journalism (3)

CMM.4420 Theory of Free Expression (3)

CMM.4430 Culture, Technology and Communication (3)

CMM.4440 History of Journalism (3)

CMM.4600 Integrated Communication Campaigns (3)

CMM.4640 Public Relations Case Studies (3)

CMM.4650 International Public Relations (3)

CMM.4700 Advertising Research and Strategic Planning (3)

CMM.4720 American Advertising Federation Competition (3)

CMM.4810 Digital Storytelling (3)

## Post-Baccalaureate Courses

CMM.5000 Graduate Study of Communication (3) (Offered every Fall semester)  
CMM.5800 Research Methods in Communication (3) (Offered every Spring semester)  
CMM.5010 Reading Foundations in Communication Theory (3) (Offered every Fall semester)  
CMM.5070 Contemporary Theories in Communication (3) (Offered occasionally)  
CMM.5450 Studies in Mass Media (3) (Offered occasionally)  
CMM.5400 Contemporary Issues in Media (3) (Offered every year)  
CMM.5300 Culture and Public Dialogue (3) (Offered occasionally)  
CMM.5600 Strategic Communication (3) (Offered every other year)  
CMM.5200 Organizational Communication (3) (Offered every year)  
CMM.5440 Communication Ethics (3) (Offered occasionally)

CMM.5050 Rhetorical Theory and Criticism (3) (Offered occasionally)  
CMM.5340 Language and Cultural Diversity (3) (Offered occasionally)  
CMM.5410 Foundations of Journalism (3) (Offered occasionally)  
CMM.5020 Interpersonal Communication (3) (Offered every other year)  
CMM.5090 Health Communication (3) (Offered every year)  
CMM.5810 Digital Storytelling (3) (Offered occasionally)  
CMM.5820 Advanced Research Methods (3) (Offered occasionally)  
CMM.5080 Philosophy of Communication (3) (Offered occasionally)  
CMM.5890 Applied Project (3)  
CMM.5930 Special Topics (3)  
CMM.5950 Special Study for Examinations (0)  
CMM.5980 Graduate Reading Course (1-3)  
CMM.5990 Thesis Research (0-6)



# COMMUNICATION SCIENCES & DISORDERS

---

**Travis T. Threats, Ph.D.**

*Department Chairperson*

**Mitzi Brammer, Ph.D.**

*Graduate Program Director*

The Department of Communication Sciences and Disorders offers a Master of Arts (M.A.) degree with an area of emphasis in speech-language pathology. The Department's program is accredited by the Council on Academic Accreditation (CAA) for the American Speech Language-Hearing Association (ASHA). The academic objective of the program is to prepare professionals with the expertise to provide quality clinical services in speech, language, communicative and swallowing disorders. A major focus of the program is to develop clinicians who are prepared to serve culturally and linguistically diverse populations across the life span. The program consists of 40 credits of academic credit plus successful completion of five zero-credit clinical practica (one taken each semester) and six credits in student teaching and medically based clinical internship during the last semester of the program.

## Master of Arts

### Prerequisites

General educational background in areas such as the humanities, arts, sciences, communication arts, education, modern language, statistics, psychology, and sociology is required. Undergraduate major or equivalent in coursework related to speech, language, and hearing science, development, and disorders is required.

### Required Courses

CSDI.5050 Experimental Design  
CSDI.5450 Phonological Development and Disorders  
CSDI.5510 Assessment/Management of Social Communication Disorders  
CSDI.5530 Augmentative and Alternative Communication  
CSDI.5550 Language I  
CSDI.5560 Language II  
CSDI.5600 Fluency Disorders  
CSDI.5630 Dysphagia  
CSDI.5700 Voice Disorders  
CSDI.5710 Cleft Palate and Craniofacial Anomalies  
CSDI.5720 Neurogenic Communicative Disorders in Adults  
CSDI.5760 Motor Speech Disorders  
CSDI.5770 Assessment and Management of Communication Disorders in Multicultural Populations  
CSDI.5800 Professional Issues in Speech-Language Pathology and Audiology  
CSDI.5820 Cognitive Communication Disorders  
CSDI.5010 Clinical Practicum  
CSDI.5030 Student Teaching in Communication Disorders  
CSDI.5910 Clinical Internship

Students must enroll in five terms (semester or summer) of zero-credit Clinical Practicum during their study. Additionally, six credits of off-campus clinical practice is completed during the last semester of study, typically involving three credits of Student Teaching and three credits of Clinical Internship. Total credits required: 46 credits (36 credits of required coursework, 4 credits of elective coursework and 6 credits of clinical practice).

*A formal minor is not permitted.*

### Upper-Division Undergraduate Courses

CSDI.4000 Survey of Speech Disorders (2)  
CSDI.4100 Survey of Language Disorders (2)  
CSDI.4200 Audiology: Basic Audiometry (3)  
CSDI.4300 Clinical Methods (3)  
CSDI.4350 Clinical Observation (0)  
CSDI.4400 Aural Rehabilitation (3)  
CSDI.4500 Neurological Bases of Communication (3)

## Post-Baccalaureate Courses

- CSDI.5010 Clinical Practicum (0)  
CSDI.5030 Student Teaching in Communication Disorders (3)  
CSDI.5050 Experimental Design (2)  
CSDI.5440 Linguistics (2)  
CSDI.5450 Phonological Development and Disorders (2)  
CSDI.5510 Assessment/Management of Social Communication Disorders (2)  
CSDI.5530 Augmentative and Alternative Communication (2)  
CSDI.5550 Language I (3)  
CSDI.5560 Language II (3)  
CSDI.5580 Language Based Literacy Disorders (2)  
CSDI.5600 Fluency Disorders (3)  
CSDI.5630 Dysphagia (3)  
CSDI.5650 Clinical Supervision: Practices, Issues and Choices (2)  
CSDI.5700 Voice Disorders (3)  
CSDI.5710 Cleft Palate and Craniofacial Anomalies (2)  
CSDI.5720 Neurogenic Communicative Disorders in Adults (3)  
CSDI.5730 Neuropathologies in Children (2) (offered occasionally)  
CSDI.5760 Motor Speech Disorders (3)  
CSDI.5770 Assessment and Management of Communication Disorders in Multicultural Populations (2)  
CSDI.5800 Professional Issues in Speech-Language Pathology (1)  
CSDI.5820 Cognitive Communication Disorders (3)  
CSDI.5880 Advanced Audiology (2)  
CSDI.5890 Institute in Communication Disorders (2)  
CSDI.5930 Special Topics (1-3)  
CSDI.5910 Clinical Internship (3)  
CSDI.5950 Special Study for Examinations (0)  
CSDI.5960 Essay/Project Guidance (0)  
CSDI.5970 Graduate Readings (1-3)  
CSDI.5990 Thesis Research (0-6)

# EARTH & ATMOSPHERIC SCIENCES

---

**Benjamin de Foy, Ph.D.**  
*Department Chairperson*

## GEOSCIENCE

**Robert B Herrmann, Ph.D.**  
*Graduate Program Director*

The Department of Earth and Atmospheric Sciences offers programs leading to the degrees of Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) in Geoscience with concentrations in Geology, Geophysics and Environmental Geosciences. Students with undergraduate degrees in any STEM discipline (science, technology, engineering or mathematics) are encouraged to apply to these programs.

Active research areas in geophysics include earthquake seismology, tectonics, gravimetry and physics of the deep interior, those in geology include tectonics, remote sensing, sedimentary geology and sedimentation, igneous and metamorphic petrology, geochemistry, geochronology, geomorphology and fluid-rock interaction, while those in environmental geosciences include river/reservoir sustainability, land use effects on water quality, wetland biogeochemistry, hydro-geochemistry, fluvial geomorphology, coastal geomorphology and processes..

Research facilities include a network of seismograph stations surrounding the New Madrid fault zone, state-of-the-art seismic observatories which transmit data by satellite and internet from remote sites distributed across a broad region of the central United States, high performance computing clusters, rock preparation and mineral separation facilities, a large format stream table, stable isotope geochemistry lab, elemental analysis, gas chromatography, water quality, soils laboratory and an environmental imaging lab.

## Master of Science

### **Required Core Courses (Geoscience, all Degrees)**

EAS.4500 Scientific Communications

EAS.5900 Geoscience Journal Club (each semester) Master's students must register for at least one semester for one credit. Ph.D. students must register for at least two semesters for one credit each semester.

EAS.5190 Seminar in Geosciences or EAS.5390 Seminar in Geophysics

### *Concentration in Geology*

The Master of Science (Thesis) in Geoscience with Geology concentration requires a minimum of 24 credits plus a written thesis with 6 credit. The Master of Science in Geology (non-Thesis) with a Geology concentration, coursework option, requires a minimum of 30 credits and independent study. Prerequisites include mineralogy, petrology, sedimentology and structural geology. One year each of calculus, physics and chemistry is desirable.

### **Required courses in addition to required Core courses are:**

EAS.5060 Physics of the Solid Earth

EAS.5170 Divergent and Convergent Margins or EAS.5180 Transform margins and Plate Interiors

### *Concentration in Geophysics*

The Master of Science (Thesis) in Geoscience with Geophysics concentration requires a minimum of 24 credits plus a written thesis of 6 credits. The Master of Science in Geoscience (non-Thesis) with a Geophysics concentration, coursework option, requires a minimum of 30 credits and independent study. Prerequisites include structural geology, college physics, mechanics and mathematics through differential equations.

### **Required courses in addition to required Core courses are:**

EAS.5060 Physics of the Solid Earth

EAS.5170 Divergent and Convergent Margins or EAS.5180 Transform Margins and Plate Interiors

and 2 of the following:

EAS.5040 Potential Theory, EAS.5400 Continuum Mechanisms and/or EAS.5510/5520 Seismic Exploration Methods with Laboratory

## Concentration in Environmental Geosciences

The Master of Science (Thesis) in Geoscience with an Environmental Geosciences concentration requires a minimum of 24 credits plus a written thesis of 6 credits. The Master of Science in Geoscience (non-Thesis) with an Environmental Geosciences concentration, coursework option, requires a minimum of 30 credits and independent study. Prerequisites for Master's degree: an undergraduate degree in a STEM discipline with at least one semester each of calculus, physics, biology, chemistry, and geoscience; a second semester of calculus or one semester of statistics.

## Doctor of Philosophy

The Doctor of Philosophy in Geosciences requires a minimum of 48 credits of course work and exactly 12 credits of dissertation research. Up to 24 credits of course work leading to a Master's degree may count toward the credit requirement.

*A formal minor is not permitted.*

## Concentration in Geophysics

The prerequisites are the same as for the Master's degree. When the doctorate is pursued directly from the baccalaureate, a minimum of 48 credits of coursework is required in preparation for the research-phase.

Required courses in addition to required Core courses are:

EAS.5060 Physics of the Solid Earth

EAS.5170 Divergent and Convergent Margins or EAS.5180 Transform Margins and Plate Interiors, and 2 of the following:

EAS.5040 Potential Theory, EAS.5400 Continuum Mechanisms and/or EAS.5510/5520 Seismic Exploration Methods with Laboratory

Students in seismology must take:

EAS.5120 Time Series Analysis in Geophysics

EAS.5390 Seminar in Seismology

EAS.6310 Advanced Seismology I

EAS.6320 Advanced Seismology II

## Concentration in Environmental Geosciences

The prerequisites are an undergraduate degree in a STEM discipline with two semesters of calculus, and six semesters combined in physics, biology, chemistry, and geoscience; or a Master's degree in a STEM discipline.

## METEOROLOGY

**Zaitao Pan, Ph.D.,**

*Graduate Program Director*

Meteorologists study the dynamics of air motion, physical processes such as transfer of radiation, and convection resulting in severe storms, flash floods, and hurricanes. During the past few decades progress has been made in atmospheric sciences in developing systems to observe the current state of the atmosphere and in using those observations in improved computer models for weather prediction and climate simulation. The atmosphere is also the centerpiece of the interconnected, interactive global environmental system within which life thrives. Current research efforts include the study of heavy precipitation, regional climate, and air quality using numerical weather prediction models. Faculty members collaborate with research meteorologists at national centers as well as operational meteorologists at local National Weather Service forecast offices.

The Department is a charter member of the University Corporation for Atmospheric Research (UCAR) which manages the National Center for Atmospheric Research, Boulder, Colorado, under the sponsorship of the National Science Foundation. External funding for research comes from the National Oceanic and Atmospheric Administration (NOAA), the National Weather Service, and the National Aeronautics and Space Administration (NASA). The department has a dedicated synoptic computer lab and receives real-time data from both satellite downlink and the Internet.

Software for displaying and analyzing weather data comes from Unidata Program Center, the National Weather Service, and locally written code.

# Masters of Science (Research)

This degree requires 30 credits with 6 credits being thesis research.

## Prerequisite

An undergraduate degree in meteorology or a related field.

## Required Courses (9 hrs):

EAS.5080 Dynamics of the Atmosphere (3)  
EAS.5090 Physics of the Atmosphere (3)  
EAS.5300 Seminar in Atmospheric Science (0-1), first time 1 hr, subsequently 0 hr when offered  
EAS.5330 Communicating in Research (2)

## Elective Courses (15 credits) from following list:

EAS.5110 Computing in Atmospheric Science (2)	EAS.5610 Satellite Meteorology (3)
EAS.5200 Numerical Methods of Prediction (3)	EAS.5650 Radar Meteorology (3)
EAS.5230 Boundary Layer Meteorology (3)	EAS.5700 Convection in the Atmosphere (3)
EAS.5240 Tropical Meteorology (3)	EAS.5981 Independent Study (1-3)
EAS.5270 Meteorology of Severe Storms (3)	EAS.5890 Research Seminar (3)
EAS.5290 Mesometeorology (3)	EAS.5930 Special Topics in Meteorology (1-3)
EAS.5340 Cloud Physics (3)	EAS.5970 Research Topics (1-3)
EAS.5380 Statistical Methods in Meteorology (3)	EAS.5980 Graduate Reading Course (1-3)
EAS.5360 Principles of Radiation Transfer I (3)	EAS.6480 General Circulation of the Atmosphere (3)
EAS.5470 Turbulence and convection (3)	GIS.5010 Introduction to GIS (3)
EAS.5600 Atmospheric Chemistry (3)	

In addition, up to 9 credits of some upper division (4000 level) undergraduate courses in meteorology can be counted towards electives with permission.

## Additional Requirements:

Qualifying exam  
EAS.5950 Special Study for Examinations (0)  
6 thesis credits, EAS.5990 Thesis Research (0-6)

# Master of Science (Professional)

Same as Master (Research), except that the 6 credits of thesis research is replaced with 2 elective courses.

# Doctor of Philosophy

This degree requires 60 credits (30 after the masters) including 12 credits being dissertation research.

## Prerequisite

An undergraduate area of concentration in meteorology

## Required Courses

Same as Masters

## Elective courses (15 hrs):

Those listed in Masters  
EAS.6880 Independent Study (1-3)  
EAS.6980 Graduate Reading Course (1-3)  
EAS.6930 Special Topics in Meteorology (1-3)

## Additional Requirement:

Written and oral preliminary exam  
EAS.6950 Special Study for Examination (0)  
12 credits Dissertation Research, EAS.6990 Dissertation Research (0-12)  
The doctorate may be pursued directly from the baccalaureate with the permission of the Program Director.

## Upper-Division Undergraduate Courses

EAS.4050 Petrology (3)  
EAS.4060 Petrology Laboratory (1)  
EAS.4100 Sedimentology and Stratigraphy (3)  
EAS.4180 Stratigraphy (3)  
EAS.4190 Petroleum Geology (3)  
EAS.4200 Synoptic Meteorology I (3)  
EAS.4220 Synoptic Meteorology II (3)  
EAS.4230 Micrometeorology (3)  
EAS.4270 Environmental Geophysics (3)  
EAS.4280 Environmental Geochemistry (3)  
EAS.4300 Structural Geology (4)  
EAS.4350 Groundwater Hydrology (3)  
EAS.4370 Earth Dynamics (3)  
EAS.4400 Engineering Geology (3)  
EAS.4440 Principles of Dynamic Meteorology I(3)  
EAS.4450 Principles of Dynamic Meteorology II (3)  
EAS.4500 Scientific Communications (2)  
EAS.4510 Principles of Seismic Exploration (2)  
EAS.4520 Seismic Exploration Laboratory (1)  
EAS.4530 Principles of Electrical Exploration (3)  
EAS.4550 Principles of Gravity and Magnetic Exploration (4)  
EAS.4600 Introduction to the Physics of the Solid Earth (3)  
EAS.4620 Introduction to Earthquake Seismology (3)  
EAS.4720 Seismological Instrumentation (3)  
EAS.4750 Introduction to Geomagnetism (3)

## Post-Baccalaureate Courses

EAS.5040 Potential Theory (3)  
EAS.5060 Physics of Solid Earth (3)  
EAS.5070 Advanced Coastal Processes and Morphology (3)  
EAS.5080 Dynamics of the Atmosphere (3)  
EAS.5090 Physics of the Atmosphere (3)  
EAS.5110 Computing in Atmospheric Science (2)  
EAS.5120 Time Series Analysis in Geophysics (3)  
EAS.5150 Properties of Earth Materials (3)  
EAS.5170 Divergent and Convergent Margins (3)  
EAS.5180 Transform Margins and Plate Interiors (3)  
EAS.5190 Seminar in Geoscience (2)  
EAS.5200 Numerical Methods of Prediction (3)  
EAS.5220 Geophysical Data Processing (3)  
EAS.5230 Boundary Layer Meteorology (3)  
EAS.5240 Tropical Meteorology (3)  
EAS.5260 Synoptics and Dynamics of Jet Streams (3)  
EAS.5270 Meteorology of Severe Storms (3)  
EAS.5280 Diagnosis and Prediction of Severe Storms (3)  
EAS.5290 Mesometeorology (3)  
EAS.5300 Seminar in Atmospheric Science (0-1)  
EAS.5330 Communicating in Research (2)  
EAS.5340 Cloud Physics (3)  
EAS.5360 Principles of Radiative Transfer (3)  
EAS.5380 Statistical Methods in Meteorology (3)  
EAS.5390 Seminar in Seismology (2)  
EAS.5400 Continuum Mechanics in Wave Propagation (3)  
EAS.5420 Advanced Structural Geology (2)  
EAS.5430 Isotope Geochemistry (2)  
EAS.5440 Advanced Sedimentary Geology (2)  
EAS.5450 Advanced Petrology (2)  
EAS.5460 Geodynamics (3)  
EAS.5470 Turbulence (3)  
EAS.5510 Seismic Exploration Methods (2)  
EAS.5520 Seismic Exploration Laboratory (1)  
EAS.5540 Potential and Electrical Exploration Methods (3)  
EAS.5610 Satellite Meteorology (3)  
EAS.5650 Radar Meteorology (3)  
EAS.5700 Convection in the Atmosphere (3)  
EAS.5720 Seismological Instrumentation (3)  
EAS.5750 Land-Atmosphere Interaction (3)  
EAS.5800 Synoptic-Mesoscale Circulations (3)  
EAS.5981 Independent Study (1-3)  
EAS.5900 Geoscience Journal Club (0-1)  
EAS.5930 Special Topics in Earth and Atmospheric Sciences (1-3)  
EAS.5950 Special Study for Examinations (0)  
EAS.5970 Research Topics (1-3)  
EAS.5980 Graduate Reading Course (1-3)  
EAS.5990 Thesis Research (0-6)  
EAS.6100 Advanced Topics in Solid Earth Geophysics (3)  
EAS.6190 Advanced Seminar in Geophysics (2)  
EAS.6200 Advanced Geomagnetism (3)  
EAS.6300 Seminar in Atmospheric Science (1)  
EAS.6310 Advanced Seismology I (3)  
EAS.6330 Communicating in Research (2)  
EAS.6320 Advanced Seismology II (3)  
EAS.6480 General Circulation of the Atmosphere (3)  
EAS.6590 Seminar in Numerical Methods of Atmospheric Sciences (3)  
EAS.6981 Independent Study (1-3)  
EAS.6900 Geoscience Journal Club (0-1)  
EAS.6930 Special Topics in Earth and Atmospheric Sciences (1-3)  
EAS.6950 Special Study for Examinations (0)  
EAS.6970 Research Topics (1-3)  
EAS.6980 Graduate Reading Course (1-3)  
EAS.6990 Dissertation Research (0-6)

# ENGLISH

---

**Toby Benis, Ph.D.**

*Department Chairperson*

**Joseph Weixlmann, Ph.D.**

*Graduate Program Director*

The Graduate Program provides students scholarly training in English language and literature. Encountering courses that span the full experience of works in the English language--from Old Norse to Shakespeare to contemporary and postcolonial writing--students in the program have the chance to pursue specializations in a great variety of literary fields and in the study of rhetoric and composition. Responsive to interdisciplinary interests and to all of the theoretical discourses that connect the study of English language and literature to other literatures and cultures, the program is committed to equipping students with the disciplines and methods of linguistic and literary analysis that will prepare them professionally for the careers they seek.

## Master of Arts

### **Prerequisites**

Normally, a B.A. in English (or at least 18 credits of successful work in upper-division undergraduate courses in English) is required. Applicants with different majors who possess strong backgrounds in English and American literature will also be considered.

### **Required Courses**

The Master of Arts requires 30 credits beyond the B.A. Six credits may be taken at the 4000 level. Students are required to take, preferably in their first year, ENGL.5000 Methods of Literary Research and ENGL.5110 Literary Theory. ENGL.5010, The Teaching of Writing, or its equivalent, is also required of those who teach writing classes offered by the Department.

## Master of Arts (Thesis)

The M.A. (Thesis) gives students the option of substituting a thesis for six credits of course work. Such students must register for 6 credits of ENGL.5990 (Thesis Research) in their second year.

### **Madrid Campus**

The M.A. or M.A. (Thesis) program is also offered at the Saint Louis University Madrid-Spain campus. Students who enroll at the Madrid campus are required to spend one semester, during the academic year or a six-week summer term, in residence at the St. Louis campus. For further information on the Madrid Campus and the M.A. program there, see [spain.slu.edu](http://spain.slu.edu).

### **Additional Requirements**

M.A. students take a one-hour oral examination on works drawn from a list that is made available to them at the outset of their program. M.A. (Thesis) students are also examined orally on their theses.

### **Advancement to the Doctorate**

Admission to the doctorate is made by separate application in the spring of the Master's candidate's second year. Students seeking admission to the doctorate from the Master's program must complete a written project testifying to their sustained ability to work independently. This requirement can be satisfied in one of two ways. If they wish, students in their second year may write a Master's Thesis; at the completion of this two-semester process, these candidates graduate with M.A. degrees. Alternately, students contemplating advancement to Doctoral study can complete a Master's Essay in one semester. Written under the direction of a faculty member chosen by students, the Master's Essay is shorter than a thesis but nevertheless testifies to students' abilities to independently frame and complete article-length projects (roughly 25-30 pages) of their own design. Students writing a Master's Essay must register for 3 credits of ENGL.5980 (a Graduate Reading Course) in the semester in which they undertake this project.

# Doctor of Philosophy

## Prerequisites

An M.A. or 30 credits in course work in English beyond the B.A., though students from other fields with strong backgrounds in English studies will also receive consideration.

## Required Courses

Students are required to take a minimum of 24 credits in English course work beyond the M.A. Six credits may be taken at the 4000 level. ENGL.5000 and ENGL.5110 are required of all students who have not taken equivalent courses in another program as part of their prior training. ENGL.5010, The Teaching of Writing, or its equivalent, is also required of those who teach writing classes offered by the Department. After their first year, all Ph.D. students must, over several terms, distribute registrations for 12 credits of ENGL.6990 (Dissertation Research).

## Language Requirement

Before taking their comprehensive exams, all Ph.D. candidates must display reading proficiency in one modern foreign language relevant to their research. Students concentrating in medieval or renaissance literature also need to demonstrate competence in either Latin or Classical Greek.

## Additional Requirements

Ph.D. candidates will take a Doctoral Competency Exam, which has a written and an oral component. The Written Component takes the form of a Competency Essay, written over the course of seven days, in response to a question based on the texts on the Doctoral Reading List selected by each candidate. These lists are made available to students at the outset of their program.

The Oral Competency Examination Committees are comprised of the three faculty on students' dissertation committees and two other faculty agreed upon by students and their advisors in consultation with the program director and the department chair. The oral exam lasts two hours. The Examination Committee questions students about their Competency Essay, as well as the texts on the chosen Doctoral Reading List. Within one week following successful completion of students' oral examinations, their dissertation committee will meet with them to discuss and give final approval to the dissertation prospectus. If students perform acceptably, they achieve two goals simultaneously: passing the Doctoral Competency Exam and having the dissertation prospectus approved by the dissertation committee. Students are then eligible to write their dissertations. Completed dissertations are assessed by the committee and are formally accepted after a public defense.

## Upper-Division Undergraduate Courses

ENGL.4000-4040 Writing and Rhetoric	ENGL.4200-4290 Medieval Literature
ENGL.4000 Business and Professional Writing	ENGL.4200 Introduction to Old English
ENGL.4010 New Media Writing	ENGL.4210 Beowulf
ENGL.4020 History of Rhetoric I	ENGL.4220 Introduction to Old Norse
ENGL.4030 History of Rhetoric II	ENGL.4230 Literature of the Vikings
ENGL.4040 Problems in Rhetoric	ENGL.4240 Chaucer: The Canterbury Tales
ENGL.4050-4090: Creative Writing	ENGL.4250 Chaucer: Troilus and Criseyde and Shorter Works
ENGL.4050 Advanced Creative Writing: Poetry	ENGL.4260 Medieval Drama
ENGL.4060 Advanced Creative Writing: Fiction	ENGL.4270 Arthurian Literature: Medieval to Modern
ENGL.4070 Advanced Creative Writing: Drama	ENGL.4280 The Alliterative Tradition
ENGL.4080 Advanced Creative Writing: Non-Fiction	ENGL.4290 Medieval Literature: Special Topics
ENGL.4090 Advanced Creative Writing: Special Topics	ENGL.4300-4390 16 <sup>th</sup> - & 17 <sup>th</sup> -Century Literature
ENGL.4100-4120 Language Studies	ENGL.4300 The Age of Elizabeth
ENGL.4100 History of the English Language	ENGL.4310 Early Shakespeare
ENGL.4110 Introduction to Linguistics	ENGL.4320 Later Shakespeare
ENGL.4120 Language Studies: Special Topics	ENGL.4330 Renaissance Drama
ENGL.4130-4190 Literary Theory, Cultural Studies, and Film Studies	ENGL.4340 Renaissance Poetry and Prose
ENGL.4130 Literary Theory	ENGL.4350 17 <sup>th</sup> -Century Literature
ENGL.4140 Cultural Studies	ENGL.4360 Milton
ENGL.4150 Ethnic and Race Studies	ENGL.4370 Renaissance Literature and Rhetoric
ENGL.4160 Gender Studies	ENGL.4380 Early Women Writers
ENGL.4170 American Film History	ENGL.4390 16 <sup>th</sup> - and 17 <sup>th</sup> -Century Literature: Special Topics
ENGL.4180 Film Theory	ENGL.4400-4450 Restoration & 18 <sup>th</sup> -Century Literature
ENGL.4190 Literary Theory, Cultural Studies, and Film Studies: Special Topics	ENGL.4400 Restoration Literature
	ENGL.4410 18 <sup>th</sup> -Century Literature
	ENGL.4420 Dryden, Pope, Swift



ENGL.4430 The Age of Johnson  
 ENGL.4440 Restoration and 18<sup>th</sup>-Century Drama  
 ENGL.4450 Restoration and 18<sup>th</sup>-Century Literature: Special Topics  
 ENGL.4460-4520 18<sup>th</sup>- & 19<sup>th</sup>-Century British Literature  
 ENGL.4460 The Gothic Novel  
 ENGL.4470 Crime and Punishment  
 ENGL.4480 Jane Austen and her Predecessors  
 ENGL.4490 18<sup>th</sup>- and 19<sup>th</sup>-Century Women Writers  
 ENGL.4500 The Age of Romanticism  
 ENGL.4510 Romantic Poetry  
 ENGL.4520 18<sup>th</sup>- and 19<sup>th</sup>-Century Literature: Special Topics  
 ENGL.4530-4590 19<sup>th</sup>-Century British Literature and Culture  
 ENGL.4530 The Victorian Age  
 ENGL.4540 Victorian Fiction  
 ENGL.4550 Victorian Poetry  
 ENGL.4560 The Victorian Essay/Prose  
 ENGL.4570 Victorian Satire  
 ENGL.4580 Major Victorian Authors/Movements  
 ENGL.4590 19<sup>th</sup>-Century Literature: Special Topics  
 ENGL.4600-4690 20<sup>th</sup>- & 21<sup>st</sup>-Century British, Irish, and Postcolonial Literature  
 ENGL.4600 Topics in British Literature 1900-1945  
 ENGL.4610 Female/Expatriate Modernism  
 ENGL.4620 British Postmodernism  
 ENGL.4630 Nationalism and the Irish Cultural Revival  
 ENGL.4640 Irish Culture and Politics at Mid-20<sup>th</sup> Century  
 ENGL.4650 Contemporary Irish Literature, Culture, and Politics  
 ENGL.4660 Early 20<sup>th</sup>-Century Postcolonial Literature and Culture  
 ENGL.4670 Contemporary Postcolonial Literature and Culture  
 ENGL.4680 Major Postcolonial Writers  
 ENGL.4690 20<sup>th</sup>/21<sup>st</sup>-Century Literature: Special Topics  
 ENGL.4980 Advanced Independent Study  
 ENGL.4WU Wash-U Inter University Course

### Post-Baccalaureate Courses

ENGL.5000-5040: Research Methodology and Pedagogy  
 ENGL.5000 Methods of Literary Research (3)  
 ENGL.5010 The Teaching of Writing (3)  
 ENGL.5020 Teaching Literature (3)  
 ENGL.5040 Problems in Rhetoric (3)  
 ENGL.5100-5180: Theory and Criticism  
 ENGL.5100 History of Literary Criticism from Aristotle to the Present (3)  
 ENGL.5110 Literary Theory (3)  
 ENGL.5120 Theoretical Perspectives in Medieval Literature (3)  
 ENGL.5130 Theoretical Perspectives in Renaissance Literature (3)  
 ENGL.5140 Theoretical Perspectives in Restoration and 18<sup>th</sup>-Century British Literature (3)  
 ENGL.5150 Theoretical Perspectives in 19<sup>th</sup>-Century British Literature (3)  
 ENGL.5160 Theoretical Perspectives in 20<sup>th</sup>-Century British Literature (3)  
 ENGL.5170 Theoretical Perspectives in American Literature (3)  
 ENGL.5180 Theoretical Perspectives in Contemporary Literature (3)

### Advanced Graduate Seminars

ENGL.6040 Rhetorical Theory and Discourse Pedagogy (3)  
 ENGL.6100 Studies in Literary Theory (3)  
 ENGL.6150 Genre Studies (3)  
 ENGL.6170 Literary Themes (3)  
 ENGL.6190 Interdisciplinary Studies (3)

ENGL.4700-4890 American Literature  
 ENGL.4700 American Literary Tradition to 1865  
 ENGL.4710 American Literary Tradition 1865-present  
 ENGL.4720 Contemporary American Literature  
 ENGL.4730 Ethnic American Literature  
 ENGL.4740 19<sup>th</sup>-Century American Literature  
 ENGL.4750 19<sup>th</sup>-Century American Poetry  
 ENGL.4760 20<sup>th</sup>-Century American Literature  
 ENGL.4770 20<sup>th</sup>-Century American Poetry  
 ENGL.4780 Recent American Poetry  
 ENGL.4790 American Drama  
 ENGL.4800 American Short Story  
 ENGL.4810 Major American Authors  
 ENGL.4820 Pre-1900 African American Literature  
 ENGL.4830 Post-1900 African American Literature  
 ENGL.4840 Native American Literature  
 ENGL.4850 Latino American Literature  
 ENGL.4860 Literature and Culture of the Americas  
 ENGL.4870 Introduction to Young Adult Literature  
 ENGL.4880 The Machine Age in American Literature  
 ENGL.4890 American Literary and Cultural Studies: Special Topics  
 ENGL.4900-4930 Special Studies  
 ENGL.4900 Interdisciplinary Studies  
 ENGL.4910 Internship  
 ENGL.4920 World Literature: Special Topics  
 ENGL.4930 Special Topics in Literature  
 ENGL.4940 Senior Inquiry Seminar  
 ENGL.4950 Senior Residency

ENGL.5190-5290: Medieval Literature and Language Studies  
 ENGL.5190 History of the English Language (3)  
 ENGL.5200 Introduction to Old English (3)  
 ENGL.5210 Beowulf (3)  
 ENGL.5220 Introduction to Old Norse (3)  
 ENGL.5230 Literature of the Vikings (3)  
 ENGL.5240 Anglo-Saxon/Old English Literature (3)  
 ENGL.5250 Old Norse Literature (3)  
 ENGL.5270 Arthurian Literature (3)  
 ENGL.5290 Special Topics in Medieval Literature (3)  
 ENGL.5710 American Fiction, 1900-1950 (3)  
 ENGL.5800 Film Studies (3)  
 ENGL.5930 Special Topics (1-3)  
 ENGL.5950 Special Study for Examinations (0)  
 ENGL.5980 Graduate Reading Course (1-3)  
 ENGL.5990 Thesis Research (0-6)  
 ENGL.5UMSL UMSL Inter-University Course (0-3)  
 ENGL.5WU Wash-U Inter University Course (1-5)

ENGL.6250 Chaucer: The Canterbury Tales (3)  
 ENGL.6260 Studies in Chaucer (3)  
 ENGL.6270 Middle English Literature (3)  
 ENGL.6300 16<sup>th</sup>-Century Non-Dramatic Literature (3)  
 ENGL.6310 Renaissance Drama (3)

ENGL.6320 Shakespeare (3)  
 ENGL.6340 Renaissance Drama (3)  
 ENGL.6350 17th-Century Literature (3)  
 ENGL.6360 17th-Century Prose (3)  
 ENGL.6390 Special Topics in Renaissance Literature (3)  
 ENGL.6400 Restoration Literature (3)  
 ENGL.6410 Restoration and 18th-Century Poetry (3)  
 ENGL.6420 Restoration and 18th-Century Prose Fiction (3)  
 ENGL.6430 Restoration and 18th-Century Drama (3)  
 ENGL.6490 Special Topics in Restoration and 18th-Century British Literature (3)  
 ENGL.6500 Romanticism (3)  
 ENGL.6510 19th-Century Prose Non-Fiction (3)  
 ENGL.6520 Victorian Poetry (3)  
 ENGL.6530 19th-Century Novel (3)  
 ENGL.6590 Special Topics in Nineteenth-Century British Literature (3)  
 ENGL.6600 Studies in Modernism (3)  
 ENGL.6610 20th-Century Fiction (3)  
 ENGL.6620 20th-Century Poetry (3)  
 ENGL.6630 20th-Century Drama (3)  
 ENGL.6650 20th-Century Postcolonial Literature (3)  
 ENGL.6690 Special Topics in Literature of the 20th Century (3)  
 ENGL.6700 Early American Literature (3)  
 ENGL.6710 19th-Century American Literature (3)  
 ENGL.6720 19th-Century American Poetry (3)  
 ENGL.6730 19th-Century American Modernism (3)  
 ENGL.6740 Studies in American Modernism (3)  
 ENGL.6760 20th-Century American Fiction (3)  
 ENGL.6770 20th-Century American Poetry (3)  
 ENGL.6780 20th-Century American Drama (3)  
 ENGL.6790 Special Topics in 20th-Century American Literature (3)  
 ENGL.6800 The American Short Story  
 ENGL.6810 American Film Aesthetics (3)  
 ENGL.6850 Studies in Comparative Literature (3)  
 ENGL.6890 Poetry and Theory of Gender after the 1960s (3)  
 ENGL.6930 Special Topics (1-3)  
 ENGL.6950 Special Study for Examinations (0)  
 ENGL.6970 Research Topics (1-3)  
 ENGL.6980 Graduate Reading Course (1-3)  
 ENGL.6990 Dissertation Research (0-12)

# HISTORY

---

**Philip R. Gavitt, Ph.D.**

*Department Chairperson*

**Damian J. Smith, Ph.D.**

*Director of the Graduate Program*

The Department offers the Ph.D. in Medieval, Early Modern, and U.S. History. Master's students may specialize in one of these three fields or in Late Antiquity/Byzantine History, Modern European History, or World History. Doctoral students must choose a primary and a secondary specialty. The secondary specialty may be in any of the areas cited for Master's degree study or in a specialized area constructed in consultation with the departmental advisor and with the approval of the graduate committee. The Department participates in the activities of the Center for Medieval and Renaissance Studies and is ranked in the nation's top 100 Doctoral programs by *U.S. News and World Report*.

## Master of Arts

### **Prerequisite**

An undergraduate area of concentration in history or the equivalent.

### **Required Courses**

Thirty (30) credits (twenty-seven (27) credits for those enrolled in the combined M.A./Ph.D. program), including HIST.5000, and a historical studies course and a seminar in the chosen specialty. A maximum of six (6) credits may be taken in academic fields other than history. For those pursuing an M.A. research degree, six (6) credits of thesis research replace six (6) credits of coursework.

### **Additional Requirements**

Competency in one foreign language, to be verified by written examination. A two-hour written comprehensive exam and a one-hour oral exam for the M.A.; a one-hour oral thesis presentation for M.A. research. (For students continuing on to the Ph.D., no exam or thesis is necessary).

*A formal minor is not permitted.*

## Doctor of Philosophy (Combined M.A./Ph.D.)

### **Prerequisites**

A Master's degree in the field or the equivalent.

### **Required Courses**

For students entering with an M.A. from another institution, twenty-seven (27) credits; for those pursuing the combined M.A./Ph.D., thirty-six (36) credits total (twenty-seven (27) from the M.A. plus nine (9) additional credits). Coursework must include HIST.5000, and historical studies courses and seminars in both the primary and secondary specialties. A maximum of six (6) credits may be taken in fields other than history.

### **Additional Requirements**

For Medieval and Early Modern European history, competency in two foreign languages, one of which must be Latin. For U.S. history, competency in one foreign language. Full-time study for at least one year at SLU. Two four-hour written comprehensive exams and a two-hour oral exam at the end of coursework. HIST.6900/6901, courses leading to the preparation of a prospectus, including a historical essay, before undertaking dissertation research.

### **Post-Baccalaureate Courses**

HIST.5000 Theory and Practice of History: An Introduction (3)  
HIST.5200 Studies in Late Antiquity and Byzantine History (3)  
HIST.5210 Advanced Studies in Late Antiquity and Byzantine History (3)  
HIST.5250 Perspectives in Late Antiquity and Byzantine History (3)  
HIST.5300 Studies in Medieval History (3)  
HIST.5310 Advanced Studies in Medieval History (3)  
HIST.5350 Perspectives in Medieval History (3)  
HIST.5400 Studies in Early Modern European History (3)

HIST.5410 Advanced Studies in Early Modern European History (3)  
HIST.5450 Perspectives in Early Modern European History (3)  
HIST.5500 Studies in Modern European History (3)  
HIST.5510 Advanced Studies in Modern European History (3)  
HIST.5550 Perspectives in Modern European History (3)  
HIST.5600 Studies in American History (3)  
HIST.5610 Advanced Studies in American History (3)  
HIST.5650 Perspectives in American History (3)

HIST.5900 History Teaching Practicum (0)  
HIST.5930 Special Topics in History (1-3)  
HIST.5950 Special Study for Examinations (0)  
HIST.5970 Research Topics (1-3)  
HIST.5980 Graduate Reading Course (1-3)  
HIST.5990 Thesis Research (0-6)  
HIST.6800 Seminar in Late Ancient and Byzantine History (3)  
HIST.6810 Seminar in Medieval History (3)  
HIST.6820 Seminar in Early Modern European History (3)

HIST.6830 Seminar in Modern European History (3)  
HIST.6840 Seminar in American History (3)  
HIST.6900 Professional Writing for Historians I (3)  
HIST.6901 Professional Writing for Historians II (3)  
HIST.6930 Special Topics in History (1-3)  
HIST.6950 Special Study for Examinations (0)  
HIST.6970 Research Topics (1-3)  
HIST.6980 Graduate Reading Course (1-3)  
HIST.6990 Dissertation Research (0-6)

# INTEGRATED & APPLIED SCIENCES

---

**Paul Jelliss, Ph.D.**

*Graduate Program Director*

## Doctor of Philosophy

The Doctor of Philosophy (Ph.D.) program in Integrated and Applied Sciences (I.A.S) utilizes interdisciplinary approaches and collaboration within the fields of Chemistry, Physics, Biology, Biomedical Sciences, and Environmental Sciences to prepare graduates to confidently assume multi-faceted roles in the changing scientific community.

The distribution of courses in the various I.A.S. areas is determined by students' dissertation committees with a minimum total of 48 credits between all three areas. A total of 60 credits are required with the remaining 12 credits coming from dissertation credits. Students and their mentor develop an appropriate coursework track with subsequent approval by the I.A.S. Administrative Committee.

### **Prerequisites**

A Master's or Bachelor's degree in an area appropriate for the proposed interdisciplinary study.

### **Required Courses**

Students choose a core department, completing 25-29 credits of lecture or laboratory-based 5000 and 6000 level courses. Students are also required to complete the following courses for at least four and up to six semesters:

IAS.6010 Interdisciplinary Seminar; and  
IAS.6030 (Current Topics in) Interdisciplinary Research

### **Additional Requirements**

Students must complete 19-26 credits in courses selected from outside the core department. These may be taken from: Chemistry, Earth & Atmospheric Science, Engineering, Physics, Mathematics & Computer Science, Biology, Biomedical Sciences, Public Health, and Research Methodology. 12 credits of Dissertation Research are required.

### **Post-Baccalaureate Courses**

GIS.5010 Introduction to GIS (3)  
GIS.5020 Intermediate GIS (3)  
GIS.5040 Introduction to Remote Sensing (3)  
GIS.5060 Geospatial Methods in Environmental Studies (3)  
GIS.5100 Microwave Remote Sensing: SAR principles, data processing and Applications (3)  
GIS.5110 InSAR - Synthetic Aperture Radar Interferometry (3)  
GIS.585 - GIS Capstone  
IAS.6010 Interdisciplinary Seminar (1)  
IAS.6030 (Current Topics in) Interdisciplinary Research (2)  
IAS.6950 Special Study for Examinations (0)  
IAS.6970 Research Topics (1-3)  
IAS.6980 Graduate Reading Course (1-3)  
IAS.6990 Dissertation Research (0-12)

# LANGUAGES, LITERATURES, & CULTURES

---

**Annie K. Smart, Ph.D.**  
*Department Chairperson*

## Master of Arts in French

**Jean-Louis Pautrot, Ph.D.,**  
*Graduate Program Director*

The Master of Arts (M.A.) degree program in French offers a diverse curriculum in French language, cultures, and literatures, including Francophone studies, film, and gender studies. The Master of Arts is designed to suit the needs of those planning or already engaged in professional careers such as teaching or international affairs. At the same time, the program provides excellent preparation for studies in French beyond the Master's degree.

A Dual Master's Program in French is offered in partnership with the Université de Poitiers, France. Students have the unique opportunity of earning an M.A. in French from Saint Louis University and a Master in Lettres Modernes, spécialité Texte et Image, or Littérature et Politique from the Université de Poitiers, France.

Qualified students may add a minor in Spanish to their M.A. degree program in French. This combination can be an attractive option for those preparing to teach or work in an environment where competency in two Romance languages would be an asset.

### **Prerequisite**

An undergraduate major in French or the equivalent.

### **Required Courses**

FREN.5100 Critical Writing, Oral Expression, and Research;

Nine credits of coursework prior to 1900 and nine credits of coursework after 1900.

### **Additional Requirements**

A final written project to be approved by the graduate examination committee or a written comprehensive examination.

A formal minor may be permitted.

### **Post-Baccalaureate Courses**

FREN.5000 Teaching College French (0)

FREN.5040 Methods and Technology for Teaching French (3)

FREN.5070 Studies in Francophone Culture (3)

FREN.5100 Critical Writing, Oral Expression, and Research (3)

FREN. 5200 Perceiving Others (3)

FREN.5220 French and Francophone Media (3)

FREN.5290 Women and Global Issues (3)

FREN.5330 French "Moralists" (3)

FREN.5340 The Age of Enlightenment (3)

FREN.5350 Studies in 19th-Century French Novel (3)

FREN.5370 Literature of the Fantastic (3)

FREN.5390 Studies in 20th-Century French Prose (3)

FREN.5410 Early Modern French Poetry (3)

FREN.5420 Studies in 19th-Century French Poetry (3)

FREN.5510 Early Modern French Theater (3)

FREN.5540 Studies in 20th-Century French Theater (3)

FREN.5220 French and Francophone Media (3)

FREN.5550 Writers of Memory (3)

FREN.5600 Contemporary Women Writers in France and Quebec (3)

FREN.5610 French Cinema (3)

FREN.5630 Studies in Francophone Literature (3)

FREN.5660 Nation, Identity and Culture (3)

FREN.5670 Post colonialism and Violence (3)

FREN.5700 Love & Honor in Early Modern France (3)

FREN.5710 Women and Writing in Early Modern France (3)

FREN.5850 Seminar on Molière (3)

FREN.5860 The World of Baudelaire (3)

FREN.5870 Exoticism in French Literature (3)

FREN.5930 Special Topics in French (1-3)

FREN.5950 Special Study for Examinations (0)

FREN.5980 Graduate Reading Course (1-3)

# Master of Arts in Spanish

**Olga Arbeláez, Ph.D.,**  
Graduate Program Director

The Master of Arts (M.A.) program seeks to give students a generalist foundation in the areas of Spanish Peninsular and Latin American Literature and Culture as well as in the areas of Teaching and Linguistics. A diverse curriculum makes it possible to gain a solid, up-to-date background in Spanish Studies as well as to broaden the perspective within specific areas of interest.

The program is suited to those planning or already engaged in professional careers such as teaching or international affairs. It also has a record of providing excellent preparation for those electing to continue studies beyond the M.A. degree.

The program is offered on two campuses: Madrid and St. Louis. Students may fulfill all or part of the program requirements on either campus. Students wishing to complete the program exclusively in Madrid have two options: they may complete it in three summers extendable to five, or they may complete it through a combination of summers and the regular spring and fall semesters.

## Prerequisites

An undergraduate major in Spanish or the equivalent.

## Course requirements

Of the ten courses required for the degree, two must be in the area of Latin American Studies, two in Peninsular Spanish Studies, and two in Teaching or Linguistics.

## Additional Requirements

A final written exam over a reading list and a final oral degree exam over coursework.

*A formal minor may be permitted.*

## Post-Baccalaureate Courses

SPAN.5000 Teaching College Spanish (0)  
SPAN.5020 Spanish in the World (3)  
SPAN.5030 Spanish Linguistics (3)  
SPAN.5040 Methods and Technology for the Teaching of Spanish (3)  
SPAN.5050 Spanish Phonology and its Place in the Classroom (3)  
SPAN.5070 Spanish Stylistics (3)  
SPAN.5080 Learning Texts: Tradition, Authenticity and Virtuality (3)  
SPAN.5790 Contemporary Spanish Culture and Civilization (3)  
SPAN.5190 Contemporary Spanish American Culture and Civilization (3)  
SPAN.5200 Introduction to Literary Criticism (3)  
SPAN.5240 Short Stories: History, Histories (3)  
SPAN.5260 Latin American "Modernismo" (3)  
SPAN.5270 Contemporary Latin American Poetry (3)  
SPAN.5280 Early Latin American Novel (3)  
SPAN.5290 Boom, Mass Media and Utopia (3)  
SPAN.5310 Women Writing Women: Latin American Women Playwrights (3)  
SPAN.5320 The African Experience in Spanish America (3)  
SPAN.5330 Narratives on the End of Utopias (3)  
SPAN.5350 Counter Hegemony Discourses (3)  
SPAN.5360 Written by Herself: Latin American Women Writers (3)

SPAN.5370 Latin American Film (3)  
SPAN.5380 Cultural Stereotypes: Latin America (3)  
SPAN.5780 Contemporary Spanish Women Writers (3)  
SPAN.5830 Three Spanish Literary Masterpieces (3)  
SPAN.5560 Don Quixote by Cervantes (3)  
SPAN.5570 Golden Age Lyric Poetry (3)  
SPAN.5580 Golden Age Drama (3)  
SPAN.5550 Spanish Jewry in Medieval Spain: Life under Islam and Christianity. Expulsion and Diaspora, 1492-1700 (3)  
SPAN.5610 Nineteenth-Century Poetry and Drama (3)  
SPAN.5620 Nineteenth-Century Novel (3)  
SPAN.5680 Contemporary Spanish Short Story (3)  
SPAN.5700 Twentieth-Century Poetry (3)  
SPAN.5710 Twentieth-Century Novel (3)  
SPAN.5720 Twentieth-Century Drama (3)  
SPAN.5730 Spanish Literature and Film (3)  
SPAN.5740 From the Poetry of Knowledge to the Poetry of the Turn of the Century (3)  
SPAN.5750 Spanish Novel after 1970 (3)  
SPAN.5770 Carpe Verbum: The Journey of Women Poets in Contemporary Spain (3)  
SPAN.5930 Special Topics (1-3)  
SPAN.5950 Special Study for Examinations (0)  
SPAN.5980 Graduate Reading Course (1-)

# MATHEMATICS

---

**James Hebda, Ph.D.**

*Department Chairperson*

**Bradley Currey, Ph.D.**

*Graduate Director*

The Department of Mathematics and Computer Science offers programs of instruction and research leading to the Master of Arts and Doctor of Philosophy degrees in Mathematics. The M.A. is intended to prepare students for further study toward the Ph.D. degree or for a career in teaching or industry. The Ph.D. degree program prepares students for research and/or teaching careers in colleges, universities, or industry. The faculties are internationally recognized in many areas of research including topology, differential geometry, algebra and analysis.

## Master of Arts

### **Prerequisite**

An undergraduate area of concentration in Mathematics.

### **Required Courses**

Two of the following three sequences must be completed with a grade of "B" or higher in each course:

MATH.5110 Algebra I, MATH.5120 Algebra II

MATH.5210 Analysis I, and one of MATH.5220 Complex Analysis, MATH 5230 Functional Analysis, and MATH.5240 Harmonic Analysis

MATH.5310 Topology I, MATH.5320 Topology II

*No formal minor is permitted.*

### **Additional Requirements**

A comprehensive oral exam in the final semester of the program. Master's students have the option of writing a Master's thesis. In that case two of the courses during the second year would be devoted to research for the thesis, and the comprehensive oral exam would be replaced by an oral defense of the thesis.

## Doctor of Philosophy

### **Prerequisite**

A Master's degree in Mathematics, or Bachelor's degree in Mathematics and a strong background, particularly in analysis and algebra.

### **Required Courses**

Four one-year long sequences:

MATH.5110 Algebra I, and MATH.5120 Algebra II

MATH.5210 Analysis I and one of MATH.5220 Complex Analysis, MATH 5230 Functional Analysis, and MATH.5240 Harmonic Analysis

MATH.5310 Topology I and MATH.5320 Topology II

MATH.6410 Differential Geometry I and MATH.6420 Differential Geometry II

### **Additional Requirements**

Written preliminary exams in three out of the four possible areas of algebra, analysis, differential geometry, and topology. An oral exam in a special area of concentration. Demonstration of proficiency in one of the following languages: French, German, or Russian. Proficiency is to be demonstrated by passing a journal/translation examination administered by the department. The culminating requirement for the Ph.D. degree is writing and successfully defending a dissertation that presents the results of the original and independent mathematical research that students have carried out, with the guidance of a faculty member.

*No formal minor is permitted.*



### Upper-Division Undergraduate Courses

MATH.4010 Elementary Theory of Probability (3)  
MATH.4020 Introductory Mathematical Statistics (3)  
MATH.4030 Probability and Statistics for Engineers (3)  
MATH.4050 History of Mathematics (3)  
MATH.4110 Introduction to Abstract Algebra (3)  
MATH.4120 Linear Algebra (3)  
MATH.4150 Number Theory (3)  
MATH.4210 Introduction to Analysis (3)  
MATH.4220 Metric Space (3)  
MATH.4230 Multivariable Analysis (3)

MATH.4410 Foundations of Geometry (3)  
MATH.4430 Non-Euclidean Geometry (3)  
MATH.4480 Differential Geometry (3)  
MATH.4310 Introduction to Complex Variables (3)  
MATH.4320 Complex Variables II (3)  
MATH.4360 Geometric Topology (3)  
MATH.4550 Nonlinear Dynamics and Chaos (3)  
MATH.4570 Partial Differential Equations (3)  
MATH.4630 Graph Theory (3)  
MATH.4650 Cryptography (3)

### Post-Baccalaureate Courses

MATH.5102 Linear Algebra (3)  
MATH.5202 Metric Spaces (3)  
MATH.5105 Number Theory (3)  
MATH.5203 Multivariable Analysis (3)  
MATH.5110 Algebra (3)  
MATH.5120 Algebra II (3)  
MATH.5210 Real Analysis I (3)  
MATH.5220 Complex Analysis (3)  
MATH.5230 Functional Analysis (3)  
MATH.5240 Harmonic Analysis (3)  
MATH.5310 Topology I (3)  
MATH.5320 Topology II (3)  
MATH.5930 Special Topics in Mathematics (1-3)  
MATH.5950 Special Study for Examinations (0)  
MATH.5980 Graduate Reading Course (1-3)  
Prior permission of instructor and chairperson required.

MATH.5990 Thesis Research (0-6)  
MATH.6110 Algebra III (3)  
MATH.6180 Topics in Algebra (3)  
MATH.6210 Lie Groups and Lie Algebras (3)  
MATH.6220 Representation Theory of Lie Groups (3)  
MATH.6280 Topics in Analysis (3)  
MATH.6310 Algebraic Topology (3)  
MATH.6320 Topology of Manifolds (3)  
MATH.6380 Topics in Topology (3)  
MATH.6410 Differential Geometry I (3)  
MATH.6420 Differential Geometry II (3)  
MATH.6480 Topics in Geometry (3)  
MATH.6950 Special Study for Examinations (0)  
MATH.6980 Graduate Reading Course (1-3)  
Prior permission of instructor and chairperson required.  
MATH.6990 Dissertation Research (0-6)

# PHILOSOPHY

---

**Theodore R. Vitali, C.P., Ph.D.,**

*Department Chairperson*

The Department of Philosophy offers a range of courses in the history of philosophy with principal emphases on ethics, social and political philosophy, metaphysics and epistemology, and the philosophy of religion. Special resources available to the program include the international philosophical journal, *Res Philosophica* (formerly known as the *Modern Schoolman*); the Vatican Film Library, the only depository of its kind in the Western hemisphere; and the Center for Medieval and Renaissance Studies of Saint Louis University.

## Master of Arts (Non-thesis option)

### **Prerequisites**

Eighteen (18) credits of undergraduate upper-division philosophy coursework.

### **Required Courses**

Thirty (30) credits, 21 of which must be post-baccalaureate credits.

Eighteen (18) credits must be in philosophy and 12 of which must be post-baccalaureate credits.

Completion of the systematic synthesis course (3 credits).

One-hour defense of synthesis paper.

## Master of Arts (Thesis option)

### **Prerequisites**

Eighteen (18) credits of upper-division philosophy coursework.

### **Required Courses**

Thirty (30) post-baccalaureate credits, twelve of which must cover the ancient, medieval, modern, and contemporary periods. Six post-baccalaureate credits of thesis research. A Master's thesis under the direction of a faculty mentor and two readers is required. The thesis requirement is for six (6) credits that count toward the thirty (30) credit requirement.

### **Additional Requirements**

Completion of a three credit written examination on the history of philosophy covering three of the four periods of history. Reading proficiency in French, German or another foreign language at the discretion of student's supervisory faculty committee. One-hour defense of thesis.

*A formal minor may be permitted.*

## Doctor of Philosophy

### **Prerequisites**

Eighteen (18) credits of upper-division undergraduate coursework.

### **Required Courses**

Sixty-six (66) credits, six of which are prospectus credits and 12 of which are dissertation research credits. The other 54 credits of coursework beyond the bachelor's degree must include: 21 credits in the history of philosophy, namely six in ancient, six in medieval, six in modern and three in contemporary philosophy; 15 credits in topics courses to be distributed over three of the following areas: epistemology, metaphysics, ethics, and social and political philosophy, with nine credits falling within a chosen area of competence; three credits of advanced logic at 4000 level or above (for which a departmental examination may be substituted [but without credit]); nine credits of electives; six credits of reading courses on the dissertation topic culminating in dissertation topic prospectus.

### **Additional Requirements**

One course permitted at the 4000 level. A maximum of nine credits may be taken in a related discipline. A two-hour oral examination on the dissertation prospectus covering: (i) the relationship between the dissertation topic and the broader discipline, whether contemporary or historical, and (ii) the philosophical import of the topic itself. Reading proficiency in both French and German, or in two other foreign languages at the discretion of students' supervisory faculty committee.

*A formal minor is permitted.*

## Upper-Division Undergraduate Course

PHIL.4930 Advanced Logic (3)

## Post-Baccalaureate Courses

The next courses address the basic questions raised both in the history of philosophy and the contemporary philosophical setting:

PHIL.5000 Introduction to the Graduate Study of Philosophy (0)

PHIL.5100 Problems in Epistemology (3)

PHIL.5200 Problems in Metaphysics (3)

PHIL.5300 Problems in Ethical Theory (3)

PHIL.5400 Problems in Social and Political Philosophy (3)

PHIL.5800 Systematic Synthesis (3)

PHIL.5930 Special Topics in Philosophy (3)

PHIL.5950 Special Study for Examinations (0)

PHIL.5980 Graduate Reading Course (1-3)

PHIL.5990 Thesis Research (0-6)

PHIL.6000 Seminar on a Major Philosopher in Ethics (3)

PHIL.6050 Seminar on a Major Philosopher in Political Philosophy (3)

PHIL.6100 Seminar on a Major Philosopher in Metaphysics (3)

PHIL.6150 Seminar on a Major Philosopher in Epistemology (3)

The following courses explore on a more advanced plane historical and contemporary philosophical themes:

PHIL.6200 Philosophy of Science (3)

PHIL.6220 Advanced Logic (3)

PHIL.6260 Problems in the Philosophy of Religion (3)

PHIL.6300 Advanced Ethics (3)

PHIL.6320 Advanced Metaphysics (3)

PHIL.6340 Advanced Epistemology (3)

PHIL.6360 Seminar in Political Philosophy (3)

PHIL.6380 Seminar in Aesthetics (3)

The next four courses examine the major philosophical figures and issues pertaining to periods in the history of philosophy:

PHIL.6400 Ancient Philosophy (3)

PHIL.6450 Medieval Philosophy (3)

PHIL.6500 Modern Philosophy (3)

PHIL.6550 Contemporary Philosophy (3)

PHIL.6800 Prospectus (3-6)

PHIL.6950 Special Study for Examinations (0)

PHIL.6970 Special Topics in Philosophy (1-3)

PHIL.6980 Graduate Reading Course (1-3)

PHIL.6990 Dissertation Research (0-6)

# POLITICAL SCIENCE

---

**Ellen Carnaghan, Ph.D.,**  
*Department Chairperson*

**J. D. Bowen, Ph.D.,**  
*Director of Graduate Studies*

**Robert Croft, Ph.D.**  
*Director of the M.P.A. Program*

The Political Science department offers an M.A., an accelerated B.A./M.A., an M.P.A., and four dual-degree programs: a J.D./M.A. in Political Science, an M.P.A./M.A. in Political Science, an M.P.A./J. D., and an M.P.A./M.S.W. The Political Science department collaborates with other departments on a minor in Global and Local Social Justice and a Ph.D. in Public and Social Policy.

The M.A. program allows academically talented students to advance their knowledge and analytical skills by focusing on an interdisciplinary problem-oriented area of concentration within political science. The M.A. is open to individuals who have previously earned a B.S. or B.A. degree in political science or a related social science discipline from an accredited university and demonstrate outstanding potential. Students admitted for M.A. study must have an outstanding undergraduate record and demonstrate the potential for senior leadership in Political Science.

The B.A./M.A. in Political Science offers students the opportunity to complete the B.A. and M.A. degrees in an accelerated 5-year 144 credit program of study (120 as an undergraduate, 30 as a post-baccalaureate student, 6 of those credits counted towards both degrees). Students who have been admitted for undergraduate study at Saint Louis University and select a major in Political Science may apply in their junior year of study to be admitted to the Master's program to complete the linked post-baccalaureate degree.

The Master of Public Administration (M.P.A.) program is designed for public service professionals and pre-service students interested in preparing themselves for a career in the public or nonprofit sectors at the national, state, and local levels. The M.P.A. provides a unique interdisciplinary range of educational experience and research. In the past, students have participated in projects for the U.S. Departments of Labor, Education, Justice, Health and Human Services, the Brookings Institution, and a variety of regional, state, and local public and private entities. The M.P.A. degree program is accredited by the Network of Schools of Public Policy, Affairs, and Administration (NASPAA).

## Accelerated Bachelor of Arts/Master of Arts

### **Prerequisites**

Political Science major, junior standing, and a grade point average of at least 3.40.

## Master of Arts in Political Science

### **Prerequisites**

B.A. or B.S. in political science or a related social science discipline. This should include at least 18 credits of undergraduate political science courses and an undergraduate social science methods course.

### **Required Courses**

Students will choose a track and focus on American Politics, Gender and Politics, International Affairs, Public Policy, or Political Theory. All students will complete a total of 30 credits for the M.A. degree. All students are required to pass a field exam administered at the beginning of the student's final semester of coursework.

No more than 12 credits of the M.A. may be taken outside Political Science, no more than 6 credits may be taken at the 4000 level, and no more than 6 credits may be independent study classes or internships. Some classes have prerequisites. Depending on their undergraduate preparation, students may be required to take specific undergraduate classes prior to enrolling in post-baccalaureate classes. Exceptions will be allowed only with the approval of the Director of Graduate Studies for the department.

Specific requirements for each track are listed below.

## American Politics - General Track

### **Core Courses (6 credits)**

POLS.5100 Seminar in American Politics

POLS.6700 American Political Thought

### **Research Methods (6 credits)**

POLS.5010 Cultural Methods: Gender, Politics, and Power

POLS.5020 Advanced Topics in Research Methods

### **Other Required Courses (6 credits)**

Two more American politics or Public Policy courses

Political Science Electives (12 credits, 6 of which may be an internship or M.A. thesis)

Field exam administered at the beginning of the student's final semester of coursework

## American Politics - Public Law Track

### **Core Courses (6 credits)**

POLS.5100 Seminar in American Politics

POLS.6700 American Political Thought

### **Research Methods (6 credits)**

POLS.5010 Cultural Methods: Gender, Politics, and Power

POLS.5020 Advanced Topics in Research Methods

### **Other Requirements (6 credits)**

*Choose two classes from:*

POLS.5300 Administrative Law

POLS.5800 Theories of Constitutional Interpretation

POLS.5171 Law, Policy and Society

Political Science electives (12 credits, 6 of which may be an internship or M.A. thesis)

Field exam administered at the beginning of the student's final semester of coursework

## Gender and Politics Track

### **Core Courses (6 credits)**

POLS.5760 Feminist Theory

POLS.5770 Feminist Epistemology

### **Research Methods (6 credits)**

POLS.5010 Cultural Methods: Gender, Politics, and Power

POLS.5020 Advanced Topics in Research Methods

### **Other Required Courses (12 credits)**

*Choose four classes from:*

POLS.5130 American Race Relations

POLS.5150 Gender and American Politics

POLS.5580 Islam and Gender

POLS.5710 Citizenship and Social Difference

POLS.5930 Gender, Development, and Sustainability

POLS.6710 Leadership and Culture

Political Science electives (6 credits, may be in the form of an internship or M.A. thesis)

Field exam administered at the beginning of the student's final semester of coursework

## *International Affairs - General Track*

### **Core courses (6 credits)**

*Choose two classes from:*

POLS.5510 Democratization

POLS.5550 Politics of Economic Development

POLS.5690 Theories of World Politics

### **Research Methods (6 credits)**

POLS.5010 Cultural Methods: Gender, Politics, and Power

POLS.5020 Advanced Topics in Research Methods

Political Science electives (18 credits, 6 of which may be in the form of an internship or M.A. thesis)

Field exam administered at the beginning of the student's final semester of coursework

## *International Affairs - Foreign Service Track*

### **Core Courses (6 credits)**

*Choose two classes from:*

POLS.5510 Democratization

POLS.5550 Politics of Economic Development

POLS.5690 Theories of World Politics

### **Research Methods (6 credits)**

POLS.5010 Cultural Methods: Gender, Politics, and Power

POLS.5020 Advanced Topics in Research Methods

### **Other Required Courses (6 credits)**

POLS.5100 Seminar in American Politics

POLS.5620 Global Diplomacy

### **Language Requirement (6 credits)**

6 credits at the 4000 or 5000 level of the foreign language appropriate to an area of interest.

(Students who have already achieved this level of proficiency may take 6 credits of electives instead.)

Political Science Electives (6 credits, which may be in the form of an internship or M.A. thesis)

Field exam administered at the beginning of the student's final semester of coursework

## *International Affairs - Security and Cooperation Track*

### **Core Courses (6 credits)**

*Choose two classes from:*

POLS.5510 Democratization

POLS.5550 Politics of Economic Development

POLS.5690 Theories of World Politics

### **Research Methods (6 credits)**

POLS.5010 Cultural Methods: Gender, Politics, and Power

POLS.5020 Advanced Topics in Research Methods

### **Other Required Courses (9 credits)**

*Choose three classes from:*

POLS.5620 Global Diplomacy

POLS.5640 Problems of International Terrorism

POLS.5660 Asymmetric War

POLS.6310 Policy Process

SOC.5650 Introduction to Geographic Information Systems

SOC.5660 Intermediate Geographic Information Systems

Political Science Electives (9 credits, 6 of which may be in the form of an internship or M.A. thesis)

Field exam administered in the beginning of the student's final semester of coursework

## Political Theory Track

### **Required Course (3 credits)**

POLS.5930 History of Political Thought

### **Research Methods (3 credits)**

POLS.5010 Cultural Methods: Gender, Politics, and Power

### **Other required courses (12 credits)**

*Choose four classes from:*

POLS.5710 Citizenship and Social Difference

POLS.5730 Contemporary Political Ideologies

POLS.5740 Marx's *Capital*

POLS.5760 Feminist Theory

POLS 5770 Feminist Epistemologies

POLS.6700 American Political Thought

POLS.6710 Leadership and Culture

POLS.5930 Critical Theory and the Frankfurt School

Courses from other departments approved by the Director of Graduate Studies to satisfy this political theory requirement

Political Science electives (12 credits, 6 of which may be in the form of an internship or M.A. thesis)

Field exam administered in the beginning of the student's final semester of coursework

## Public Policy Track

### **Core Courses (6 credits)**

POLS.5100 Seminar in American Politics

POLS.6310 Policy Process

### **Research Methods (6 credits)**

POLS.5010 Cultural Methods: Gender, Politics, and Power

POLS.5020 Advanced Topics in Research Methods

### **Other Required Courses (6 credits)**

POLS.6320 Organizational Theory

POLS.6330 Public Finance Theory

Political Science electives (12 credits, 6 of which may be in the form of an internship or M.A. thesis)

Field exam administered in the beginning of the student's final semester of coursework

## Master of Arts in Political Science & Juris Doctor

The dual M.A. in Political Science/J.D. allows students to complete a J.D. and an M.A. in Political Science in roughly four years, with less time and expense than would be incurred completing the two degrees separately. The dual degree is compatible with any of the tracks in the Political Science M.A. A student interested in the role law plays in American society, for instance, might follow the Public Law M.A. track, while a student interested in international law might combine the J.D. with one of the International Affairs tracks.

Students must complete the first-year requirements for the School of Law before beginning their studies in the M.A. program. Thereafter, students will attend classes in both the School of Law and Department of Political Science. Students will ordinarily complete a total of 103 hours of academic work in order to complete the M.A./J.D., 82 hours in the School of Law and 21 hours in the Department of Political Science. Of the 91 hours required for the J.D. degree, 9 hours are satisfied by Political Science courses and 9 hours of Law School courses are accepted toward the 30 credit hours required for the Master's degree.

## Master of Public Administration

The Master of Public Administration (M.P.A.) program is comprised of course work totaling 36 credits: 18 credits of required core courses and 18 credits of electives. In addition, the program requires an Internship (3 credits) for students with limited professional experience in the public sector.

In order to complete the program, students complete a capstone project. J.D./M.P.A. dual degree students complete a comprehensive examination in lieu of the capstone.

**Prerequisites**

At least 18 credits in advanced social science or business courses, an introductory inferential statistics course or its equivalent.

**Required Courses (18 credits)**

- POLS.5020 Advanced Topics in Research Methods
- POLS.5300 Administrative Law
- POLS.5310 Issues in American Public Administration
- POLS.5325 Introduction to Public Sector Budgeting
- POLS.5330 Economics of the Public Sector
- POLS.6320 Organizational Theory and Behavior

**Elective Courses (18 credits)**

Students select elective course work with advice from the program director. Elective course work is available in a variety of areas. Students have taken classes in business, social work, American studies, communication and more. Of course, many also take classes offered by Political Science, including American politics, American political thought and public policy. Typical focus areas for Public Administration students include:

Criminal Justice Policy	Health Care Policy	Organizational Psychology
Finance	Housing Policy	Public Sector Budgeting
Nonprofit Fundraising	Nonprofit Management	The Policy Process

**Additional Requirements:**

Students without significant professional experience in public service are required to take a three credit internship. A total of 36 or, with the internship, 39 credits are required.

*A formal minor is not allowed.*

## Master of Public Administration & Master of Arts in Political Science

The M.P.A./M.A. dual degree program unites the American and urban focus of public policy analysis with the broad international and theoretical concerns of political science. There are a total of 51 credits of course work required for the M.P.A./M.A. in Political Science.

**Required Courses (18 credits)**

- POLS.5020 Advanced Topics in Research Methods
- POLS.5300 Administrative Law
- POLS.5310 Issues in Public Administration
- POLS.5325 Introduction to Public Sector Budgeting
- POLS.5330 Economics of the Public Sector
- POLS.6320 Organizational Theory and Behavior

Three core classes, with two from either the American Politics or the International Affairs concentration, and one core class from the other concentration (9 credits)

Internship (3 credits)

Political Science electives chosen with the student's mentor (18 credits)

Capstone (3 credits)

## Master of Public Administration & Juris Doctor

The Department of Political Science and the School of Law offer students the opportunity to earn a dual degree in Law and Public Administration (J.D./M.P.A). Students spend the first year of the dual program in the law school. Thereafter, students undertake both M.P.A. and J.D. coursework. Students in the dual degree program take a total of 106 credits of coursework (82 credits in the School of Law and 24 credits from the M.P.A. curriculum). Students complete the same core classes as in the M.P.A.



# Master of Public Administration & Master of Social Work

The Department of Political Science and the College for Public Health and Social Justice offer students the opportunity to earn a dual degree in Public Administration and Social Work. Students will generally spend the first semester of the dual degree program in Social Work. Thereafter, students undertake both M.P.A. and M.S.W. coursework. Students in the dual degree program take a total of 72 credits. For more information on the M.P.A./M.S.W., please check the School of Social Work webpage.

POLS.4120 Civil Rights: A Moot Court Seminar (3)  
POLS.4160 Advanced Topics: American Presidency (3)  
POLS.4300 Administration of National Policy (3)

## Post-Baccalaureate Courses

POLS.5010 Cultural Methods: Gender, Politics and Power (3)  
POLS.5020 Advanced Topics in Research Methods (3)  
POLS.5060 Qualitative Research and Evaluation Methods (3)  
POLS.5100 Seminar in American Politics (3)  
POLS.5110 American Political Institutions (3)  
POLS.5130 American Race Relations (3)  
POLS.5140 Political Parties and Interest Groups (3)  
POLS.5150 Gender and American Politics (3)  
POLS.5170 Seminar in Electoral Politics (3)  
POLS.5171 Law, Policy, and Society (3)  
POLS.5200 Seminar in American State Politics (3)  
POLS.5210 Law, Crime, and Policy (3)  
POLS.5300 Administrative Law (3)  
POLS.5310 Issues in American Public Administration (3)  
POLS.5320 Environmental Politics and Policy-making (3)  
POLS.5325 Introduction to Public Sector Budgeting (3)  
POLS.5330 Public Sector Economics (3)  
POLS.5340 Policy Ethics (3)  
POLS.5500 Russian Political Culture (3)  
POLS.5510 Democratization (3)  
POLS.5520 Political Change (3)  
POLS.5530 Authoritarianism: A Useful Concept? (3)  
POLS.5550 Politics of Economic Development (3)  
POLS.5580 Islam and Gender (3)  
POLS.5620 Global Diplomacy (3)  
POLS.5640 Problems of International Terrorism (3)  
POLS.5660 Asymmetric Warfare  
POLS.5690 Theories of World Politics (3)  
POLS.5700 Politics, Rhetoric, and Culture (3)  
POLS.5710 Citizenship and Social Difference (3)  
POLS.5730 Contemporary Political Ideologies (3)  
POLS.5740 Marx's *Capital* (3)  
POLS.5760 Feminist Theory (3)  
POLS.5770 Feminist Epistemologies (3)  
POLS.5800 Theories of Constitutional Interpretation (3)  
POLS.5840 Global Health Politics & Policy (3)  
POLS.5850 Policy Evaluation and Assessment (3)  
POLS.5910 Graduate Internship (1-3)  
POLS.5911 Graduate Capstone Internship (3-6)  
POLS.5912 MPA Internship (3)  
POLS.5913 Field Service (1-6)  
POLS.5950 Study for Special Exams (0)  
POLS.5951 MPA Study for Special Exams (0)  
POLS.5960 MPA Capstone (3)  
POLS.5971 MPA Research Topics (1-3)  
POLS.5980 Graduate Independent Study (1-3)  
POLS.5981 MPA Reading Course (1-3)  
POLS.5990 Thesis Research (0-6)  
POLS.6100 Judicial Policy Making (3)  
POLS.6250 Poverty, Inequality and Public Policy (3)  
POLS.6300 U.S. Health Care Policy (3)  
POLS.6310 The Policy Process (3)  
POLS.6320 Organizational Theory and Behavior (3)  
POLS.6330 Public Finance Theory (3)  
POLS.6340 Politics, Power, and Coalitions (3)  
POLS.6350 Economic Development Policy (3)  
POLS.6700 American Political Thought (3)  
POLS.6710 Leadership and Culture (3)

# PSYCHOLOGY

---

**Jeffrey D. Gfeller, Ph.D.**

*Department Chairperson*

**Kimberly Powlishta, Ph.D.**

*Graduate Director, Experimental Program*

**Michael J. Ross, Ph.D.**

*Graduate Director, Clinical Program*

**Edward J. Sabin, Ph.D.**

*Graduate Director, Industrial-Organizational Program*

## EXPERIMENTAL PROGRAM

### Master of Science

The Master of Science (M.S.) program in Experimental Psychology includes three concentration areas: Cognitive Neuroscience, Developmental Psychology, and Social Psychology. All areas integrate theory and research in courses, research, and professional experiences. The Cognitive Neuroscience concentration reflects the expertise of faculty in the areas of learning, memory, cognitive aging, sleep, stress, and language processing. The Developmental Psychology concentration emphasizes social aspects of child and adolescent development (e.g., parent-child interaction, gender cognitions, stereotyping and prejudice, cultural influences, identity, emotion understanding, and socio-moral reasoning). The Social Psychology concentration examines the behavior of groups and individuals in a social context, with a focus on self-concept structure, self-regulation, close relationships, stereotyping and prejudice, social justice, the social psychology of health, social exclusion, racial and social identification, and attitudes.

#### **Prerequisites**

Minimum of 18 credits of advanced undergraduate courses in psychology, including statistics and research methods.

#### **Required Courses**

Six credits of Research Methodology and Statistics; this requirement must be fulfilled by taking PSY.5080 Advanced Quantitative Research Methods, and PSY.5790 Applied Univariate Statistics in Behavioral Science. Six credits of program core; choose two courses from the following list:

PSY.5120 Memory and Cognition

PSY.5130 Neuroscience

PSY.5300 Advanced Social Psychology

PSY.5250 Cognitive Development

PSY.5260 Social Development

Twelve credits of electives

Six credits of thesis research (PSY.5990)

PSY.5950 (Special Study for Exams; 0 credits) during semester in which thesis is defended

#### **Additional Requirements**

Continuous enrollment in PSY.5840 (Experimental Psychology Research Vertical Team)

### Doctor of Philosophy

The Ph.D. program in Experimental Psychology offers the same three concentration areas that are described above for the M.S. program.

#### **Prerequisites**

Masters of Science in Psychology or equivalent

#### **Departmental Course Requirements**

Statistics and research methods: 12 credits minimum at the post-baccalaureate level (which must include PSY.5080, PSY.5790, and PSY.6500)

One credit in Human Diversity (PSY.6030)  
One credit in Research Ethics (PSY.6800)

### **Program Core Course Requirements**

12 credits of coursework from the following core areas:

Cognitive Psychology: PSY.5120 (Memory and Cognition)

Developmental Psychology: PSY.5250 (Cognitive Development) or PSY.5260 (Social Development)

Neuroscience: PSY.5130

Social Psychology: PSY.5300

### **Concentration Course Requirements**

Nine credits within a concentration area (Cognitive Neuroscience, Developmental Psychology, or Social Psychology). For Cognitive Neuroscience and Social Psychology students, this requirement is met by completing three 6000 level seminars (in cognition/neuroscience – PSY.6190, or social psychology – PSY.6390, respectively); for Developmental Psychology students, this requirement is met by completing PSY.5250 or PSY.5260 (whichever was not taken to complete the Program Core requirement) and two 6000 level developmental psychology seminars (PSY.6290).

### **Program electives**

Six credits of additional post-baccalaureate level coursework in any of the Experimental concentrations (PSY.5250, 5260, 6190, 6290, or 6390) and/or the teaching of psychology (PSY.6000). In addition, students in the Social concentration may take PSY.6490 (Individual Differences) and students in the Cognitive neuroscience concentration may take Fundamentals of Neuropsychology (currently offered under the number PSY.5930) as part of these electives.

### **Additional Requirements**

Twelve credits of dissertation research (PSY.6990)

Successful completion of the written preliminary and the oral qualifying exams (enrolling in PSY.6950, Special Study for Exams, while completing each exam).

Continuous enrollment in PSY.5840 (Experimental Psychology Research Vertical Team).

Note: Some of the coursework required for the Ph.D. may be completed as part of the M.S. requirements.

## **INDUSTRIAL-ORGANIZATIONAL PROGRAM**

The graduate program in Industrial-Organizational Psychology prepares Doctoral-level professionals with the knowledge, research abilities, assessment skills, and intervention approaches to impact organizational issues at the individual, group, and system levels to improve individual well-being, group functioning, and organizational effectiveness.

## **Master of Science**

### **Prerequisites**

Minimum of 18 credits of advanced undergraduate courses in psychology, including statistics and research methods.

### **Required Courses**

A total of 30 credits of post-baccalaureate level, program approved courses including:

PSY.5080 Advanced Quantitative Research Methods (3)

PSY.5790 Applied Univariate Statistics in Behavioral Science (3)

PSY.6500 Applied Multivariable and Multivariate Statistics in Behavioral Science (3)

PSY.5460 Advanced Organizational Psychology (3)

PSY.5990 Master's Thesis Research (6)

Program Electives (12)

### **Additional Requirements**

Participation in research/professional activity group each semester.

# Doctor of Philosophy

## Prerequisite

Master of Science in Psychology

## Required Courses

PSY.6030 Human Diversity (1)

PSY.6800 Ethics and Professional Issues (1)

PSY.6990 Dissertation Research (12)

Graduate level statistics and research methods (15)

Graduate level, program approved, industrial-organizational courses (33)

## Additional Requirements

Involvement in research/professional practice activities each semester.

Written and oral preliminary examinations.

Additional curricular information is available from the director.

# CLINICAL PROGRAM

The Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) in Clinical Psychology is accredited by the American Psychological Association (Office of Program Consultation and Accreditation, American Psychological Association, 750 1<sup>st</sup> Street, NE, Washington, DC 20002; Phone: (202) 336-5979; Email: [apaaccred@apa.org](mailto:apaaccred@apa.org); Web: [www.apa.org/ed/accreditation](http://www.apa.org/ed/accreditation)). The program is grounded in the scientist-practitioner model with equal emphasis on research and clinical practice. The program is designed to prepare clinical psychologists to function in academic or multidisciplinary health care settings, providing clinical and research services. Integration of theory, research, methodology, and clinical practice is accomplished through academic coursework, clinical experience, clinical and research teams, and internships. Clinical training is obtained in the Department's Psychological Services Center.

# Master of Science

## Prerequisites

Minimum of 18 credits of advanced undergraduate courses in psychology, including statistics and research methods.

## Required Courses

Statistics: six credits. Research methods: six credits. Thesis research: six credits.

## Additional Requirements

PSY.5030 Clinical Assessment I (3)

PSY.5040 Clinical Assessment II (3)

PSY.5520 Psychopathology (3)

PSY.5610 Clinical Interventions (3)

PSY.6800 Ethics, Supervision, and Consultation (3)

PSY.5610 Clinical Practicum I (3)

PSY.5620 Clinical Practicum II (3)

PSY.5860 Clinical Research I (0)

PSY.5870 Clinical Research II (0)

PSY.5800 Clinical Assessment Practicum I (0)

PSY.5830 Clinical Assessment Practicum II (0)

PSY.5880 Psychopathology Practicum (0)

PSY.6880 Clinical Interventions Practicum (0)

# Doctor of Philosophy

## Prerequisites

Master of Science in Psychology or equivalent.

## Required Courses

Dissertation research: twelve credits.

## Additional Requirements

PSY.5100 History and Systems (3)

PSY.5120 Cognitive-Affective Bases of Behavior (3)

PSY.5130 or 593 Biological Aspects of Behavior (3)

PSY.5220 Lifespan Developmental Psychology (3)

PSY.5300 Social Aspects of Behavior (3)

PSY.6390 Human Diversity (3)

PSY.6810 Clinical Practicum III (3)

PSY.6820 Clinical Practicum IV (3)

PSY.6860 Advanced Clinical Research I (0)

PSY.6870 Advanced Clinical Research II (0)

PSY.6890 Internship in Clinical Psychology (0)

Electives (15)

## Post-Baccalaureate Courses

- PSY.5030 Clinical Assessment I (3)  
PSY.5040 Clinical Assessment II (3)  
PSY.5080 Advanced Quantitative Research Methods (3)  
PSY.5090 Psychometric Theory (3)  
PSY.5100 History of Psychology (3)  
PSY.5120 Memory and Cognition (3)  
PSY.5130 Neuroscience (3)  
PSY.5220 Lifespan Developmental Psychology (3)  
PSY.5250 Cognitive Development (3)  
PSY.5260 Social Development (3)  
PSY.527 Personality Assessment (3)  
PSY.5300 Advanced Social Psychology (3)  
PSY.5310 Advanced Personality Theory (3)  
PSY.5410 Industrial Psychology (3)  
PSY.5460 Advanced Organizational Psychology (3)  
PSY.5470 Psychology of Small Groups (3)  
PSY.5520 Psychopathology (3)  
PSY.5610 Clinical Interventions (3)  
PSY.5670 Behavior Therapy (3)  
PSY.5780 Program Evaluation (3)  
PSY.5790 Applied Univariate Statistics in Behavioral Science (3)  
PSY.5800 Clinical Assessment Practicum I (0)  
PSY.5810 Clinical Practicum I (0-3)  
PSY.5820 Clinical Practicum II (0-3)  
PSY.5830 Clinical Assessment Practicum II (0)  
PSY.5840 Experimental Psychology Research Vertical Team (0)  
PSY.5850 Practicum: Applied Psychology (0-6)  
PSY.5860 Clinical Research I (0-3)  
PSY.5870 Clinical Research II (0-3)  
PSY.5880 Practicum: Psychopathology (0-3)  
PSY.5890 Clerkship: Clinical Psychology (0)  
PSY.5950 Special Study for Examinations (0)  
PSY.5970 Research Topics (1-3)  
PSY.5980 Graduate Reading Course (1-3)  
PSY.5990 Thesis Research (0-6)  
PSY.6000 Teaching of Psychology (3)  
PSY.6030 Human Diversity (1-3)  
PSY.6040 Topics: Assessment (3)  
PSY.6060 Topics: Quantitative Psychology (3)  
PSY.6190 Topics: Cognitive Neuroscience (3)  
PSY.6290 Topics: Developmental Psychology (3)  
PSY.6390 Topics: Social Psychology (3)  
PSY.6490 Topics: Organizational Psychology (3)  
PSY.6500 Applied Multivariable and Multivariate Statistics in Behavioral Science (3)  
PSY.6520 Clinical Child Psychology (3)  
PSY.6590 Topics: Psychopathology (3)  
PSY.6600 Structural Equation Modeling (3)  
PSY.6630 Consultation Skills: Theory and Practice (3)  
PSY.6650 Theories of Child Psychotherapy (3)  
PSY.6660 Psychodynamic Psychotherapy (3)  
PSY.6680 Neuropsychological Assessment (3)  
PSY.6690 Topics: Intervention Strategies (3)  
PSY.6780 Community Psychology and Primary Prevention (3)  
PSY.6790 Topics: Applied Psychology (3)  
PSY.6800 Ethics and Professional Issues (1-3)  
PSY.6810 Clinical Practicum III (0-3)  
PSY.6820 Clinical Practicum IV (0-3)  
PSY.6910 Internship In Applied Psychology (0)  
PSY.6860 Advanced Clinical Research I (0-3)  
PSY.6870 Advanced Clinical Research II (0-3)  
PSY.6880 Practicum: Clinical Interventions (0-3)  
PSY.6890 Internship: Clinical Psychology (0)  
PSY.6950 Special Study for Examinations (0)  
PSY.6970 Research Topics (1-3)  
PSY.6980 Graduate Reading (1-3)  
PSY.6990 Dissertation Research (0-6)

# SOCIOLOGY & ANTHROPOLOGY

---

**Richard A. Colignon Ph.D.**

*Department Chairperson*

**Terry Tomazic Ph.D.**

*Graduate Program Director*

**J.S. Onésimo Sandoval, Ph.D.**

*Co-Director Ph.D. Program*

The Department of Sociology and Anthropology offers a MA in Sociology, MA in Sociology and Juris Doctor, Ph.D. in Public and Social Policy, and a Minor in Research Methodology.

## Master of Arts in Sociology

The Department of Sociology and Anthropology offers a Master of Arts in Sociology with specializations in Spatial Demography, Urban Social Policy, and Law and Society. The program provides students with the analytic and administrative skills to advance in leadership positions in the public, private and government sectors. The program is distinctive in its blend of academic and practical skills. Courses are taught by an interdisciplinary faculty from Sociology, Anthropology and Public Policy. Students learn from a faculty that are both outstanding scholars and have practical experience. The faculty is engaged in cutting edge research and this research experience is brought into the classroom to enrich and enliven the education of students. Students benefit from the integration of theory and the practical and empirical skills needed in 21st century organizations.

The M.A. degree requires a total of 33 credits of post-baccalaureate study with a minimum of 27 credits of course work. The M.A. is completed either through the thesis or non-thesis tracks. The thesis track includes up to 6 thesis credits while the non-thesis track includes 6 additional credits of course work.

### Prerequisites

An undergraduate degree in the social sciences is anticipated but not required. A research methodology quantitative analysis course is anticipated but not required.

### Required and Elective Courses

With the consent of your advisor and the director of the program, students may count other courses as electives.

SOC.5010 Organizational Theory and Behavior	SOC.5640 Demography Methods: Measuring and Modeling
SOC.5050 Quantitative I: Applied Inferential Statistics	SOC.5650 Introduction to GIS
SOC.5100 Pro-seminar	SOC.5660 Intermediate GIS
SOC.5200 Urbanization	SOC.5670 Spatial Demography
SOC.5250 Urban Ecology: Neighborhood	SOC.5680 Spatial Analytics of Injustice: Crime and Deviance
SOC.5500 Social Inequality	SOC.5700 Applied Spatial Analysis
SOC.5510 Constructing Social Problems	SOC.5750 Intermediate Qualitative Research
SOC.5520 Sociological Social Psychology	SOC.5800 Survey Design and Sampling
SOC.5530 Urban Ethnography	SOC.5850 Program Evaluation and Assessment
SOC.5540 Environmental Impact of the City	SOC.5890 Reading Statistics in Research
SOC.5550 Comparative Theories of Race & Ethnic Relations	SOC.6100 Regression Analysis and Non-linear Models
SOC.5590 Law and Society	SOC.6200 Nonparametric Statistical Analysis
SOC.5600 General Research Methodology	SOC.6500 Confirmatory Factor Analysis
SOC.5610 Death Investigation	

## Master of Arts in Sociology & Juris Doctor

The School of Law and the Department of Sociology and Anthropology offer a dual degree program (J.D./M.A.). This specialized program combined the J.D. and M.A. degrees, broadly focusing on the relationship between law and society. The dual degree capitalizes on the advantages of legal training and social science research expertise. Graduates of the J.D./M.A. program are in demand in jobs requiring skill in gathering and analyzing information, interpreting legal issues and implementing administrative policy.

Students may earn both degrees in roughly four years, instead of the typical five years. The savings in time and tuition are considerable. Participants must meet the admission requirements for the Master's degree in Sociology as well as the admission requirements for the J.D. degree.

There are several practical objectives to this dual degree program. Graduates of this program enjoy an increased number of the job opportunities in federal and state law enforcement, corrections and judicial positions. Graduate gain additional competitive advantages in a broad range of job possibilities over graduate with only one of the degrees. Further, graduates find their education useful as social entrepreneurs applying their legal, administrative and research knowledge in policy areas from mental health, economic development, and environmental sustainability to issues of civil rights, immigration, international human rights, and employment discrimination. Moreover, this program attracts highly qualified students from outside the region as this is one of the only J.D./M.A. programs of its kind between the middle of the country.

Students must complete the basic first-year requirements for the School of Law before beginning their studies in the M.A. program. Thereafter, students attend classes in both the School of Law and Department of Sociology and Anthropology. Students complete a total of 106 hours of academic work, including a summer internship, in order to complete the J.D./M.A. (82 hours in the School of Law and 24 hours in the Department of Sociology and Anthropology. Of the 91 hours required for the J.D. degree, 9 hours are satisfied by Sociology and Anthropology courses and 9 hours of Law School courses are accepted toward the 33 credit hours required for the Master's degree.

## Doctor of Philosophy in Public and Social Policy

The Department of Sociology and Anthropology (in conjunction with the Department of Political Science) supports an interdisciplinary Ph. D. program in Public and Social Policy within the College of Arts and Sciences. Our new Ph.D. program has five concentrations: Health Policy, International Development Policy, Policy and Geo-spatial Analysis Public Administration, and Urban and Community Development. Students can choose one of the concentrations or they can combine two or more of the concentrations. We offer a diverse set of classes and research opportunities related to Public and Social policy.

The program prepares students to tackle some of the biggest problems of our times, including persistent poverty both in American cities and in poor countries around the world, urban renewal, racial and ethnic inequality, and health disparities. The Ph.D. in Public and Social Policy prepares students for scholarly and leadership roles in government, universities, research, and public service organizations by providing them with multiple disciplinary perspectives, advanced methodological skills, and the ability to conduct original research in an academic or applied setting. Students will learn how quality research can inform both basic and policy-related questions, and they will have the ability to share their knowledge with both academic and non-academic audiences.

The Ph.D. degree in Public and Social policy requires a minimum of 46 graduate semester credit hours beyond a master's degree. All applications are required to possess a master's or professional degree. If a student completes his/her master's degree at Saint Louis University in Sociology, Political Science, or Public Administration, a maximum of 6 credit hours can be counted toward the Ph.D. degree.

Students are cautioned, however, not to think in terms of the accumulation of credit hours, but rather in terms of the accumulation of conceptual, theoretical, and methodological skills that are required to achieve competency in the field of public and social policy analysis and administration.

### **Required Classes**

All students complete seven core classes:

Core: Policy Analysis and Methods of Inquiry

SOC/POLS.5850 Policy evaluation and assessment

SOC/POLS.5060 Qualitative research

SOC/POLS.6100 Regression Analysis and Non-Linear Models

SOC.5650 Introduction to GIS

### **Core: Policy Theory**

POLS.6310 Policy process

POLS.6330 Public finance Theory

A core class specific to the area of concentration

Students complete four more classes (12 hours) in the area of concentration, selected in cooperation with their mentor and the program director. Students must register for 12 hours of dissertation research.

### *Public Administration Concentration*

For a concentration in Public Administration all students are required to take the following course:  
SOC.5010/POLS.5010 Organizational Theory and Administration

Students are also required to take four of the following classes. Students are encouraged to choose the classes with the help of their mentor.

POLS.5130 American Race Relations  
POLS.5150 Gender and American Politics  
POLS.5300 Administrative Law  
POLS.5310 Issues in U.S. Public Administration  
POLS.5325 Public Sector Budgeting  
POLS.6710 Leadership & Culture  
SOC.5171/POLS.5171 Law, Policy, Society  
SOC.5520 Social Psychology  
SOC.6320/POLS.6320 Organization Theory & Behavior  
LAW.7060 Anthropology of Law

### *Urban and Community Development Concentration*

For a concentration in Urban and Community Development, all students are required to take the following course:  
SOC.6200 Urban Social and Political Theory

Students are also required to take four of the following classes. Students are encouraged to choose the classes with the help of their mentor.

POLS.5130 American Race Relations  
POLS.5200 Seminar in American State Politics  
SOC.5200 Cities, Suburbs, & Neighborhoods  
SOC.5400 Urban Crime, Violence, and Justice  
SOC.5510 Constructing Social Problems  
SOC.5530 Urban Ethnography  
SOC.5500 Social Stratification  
SOC.5540 Environmental Impact of City  
SOC.5550 Comparative Theories of Race / Ethnic Relations  
SOC.6225 Urban Community Development  
SOC.6250/POLS.6250 Poverty, Inequality and Public Policy  
SOC.6350/POLS.6250 Economic Development Policy

### *International Development Policy Concentration*

For a concentration in International Development Policy, all students are required to take the following course:  
POLS.5550 Politics of Economic Development

Students are also required to take four of the following classes. Students are encouraged to choose the classes with the help of their mentor.

POLS.5510 Democratization  
POLS.5520 Political Change  
POLS.5530 Authoritarianism: A Useful Concept?  
POLS.5610 International Relations: Theory & Practice  
POLS.5620 Global Diplomacy  
POLS.5630 International Security & Conflict Resolution  
POLS.5690 Theories of World Politics  
POLS.5840 Global Health Politics & Policy  
SOC.5540 Environmental Impact of City  
SOC.5550 Comparative Theories of Race / Ethnic Relations



## Health Policy Concentration

For a concentration in Health Policy, all students are required to take the following course:  
SOC.6275 Health and The Social Sciences

Students are also required to take four of the following classes. Students are encouraged to choose the classes with the help of their mentor.

ECON.6700 Health Economics  
EOH.5600 Policy, Science and Decisions in Environmental Health  
SOC.6300/POLS.6300 U.S. Health Care Policy  
HMP.5000 Health Care Organization  
HMP.5500 Health Policy  
HMP.5520 Legislative Health Policy and Procedures  
HMP.5550 Global Health Management and Policy  
POLS.5840 Global Health Politics & Policy  
SOC.5540 Environmental Impact of City  
HCE.5330 Research Ethics for Health Outcomes

## Policy and Geo-Spatial Analysis Concentration

For a concentration in Policy and Geo-spatial Analysis, all students are required to take the following course:  
SOC.5670 Spatial Demography: Applied Statistics for Spatial Data

Students are also required to take four of the following classes. Students are encouraged to choose the classes with the help of their mentor.

SOC.5530 Urban Ethnography  
SOC.5640 Demography: Measuring and Modeling Population Processes  
SOC.5660 Intermediate GIS  
SOC.5680 Forensic GISc and Policy  
SOC.5700 Applied Spatial Analysis with R  
SOC.5800 Survey Design & Sampling  
SOC.6200 Nonparametric Statistical Analysis  
SOC.6500 Exploratory and Confirmatory Factor Analysis  
POLS.5770 Feminist Epistemologies  
ECON.6050 Econometrics I  
ECON.6060 Econometrics II  
PSYC.6600 Structural Equations Modeling

## Minor in Research Methodology

A formal University-wide, minor in Research Methodology is offered and administered through the Department of Sociology and Anthropology. The minor is designed to provide students with a background in advanced analysis and methods. This minor is open to all students and can be tailored to meet students' own disciplinary program needs. Elements of the minor are developed by consensus between students, their advisor/mentor and the Graduate Director in the Department of Sociology & Anthropology. Essentially the minor consists of (with Prerequisites) five courses: a basic, quantitative statistics/analysis course; two advanced quantitative analysis courses; and two advanced research methodology courses. A listing of the courses offered across the University that will fulfill the requirements can be found on the Graduate Education [website](#). Students may petition for the inclusion of additional courses by submitting a copy of the syllabus for such courses. Upon approval, these courses can also be included in the minor.

### **Process**

To be admitted, students must be admitted to a degree-seeking program at Saint Louis University. For a minor, students must first make an application through the Department of Sociology and Anthropology. Then, in consultation with the department's Graduate Director and their advisor/mentor, the minor is developed by determining selections from the three clusters of courses: basic quantitative analysis; advanced methodological design; and advanced statistics/analysis. Once all academic plan forms are signed and

courses completed, a petition to amend the minor field is submitted to the Associate Graduate Dean/Director of the college, school, or center appropriate for students, who will sign and file the form with the Registrar. Upon completion, it will be noted as a “Minor in Research Methodology” on the academic transcript.

Students are encouraged to discuss the possibilities of the minor with their advisor/mentor or they can contact the Graduate Director in Sociology and Anthropology. In this way, students can build a minor that is best suited for his/her own needs and the goals in their major program. The minor is designed to be flexible and broad enough to support students across the University.

# THEOLOGICAL STUDIES

---

**Peter Martens, Ph.D.**

*Department Chairperson*

**Rubén Rosario-Rodríguez, Ph.D.**

*Director of M.A. Program*

**Fr. David Meconi, S.J., D.Phil.**

*Director of Ph.D. Program*

The department offers two degrees, the Master of Arts in theology and the Doctor of Philosophy in historical theology. The M.A. in Theology has two tracks, Research and Religious Education, and the research track has three areas of specialization: Constructive Theology, Theological Ethics, and Historical Theology. The Ph.D. in Historical Theology has three areas of specialization: Early Christianity, Medieval Christianity, and Modern Christianity.

## Master of Arts

The M.A. in Theology brings together two, complementary poles of theological reflection: *retrieval* and *appropriation*. On the one hand, the program equips students with the methodological and conceptual tools necessary for understanding classic theological texts within their historical, cultural, and ecclesial contexts. This emphasis on *retrieval* not only allows for a greater appreciation of the rich and varied traditions out of which contemporary theological reflection emerges; it also gives students a better grasp of the context sensitive character of all human understanding.

On the other hand, the program brings classic theological texts into critical conversation with our contemporary setting. This emphasis on *appropriation* provides students opportunities and skills to think creatively and practically about the ongoing impact of theological reflection, both in the search for human meaning and the task of personal and social transformation. While each area of specialization retains distinguishing characteristics and requirements, all three areas gain an internal coherence through integrating these two poles.

This integration process is the chief goal of the *Theological Sources and Methods Seminar* required of all M.A. students. This seminar introduces students to the major sources and methods for thinking theologically at the post-baccalaureate level. With a triple emphasis on historical methods, theological hermeneutics, and practical theology, the seminar provides students the opportunity to understand and to begin practicing the interrelated tasks of theology.

### Prerequisites

An undergraduate major in theology is the standard prerequisite for the M.A. in Theology. However, the Department may admit students who have had at least 18 credits in Theology (or Religious Studies with a strong theological component). The overall concern is that M.A. students have the basic knowledge and skill set to succeed in a post-baccalaureate program in theological studies. Deficiencies may be satisfied through specific, intensive, prerequisite courses offered by the Department of Theological Studies. Applicants with an undergraduate major in the humanities (with a strong liberal arts background) may also apply, although in these cases a greater number of prerequisite courses may be required in their first year.

### Required Courses

The M.A. consists of two major tracks, Religious Education and Research (Historical Theology, Constructive Theology, or Theological Ethics). The RE track consists of a two-year program of study that consists of 33 credits of coursework (including 2 semesters/200 hours of supervised internship) and comprehensive exams. RE track students are eligible for a 60% tuition reduction and merit-based Tuition Scholarships. The Research track consists of a two-year program of study that includes 36 credits of coursework, and a 50-70 page thesis. Research track students are eligible for Research Assistantships and merit-based Tuition Scholarships.

### Track #1: Religious Education

This track is designed to provide students with a strong background in the discipline of theology, including systematic/constructive theology, theological ethics, and scripture, while preparing students who elect the Religious Education track to take 9 credits of courses specific to the challenges of Catholic Religious Education.

The Religious Education concentration consists of a 33 credit program of study:

THEO.5400 Theological Resources and Methods (3 credits)

THEO.5000 Biblical Interpretation (3 credits)

Systematic/Constructive Theology (6 credits)  
Theological Ethics (3 credits)  
Scripture (3 credits)  
Elective (6 credits)  
Religious Education (9 credits)  
THEO.5810 Ignatian Spirituality & Pedagogy  
THEO.5820 Internship (6 credits) / Integration Paper (20-25 pages)  
THEO.5950 Comprehensive Exams (0 credits)

## Track #2: Research

This track is designed to train students in the craft of *academic theology* in a manner that is both *historically conscious* and *ethically-engaged*. All students take courses in systematic/constructive theology, historical theology, theological ethics, and scripture to deepen their understanding of the historical roots and practical implications of theological reflection. The research track offers three areas of specialization, Constructive Theology, Theological Ethics, and Historical Theology.

Students concentrating in Constructive Theology or Theological Ethics must demonstrate proficiency in *one* foreign language, either ancient or modern. Students concentrating in Historical Theology must demonstrate proficiency in *two* foreign languages, one ancient and one modern.

The Research track consists of a 36 credit, two-year program of study, with a 50-70 paged thesis.

## Specialization #1: Constructive Theology

This specialization is designed for students concentrating in *constructive/systematic theology* with a core of course offerings in the doctrinal loci of systematic theology (e.g., Christology, Anthropology, Ecclesiology, and God), while allowing students to take accompanying courses in historical theology, theological ethics, and scripture.

THEO.5400 Theological Resources and Methods (3 credits)  
Constructive Theology (9 credits)  
Theological Ethics (3 credits)  
Historical Theology (3 credits)  
Scripture (3 credits)  
Electives (9 credits)  
THEO.5990 M.A. Thesis (6 credits)

*M.A. Thesis:* The M.A. thesis in Constructive Theology (50-70 pages) for a total of 6 credits. This option is especially recommended to students who intend to apply to Ph.D. programs.

*Languages:* Students must demonstrate proficiency in at least one foreign language, classical or modern (Latin, Greek, German, French, or Spanish).

## Specialization #2: Historical Theology

This specialization is designed for students who wish to emphasize the *historical* dimension of theological reflection. Students select a major area of study (from Early Christianity, Medieval Christianity, and Modern Christianity), while also taking courses in constructive theology, theological ethics, and scripture.

THEO.5400 Theological Resources and Methods (3 credits)  
THEO.5200 Introduction to Historical Method (3 credits)  
Historical Theology (9 credits)  
Theological Ethics (3 credits)  
Constructive Theology (3 credits)  
Scripture (3 credits)  
Electives (6 credits)  
THEO.5990 M.A. Thesis (6 credits)

*M.A. Thesis:* Students will compose an M.A. thesis in Historical Theology (50-70 pages) for a total of 6 credits.

*Languages:* Students must demonstrate proficiency in two Foreign languages—one ancient (Latin or Greek), and one Modern (German or French).

### Specialization #3: Theological Ethics

This specialization focuses on theological ethics, emphasizing the importance of historical grounding while engaging the contemporary context, by providing a core of courses in moral theology supplemented by courses in constructive theology, historical theology, and scripture.

THEO.5400 Theological Resources and Methods (3 credits)

Theological Ethics (9 credits)  
Constructive Theology (3 credits)  
Historical Theology (3 credits)  
Scripture (3 credits)  
Electives (9 credits)

THEO.5990 M.A. Thesis (6 credits)

*M.A. Thesis:* The M.A. thesis in Theological Ethics (50-70 pages) for a total of 6 credits.

*Languages:* Students must demonstrate proficiency in at least one foreign language, classical or modern (Latin, Greek, German, French, or Spanish).

## Doctor of Philosophy in Historical Theology

### **Prerequisites**

M.A. degree in Historical Theology or the equivalent

Nine credits of undergraduate and/or M.A. philosophy courses

Nine credits of undergraduate and/or M.A. history courses

Competency in at least one research language besides English (usually Greek, Latin, French, German or Italian).

Deficiencies may be satisfied through specific, intensive, prerequisite courses offered by the Department of Theological Studies.

### **Required Courses (54 credits)**

The program requires two years of coursework (36 credits), and a third year dedicated to dissertation related research (18 credits). The remaining two years focus on dissertation writing, which does not require credits. Students are expected to have a major area (12 credits of Doctoral seminars) and 6 elective credits for Doctoral seminars. By the end of the first year, students are required to declare their major area.

The thirty-six credits derive from the following options:

THEO.6010 Methods in Historical Theology (3 credits) required of all students

Historical Theology Surveys (9 credits) required of all students

THEO.6020 Early Christianity

THEO.6030 Medieval Christianity

THEO.6040 Modern Christianity

**Major Seminars** (12 credits) chosen according to declared major field

THEO.6110 Early Christianity

THEO.6120 Medieval Christianity

THEO.613 Modern Christianity

**Minor Seminars** (6 credits) chosen according to declared minor field

THEO.6110 Early Christianity

THEO.6120 Medieval Christianity

THEO.613 Modern Christianity

### **Electives (6 credits)**

Chosen from any post-baccalaureate course offered (5000/6000 level)

### **Dissertation research (18 credits)**

Dissertation Prospectus (6 credits)

Dissertation Research (12 credits)

### **Additional Requirements**

All Ph.D. students are required to demonstrate competency in *three* languages before advancement to their dissertation field exam in the second year. One language must be ancient and one modern. The language choices of students are determined by their research specialty as approved by the Director of the Ph.D. program in consultation with the chair of their comprehensive examination board.

The language possibilities include, but are not limited to: Greek, Latin, Syriac, German, French, Spanish or Italian.

Prior to acceptance into the program, students must assure competency in at least one of the above languages. Students must demonstrate this competency during the first year of study. If competency is not demonstrated during the first year, students will be removed from the program.

In addition to the three language requirements for advancement to Ph.D. candidacy, other languages to conduct research for the dissertation may be required by the director of the candidate's dissertation. The dissertation is the final arbitrator of the languages required.

## **Masters Courses**

### **Biblical Theology**

THEO.5000 Biblical Interpretation (3)	THEO.5100 New Testament (3)
THEO.5020 Pentateuch (3)	THEO.5110 The Synoptics (3)
THEO.5030 Historical Books (3)	THEO.5120 Luke-Acts (3)
THEO.5040 Prophets (3)	THEO.5130 Paul (3)
THEO.5050 Wisdom Literature (3)	THEO.5140 Johannine Literature (3)
THEO.5060 The Psalms (3)	THEO.5190 Special Topics: New Testament (3)
THEO.5090 Special Topics: Old Testament (3)	

### **Historical Theology**

THEO.5200 Methods in Historical Theology (3)	THEO.5250 Survey of the History of Religions (3)
THEO.5210 Survey of Early Christian History, 200-600 (3)	THEO.5260 Comparative Theology (3)
THEO.5220 Survey of Medieval Christian History, 600-1500 (3)	THEO.5390 Special Topics: Historical Theology (3)
THEO.5230 Christianity, 1500-2000 (3)	

### **Systematic Theology**

THEO.5400 Theological Resources and Methods (3)	THEO.5470 Ecclesiology (3)
THEO.5420 God (3)	THEO.5500 Sacraments (3)
THEO.5440 Christology (3)	THEO.5590 Special Topics: Systematic Theology (3)
THEO.5450 Theology of the Human Person (3)	

### **Moral Theology**

THEO.5600 Contemporary Moral Theology (3)	THEO.5650 Bioethical Controversies (3)
THEO.5620 Fundamental Moral Theology (3)	THEO.5680 History of Moral Theology (3)
THEO.5630 Social Ethics (3)	THEO.5690 Special Topics: Moral or Pastoral Theology (3)
THEO.5640 Family Ethics (3)	

### **Spirituality**

THEO.5730 Spirituality and Psychology (3)
THEO.5790 Special Topics: Spirituality (3)

### **Religious Education Miscellaneous**

THEO.5800/EDF.5610 Foundations of Catholic Education (3)	THEO.5950 Special Study for Examinations (0)
THEO.5810 Ignatian Spirituality & Pedagogy (3)	THEO.5980 Graduate Reading Course (1-3)
THEO.5820 Internship (6)	THEO.5990 Essay Guidance: M.A. Thesis (6)

### **Doctoral Courses in Historical Theology**

THEO.6010 Methods in Historical Theology (3)	THEO.6210 Prospectus (3)
THEO.6020 Survey of Early Christian History, 200-600 (3)	THEO.6930 Special Topics in Historical Theology (3)
THEO.6030 Survey of Medieval Christian History, 600-1500 (3)	THEO.6950 Special Study for Examinations (0)
THEO.6040 Survey of Early Modern: 1500-2000 (3)	THEO.6970 Research Topics (1-3)
THEO.6110 Early Church Seminar (0 or 3)	THEO.6980 Graduate Reading Course (1-3)
THEO.6120 Medieval Seminar (0 or 3)	THEO.6990 Dissertation Research (0-9)
THEO.6140 Modern Seminar (0 or 3)	

# WOMEN'S AND GENDER STUDIES

---

**Penny Weiss, Ph.D.**

*Graduate Program Director*

**Gretchen Arnold, Ph.D.**

Director of Graduate Studies

The Women's and Gender Studies Department offers a 30-credit hour M.A., an accelerated B.A./M.A. program for undergraduates at Saint Louis University, and a 9-credit hour graduate minor program.

The Master of Arts (M.A.) in Women's and Gender Studies provides an interdisciplinary education about contemporary social justice issues, preparing students for leadership and advocacy roles in community or academic settings. While gender is the primary focus, each course and the discipline as a whole examine gender in light of race, ethnicity, class, sexual identity, ability, age and religion. The discipline teaches students to think critically and to engage in the world as responsible citizens.

The M.A. is a 30-hour program. Graduate work is designed to develop: 1) students' ability to engage critically with multicultural feminist theories concerning social inequalities; 2) strong research and writing skills; and 3) knowledge and skills that enable communication with diverse audiences, coalition building for social action, and development of initiatives for change. Each student works out a curriculum plan for his or her area of specialization and a capstone project in consultation with the director of graduate studies. The interdisciplinary M.A. program welcomes applicants from all academic fields.

There is also an accelerated B.A./M.A. program for undergraduates at Saint Louis University. Students who enter the accelerated B.A./M.A. program take 6 credit hours (two graduate classes) in their senior year that count toward both the B.A. and M.A. requirements.

The Graduate Minor in Women's and Gender Studies provides graduate students the opportunity to integrate the study of women and gender issues into their chosen field of study. The 9 credit hours required include the Feminist Theory course, the Feminist Epistemologies course, and a graduate level elective course that is cross-listed with Women's and Gender Studies.

All graduate students, regardless of whether or not they are pursuing an M.A., B.A./M.A., or Graduate minor in WGS, are welcome to enroll in our graduate classes.

The Women's and Gender Studies M.A. and B.A./M.A. prepare students for careers in community organizing, nonprofit organizations, government service, health care, business, the arts and policy research; doctoral work in women's and gender studies and related fields; and professional schools, including public health, law, social work, and public policy.

## Master of Arts

A total of 30 credit hours (10 courses total) are required for the Master's in Women's and Gender Studies. These include 5 required courses, 5 electives, and a Capstone project.

### **Required Courses:**

WGST.5010 Feminist Theory

WGST.5020 Feminist Epistemologies

WGST.5030 Cultural Methods: Gender, Politics, and Power

WGST.5040 Current Issues and Debates

WGST.5910 Women Leaders Internship

**Electives:** Five cross-listed electives are chosen from dozens of courses in Women's and Gender Studies; Political Science; African-American Studies; Philosophy; English; History; Languages, Literatures, and Cultures; Fine and Performing Arts; Social Work; and Law, among others.

Possible cross-listed electives:

WGST.5070 Studies in Francophone Culture  
WGST.5150 Gender and American Politics  
WGST.5210 Women's Movements in the U.S. and Beyond  
WGST.5290 Women and Global Issues  
WGST.5310 Women Writing Women: Latin American Women Playwrights  
WGST.5360 Written by Herself: Latin American Women Writers  
WGST.5690 Adv Nurse Prac: Gynecologic Issues  
WGST.5710 Women and Writing in Early Modern France  
WGST.5716 Diversity and Anti-Oppression Practice  
WGST.5720 Citizenship and Social Difference  
WGST.5771 Intimate Partner Violence  
WGST.5780 Contemporary Spanish Women Writers  
WGST.6200 Visual Culture Theory  
WGST.6270 Middle English Literature  
WGST.6300 Feminist Ethics

WGST.6350 17th Century Literature  
WGST.6500 Romanticism  
WGST.6590 19th Century English Lit.  
WGST.6600 Studies in Modernism  
WGST.6610 Twentieth-Century Fiction  
WGST.6650 Twentieth-Century Postcolonial Literature  
WGST.6670 Topics in Literature of the 20th Century  
WGST.6690 Irish Gothic  
WGST.6700 American Political Thought  
WGST.6710 19th Century American Literature  
WGST.6780 Topics: 20th Cent American Lit  
WGST.6790 Fem Approach: Not for Women Only  
WGST.6800 School of Law Seminars  
WGST.6833 Employment Discrimination  
WGST.6875 Family Law

With the consent of your advisor and the Graduate Director, students may count other courses as electives.

**Capstone project:** A capstone project and presentation based on either an internship or research developed through coursework is also required.

## Accelerated Bachelor of Arts/Master of Arts

**Prerequisites:** In most cases, students must be pursuing a Women's and Gender Studies major or minor, have at least junior standing, and have a minimum grade point average of 3.3, although exceptions can be granted by the Graduate Director.

## Minor in Women's and Gender Studies

**Required courses:** 9 credit hours (3 courses total)

WGST.5010: Feminist Theory

WGST.5020: Feminist Epistemologies

Graduate elective course cross-listed with Women's and Gender Studies

See the list of possible cross-listed electives, above. If a graduate class is not already cross listed as a Women's and Gender Studies course, it is possible to request permission for it to count towards the elective requirement.

To receive a graduate minor, students must be enrolled in another graduate program at SLU. Any graduate student may take the required courses as long as they have the approval of their department or program.



# SCHOOL OF LAW

---

**Michael A. Wolff, J.D.**

*Dean and Professor of Law*

**Michael J. Kolnik, J.D.**

*Assistant Dean and Director of Admissions*

As a Jesuit institution founded in 1843, Saint Louis University School of Law (SLU LAW) strives to foster an environment of academic excellence and a commitment to public service and professionalism. With an accomplished faculty and a diverse curriculum designed to prepare students for all areas of legal practice, SLU LAW provides an ideal environment for those committed to succeeding. Through its Center for Health Law Studies, SLU LAW also offers one of the premier health law programs in the nation, along with specialized centers in employment law and international and comparative law. Whatever the interest - corporate, criminal, employment, finance, health, international, intellectual property, public service, tax, real estate or litigation - SLU LAW can help students achieve their desired career goals. [Click here](#) for comprehensive information about our 10 different concentrations.

In Fall 2013, we welcomed our students to our new building, Scott Hall, located in the heart of downtown St. Louis. The building provides top rate facilities to our students and affords them the opportunity to integrate their legal education with the downtown legal community.

SLU LAW offers full-time day, part-time day or part-time evening programs. Students are presented with a variety of opportunities for experiential education. [Professional skills courses](#) are available to all students after the first year of study. Students have a range of options including simulated arguments before the Supreme Court, contract drafting and participating in our various legal clinics. The [Legal Clinics](#) allow students, under supervision from trained faculty, to represent clients in need at court. Additionally, students have an opportunity to clerk for judges and participate in externships at various corporations and government agencies. Through our clinic programs, our students annually provide more than 47,000 hours of free legal services to the local community.

In the spirit of the Jesuit tradition of “men and women for others,” SLU LAW focuses on the commitment to public service as part of the legal profession. Public service projects begin at orientation and opportunities continue throughout the program.

For more information, visit [SLU LAW's web site](#) or contact the Admissions Office by [email](#) or phone at (314) 977-2800. If you would like to meet with an admissions counselor or take a tour of our building, you may schedule an appointment by calling (314) 977-2800.

## **Application requirements for the J.D. degree**

Bachelor's degree from an accredited college or university is required. Exceptions may be made on a case by case basis by the Admissions Committee as authorized by ABA Accreditation Standards Section 502

Register for the Law School Admission Test (LSAT), the LSAC Credential Assembly Service (CAS) and the LSAC Letter of Recommendation Service (LOR). No application is complete without test scores and transcript analysis from LSAC's CAS. We do accept evaluation forms through the LSAC Evaluations Service, but they are not required. SLU LAW highly recommends that applicants take the LSAT in the summer or fall prior to the year they wish to enter law school. SLU LAW will only consider LSAT scores earned within the last three years.

All transcripts must be forwarded directly to the CAS. SLU LAW will request the LSAC CAS Report upon receipt of the application.

## **Letters of Recommendation**

SLU LAW requires applicants to use the LSAC Letter of Recommendation Service. A minimum of two letters is required, and we will accept up to four letters. We encourage applicants to request letters from individuals who can accurately assess their intellectual ability, motivation, character and academic performance. We place value on content that verifies the qualifications of the applicant to compete in the law school environment.

Send letters of recommendation to:

**Law School Admission Council**  
**662 Penn Street**  
**PO Box 8508**  
**Newtown, PA 19840-8505**  
**Phone: (215) 968-1001**

### **Personal Statement**

The Personal Statement is a way for applicants to communicate information about themselves that is not found in the rest of the application. The Personal Statement provides the Admissions Committee with insight into the applicant's writing ability and individual character. Information regarding personal or professional goals, academic performance and career history is helpful. The Admissions Committee looks for brevity and clarity of thought and expression. Please limit the personal statement to two pages.

### **Important**

It is the responsibility of each applicant to provide the Admissions Office with all the necessary documents. The applicant is encouraged to contact the Admissions Office throughout the admissions process to confirm receipt of application materials at [admissions@law.slu.edu](mailto:admissions@law.slu.edu) or by phone at (314) 977-2800. Incomplete applications will not be reviewed. [Click here](#) for more information or to apply online.

### **Admissions Determination**

The Admissions Committee considers several factors in determining a candidate's eligibility: academic achievement, strength of the undergraduate program, application information, LSAT results (the Admissions Committee looks only at the applicant's highest score), personal statement, work experience, degrees earned, motivation, leadership and service.

## Dual Degree Programs

SLU LAW also offers [dual degree programs](#) in partnership with several schools within the University. Dual degree programs are designed to allow students to obtain two degrees in significantly less time (4-5 years, depending upon the degree) than if the degrees were obtained separately.

Dual degree students must meet the admissions criteria for both SLU LAW and the school from which the Doctoral or Master's degree is sought. Application for both should be made either at the same time or during the first year of enrollment in SLU LAW. Dual degree students are required to complete a minimum of 82 credits in SLU LAW.

SLU LAW has established dual degree programs with the post-baccalaureate programs outlined below. In addition, SLU LAW will consider fashioning a dual degree program to meet individual student interest.

[Juris Doctor and Doctor of Philosophy in Health Care Ethics](#)

[Juris Doctor and Master of Accounting](#)

[Juris Doctor and Master of Arts in Political Science](#)

[Juris Doctor and Master of Arts in Public Administration](#)

[Juris Doctor and Master of Arts in Sociology](#)

[Juris Doctor and Master of Arts in Urban Planning and Development](#)

[Juris Doctor and Master of Business Administration](#)

[Juris Doctor and Master of Health Administration](#)

[Juris Doctor and Master of Public Health - Health Policy](#)

[Juris Doctor and Master of Science in Health Outcomes Research & Evaluation Sciences](#)

[Juris Doctor and Master of Social Work](#)

## Masters of Laws Programs

For those already possessing a law degree, SLU LAW offers two [Masters of Laws \(LL.M.\) programs](#). The Center for Health Law Studies offers the [LL.M. in Health Law](#). For those holding a degree of law from a foreign country, the [LL.M. in American Law for Foreign Lawyers](#) or the two year JD for Foreign Lawyers program offers opportunities to study the American legal system.

### **Course Listing**

[Click here](#) for SLU LAW's complete academic curriculum and program requirements.

## Master of Science in Human Resources Law

The William C. Wefel Center for Employment Law at SLU LAW is proud to introduce a new degree program in human resources law. The program offers students the opportunity to receive a Master of Science in Human Resources Law. This program provides highly-qualified individuals with the opportunity to pursue studies and research on the legal framework of human resources without the time and resource commitment of a three-year J.D. degree.

The demands of the modern business world require that human resources professionals regularly make decisions with a multitude of legal ramifications in areas such as antidiscrimination and affirmative action; minimum wage, equal pay, and overtime requirements; family and medical leave; retirement and health care program regulations; noncompete agreements and trade secret protections; employee privacy; workers' compensation; occupational safety guidelines; unemployment compensation; and executive compensation structures. The Master in Human Resources Law will provide students with a solid foundation in understanding the law and specialized expertise in those legal topics of most interest to human resources professionals.

**Course Listing**

[Click here](#) for academic curriculum and program requirements.

# SCHOOL OF MEDICINE

---

**Philip O. Alderson, M.D.**

*Dean*

In addition to contributing strongly to the first two years of the Doctor of Medicine degree curriculum, the pre-clinical, medical-science departments offer post-baccalaureate work leading to the Ph.D. degree. Five offerings, each affiliated with an individual department or center, are available; however, most students admitted for direct Ph.D.-degree study take a common, first-year core in the basic biomedical sciences. Furthermore, studies toward the Ph.D. degree in a medical-science field may be combined with the M.D.-degree curriculum, and the two degrees pursued concurrently by selected students. M.S. (Research or non-Research) and Ph.D. degrees also are offered by the Center for Anatomical Science and Education.

## BASIC BIOMEDICAL SCIENCE

---

**Willis K. Samson, Ph.D.,**

*Graduate Program Director*

Admission to all Ph.D. degree programs in the biomedical sciences is by application to the core program in Basic Biomedical Science. This interdisciplinary offering is intended for all students who are interested in biomedical research and/or teaching careers. Its objectives are to provide students with a strong foundation in all aspects of basic biomedical science and the freedom to explore diverse research opportunities during the first year of training. The first-year curriculum combines lectures, small group discussion sessions, and seminars to develop self-confidence and familiarity with a breadth of biomedical science and technology that spans the disciplines of anatomical, biochemical, cellular, molecular, developmental, genetic, and physiological sciences. At the end of this integrated first-year program, students select a dissertation research topic and mentor, and enter into one of four departmental programs in the School of Medicine [Biochemistry and Molecular Biology; Molecular Microbiology and Immunology; Pathology; Pharmacological and Physiological Science]. The subsequent requirements for completion of the Ph.D. degree vary with the individual program and include specialized advanced courses and the performance of original research leading to completion of the dissertation.

### **Required Courses**

BBS.5010 Basic Biomedical Science I;  
BBS.5020 Special Topics in Basic Biomedical Science I;  
BBS.5030 Basic Biomedical Science II;  
BBS.5040 Special Topics in Basic Biomedical Science II; and  
BBS.5100 Responsible Conduct in Research.

### **Additional Requirements**

BBS.5920 Basic Biomedical Science Colloquium (both semesters) and  
BBS.5970 Introduction to Basic Biomedical Research (both semesters)  
BBS.5010 Basic Biomedical Science I (5)  
BBS.5020 Special Topics in Basic Biomedical Science I (4)  
BBS.5030 Basic Biomedical Science II (5)  
BBS.5040 Special Topics in Basic Biomedical Science II (4)  
BBS.5100 Responsible Conduct in Research (0)  
BBS.5920 Basic Biomedical Science Colloquium (1)  
BBS.5970 Introduction to Basic Biomedical Research (2)

# BIOCHEMISTRY & MOLECULAR BIOLOGY

---

**Enrico Di Cera, M.D.**

*Department Chairperson*

**Alessandro Vindigni Ph.D.**

*Graduate Program Director*

Students with bachelor's degrees enter the Biochemistry and Molecular Biology program after acceptance into and completion of the one-year Basic Biomedical Science core program. After receiving a firm background in the fundamentals of biomedical science and the opportunity to experience research in different laboratories during this first year, students select a faculty mentor and a specific program. Graduate training in the Department of Biochemistry and Molecular Biology includes advanced coursework, instruction in the preparation of a written research proposal, oral defense of a written proposal for dissertation research, and performance of original laboratory research leading to the Ph.D. dissertation. Flexibility is provided for optional training in secondary areas such as teaching or scientific writing.

## Doctor of Philosophy

### Prerequisites

Equivalent of an undergraduate major in chemistry, biology or a related subject

### Required Courses

BBS.5010 Basic Biomedical Science I	ORES 5200 Introduction to Statistics in Biomedical Sciences
BBS.5020 Special Topics in Basic Biomedical Science I	BCHM.6280 Introduction to Genomics & Bioinformatics
BBS.5030 Basic Biomedical Science II	BCHM.6230 Macromolecules: Structure, Function, and Interactions
BBS.5040 Special Topics in Basic Biomedical Science II	BCHM.6920 Biochemistry and Molecular Biology Colloquium
BBS.5100 Ethics for Research Scientists	BCHM.6240 Molecular Basis of Human Disease
BBS.5920 Basic Biomedical Science Colloquium (two semesters)	BCHM.6250 Preparation and Evaluation of Scientific Research Proposal
BBS.5970 Introduction to Basic Biomedical Research (two semesters)	

Additional coursework in chemistry or biology may be required at the discretion of the Department Chairperson or Graduate Program Director. Program may include courses in one of the fields of preclinical medicine as electives.

### Additional Requirements for the Doctorate

Total post-baccalaureate credits toward preliminary examinations for the doctorate: at least 36. A formal minor to accompany the Doctoral major in Biochemistry and Molecular Biology may be taken at the discretion of the Department Chairperson. All students are expected to participate in the Biochemistry and Molecular Biology Journal Club throughout their tenure.

### Post-Baccalaureate Courses

BCHM.5950 Special Study for Examinations (0)	BCHM.6920 Biochemistry and Molecular Biology Colloquium (1)
BCHM.5990 Thesis Research (0-6)	Prerequisite: Permission of Instructor.
BCHM.6230 Macromolecules: Structure, Function, & Interactions (3)	BCHM.6920 Biochemistry and Molecular Biology Colloquium (1)
Prerequisite: Permission of Instructor.	Prerequisite: Permission of Instructor.
BCHM.6240 Molecular Basis of Human Disease (3)	BCHM.6950 Special Study for Examinations (0)
Prerequisite: Permission of Instructor.	BCHM.6970 Research Topics (1-3)
BCHM.6250 Preparation of Scientific Research Proposals (3)	Prior permission of guiding professor and department/program chairperson required.
Prerequisite: Permission of Instructor.	BCHM.6980 Graduate Reading Course (1-3)
BCHM.6280 Introduction to Genomics and Bioinformatics (2)	Prior permission of guiding professor and department/program chairperson required.
Prerequisites: BBS.5010 and BBS.5020 or consent of the Instructor.	BCHM.6990 Dissertation Research (0-

# MOLECULAR MICROBIOLOGY & IMMUNOLOGY

---

**William S. M. Wold, Ph.D.**

*Department Chairperson*

**John Tavis, Ph.D.**

*Graduate Program Director*

The Department of Molecular Microbiology and Immunology offers a program in molecular microbiology and immunology leading to the Ph.D. degree. Our goal is to graduate exceptionally well-trained researchers who are prepared for a career in academic science or biotechnology. Students with a bachelor's degree enter the program following successful completion of the year-long Basic Biomedical Sciences core program, which provides a strong foundation for specialization in microbiology and/or immunology. Students with Master's or Doctoral degrees may petition for direct entry to the Molecular Microbiology and Immunology program. Research in the program is diversified. Areas of research emphasis include cell and molecular biology, virology, and immunology. Graduate training in the program includes advanced coursework, training in scientific writing and oral presentation skills, and performance of original laboratory research leading to the Ph.D. dissertation. Training in teaching skills is provided for students interested in an academic career.

## Doctor of Philosophy

### Prerequisites

Coursework in college physics, organic chemistry, and the biological sciences.

### Required Courses

*Through the Basic Biomedical Sciences core program:*

BBS.5010 Basic Biomedical Science I  
BBS.5020 Special Topics in Basic Biomedical Science I  
BBS.5030 Basic Biomedical Science II  
BBS.5040 Special Topics in Basic Biomedical Science II  
BBS.5100 Ethics for Research Scientists

BBS.5920 Basic Biomedical Science Colloquium (2 semesters)  
BBS.5970 Introduction to Basic Biomedical Research (2 semesters)  
BCHM.6280 Introduction to Genomics and Bioinformatics  
ORES 5200 Introduction to Statistics in Biomedical Sciences

*Through the Microbiology and Immunology program:*

MB.6350 Virology  
MB.6650 Basic Immunobiology  
MB.6900 Microbiology Journal Club (each fall semester)  
MB.6920 Microbiology Colloquium (each spring semester)

### Additional Requirements

Minimum post-baccalaureate credits in preparation for preliminary degree examination: 36. Students are required to submit a grant proposal to an outside agency for extramural research and/or stipend support within six months of successfully passing the Candidacy Examination. Funding of the external grant application is not required for successful completion of the Ph.D. degree. Students must also publish at least 1 peer-reviewed scholarly article reporting results of their original research.

*A formal minor is not permitted without special approval from the Microbiology and Immunology program.*

### Post-Baccalaureate Courses

MB.5310 Introduction to Research Techniques and Topics (1-3)  
MB.6240 Advanced Topics in Immunology (2-3)  
MB.6350 Virology (3)  
MB.6650 Basic Immunobiology (3)  
MB.6750 Immunology Journal Club (2)  
MB.6820 Advanced Topics in Virology and Cell Biology (1-3)

MB.6900 Microbiology Journal Club (0-1)  
MB.6920 Microbiology Colloquium (0-1)  
EMB.6950 Special Study for Examinations (0)  
MB.6970 Research Topics (0-3)  
MB.6980 Graduate Reading Course (1-3)  
MB.6990 Dissertation Research (0-6)

# PATHOLOGY

---

**Carole Vogler, MD.,**

*Department Chairperson*

**Jacki Kornbluth, Ph.D.,**

*Graduate Program Director*

The program in the Department of Pathology offers training in biomedical research with a strong emphasis in medically important areas including tumor biology and cardiovascular and liver pathobiology. Students will acquire knowledge of basic disease processes, learn research methodologies, and utilize state-of-the-art cell and molecular biology techniques in preparation for research careers. In addition to the standard array of equipment necessary for performing basic biochemical and cellular biology, the Pathology Department also contains well-equipped facilities for flow cytometry, single-cell microinjection, video and confocal microscopy, laser capture microdissection, and scanning and transmission electron microscopy.

## Doctor of Philosophy

### Prerequisites

An undergraduate degree in biology or chemistry. Advanced biology coursework is recommended.

### Required Courses

BBS.5010 Basic Biomedical Science I;

BBS.5020 Special Topics in Biomedical Science I;

BBS.5030 Basic Biomedical Science II;

BBS.5040 Special Topics In Biomedical Science II;

BBS.5100 Ethics for the Research Scientist;

PATH.5010 Pathobiology;

PATH5350 Introduction to Microscopy Techniques

### Additional Requirements

BBS.5920 Basic Biomedical Science Colloquium (two semesters);

BBS.5970 Introduction to Basic Biomedical Research (two semesters);

BCHM6280 Introduction to Genomics and Bioinformatics

ORES5200 Introduction to Statistics in Biomedical Sciences

BBS.5100 Ethics for Research Scientists

PATH.6900 Molecular Pathobiology Journal Club; and

PATH.6920 Pathology Research Colloquium

**Post-baccalaureate credits in preparation for preliminary degree examinations: minimally 36.**

*A formal minor is not permitted.*

### Post-Baccalaureate Courses

PATH.5010 Pathobiology (5)

PATH.5020 Molecular Pathobiology (4)

PATH.5350 Introduction to Microscopy Techniques (3)

PATH.5380 Immunopathology (3)

PATH.6900 Molecular Pathobiology Journal Club (1)

PATH.6920 Pathology Research Colloquium (1)

PATH.6930 Special Topics in Pathology (1-3)

PATH.6950 Special Study for Examinations (0)

PATH.6970 Research Topics (1-3)

PATH.6980 Graduate Reading Course (1-3)

PATH.6990 Dissertation Research (0-6)

# PHARMACOLOGICAL & PHYSIOLOGICAL SCIENCE

---

**Thomas P. Burris, Ph.D.**

*Department Chairperson*

**Mark M. Voigt, Ph.D.**

*Vice-Chairperson*

**Terrance M. Egan, Ph.D.**

*Graduate Program Director*

The program in the Department of Pharmacological and Physiological Science is designed to prepare students for a career in research and teaching in this area of biomedical science. The program combines formal coursework, advanced seminars, lab rotations and in-depth training in one of the laboratories of the Faculty. The Faculty available as mentors have diversified backgrounds in the fields of biochemistry, molecular biology, nuclear receptors, neuroscience, pharmacology and physiology. Major areas for research specialization include neurotransmitter biochemistry, physiology and pharmacology; molecular biochemistry and molecular pharmacology of neurotransmitter, autacoid, neurohormone and hormone receptors and their signaling mechanisms; electrophysiology; neurochemistry; cardiovascular control mechanisms; molecular cellular and endocrine control mechanisms, neuropharmacology, and pharmacology of drugs of abuse.

## Doctor of Philosophy

### Prerequisites

Background in biology, chemistry (general and organic; physical chemistry recommended, but not required), physics, and mathematics (including calculus). Deficiencies in the background requirements may be made up early during the program if an applicant is otherwise acceptable for admission into the program.

### Required Courses

BBS.5010 Basic Biomedical Science I;

BBS.5020 Special Topics in Basic Biomedical Science I;

BBS.5030 Basic Biomedical Science II;

BBS.5040 Special Topics in Basic Biomedical Science II;

PPY.5110 Advanced Topics in Pharmacological and Physiological Science I;

PPY.5130 Advanced Topics in Pharmacological and Physiological Science II

### Additional Requirements

BBS.5920 Basic Biomedical Science Colloquium (two semesters);

BBS.5970 Introduction to Basic Biomedical Research (two semesters);

PPY.6800 Pharmacological and Physiological Science Seminar; and

PPY.6900 Pharmacological and Physiological Science Journal Club

Participation and attendance required in the Seminar and Journal Club during entire tenure of residency, whether or not students are formally enrolled in them.

*A formal minor at the Master's level is not permitted.*

Additional Requirements for Doctor of Philosophy degree:

Competency in statistics; knowledge of ethical conduct of research and rotation through research laboratories during the first year. Credits in preparation for preliminary examinations total 36 minimum if degree pursued directly from the baccalaureate.

*A formal minor is not permitted*



## **Post-Baccalaureate Courses**

PPY.5110 Advanced Topics in Pharmacological and Physiological Science I (4)

PPY.5120 Selected Topics in Pharmacological and Physiological Science I (2)

PPY.5130 Advanced Topics in Pharmacological and Physiological Science II (4)

PPY.5140 Selected Topics in Pharmacological and Physiological Science II (2)

PPY.5950 Special Study for Examinations (0)

PPY.5990 Thesis Research (0-6)

PPY.6000 Pharmacological Principles of Human Therapeutics (2)

PPY.6010 Pharmacology and Physiology of the Cardiovascular System (4)

PPY.6550 Signal Transduction Mechanisms (4)

PPY.6660 Pharmacology and Physiology of the Nervous System and Selected Topics in Neuropharmacology (4)

PPY.6800 Pharmacological and Physiological Science Seminar (0-1)

PPY.6900 Pharmacological and Physiological Science Journal Club (0-1)

PPY.6950 Special Study for Examinations (0)

PPY.6970 Research Topics (1-3)

PPY.6980 Graduate Reading Course (1-3)

PPY.6990 Dissertation Research (0-6)

# CENTER FOR ANATOMICAL SCIENCE AND EDUCATION

---

**John R. Martin, III, Ph.D.**

*Graduate Program Director*

*Interim Director, Center for Anatomical Science and Education*

**Patty Anderson**

*Anatomy Graduate Program Coordinator*

The Center for Anatomical Science and Education (CASE) offers programs leading to the Master of Science (thesis), Master of Science (project) and Doctor of Philosophy degrees. The Master's degree programs prepare students for teaching in the anatomical disciplines and provide experience with fundamental anatomical research and/or teaching methodologies. The Doctoral program emphasizes training in clinical human anatomy and independent research for individuals seeking careers in medical school or university teaching. Research in biological structure and function focuses on clinically relevant anatomical topics. Additionally, CASE also offers the Medical Anatomy and Physiology Preparatory Program (MAPP) to post-baccalaureate scholars considering careers in medicine, dentistry or biomedical science education. The MAPP program is a two semester (fall and spring) academic experience that provides graduate-level courses in anatomy and physiology.

## Medical Anatomy and Physiology Program (MAPP)

### **Prerequisite**

Background in biology and/or chemistry.

### **Required Courses (24 credits)**

ANAT.5000 Human Gross Anatomy;

ANAT.5100 Human Histology and Ultrastructure;

ANAT.5200 Human Embryology;

ANAT.5300 Human Systems Neurobiology;

ANAT.5400 Human Systems Physiology.

## Master of Science

### *Project Option*

### **Prerequisite**

Background in biology and/or chemistry.

### **Required Courses (30 credits)**

ANAT.5000 Human Gross Anatomy;

ANAT.5100 Human Histology and Ultrastructure;

ANAT.5200 Human Embryology;

ANAT.5300 Human Systems Neurobiology;

ANAT.5400 Human Systems Physiology;

ANAT.5500 Advanced Dissections in Human Anatomy;

ANAT.5500 Advanced Dissections in Human Anatomy;

ANAT.5960 Master's Project

ANAT.6900 Journal Club

## Thesis Option

### **Prerequisite**

Background in biology and/or chemistry.

### **Required Courses (30 credits with 4-6 credits for Thesis Research)**

ANAT.5000 Human Gross Anatomy; ANAT.5440 Basic Research Techniques in Anatomy;  
ANAT.5100 Human Histology and Ultrastructure; ANAT.5950 Special Studies for Exams;  
ANAT.5200 Human Embryology; ANAT.5990 Thesis Research;  
ANAT.5300 Human Systems Neurobiology; ANAT.6900 Journal Club;  
ANAT.5400 Human Systems Physiology; BBSG.5100 Ethics for Research Scientists

## Doctor of Philosophy

### **Prerequisite**

Background in biology, chemistry, or psychology.

### **Required Courses (48 credits – 36 coursework and 12 credits of Dissertation Research)**

ANAT.5000 Human Gross Anatomy; BBSG.5100 Ethics for Research Scientists;  
ANAT.5100 Human Histology and Ultrastructure; BST.5000 Principles of Biostatistics;  
ANAT.5200 Human Embryology; ANAT.6890 Anatomy Seminar;  
ANAT.5300 Human Systems Neurobiology; ANAT.6900 Journal Club;  
ANAT.5400 Human Systems Physiology; ANAT.6950 Special Studies for Exams;  
ANAT.5440 Basic Research Techniques in Anatomy; ANAT.6990 Dissertation Research

### **Additional Requirements**

All required Anatomy courses must be completed prior to preliminary degree examinations. Research proposal to be submitted prior to admission to the preliminary oral examinations. *A formal minor is not permitted.*

### **Post-Baccalaureate Courses**

ANAT.5000 Human Gross Anatomy (8) ANAT.5990 Thesis Research (0-6)  
ANAT.5100 Human Histology and Ultrastructure (5) ANAT.6300 Advanced Systems Neurobiology (1)  
ANAT.5200 Human Embryology (2) ANAT.6320 Developmental Neurobiology (2)  
ANAT.5300 Human Systems Neurobiology (5) ANAT.6670 Visual Neuroscience (2)  
ANAT.5400 Human Systems Physiology (4) ANAT.6890 Anatomy Seminar (0-1)  
ANAT.5440 Basic Research Techniques in Anatomy (2) ANAT.6900 Anatomy Journal Club (0-1)  
ANAT.5500 Advanced Dissections in Human Anatomy (2-4) ANAT.6950 Special Study for Examinations (0)  
ANAT.5960 Master's Project (0-4) ANAT.6970 Research Topics (1-3)  
ANAT.5970 Research Topics (1-3) ANAT.6980 Graduate Reading Course (1-3)  
ANAT.5980 Graduate Reading (1-3) ANAT.6990 Dissertation Research (12)

# MEDICAL FAMILY THERAPY

---

**F. David Schneider, MD.**

*Department Chairperson*

**Craig W. Smith, Ph.D.,**

*Director*

The mission of the Medical Family Therapy Program is to train marriage and family therapists who are engaged in service to individuals, couples, families and the community. Through a scholarly and reflective process, we are involved in the development of professional clinicians who understand and recognize the importance of scientific inquiry, diversity and social justice. We respect and accept multiple perspectives, and strive to practice in a collaborative engagement with other professionals and the community.

Both the M.A. and Ph.D. majors in the Medical Family Therapy Program at Saint Louis University are accredited by the Commission on Accreditation for Marriage and Family Therapy Education (COAMFTE) of the American Association for Marriage and Family Therapy (AAMFT), 112 S. Alfred Street, Alexandria, VA 22314, 703.838.9808.

The Medical Family Therapy Program in the Department of Family and Community Medicine is unique in training students to work with individuals, couples, and families through the life cycle, and to collaborate in other social contexts in which people live, learn, and work. In addition to working within traditional mental health settings, the program prepares professionals to work collaboratively with medical professionals in enhancing the psychological, social, emotional and physical well being of those they serve. Doctoral and Master's degree students are trained within primary and specialty care medical settings within an integrative care model. Also, they receive training at the Center for Counseling and Family Therapy. The Center provides mental health services to the university and St. Louis communities on a sliding-scale fee basis. The Medical Family Therapy Program offers both Master's and Doctoral degree programs.

## Master of Arts

The Master of Arts (M.A.) in Family Therapy is based on a systemic/relational view of individuals, couples and families. It fulfills the course and practicum requirements toward licensure in the State of Missouri as a Licensed Marital and Family Therapist. The program requires a minimum of 60 credits beyond the bachelor's degree. Program requirements include didactic courses, two semesters of practicum, three semesters of internship in a community setting and the attainment of a minimum of 500 hours of direct clinical contact, 250 of those being with couples and families.

The concentration in Medical Family Therapy prepares students to function as part of an integrated care team in addressing the biopsychosocial needs of individuals and families.

### Prerequisites

Prerequisites include 18 credits in the behavioral sciences.

### Required courses

MFT.5210 Introduction to Family Therapy (3);  
MFT.5320 Group Counseling Theory and Practice (3);  
MFT.5380 Theory and Intervention in Human Sexuality (3);  
MFT.5410 Practicum in Family Therapy (6)  
MFT.5915 Internship in Family Therapy (9)  
MFT.5700 Child and Adolescent Development and Intervention (3);  
MFT.5770 Foundations of Multicultural Counseling (3);  
MFT.6530 Ethical and Legal Issues in Family Therapy (3);  
MFT.6550 Diagnosis and Assessment in Family Therapy (3);  
MFT.6560 Foundations of Couple and Family Therapy (3);  
MFT.6650 Advanced Couple and Family Therapy (3);

MFT.6660 Introduction to Family Studies (3);  
MFT.6700 Couple Interaction and Therapy (3);  
MFT.6710 Integrative and Evidence Based Models in Couple and Family Therapy (3);  
MFT.6740 Theories and Models in Medical Family Therapy (3); (MedFT concentration)  
MFT.6760 Families, Health, and Illness (3);  
MFT.6770 Behavioral Medicine and Integrative Care (3). (MedFT concentration)  
A post-baccalaureate level statistics course (3); and  
A post-baccalaureate level research methods course (3).

*A formal minor is not permitted.*

# Doctor of Philosophy

The Ph.D. in Medical Family Therapy is based on a systemic/relational view of individuals, couples and families. It prepares clinicians to work within an integrated care health setting in collaboration with medical and mental health professionals. Coursework focuses on theory, practice, and research in the field of couple and family therapy with an emphasis on intervention in primary care medical settings and as adjunct health providers in specialty care. The Doctoral program involves a minimum of 51 credits of coursework beyond the Master's degree, plus comprehensive examinations and original research culminating in the dissertation (12+ credits). The Ph.D. has a clinical component in which students are trained in both mental health and medical settings as part of an integrated care team of health professionals. Students are required to complete a nine to twelve month internship. Prior to graduation students must have accrued a total of 1,000 hours of direct client contact (including hours obtained during their Master's degree program). Five hundred of those hours must be relationally focused working with couples and families.

## Prerequisites

A Master's degree with at least 48 credits in marriage and family therapy (MFT) or a related mental health area with coursework equivalent to a Master's degree in MFT.

## Required Courses

MFT.6500 The Neurobiology of Interpersonal Behavior (3);  
MFT.6650 Advanced Couple and Family Therapy (3);  
MFT.6690 Supervision in Family Therapy (3);  
MFT.6720 Integrative Care Practicum (9)  
MFT.6730 Research Practicum (3);  
MFT.6740 Theories and Models of Medical Family Therapy (3);  
MFT.6750 Supervision Practicum (3)  
MFT.6760 Families, Health, and Illness (3);  
MFT.6770 Behavioral Medicine and Integrative Care (3)

MFT.6820 The Self in Theory and Therapy (3);  
MFT.6870 Clinical Supervision (3);  
MFT.6940 Doctoral Internship (9-12 months; 0-3)  
MFT.6970 Research Topics: Medical Family Therapy (3)  
MFT.6990 Doctoral Dissertation (12+).

### Additional Requirements

Research Courses (6) (in addition to MFT.6970 Research Topics and MFT.673 Research Practicum)  
Clinical Elective or additional Research Course (3)

## Post-Baccalaureate Courses

MFT.5210 Intro to Family Therapy (3)  
MFT.5320 Group Counseling Theory and Practice (3)  
MFT.5380 Theory and Intervention in Human Sexuality (3)  
MFT.5410 Practicum in Family Therapy (3)  
MFT.5915 Internship in Family Therapy  
MFT.5700 Child and Adolescent Development and Intervention (3)  
MFT.5770 Foundations of Multicultural Counseling (3)  
MFT.5950 Special Study for Examinations (0)  
MFT.5980 Graduate Reading Course (1-3)  
MFT.5990 Thesis Research (0-6)  
MFT.6500 The Neurobiology of Interpersonal Behavior (3)  
MFT.6530 Ethical & Legal Issues in Family Therapy (3)  
MFT.6550 Diagnosis and Assessment in Family Therapy (3)  
MFT.6560 Foundations of Couple and Family Therapy (3)  
MFT.6650 Advanced Couple and Family Therapy (3)  
MFT.6660 Introduction to Family Studies  
MFT.6690 Supervision in Family Therapy (3)

MFT.6700 Couple Interaction & Therapy (3)  
MFT.6710 Integrative and Evidence Based Models in Couple and Family Therapy (3)  
MFT.6720 Integrative Care Practicum (3)  
MFT.6730 Research Practicum (1)  
MFT.6740 Theories and Models of Medical Family Therapy (3)  
MFT.6750 Practicum: Supervision of Marriage and Family Therapists (3)  
MFT.6760 Families, Health, and Illness (3)  
MFT.6770 Behavioral Medicine and Integrative Care (3)  
MFT.6820 The Self in Theory and Therapy (3)  
MFT.6870 Clinical Supervision (1)  
MFT.6910 Doctoral Internship (0-3)  
MFT.6950 Special Study for Examinations (0)  
MFT.6970 Research Topics in Medical Family Therapy (3)  
MFT.6980 Graduate Reading Course (1-3)  
MFT.6990 Dissertation Research (0-6)

# JOHN COOK SCHOOL OF BUSINESS

---

**Mark Higgins, Ph.D.**

*Dean*

**Mark J. Arnold, Ph.D.**

*Senior Associate Dean & Professor*

**Susan J. Hartmann MS., MB.A.**

*Assistant Dean, Master's Programs*

**Hongxin Zhao, Ph.D.**

*Director of Ph.D. Program & David Orthwein Professor in International Business*

The John Cook School of Business, accredited by AACSB International - The Association to Advance Collegiate Schools of Business, offers several Master's degree programs designed for individuals with baccalaureate degrees in business or non-business fields: the Master of Business Administration (M.B.A.), the Master of Accounting (MACC.), the Master of Science in Applied Financial Economics (M.S.-AFE), the Master of Supply Chain Management (M.S.-SCM), and the Executive Master of International Business (EMIB) degrees. These programs provide a sound academic foundation for the professional practice of business and for continued advancement in executive and management responsibilities. Emphasis is placed on managerial principles and practical, functional business skills as well as theories of business-analysis and global decision-making, and strategy formulation. In conjunction with the School of Law, the College of Education and Public Service, the Center for Sustainability, the College for Public Health and Social Justice, and the School of Medicine, the Cook School of Business also offers five dual degree programs: the Juris Doctor/Master of Business Administration (J.D./M.B.A.) the Master of Arts in Educational Leadership/Master of Business Administration (M.A./M.B.A.), the Master of Science in Sustainability/Master of Business Administration (M.S./M.B.A.), the Master of Health Administration/Master of Business Administration (M.H.A./M.B.A.), and the Doctor of Medicine/Master of Business Administration (M.D./M.B.A.) degrees.

## Master of Business Administration

The Master of Business Administration (M.B.A.) degree program is offered in two formats: the traditional evening program for part-time students and the one-year cohort program for full-time students. The program objective is to provide business students a broad perspective for managerial decision-making and strategy formulation. The one-year full-time program requires 50 credits over three semesters (Summer, Fall, and Spring), including a ten-day study abroad. The part-time program-requirements range from 36-48 credits, depending on prior academic background. The part-time program consists of twelve credits of foundation coursework (economics, accounting, quantitative methods, and operations management; part or all of which may be waived for students demonstrating competency through previously completed coursework), twenty-one credits of advanced managerial core requirements, and nine credits of advanced course-electives. The advanced managerial core includes coursework in Finance, Information Technology, Global Business, Business Analytics, Management, Marketing, Legal/Ethical Environment of Business, courses in professional development, and a strategic practicum aimed at developing teamwork and integrated strategy. Electives may be taken in any business discipline or, with academic approval, several non-business disciplines.

## Master of Accounting

The objective of the Master of Accounting (MACC) degree program is to provide strong technical, ethical, and professional skills to students planning careers in accounting. The program consists of 30 credits of advanced coursework with up to 21 credits in accounting and the remaining credits in business electives determined in consultation with the Program Director. Pre-program requirements in economics, accounting, finance, mathematics, and statistics, may be required of students without sufficient functional background.

## Master of Supply Chain Management

The Supply Chain Management (M.S.-SCM) profession addresses the critical link between demand creation and the fulfillment of demand. Supply chain management professionals participate in fundamental decisions associated with current and future business success, such as the "go/no-go" decision regarding which goods or services to provide, which suppliers to work with, and how to access and excite prospective customers.

## Master of Science in Applied Financial Economics

The Master of Science in Applied Financial Economics (M.S.AFE) is a quantitatively-based, applied program in financial economics that will focus on analysis and forecasting of financial variables such as interest rates, stock returns and their effects on financial markets. It is a one-of-a-kind program in the region that responds to the market need for individuals to enter the labor market with a set of applied technical skills. The M.S.-AFE program consists of 30-39 credits that can be completed full-time in one calendar year. The program consists of nine credits of foundation coursework in economics, accounting, and quantitative methods, part or all of which may be waived for students demonstrating competency through previously completed coursework. No work experience is required, which means that students can transition into the program upon achieving their undergraduate degree. In addition, the program can be pursued on a part-time basis for up to five years, which makes it suitable for working professionals.

## Executive Master of International Business degree program

The 21-month Executive Master of International Business degree (EMIB) combines business curriculum with international business issues and culture. It provides experienced business professionals with the skills needed to navigate the complex global business environment. Students move through the program as a cohort group fostering collaboration and networking, while a two-week study abroad trip to Asia or Latin America provides an immersive cultural and global business experience.

## Doctor of Philosophy in Business Administration

In conjunction with Graduate Education, the John Cook School of Business provides a program leading to the Doctor of Philosophy (Ph.D.) in Business Administration degree with a combined major in International Business and Marketing. The Doctoral program requires full-time study/attendance and emphasizes university level research and teaching skills. The program is designed to prepare graduates for academic careers, typically as business school faculty. Prerequisite: a Master's degree in business or a related field and basic coursework in calculus and statistics. New students with limited backgrounds in business may be required to take specific coursework to ensure sufficient preparation prior to progressing into required courses toward the doctorate. The program consists of 54 credits of required work and has a research and teaching focus that concentrates on a joint area of study in International Business and Marketing. The curricular objective is the intellectual development of students through the advancement of research skills as well as the acquisition and application of knowledge.

## Dual Degree Descriptions

All dual degree programs allow students to receive both degrees faster than if they pursued them separately.

### *Master of Arts in Education Administration & Master of Business Administration*

Graduates of Saint Louis University's dual degree program earn both a Master of Arts in Education Administration and a Master of Business Administration (M.A.(Ed)/M.B.A.). The program provides an awareness of the functional relationships between the educational system, and business and administrative organizations. The increasing complexity of both educational organizations and non-profit institutions makes understanding important for students considering careers as administrators in educational institutions.

This program includes a study abroad component where students will study foreign-based business cases, visit local businesses, and attend guest lectures. Scheduled between the fall and spring semesters, this ten-day trip provides students with the opportunity to gain valuable hands-on international business experience.

### *Master of Health Administration & Master of Business Administration*

Graduates of Saint Louis University's dual degree program earn both a Master of Health Administration and a Master of Business Administration (M.H.A./M.B.A.). The program provides students with the general management expertise within the context of dynamic healthcare environments. Graduates are prepared to hold diverse positions in the areas of health insurance, pharmaceuticals, public policy, or healthcare management consulting.

This program includes a study abroad component where students will study foreign-based business cases, visit local businesses, and attend guest lectures. Scheduled between the fall and spring semesters, this ten-day trip provides students with the opportunity to gain valuable hands-on international business experience.

## *Master of Science in Sustainability & Master of Business Administration*

Graduates of Saint Louis University's dual degree program earn both a Master of Science in Sustainability and a Master of Business Administration (M.S./M.B.A.). Our M.S. in Sustainability/M.B.A. program is designed for students who are interested in the critical link between business and sustainability. Through courses that bring the latest measurement and research in the field with key leadership skills, students will understand, anticipate and navigate the complex and evolving landscape of social, fiscal and environmental practices and policies in a low-carbon economy.

This program includes a study abroad component where students will study foreign-based business cases, visit local businesses, and attend guest lectures. Scheduled between the fall and spring semesters, this ten-day trip provides students with the opportunity to gain valuable hands-on international business experience.

## *Doctor of Medicine & Master of Business Administration*

Graduates of Saint Louis University's dual degree program earn both a Doctor of Medicine and a Master of Business Administration degree (M.D./M.B.A.). The M.D./M.B.A. students can begin the MBA portion of their degree upon the completion of either their second or third year of enrollment in the School of Medicine. Students will cultivate leadership and management skills to help them deliver optimal patient care with the rapidly changing healthcare environment.

This program includes a study abroad component where students will study foreign-based business cases, visit local businesses, and attend guest lectures. Scheduled between the fall and spring semesters, this ten-day trip provides students with the opportunity to gain valuable hands-on international business experience.

## *Juris Doctor & Master of Business Administration*

Graduates of Saint Louis University's dual degree program earn both a Juris Doctor and a Master of Business Administration (J.D./M.B.A.). Students of this program will be equipped with the skills and resources to pursue diverse careers at the convergence of the legal and business professions, including the fields of investment and commercial banking, management consulting, government regulation and business policy analysis.

This program includes a study abroad component where students will study foreign-based business cases, visit local businesses, and attend guest lectures. Scheduled between the fall and spring semesters, this ten-day trip provides students with the opportunity to gain valuable hands-on international business experience.

## *Juris Doctor & Master of Accounting*

Graduates of Saint Louis University's dual degree program earn both a Juris Doctor and a Master of Accounting (J.D./M.ACC). Exploring the functional relationship between law and accounting, students in the J.D./M.ACC program will develop the ability to analyze legal issue while gaining in-depth expertise in the areas of general accounting, taxation, and auditing.

## Post-Baccalaureate Business Certificates

### *Graduate Business Foundation Certificate*

The Graduate Business Foundation Certificate at the John Cook School of Business focuses on candidates who are right out of undergraduate school and/or have limited work experience, and individuals who do not seek or want to commit to a full M.B.A. program. The certificate requirements consist of 12 credits of foundation courses and 6 credits of breadth courses (chosen by students in association with their advisor) for a total of 18 credits. Upon completion, students will be awarded a certificate from Saint Louis University and the John Cook School of Business.

### *Post-M.B.A. Certificates*

The Post-M.B.A. Certificate at the John Cook School of Business focuses on specific areas that Master of Business Administration graduates from AACSB institutions can further their education in: Entrepreneurship, Finance, or Supply Chain Management. The certificate requirements consist of 12 credits of advanced Post-Baccalaureate Courses in their specific discipline. Upon completion, students will be awarded a certificate from Saint Louis University and the John Cook School of Business.

[Click here](#) for more comprehensive information about post-baccalaureate programs in the John Cook School of Business.



Graduate Business Programs  
John Cook School of Business  
Saint Louis University  
3674 Lindell Boulevard  
St. Louis, MO 63108 USA

Phone: 800. SLU.FOR.U or 314.977.6221, or e-mail: [gradbiz@slu.edu](mailto:gradbiz@slu.edu)

## Course Listing Post-Baccalaureate Courses

### ACCOUNTING

ACCT.5010 Accounting for Managers (3)  
ACCT.5930 Special Topics (3)  
ACCT.5980 Graduate Reading Course (0-3)  
Prerequisite: Permission of Department Chair  
ACCT.6000 Managerial Accounting Concepts (3)  
Prerequisite: ACCT 5010  
ACCT.6030 Contemporary Financial Reporting (3)  
Prerequisite: ACCT 5010 and ACCT 4110  
ACCT.6110 Financial Reporting III (3)  
Prerequisite: ACCT 4110  
ACCT.6140 Seminar in Accounting and Social Responsibilities (3)  
Prerequisite: ACCT 600  
ACCT.6160 International Accounting (3)  
Prerequisite: ACCT 5010  
ACCT.6190 Financial Statement Analysis (3)  
Prerequisite: ACCT 4110 and FIN-6000  
ACCT.6210 Issues in Strategic Cost Management (3)  
Prerequisite: ACCT 600  
ACCT.6310 Tax Planning for Individual & Entrepreneurial Bus. (3)  
Prerequisite: ACCT 501

ACCT.6320 Federal Income Taxation: Flow-Through Entities (3)  
Prerequisite: ACCT 4300  
ACCT.6340 Federal Income Tax: Corporate (3)  
Prerequisite: ACCT 4300  
ACCT.6350 State and Local Taxation (3)  
Prerequisite: ACCT 4300  
ACCT.6360 Seminar in Tax Research (3)  
Prerequisite: ACCT 4300  
ACCT.6380 Wealth Preservation (3)  
Prerequisite: ACCT 4300 or ACCT 6310  
ACCT.6390 International Taxation (3)  
Prerequisite: ACCT 6340  
ACCT.6400 International Taxation Audit (3)  
Prerequisite: ACCT 4400 / Co-requisites: ITM 4100 or ITM 6100  
ACCT.6450 Forensic and Investigative Accounting (3)  
Prerequisite: ACCT 4400  
ACCT.6500 E-Business: Strategic Applications and Controls (3)  
ACCT.6600 Research in Contemporary Accounting Issues (3)

### BUSINESS FOUNDATIONS

BIZ.6100 Creative Leadership Skills (1)  
BIZ.6101 Coaching and Mentoring (1)  
BIZ.6102 Leadership Assessment and Development (1)  
BIZ.6200 Emotional and Social Intelligence (1)  
BIZ.6201 The Artful Speaker (2)  
BIZ.6202 Power, Politics, Influence, and Negotiation (1)  
BIZ.6300 Managing the 5 Dysfunctions of a Team (1)  
BIZ.6301 Culture-Organizational, Country of Origin, and Cultural Intelligence (1)  
BIZ.6302 Professional Enrichment (1)  
BIZ.6303 Generational Differences (1)

### ECONOMICS

ECON.5010 Economics for Managers (3)  
ECON.5740 Quantitative Methods in Business and Economics (3)  
Prerequisite: ECON.501  
ECON.5930 Special Topics (3)  
ECON.5980 Graduate Reading Course (0-3)  
Prerequisite: Permission of Department Chair  
ECON.6000 Microeconomic Theory (3)  
Prerequisite: ECON.5010  
ECON.6050 Econometrics I (3)  
Prerequisite: ECON.5010 and OPM.5020

Can be taken concurrently with ECON.6000  
ECON.6060 Econometrics II (3)  
Prerequisite: ECON.6050  
ECON.6080 Industrial Organization and Antitrust Policy (3)  
Prerequisite: ECON.6000  
ECON.6170 History of Economic Thought (3)  
Prerequisite: ECON.5010  
ECON.6200 Monetary Theory (3)  
Prerequisite: ECON.6000  
ECON.6300 International Trade (3)

Prerequisite: ECON.6000  
ECON.6310 International Economics: Exchange Rates and International Adjustment (3)  
Prerequisite: ECON.6000  
ECON.6350 Public Finance (3)  
Prerequisite: ECON.5010  
ECON.6500 Sports Economics (3)  
Prerequisite: ECON.5010 and OPM.5020  
ECON.6520 Advanced Macroeconomic Theory I (3)

## FINANCE

FIN.5930 Special Topics (3)  
FIN.5980 Graduate Reading Course (0-3)  
Prerequisite: Permission of Department Chair  
FIN.6000 Finance for Managers (3)  
Prerequisite: ACCT.5010 and ECON.5010  
FIN.6090 Real Estate Finance (3)  
Prerequisite: FIN.6000 or FIN.6150  
FIN.6100 Investment Concepts (3)  
Prerequisite: FIN.6000 or FIN.6150  
FIN.6150 Finance Theory and Applications (3)  
Prerequisite: ACCT.5010 and ECON.5010  
FIN.6160 Equity Securities and Markets (3)  
Prerequisite: FIN.6150  
FIN.6200 Securities Analysis (3)  
Prerequisite: FIN.6000, FIN.6150, or MBA.6360

## INTERNATIONAL BUSINESS

IB.5910 Internship (0-3)  
IB.5901 Study Abroad (3)  
IB.5980 Graduate Reading (0-4)  
IB.6930 Special Topics (3)

### **EMIB Program Only**

IB.5010 Managerial Economics and Data Analysis (2)  
IB.5050 Financial and Managerial Accounting Methods (2)  
IB.5110 Financial Management Skills (2)  
IB.5140 International Business Environment (2)  
IB.5150 Management Skills (2)  
IB.5210 Marketing Skills (2)  
IB.5250 International Economics (2)  
IB.5310 International Business Strategies (2)  
IB.5350 International Marketing Strategies (2)  
IB.5410 International Financial Strategies (2)  
IB.5430 International Negotiations (2)  
IB.5450 International Accounting (2)

### **Ph.D. Program Only**

IB.6800 Theory in International Business (Doctoral Seminar) (3)  
IB.6820 Seminar in Global and Regional Business (Doctoral Seminar) (3)  
IB.6840 Seminar in Global Strategy (Doctoral Seminar) (3)

Prerequisite: ECON.6000  
ECON.6550 Applied Optimization Methods for Financial Economics (3)  
Prerequisites: ECON.6060 and ECON.6520  
ECON.6700 Health Economics (3)  
Prerequisite: ECON.5010  
ECON.6980 Graduate Reading Course (0-3)  
Prerequisite: Permission of Department Chair

FIN.6210 Fixed Income Securities and Markets (3)  
Prerequisite: FIN.6000, FIN.6150, or MBA.6360  
FIN.6220 Financial Institutions Management (3)  
Prerequisite: FIN.6000, FIN.6150, MBA.6360  
FIN.6250 International Finance (3)  
Prerequisite: FIN.6000, FIN.6150, MBA.6360  
FIN.6340 Financial Planning and Analysis (3)  
Prerequisite: FIN.6000, FIN.6150, or MBA.6360  
FIN.6350 Advanced Corporate Finance (3)  
Prerequisite: FIN.6000, FIN.6150, or MBA.6360  
FIN.6360 Private Equity and Venture Capital (3)  
Prerequisite: FIN.6000, FIN.6150, or MBA.6360  
FIN.6380 Derivative Securities and Markets (3)  
Prerequisite: FIN.6000, FIN.6150, or MBA.6360

IB.6000 Global Business Environment (3)  
IB.6220 International E-Business (3)  
IB.6420 Global Environment Strategy (3)  
IB.6440 Global Business Negotiations (3)

IB.5510 Asia Pacific Business Strategy (2)  
IB.5550 European Business Strategy (2)  
IB.5610 Latin America Business Strategy (2)  
IB.5620 International Marketing Research and Analysis (2)  
IB.5650 Political and Cultural Environment of Europe (2)  
IB.5660 Political and Cultural Environment of Latin America (2)  
IB.5670 Political and Cultural Environment of Asia-Pacific (2)  
IB.5680 Managing Cultural Differences (2)  
IB.5690 International Organizations (2)  
IB.5900 International Study Abroad (2)  
IB.5930 Special Topics (2)

IB.6950 Special Study for Examinations (0)  
IB.6970 Research Topics (1-3)  
IB.6980 Graduate Reading Course (0-3)  
IB.6990 Dissertation Research (0-6)

## INFORMATION TECHNOLOGY MANAGEMENT

ITM.5930 Special Topics (3)  
ITM.5980 Graduate Reading Course (0-3)  
Prerequisite: Permission of Department Chair  
ITM.6000 Managing Information Technology (3)  
ITM.6050 Project Management (3)  
ITM.6100 Systems Analysis and Design (3)  
Prerequisite: ITM.600  
ITM.6250 Electronic Commerce Systems (3)  
ITM.6300 Database Management Systems (3)  
Prerequisite: ITM.6000

Prerequisite: ITM.6000  
ITM.6350 Telecommunications (3)  
Prerequisite: ITM.6000  
ITM.6400 Applied Business Analytics (3)  
Prerequisite: Six credits of 6000 level post-baccalaureate business courses  
ITM.6450 Business Strategy and Enterprise Systems (3)  
ITM.6550 Big Data in Organizations  
Prerequisite: OPM.5020

## MANAGEMENT

MGT.5930 Special Topics (3)  
MGT.5980 Graduate Reading Course (0-3)  
MGT.6003 Legal, Ethical, Professional Environment of Business (3)  
MGT.6006 Strategy and Practice (3)  
Prerequisite: MGT.6000  
MGT.6100 Failing Forward: Leadership / Art of Failure (3)  
MGT.6101 Executive Decision-Making (3)  
Prerequisite: MGT.6000  
MGT.6102 Current Issues in Management (3)  
Prerequisite: MGT.6000  
MGT.6103 Value Based Organizational Design (3)  
Prerequisite: MGT.6000 MGT.6105 Management of Change (3)  
Prerequisite: MGT.6000  
MGT.6200 New Venture Initiation (3)  
Prerequisite: MGT.6000

MGT.6201 Corporate Entrepreneurship (3)  
Prerequisite: MGT.6000  
MGT.6204 Special Topics in Entrepreneurship (3)  
Prerequisite: MGT.6000  
MGT.6210 Advanced Business Planning for New Ventures (3)  
Prerequisite: MGT.6200 or MGT.6201  
MGT.6300 Management of Human Resources (3)  
MGT.6301 Employee Performance and Turnover Management (3)  
Prerequisite: MGT.6000  
MGT.6980 Graduate Reading Course (0-3)  
Prerequisite: Permission of Department Chair

## MARKETING

MKT.5930 Special Topics (3)  
MKT.5980 Graduate Reading Course (0-3)  
Prerequisite: Permission of Department Chair  
MKT.6000 Marketing Management (3)  
MKT.6120 Marketing and Electronic Commerce (3)  
Prerequisite: MKT.6000  
MKT.6150 New Product Management (3)  
Prerequisite: MKT.6000  
MKT.6200 Consumer Analysis and Buyer Behavior (3)  
Prerequisite: MKT.6000  
MKT.6250 International Marketing (3)  
Prerequisite: MKT.6000  
MKT.6260 Green Marketing (3)  
Prerequisite: MKT.6000  
MKT.6300 Advertising Management (3)  
Prerequisite: MKT.6000  
MKT.6400 Social Media and Digital Marketing (3)  
MKT.6460 Strategic Marketing (3)  
Prerequisite: MKT.6000 and/or permission of instructor  
MKT.6500 Sports Marketing (3)  
Prerequisite: MKT.6000

MKT.6600 Marketing Analytics (3)  
MKT.6650 Brand Management in Digital Age (3)  
Prerequisite: MKT.6000  
MKT.6820 Seminar in Marketing Theory (Doctoral Seminar) (3)  
Prerequisite: Ph.D. program  
MKT.6830 Seminar in International/Global Marketing (Doctoral Seminar) (3)  
Prerequisite: Ph.D. program  
MKT.6840 Seminar in Consumer Behavior (3)  
Prerequisite: Ph.D. program  
MKT.6950 Special Study: Examinations (0)  
Prerequisite: Ph.D. program  
MKT.6970 Research Topics (1-3)  
Prerequisite: Ph.D. Program  
MKT.6980 Graduate Reading Course (1-3)  
Prerequisite: Permission of Department Chair  
MKT.6990 Dissertation Research (0-6)  
Prerequisite: Ph.D. Program  
MKT.6950 Special Study for Examinations (0)  
Prerequisite: Ph.D. Program

## MASTER OF BUSINESS ADMINISTRATION

MBA.5010 Accounting for Managers (3)  
MBA.5750 Professional Effectiveness Seminar (1)  
MBA.5930 Special Topics (3)

### **One-Year M.B.A. Students Only**

MBA.6000 Meaning-Centered Approach to Organizational Communication (3)  
MBA.6010 Emerging Business Issues I (1)  
MBA.6020 Emerging Business Issues II (1)  
MBA.6030 Emerging Business Issues III (1)  
MBA.6040 Ethics and Values-Based Decision Making (1)  
MBA.6070 Career Management (1)  
MBA.6150 Global Business Ethics (3)  
MBA.6200 Professional Effectiveness Series I (1)  
MBA.6210 Information Technology (1)  
MBA.6220 Operations Management (2)  
MBA.6230 Supply Chain Management (1)  
MBA.6240 Managerial Economics and Applied Statistics (2)  
MBA.6250 Essentials of Marketing Strategy (2)  
MBA.6260 Legal and Ethical Environment (2)  
MBA.6270 Leadership and Strategic Management (2)  
MBA.6280 Integrated Decision Making (2)  
MBA.6290 Accounting and Financial Management (4)

MBA.5980 Graduate Reading Course (0-3)  
Prerequisite: Permission of Department Chair

MBA.6300 Applied Statistics (2)  
MBA.6310 Legal Aspects of Business (1)  
MBA.6320 Financial Accounting (1)  
MBA.6330 Managerial Economics (2)  
MBA.6340 Nexus I (1)  
MBA.6360 Financial Management (3)  
MBA.6370 Ethical Environment of Business (1)  
MBA.6380 Managerial Accounting (1)  
MBA.6400 Professional Effectiveness Series II (2)  
MBA.6410 Global Business Integration I (2)  
MBA.6420 Data and Decisions (3)  
MBA.6430 The Organization: Governance and Compliance (3)  
MBA.6440 Nexus II (1)  
MBA.6500 Professional Effectiveness Series III (1-2)  
MBA.6510 Study Abroad (3)  
MBA.6520 Global Business Integration II (1)  
MBA.6530 Integrated Consulting Module (3)  
MBA.6540 Nexus III (1)

## OPERATIONS MANAGEMENT

OPM .5020 Applied Business Statistics (3)  
OPM .5050 Operations Management (3)  
Prerequisite: OPM .5020  
OPM .5930 Special Topics (3)  
OPM .5980 Graduate Reading Course (0-3)  
Prerequisite: Permission of Department Chair  
OPM .6000 Forecasting and Demand Mgmt (3)  
Prerequisite: OPM .5020  
OPM .6050 Business Process and Operations Management (3)  
Prerequisite: OPM .5020  
OPM .6370 Simulation in Supply Chain Operations  
Prerequisite: OPM .5050  
OPM .6380 Manufacturing Strategy and Global Competitiveness  
Prerequisite: OPM .5050  
OPM .6430 Quality Improvement Through a Lean Six Sigma Approach (3)

Prerequisite: OPM .5050  
OPM .6440 Global Supply Chain Management Concepts, Design, and Strategies (3)  
Prerequisite: OPM .5050  
OPM .6450 Computer Integrated Global Supply Chains  
Prerequisite: OPM .5050  
OPM .6460 Global Logistics and Operations Management (3)  
Prerequisite: OPM .5050  
OPM .6480 Strategic Sourcing and Procurement in Supply Chain Management (3)  
Prerequisite: OPM .5050  
OPM .6520 Transportation and Warehouse Management  
Prerequisite: OPM .5020 and OPM .5050  
OPM .6550 Special Topics in Supply Chain

# PARKS COLLEGE OF ENGINEERING, AVIATION, AND TECHNOLOGY

---

**Steve Buckner, Ph.D.**

*Interim Dean*

**Riyadh Hindi, Ph.D., P.Eng.**

*Director of Graduate Programs*

Consistent with the mission of Saint Louis University, the mission of Parks College of Engineering, Aviation, and Technology (Parks College) is to prepare students to advance the frontiers of knowledge and technical expertise in engineering and aviation while instilling within them good ethical and professional character.

## **History**

Oliver L. Parks founded Parks College, the first federally certified school of aviation in the United States, in 1927 in Cahokia, Illinois. After establishing a strong aviation program, the school's founder entrusted his legacy to Saint Louis University in 1947. Now, Parks College offers a variety of engineering and aviation programs.

## **Program Objectives**

The Parks College post-baccalaureate engineering and aviation programs are organized around a unique curriculum that prepares students with a solid theoretical and practical foundation to become effective leaders in all facets of their chosen discipline. By involving students in fundamental and applied research, encouraging collaboration across departments, and partnering within and outside institutions and organizations, Parks College of Engineering and Aviation students gain a rich education in their chosen discipline. The college offers Master of Science and Doctoral of Philosophy degrees in the areas of Aerospace and Mechanical Engineering, Biomedical Engineering, Civil Engineering, Electrical and Computer Engineering, and Aviation Science. For more information, please visit Parks Graduate Programs webpage at [parks.slu.edu/grad](http://parks.slu.edu/grad).

The dedicated Parks College faculty and staff are prepared to mentor, guide, and support your education activities. Your program will be uniquely structured to provide a multi-disciplinary approach, curriculum design flexibility, and customized research opportunities to meet your specific career goals. Innovation and leadership will be emphasized throughout, producing highly-skilled professionals, well-prepared to pursue careers at multi-national firms, competitive government agencies, or prestigious academic institutions.

In parallel with these objectives and reflective of its mission, Saint Louis University also strives to engage its students in five interrelated dimensions: scholarship and knowledge; intellectual inquiry; community building; leadership and service; and spirituality and values. Graduates will be a part of the future workforce finding ethical solutions, meeting the needs of the society with emerging technologies, and educating leaders who are aware of their impact on the surrounding world from technical and ethical perspectives.

## **Criteria for Admission**

Submission Deadlines: Complete applications must be submitted by March 1<sup>st</sup> for financial aid (fellowships or graduate research assistantships) for the Fall Semester.

Regular admission applications (without financial aid) should be submitted by June 30<sup>th</sup> for the Fall Semester or November 30<sup>th</sup> for the Spring Semester.

## **Criteria for Acceptance**

A four-year undergraduate degree in engineering or a related field may be appropriate for admission to the engineering program. A four-year undergraduate degree in aviation or a related field may be appropriate for admission to the aviation program.

### **Admission Requirements:**

1. Online application at [www.slu.edu/graduate-admission-home/apply-now](http://www.slu.edu/graduate-admission-home/apply-now)
2. Official GRE quantitative score
3. Official transcripts of all previous degrees
4. Three letters of recommendation & three Personal Potential Index (PPI) scores
5. Curriculum Vitae (CV)
6. Professional goals statement
7. Evidence of English language proficiency (when native language is not English).  
Minimum scores: TOEFL PBT 550, TOEFL IBT 80, or IELTS 6.5

## Master of Science

The Master's Degree (M.S.) requires minimum of 30 credits beyond a Bachelor's degree. For students pursuing the research option, 6 of the total credits to the degree must be in Thesis Research. For students pursuing the project option, 3 of the total credits to the degree must be devoted to carrying out a project, approved by students' Faculty Advisor. Up to 12 credit hours may be transferred from another institution. Students are expected to maintain a cumulative grade point average (GPA) of 3.00; lower GPA may result in probationary status and/or dismissal from the program due to unsatisfactory academic performance. Lastly, all students are required to enroll each semester until degree is received.

M.S. students prepare a program of study that must be approved by the Faculty Advisor, department chair, and the Parks College Graduate Programs Director. This program of study is developed within the context of background and career goals of students allowing them to customize their program to suit their professional goals.

## Master of Science (Course only option)

Prior to registration, an admitted student, in consultation with the Faculty Advisor, will prepare a program of study. The program of study should include tentative courses to fulfill the requirement of 30 credits for an M.S. Degree.

## Master of Science (Project option)

Prior to registration, an admitted student, in consultation with the Faculty Advisor, will prepare a program of study with tentative courses, to be taken over the course of the coming semesters, to fulfill the minimum of 30 credits required for an M.S. Degree. Three of the total credits will be dedicated to a project. Students' project details could be decided at a later date, in consultation with their Faculty Advisor.

## Master of Science (Thesis option)

### **First Semester in the M.S. Program**

In the first semester, M.S. students will begin taking courses as indicated in the program of study. In parallel, students may also begin research in an identified research area, under the guidance of a Faculty Advisor.

The Faculty Advisor and student will form a **Guidance Committee** of at least three members. The Committee members should be persons who will likely provide expertise and guidance that will assist students in research. At least one member, besides the Faculty Advisor, must be in the home department of students. If the Faculty Advisor is in another department, then one Guidance Committee member in the home department will be designated as the Guidance Committee Chair.

### **Thesis Proposal**

Students prepare a Thesis Proposal before the end of the first year activities. The title and outline for this proposal are approved by the Guidance Committee and reported on the *Master's Thesis Proposal/Prospectus* form. After completing the thesis proposal, students meet with the Guidance Committee at least once every semester.

### **Thesis Defense**

An oral Thesis Defense must be completed before graduation. The Defense typically includes a seminar that is open to the public. Following the open session, the student and Guidance Committee continue discussion in a closed session. A written Thesis report is submitted ~4 weeks prior to the oral defense.

Based on the Defense, the Guidance Committee may:

- (1) Approve the Thesis,
- (2) Conditionally approve, with specific instructions on revisions to the Thesis document, or
- (3) Not approve the Thesis.

The Guidance Committee conveys the decision to the Department Chair and the Director of Graduate Programs.

### **Independent Studies and Special Topics Courses**

For all independent studies and special topics courses an outline of the topic(s) covered and students' evaluation process must be submitted and approved by the Faculty Advisor prior to registration. A copy of the outline or syllabus will be kept in the student's file in the Graduate Programs Office.

## **Doctor of Philosophy**

The Doctor of Philosophy (Ph.D.) programs focus on a specific research topic. The students are expected to conduct original academic research that culminates in a dissertation and peer-reviewed publications. Additional coursework related to the chosen research area is also required.

Ph.D. students prepare a program of study that must be approved by the Faculty Advisor, Department Chair, and the Director of Graduate Programs. This program of study is developed and then reviewed within the context of students' background and career goals, allowing students to customize their program to suit their professional goals.

**The Engineering Ph.D. degree** requires a total of 60 credits beyond the Bachelor's degree with a minimum of 36 credits of coursework and a minimum of 12 credits of dissertation research. Of the 60 credits, a maximum of 9 credit hours may be comprised of coursework at the 4000 level; all other course credits must be at the 5000 or 6000 level. Those students who earn a Master of Science degree may include the associated Master of Science degree coursework credits, but not the thesis or project credits, in the 60 credits which are needed for the Ph.D. degree.

**The Aviation Ph.D. degree** requires a total of 63 credits beyond the Bachelor of Science degree, including a minimum of 12 credits of dissertation. The curriculum will include a minimum of 24 credits comprised of at least 12 credits of coursework in research methodologies and 12 credits in a secondary discipline intended to complement knowledge of aviation. Students will work with their advisor and Ph.D. committee to determine the specific coursework to complete the program. Those students holding an appropriate Master of Science degree may include a maximum of 27 credits of the associated Master of Science degree course credits, but not the thesis or project credits, in the 63 credits required for the Ph.D. degree.

### **First Semester in Ph.D. Program**

In the first semester, Ph.D. students will begin taking courses as indicated in the program of study. In parallel, students may also begin research in an identified research area under the guidance of a Faculty Advisor.

The Faculty Advisor and students will form a Guidance Committee of at least five members. The Committee members should be persons who will likely provide expertise and guidance that will assist students in their research. At least two members, besides the Faculty Advisor, must be in students' home department. If the Faculty Advisor is in another department, then one Guidance Committee member in the home department will be designated as the Guidance Committee Chair.

### **Qualifying Exam**

A qualifying exam will be administered according to the expectations of the academic discipline. For example, in engineering a qualifying exam may be administered relatively early in the doctoral studies. In aviation, the qualifying exam is structured to assess comprehensive knowledge of the discipline after all or nearly all of academic work has been completed and thus, it is administered closer to the completion of the degree.

The student's Guidance Committee will advise students on preparation for the Qualifying Exam. Ideally, the Guidance Committee will continue after the Qualifying Exam and through the dissertation research.

The Qualifying Exam is designed to determine if students are prepared to continue Ph.D. studies. Normally, it is a written exam, with the option for follow-up with an oral exam. The details of the exam are determined by the home department.

Qualifying examinations are arranged and administered by the home department. The result of the exam may be a pass, no-pass, or conditional-pass. The conditional-pass will normally require that students correct specific weaknesses, with appropriate modifications to the plan of study.

Qualifying exam procedures can be accessed at the Parks College Graduate Programs:

### **Dissertation Proposal Exam**

Typically, after a year following the Qualifying Exam, students will present and defend a Dissertation Proposal. This Exam is based on their written proposal, and their oral defense of the proposal. Both components will be evaluated by the Guidance Committee.

**Doctoral Candidate status** will be given to students after successful passage of the oral defense of the dissertation proposal.

### **Dissertation Defense**

At a time selected by students and the Guidance Committee, the doctoral candidates present the dissertation research in both written and oral format. The Defense typically includes a seminar that is open to the public. Following the open session, students and

Guidance Committee continues the discussion in a closed session.

Based on the Defense, the Guidance Committee may: (1) approve the Dissertation, (2) conditionally approve, with specific instructions on revisions to the Dissertation document, or (3) not approve the Dissertation.

### **Independent Studies and Special Topics Course**

For all independent studies and special topics courses, an outline of the topic(s) covered and the evaluation process must be submitted and approved by the mentor/advisor of students prior to registration. A copy of the outline or syllabus will be kept in the student's file in the Graduate Programs Office.

### **Annual Progress Review**

Admitted students are expected to meet with their Faculty Advisors at least once each semester. Students must have their Faculty Advisor's permission to enroll in new academic work in anticipation of a new academic term.

For all M.S. and Ph.D. students, an annual progress review must be evaluated and completed in consultation with the Faculty Advisor and submitted to a respective Department Chair or the Graduate Programs office.

The Annual Student Review form can be obtained from the Parks College Graduate Programs Office.

## **Post-baccalaureate Course Listing**

### **AEROSPACE ENGINEERING**

#### **Sridhar Condoor, Ph.D.,**

*Department Chair*

AENG.5009 Seminar (0)	AENG.5530 Composite Materials for Structure and Design (3)
AENG.5050 Space Mission Analysis and Design (3)	AENG.5700 Aeroelasticity (3)
AENG.5060 Advanced Space Mission Design (3)	AENG.5750 Parachute Systems & Design (3)
AENG.5150 Orbital Mechanics (3)	AENG.5800 Autonomous Systems Design (3)
AENG.5230 Introduction to Computational Fluid Dynamics (3)	AENG.5850 Space Mission Failures (3)
AENG.5240 Hypersonics (3)	AENG.5910 Co-op with Industry (0-3)
AENG.5260 Unsteady Aerodynamics of Bluff Bodies (3)	AENG.5915 Internship with Industry (0-3)
AENG.5280 Applied Aerodynamics (3)	AENG.5930 Special Topics (1-3)
AENG.5400 Guidance, Navigation and Estimation for Dynamic Vehicles (3)	AENG.5984 Independent Study (1-3)
AENG.5410 Flight Simulation (3)	AENG.5994 Master's Thesis Research (0-6)
AENG.5450 Space Dynamics and Control (3)	AENG.6910 Co-op with Industry (0-3)
AENG.5460 Modern Control Systems (3)	AENG.6915 Internship with Industry (0-3)
AENG.5470 Advanced Control Systems (3)	AENG.6984 Independent Study (1-3)
	AENG.6994 Doctoral Dissertation Research (0-6)

### **AVIATION SCIENCE**

#### **Stephen Magoc, MBA**

*Department Chair*

ASCI.5010 Analysis of Aviation Safety Data (3)	ASCI.5960 Project Guidance (3)
ASCI.5020 Aviation Safety Data Analysis (3)	ASCI.5980 Graduate Reading Course (1-3)
ASCI.5030 Aviation Security Management (3)	ASCI.5990 Master's Thesis Research (0-6)
ASCI.5040 Human Factors in Aviation Safety (3)	ASCI.6010 Federal and International Regulatory Environment (3)
ASCI.5080 Management of Aviation Safety Programs (3)	ASCI.6020 Flight Operations Business and Administration (3)
ASCI.5100 Aviation Safety Career and Personal Development (3)	ASCI.6030 Aviation and Public Policy (3)
ASCI.5120 Aviation Safety Quality Issues (3)	ASCI.6050 Legal and Ethical Issues in Collegiate Flight Education (3)
ASCI.5130 Aviation Safety Ethics (3)	ASCI.6060 Aviation Curriculum Development and Management (3)
ASCI.5150 Aviation Incident/Accident Analysis (3)	ASCI.6070 Aviation Training Methods and Practice (3)
ASCI.5210 Aviation Org. Theory and Management (3)	ASCI.6990 Doctoral Dissertation Research (0-6) 100
ASCI.5220 Aviation Safety Programs (3)	FSCI.5230 Economics of Air Transportation (3)
ASCI.5230 Professional Ethics and Standards (3)	
ASCI.5460 Qualitative Analysis (3)	
ASCI.5470 Quantitative Analysis (3)	
ASCI.5910 Graduate Internship (3)	



## BIOMEDICAL ENGINEERING

**Michelle Sabick, Ph.D.,**

*Department Chair*

- BME.5000 Seminars (0)
- BME.5010 Research Analysis (2)
- BME.5020 Accelerated Introduction to Biomechanics & Biomaterials (2)
- BME.5030 Accelerated Introduction to Neuroengineering and Bioimaging (2)
- BME.5050 Data Handling (3)
- BME.5060 Ethics & Compromise (3)
- BME.5200 Continuum Biomechanics (3)
- BME.5400 Tissue-Material Interfaces (3)
- BME.5410 Tissue Engineering (3)
- BME.5420 Tissue engineering Scaffold Fabrication Techniques (3)
- BME.5450 AFM Techniques and Training (3)
- BME.5500 Experimental Techniques and Design (0-2)
- BME.5600 Quantitative Physiology I (3)
- BME.5650 Quantitative Physiology II (3)
- BME.5800 Research Rotation (1-3)
- BME.5930 Special Topics (1-3)
- BME.5960 Project Guidance (1-3)
- BME.5970 Research Topics (1-3)
- BME.5980 Graduate Reading Course (1-3)
- BME.5990 Master's Thesis Research (0-6)
- BME.6930 Special Topics (1-3)
- BME.6970 Research Topics (1-3)
- BME.6980 Graduate Reading Course (1-3)
- BME.6990 Doctoral Dissertation Research (0-6)

## CIVIL ENGINEERING

**Ronaldo Luna, Ph.D.,**

*Department Chair*

- CVNG 5000 Seminar (0)
- CVNG.5050 Advanced Structural Analysis (3)
- CVNG.5070 Structural Dynamics (3)
- CVNG.5090 Advanced Reinforced Concrete (3)
- CVNG.5110 Advanced Steel Design (3)
- CVNG.5130 Bridge Engineering (3)
- CVNG.5150 Prestressed Concrete (3)
- CVNG.5170 Seismic Design (3)
- CVNG.5190 Sustainable Land Development Engineering (3)
- CVNG.5210 Sustainable Water Management (3)
- CVNG.5230 Biological Treatment Systems (3)
- CVNG.5250 Physical/Chemical Treatment Systems (3)
- CVNG.5270 Design of Wastewater Treatment Facilities (3)
- CVNG.5290 Design of Drinking Water Treatment Facilities (3)
- CVNG.5310 Air Pollution (3)
- CVNG.5450 Traffic Engineering (3)
- CVNG.5470 Urban Transportation Planning (3)
- CVNG.5930 Special Topics (1-3)
- CVNG.5960 Master's Project (1-3)
- CVNG.5990 Master's Thesis Research (0-6)
- CVNG.6990 Doctoral Dissertation Research (0-6)

## ELECTRICAL AND COMPUTER ENGINEERING

**Huliyar Mallikarjuna, Ph.D.,**

*Department Chair*

- ECE.5000 Seminar (0)
- ECE.5055 Stochastic Processing (3)
- ECE.5110 Power Systems I (3)
- ECE.5111 Power Systems II (3)
- ECE.5120 Modern Control Theory (3)
- ECE.5130 Advanced Semiconductor Devices (3)
- ECE.5131 Low Noise Electronics Design (3)
- ECE.5132 Analog Integrated Circuit Design (3)
- ECE.5141 Radar System Design and Analysis (3)
- ECE.5142 Microwave Theory and Techniques (3)
- ECE.5143 Antenna Theory and Design (3)
- ECE.5150 Advanced Filter Design (3)
- ECE.5151 Digital Signal Processing (3)
- ECE.5160 Communication Systems (3)
- ECE.5161 Spacecraft Communications (3)
- ECE.5162 Cellular Communications (3)
- ECE.5170 Energy Technologies I (3)
- ECE.5225 Hardware Software Co-design (3)
- ECE.5226 Robotics (3)
- ECE.5235 Digital IC Design (3)
- ECE.5910 Co-op with Industry (0-3)
- ECE.5915 Internship with Industry (0-3)
- ECE.5930 Special Topics (1-3)
- ECE.5960 Master's Project (3)
- ECE.5970 Research Topics (1-3)
- ECE.5980 Independent Study (1-3)
- ECE.5990 Master's Thesis Research (0-6)
- ECE.6910 Co-op with Industry (0-3)
- ECE.6915 Internship with Industry (0-3)
- ECE.6970 Research Topics (1-3)
- ECE.6980 Independent Study (1-3)
- ECE.6990 Doctoral Dissertation Research (0)

## ENGINEERING PHYSICS

**William Thacker, Ph.D.,**

*Department Chair*

PHYS.5010 Nanoscience and Nanofabrication Frontiers (required core course) (3)

PHYS.5020 Experimental Physics (3)

PHYS.5030 Mathematical Methods in Physics with Elements of Classical Mechanics (3)

PHYS.5060 Numerical Analysis and Computational Physics (required core course) (3)

PHYS.5930 Special Topics (1-3)

PHYS.5980 Independent Study (1-3)

PHYS.5990 Thesis Research (0-6)

## MECHANICAL ENGINEERING

**Sridhar Condoor, Ph.D.,**

*Department Chair*

MENG.5009 Seminar (0)

MENG.5100 Advanced Mechanics of Solids (3)

MENG.5110 Fracture Mechanics and Plasticity (3)

MENG.5120 Structural Reliability (3)

MENG.5150 Finite Element Analysis I (3)

MENG.5160 Finite Element Analysis II (3)

MENG.5200 Advanced Fluid Dynamics (3)

MENG.5220 Experimental Methods in Fluid Dynamics (3)

MENG.5230 Viscous Flows (3)

MENG.5240 An Introduction to Turbulence (3)

MENG.5530 Composite Materials for Structure and Design (3)

MENG.5700 Multidisciplinary Optimization (3)

MENG.5810 Technology Entrepreneurship (3)

MENG.5910 Co-op with Industry (0-3)

MENG.5915 Internship with Industry (0-3)

MENG.5930 Special Topics (1-3)

MENG.5980 Independent Study (1-3)

MENG.5990 Master's Thesis Research (0-6)

MENG.6910 Co-op with Industry (0-3)

MENG.6915 Internship with Industry (0-3)

MENG.6994 Doctoral Dissertation Research (0-6)

# SCHOOL OF NURSING

---

**Teri A. Murray, Ph.D.**

*Dean*

**Joanne L. Thanavaro, D.N.P.**

*Graduate Education, Associate Dean*

*Advanced Practice Nursing Program, Director*

**Joanne K. Schneider, Ph.D.**

*Ph.D. Nursing Program, Director (Interim)*

**Kristine M. L'Ecuyer, Ph.D.**

*Accelerated Masters of Science in Nursing, Clinical Nurse Leader Option, Coordinator*

The baccalaureate, Master's and DNP programs at Saint Louis University School of Nursing are accredited by the Commission on Collegiate Nursing Education and approved by the Missouri State Board of Nursing. To achieve its educational objectives, the School uses the hospitals within the Health Sciences Center and many health care organizations of greater St. Louis. In addition to its undergraduate offerings, programs leading to the Master of Science in Nursing (Generalist), Master of Science in Nursing (Advanced Nursing Practice), Doctor of Nursing Practice (D.N.P.), Doctor of Philosophy (Ph.D.) in Nursing degrees, and a Post-Master's certificate are available online through Graduate Education.

The Master of Science in Nursing (Clinical Nurse Leader) degree program prepares nurses for direct-care leadership roles in a variety of health care settings with focus on quality improvement, clinical coordination and accountability for health outcomes as a provider and manager of care. The Accelerated Master of Science in Nursing (Clinical Nurse Leader) degree is an accelerated 21 month on-site prelicensure program designed to educate advanced generalist nurses for clinical practice and leadership in health care settings. The prelicensure program prepares individuals who have non-nursing baccalaureate degrees to take the National Council Licensing Exam (NCLEX) for practice as a registered professional nurse; however, per section 335.066 RSMo of the Missouri Nurse Practice Act, completion of the nursing program does not guarantee eligibility to take the licensure exam. In addition, upon completion of the program and with licensure, graduates will be eligible to sit for the clinical nurse leader exam offered by American Association of Colleges of Nursing Commission on Nurse Certification.

The Master of Science in Nursing (Advanced Practice Registered Nurse) degree program enables nurses to attain specialized knowledge and skills needed to perform leadership roles in advanced nursing practice. A range of specializations may be pursued at the M.S.N. or certificate level. All specializations are available online. The Post-Master of Science in Nursing certificate program provides opportunities for individuals who have earned a Master's degree in Nursing to prepare for advanced practice in a second nursing specialty or role. The Post-Master Nurse Educator Certificate Program, offered online, prepares nurses with skills to teach in associate, diploma, or baccalaureate nursing programs.

The Doctor of Nursing Practice (D.N.P.) prepares baccalaureate prepared nurses and advanced practice nurses with the specialized knowledge and skills needed to diagnose and manage health and illness while improving the quality of health care in all practice settings using evidence and outcome-based methodologies. DNP graduates promote the value of the human person, clinical expertise, and patient-centered care with an emphasis on interdisciplinary collaboration within the health care delivery system.

The Ph.D. degree program prepares nurses as scholars and beginning nurse scientists who will contribute to the continued knowledge development of the discipline and profession of nursing. The program is offered in both a traditional classroom format and distance learning with live, real-time Web-based teleconferencing. Students may attend classes on campus at the School of Nursing or by teleconference using Web technology Full-time and part-time study is available.

## Accelerated Master of Science in Nursing (Clinical Nurse Leader)

### Prerequisites

1. A baccalaureate degree from an accredited university.
2. Completion of coursework in microbiology, human anatomy and physiology, and inferential statistics.

### Required Courses

NURS.4600 Pharmacology in Nursing Practice (3)  
NURS.5005 Nursing Strategies for Health (6)  
NURS.5115 Advanced Health Assessment for the Generalist Nurse (3)  
NURS.5080 Advanced Pharmacology (3)  
NURS.5010 Nursing Strategies in Physiological Health Alterations (6)  
NURS.5015 Nursing Strategies in Psychosocial Health Alterations (4)  
NURS.5170 Advanced Pathophysiology (3)  
NURS.5205 Evidence-Based Practice for the Advanced

Generalist Nurse (3)  
NURS.5020 Health Care Systems and Policy (3)  
NURS.5601 Clinical Studies I (4)  
NURS.5602 Clinical Studies II (4)  
NURS.5603 Clinical Studies III (4)  
HCE.5500 Ethics in Nursing and Healthcare  
NURS.5604 Advanced Clinical Studies (4)  
NURS.5025 Informatics and Quality Improvement (3)  
NURS.5606 Clinical Nursing Leadership for Advanced Generalists (3)  
NURS.5605 Practicum in Clinical Leadership (6)

## Master of Science in Nursing (Clinical Nurse Leader)

### Prerequisites

A baccalaureate degree in nursing from an accredited university.

### Required Courses

NURS.5170 Advanced Pathophysiology (3)  
NURS.5160 The Role of Masters Prepared Nurse in Promoting Health and Reducing Risk (3)  
NURS.5020 Health Care Systems and Policy (3)  
NURS.5110 Advanced Health Assessment & Clinical Decision Making (3)  
NURS.5200 General Research Methods (3), or NURS.5205 Evidence-Based Practice for the Advanced Generalist Nurse

NURS.5000 Epidemiology (3)  
NURS.5025 Informatics and Quality Improvement (3)  
HCE.5500 Ethics in Nursing and Health Care (2)  
NURS.5614 Clinical Nurse Leader Capstone and Clinical Immersion I (3)  
NURS.5080 Advanced Pharmacology (3)  
NURS.5616 Clinical Nurse Leader Capstone and Clinical Immersion II (3)

## Master of Science in Nursing (Advanced Practice Registered Nurse)

Specialties are available in Adult-Gerontological, Family, and Psychiatric-Mental Health Nursing, and Nursing of Children. Role preparation as a nurse practitioner is offered in Adult-Gerontological combination, Family, Family Psychiatric-Mental Health Nursing, and Nursing of Children. Nurse-practitioner tracks in the Adult-Gerontological Nursing specialty include both acute-care and primary nurse-practitioner tracks. Educator tracks are available in all specialties.

### Prerequisites

1. A baccalaureate degree in nursing from a program accredited by a nationally recognized accrediting agency is required.
2. Completion of a three-semester-hour introductory statistics course.
3. Unencumbered registered nurse licensure in the State of Missouri or in other state in which the student will complete a practicum.
4. Completion of a beginning-level-health assessment course or the equivalent thereof is required.
5. One year of clinical nursing experience prior to enrollment in a clinical nursing course is strongly recommended. One year of nursing practice experience within the last three years is strongly recommended for all Nurse Practitioner tracks.

### Curriculum

All students complete 20 credits of CORE courses that include:

NURS 5040 Role Acquisition (1)  
HCE.5500 Ethics in Nursing and Health Care (2)  
NURS.5080 Advanced Pharmacology (3)  
NURS.5101 Advanced Health Assessment & Clinical Decision Making (3)

NURS.5140 Health Promotion (3)  
NURS.5160 Principles of Practice Management (2)  
NURS.5170 Advanced Pathophysiology (3)  
NURS.5200 General Research Methods (3), and  
NURS.5900 Residency (0)

### Adult-Gerontological Acute Care Nurse Practitioner Concentration (Core courses +)

#### **Required Courses (16 credits)**

Cognate: NURS.5310 Critical Appraisal of Technology: Acute Care (3)	NURS.5270 Advanced Clinical Studies in the Acute Care Setting II (5)
NURS.5260 Advanced Clinical Studies in the Acute Care Setting I (4)	NURS.5810 Nursing Practicum (4)
	NURS.5950 Special Study for Exams (0)

**Total MSN (Advanced Nursing Practice) Degree 36 credit hours**

### Adult-Gerontological Primary Care Nurse Practitioner Concentration (Core courses +)

#### **Required Courses (17 credits)**

Cognate: NURS.5750 Care of the Elderly: An Interdisciplinary Approach to Health (3)	NURS.5250 Advanced Clinical Studies II: Adults and Older Adults (5)
NURS.5240 Advanced Clinical Studies I: Adolescents and Adults (4)	NURS.5810 Nursing Practicum (5)
	NURS.5950 Special Study for Exams (0)

**Total MSN (Advanced Nursing Practice) Degree 37 credit hours**

### Family Nurse Practitioner Concentration (Core courses +)

#### **Required Courses (21 credits)**

Cognate: NURS.5630 Dynamics of Family Nursing Practice (3)	NURS.5510 Mental Health Care of the Family in Primary Care (2)
NURS.5280 Advanced Clinical Studies I: Adults, and Older Adults (5)	Elective (2)
NURS.5290 Advanced Clinical Studies II: Women and Children (5)	NURS.5810 Nursing Practicum (4)
	NURS.5950 Special Study for Exams (0)

**Total MSN (Advanced Nursing Practice) Degree 41 credit hours**

### Pediatric Nurse Practitioner Concentration (Core courses +)

#### **Required Courses (18 credits)**

Cognate: NURS.5550 Family and Child Development (3)	Children (4)
NURS.5320 Advanced Clinical Studies I in Nursing of Children (4)	Elective (2)
NURS.5330 Advanced Clinical Studies II in Nursing of	NURS.5810 Nursing Practicum (5)
	NURS.5950 Special Study for Exams (0)

**Total MSN (Advanced Nursing Practice) Degree 38 credit hours**

### Family Psychiatric-Mental Health Nurse Practitioner Concentration (Core courses +)

#### **Required Courses (21 credits)**

Cognate: NURS.5400 Ecological Approach to Human Behavior (3)	NURS.5350 Advanced Clinical Studies II : P/MH Nursing (5)
Cognate: NURS.5550 Family and Child Development (3)	NURS.5430 Psychopharmacology (2)
NURS.5340 Advanced Clinical Studies I : P/MH Nursing (4)	NURS.5810 Nursing Practicum (4)
	NURS.5950 Special Study for Exams (0)

**Total MSN (Advanced Nursing Practice) Degree 41 credit hours**

### Educator Option

The Nurse Educator courses provide an opportunity for course work and practicum experience in nursing education.

NURS.5570 Curriculum Development in Nursing Education (2-3)
NURS.5580 Instructional Strategies and Evaluation for Nurse Educators (2)
NURS.5590 Practicum in Nursing Education (2)

An additional 3-credit Education course may be added so that the student may apply for the NLN Nurse Educator certificate.

## Post-Master's Certificate, Advanced Practice Registered Nurse

Preparation in a second specialty or for a second role is offered to individuals who have earned Master's degrees in Nursing. Specialties in which preparation is available are the same as those in which Master's degrees are offered. Preparation is currently available for a second role as acute care, adult-gerontological, family, pediatric, or psychiatric-mental health nurse practitioner. A certificate may be earned by completing a focused program of study that includes a minimum of 15 semester hours.

### Prerequisites

- Master of Science degree in nursing from a program accredited by a nationally recognized accrediting agency is preferred.
- Registered professional nurse licensure in the State of Missouri or in other states in which the student will complete a practicum, or clinical rotation/experience.
- Additional prerequisites are specific for the role option chosen by the student. Please contact the Associate Dean, Graduate Education for additional prerequisites.

### Required Courses

Course work is dependent upon the requirements for the specific specialty or specific role.

## Master of Science in Nursing (Advanced Practice Registered Nurse) Degree and Post-Master's Certificate Online Programs

Complete advanced nursing practice Master's degree programs and post-Master's certificate programs are available online for the adult-gerontological primary and acute care, family, pediatric, and family psychiatric/mental health nurse practitioner options.

## Nurse Educator Certificate

The Nurse Educator Certificate (NEC) will prepare graduates with the skills to teach in baccalaureate, associate or diploma nursing programs. All four educator courses are offered on-line with attention to building a learning community with a culture of sharing and support. Attention to development of the educator role is threaded through each course and culminates in the development of an educator portfolio including a personal philosophy of teaching, a research plan and examples of teaching products. Students in the NEC must meet the current residency requirements within the SON.

### Prerequisites

- Master of Science degree in nursing from a program accredited by a nationally recognized accrediting agency is preferred.
- Registered professional nurse licensure in the State of Missouri or in other states in which the student will complete his/her practicum, or clinical/rotation experience.

### Required Courses

A certificate may be earned by completing a focused program of study that includes a minimum of 9 credits.

NURS.5560 Evidence-Based Nursing Education (2)

NURS.5570 Curriculum Development in Nursing Education

(3)

NURS.5580 Instructional Strategies and Evaluation for Nurse Educators (2)

NURS.5590 Practicum in Nursing Education (2)

## Doctor of Nursing Practice

Complete advanced nursing practice Doctoral degree programs are available online through the World Wide Web for the adult-gerontological primary and acute care, family, pediatric, and psychiatric/mental health nurse practitioner options

## Post-Bachelor of Science in Nursing to Doctor of Nursing Practice Option

### **Prerequisites**

- A baccalaureate degree in nursing from a program accredited by a nationally recognized accrediting agency is required.
- Cumulative credit point average (GPA) of 3.5 on a 4.0 system for admission as a classified student.
- Completion of a three-semester-hour introductory statistics course.
- Unencumbered registered nurse licensure in the State of Missouri or in other state in which the student will complete his/her practica, or clinical/rotation experience. (International applicants are advised to begin this process one year prior to the intended enrollment date.)
- Completion of a beginning-level-health assessment course or the equivalent thereof is required.
- One year of clinical nursing experience prior to enrollment is required. One year of nursing practice experience within the last three years is strongly recommended.

### **Required Courses**

#### **D.N.P. Core Courses (51 total credits, 5000 and 6000 level)**

**All students complete 26 credits of 5000 level core courses that include:**

NURS.5000 Epidemiology (3)	NURS.5140 Health Promotion (3)
HCE.5500 Ethics in Nursing and Health Care (2)	NURS.5160 Principles of Practice Management (3)
NURS.5080 Advanced Pharmacology (3)	NURS.5170 Advanced Pathophysiology (3)
NURS.5110 Advanced Health Assessment & Clinical Decision Making (3)	NURS.5200 General Research Methods (3)
	ORES.5010 Biostatistics (3)

**All students complete 25 credits of 6000 level core courses that include:**

NURS.6100 Health Care Policy and Advanced Practice Nursing (3)	NURS.6150 Clinical Informatics (2)
NURS.6110 Health Care Delivery Systems (3)	NURS.6160 Evidence Based Practice I (3)
NURS.6130 Interprofessional Collaboration (3)	NURS.6170 Evidence Based Practice II (3)
NURS.6140 Leadership in Health Care (3)	NURS.6960 Project Management (2)
	NURS.6961 D.N.P. Clinical and Capstone Project (3)

### Adult-Gerontological Acute Care Nurse Practitioner Concentration (Core courses +)

#### **Required Courses (16 credits)**

Cognate: NURS 5310 Critical Appraisal of Technology: Acute Care (3)	NURS.5270 Advanced Clinical Studies in the Acute Care Setting II (5)
NURS.5260 Advanced Clinical Studies in the Acute Care Setting I (4)	NURS.5810 Nursing Practicum (4)
	NURS.5950 Special Study for Exams (0)

**Total D.N.P. Degree 67 credit hours**

### Adult-Gerontological Primary Care Nurse Practitioner Concentration (Core courses +)

#### **Required Courses (17 credits)**

Cognate: NURS.5750 Care of the Elderly: An Interdisciplinary Approach to Health (3)	NURS.5250 Advanced Clinical Studies II: Adults and Older Adults (5)
NURS.5240 Advanced Clinical Studies I: Adolescents and Adults (4)	NURS.5810 Nursing Practicum (5)
	NURS.5950 Special Study for Exams (0)

**Total D.N.P. Degree 68 credit hours**

### Family Nurse Practitioner Concentration (Core courses +)

#### **Required Courses (19 credits)**

Cognate: NURS.5630 Dynamics of Family Nursing Practice (3)  
NURS.5280 Advanced Clinical Studies I: Adults, and Older Adults (5)  
NURS.5290 Advanced Clinical Studies II: Women

and Children (5)  
NURS.5510 Mental Health Care of the Family in Primary Care (2)  
NURS.5810 Nursing Practicum (4)  
NURS.5950 Special Study for Exams (0)

**Total D.N.P. Degree 70 credit hours**

### Pediatric Nurse Practitioner Concentration (Core courses +)

#### **Required Courses (18 credits)**

Cognate: NURS.5550 Family and Child Development (3)  
NURS.5320 Advanced Clinical Studies I in Nursing of Children (4)  
NURS.5330 Advanced Clinical Studies II in Nursing

of Children (4)  
Elective (2)  
NURS.5810 Nursing Practicum (5)  
NURS.5950 Special Study for Exams (0)

**Total D.N.P. Degree 69 credit hours**

### Family Psychiatric-Mental Health Nurse Practitioner Concentration (Core courses +)

#### **Required Courses (21 credits)**

Cognate: NURS.5400 Ecological Approach to Human Behavior (3)  
Cognate: NURS.5550 Family and Child Development (3)  
NURS.5340 Advanced Clinical Studies I: P-MH Nursing (4)

NURS.5350 Advanced Clinical Studies II: P-MH Nursing (5)  
NURS.5430 Psychopharmacology (2)  
NURS.5810 Nursing Practicum (4)  
NURS.5950 Special Study for Exams (0)

**Total D.N.P. Degree 72 credit hours**

### *Post-Master of Science in Nursing to Doctor of Nursing Practice Option*

#### **Prerequisites**

A Master's degree in Nursing from a nationally accredited program.

Current unencumbered registered professional nurse licensure in state in which clinical experience will be done.

Evidence of high potential for scholarship and leadership in nursing.

Certification as a nurse practitioner (NP) in at least one of the nursing specialties that the School of Nursing offers (i.e. acute care NP, adult NP, gerontological NP, family NP, pediatric NP, or psychiatric/mental health NP).

-OR-

Certification as a Clinical nurse specialist (CNS) with national and/or state recognition will be individually evaluated according to specialty and functional role.

Recognition as an advanced practice registered nurse (APRN) in the state in which clinical experience will be done.

Inferential or Biostatistics or equivalent within the past 5 years.

#### **Required Courses**

NURS.5000 Principles of Epidemiology (3)  
NURS.6100 Health Care Policy and Advanced Practice Nursing (3)  
NURS.6110 Health Care Delivery Systems (3)  
NURS.6130 Interprofessional Collaboration (3)  
NURS.6140 Leadership in Health Care (3)

NURS.6150 Clinical Informatics (2)  
NURS.6160 Evidence Based Practice I (3)  
NURS.6170 Evidence Based Practice II: Methods and Techniques (3)  
NURS.6960 Capstone Project Management (2)  
NURS.6961 D.N.P. Clinical and Capstone Project (3)



# Doctor of Philosophy in Nursing

## Post-Master of Science in Nursing to Doctor of Philosophy in Nursing

### Prerequisites

A Master's degree in nursing from a nationally accredited program.  
Cumulative grade point average of 3.25 on a 4.0 system.  
Satisfactory performance on the Graduate Record Examination (General Test).  
Current, unencumbered registered professional nurse licensure in the state/country of residence/employment or eligibility for licensure in the State of Missouri.  
Evidence of high potential for scholarship and leadership in nursing research and interests that are congruent with the research expertise of the faculty and  
NURS.6805 Applied Univariate Statistics for Nursing Research (or its equivalent).

*International students are welcome to apply. Documented English proficiency is required.*

### Required Courses

NURS.6800 Theory Development in Nursing (3)	Health Research (1)
NURS.6801 Research Issues in Health Promotion, Disease Prevention, and Reduction of Health Disparities (3)	NURS.6813 Nursing Knowledge Development: Philosophical Perspectives (3)
NURS.6802 Measurement of Nursing Variables (3)	NURS.6806 Applied Multivariable and Multivariate Statistics in Nursing Research (3)
NURS.6803 Nursing Issues and Leadership Strategies (2)	Research-methods elective, (3)
NURS.6804 Research Issues in the Care of Acutely and Chronically Ill Populations (3)	Area of concentration enhancing the dissertation research or the nurse faculty role option (9).
NURS.6809 Quantitative Methods in Nursing Research (3)	NURS 6999 Dissertation Research (12)
NURS.6810 Qualitative Methods in Nursing Research (3)	
NURS.6812 Issues of Scientific Integrity in Nursing and	

*Students may pursue a formal minor in lieu of an area of concentration (15).*

## Post-Bachelor of Science in Nursing to Doctor of Philosophy in Nursing

### Prerequisites

A bachelor's degree in nursing from a nationally accredited program.  
Two years of RN clinical experience required.  
Cumulative grade point average of 3.25 on a 4.0 system.  
Satisfactory performance on the Graduate Record Examination (General Test).  
Current, unencumbered registered professional nurse licensure in the state/country of residence/employment or eligibility for licensure in the State of Missouri.  
Evidence of high potential for scholarship and leadership in nursing research and interests that are congruent with the research expertise of the faculty.

### Required Courses

Nursing courses with a total of 18-20 credits at the 500+ level (allow one 497 or other upper division undergraduate level nursing course). Core courses:

HCE 5500 Ethics in Nursing and Health Care (2)	NURS 5200 General Research Methods (3)
NURS 5140 Health Promotion (3)	NURS 6805 Applied Univariate Statistics in Nursing Research (3)
NURS 5170 Advanced Pathophysiology (3)	

Declared specialty in advanced nursing: Specialty cognates: 4-6 credits

NURS.6800 Theory Development in Nursing (3)  
NURS.6801 Research Issues in Health Promotion, Disease Prevention, and Reduction of Health Disparities (3)  
NURS.6802 Measurement of Nursing Variables (3)  
NURS.6803 Nursing Issues and Leadership Strategies (2)  
NURS.6804 Research Issues in the Care of Acutely and Chronically Ill Populations (3)  
NURS.6809 Quantitative Methods in Nursing Research (3)  
NURS.6810 Qualitative Methods in Nursing Research (3)  
NURS.6812 Issues of Scientific Integrity in Nursing and

Health Research (1)  
NURS.6813 Nursing Knowledge Development: Philosophical Perspectives (3)  
NURS.6806 Applied Multivariable and Multivariate Statistics in Nursing Research (3)  
Research-methods elective, (3)  
Area of concentration enhancing the dissertation research or the nurse faculty role option (9).  
NURS.6999 Dissertation Research (12)

*Students may pursue a formal minor in lieu of an area of concentration (15).*

# DOISY COLLEGE OF HEALTH SCIENCES

---

**Mardell Wilson, Ed.D, RD, LDN**

*Dean*

**Gretchen Salsich, Ph.D., PT**

*Interim Associate Dean for Research & Graduate Education*

The Doisy College of Health Sciences incorporates Saint Louis University's long-standing tradition of excellence in health care education with modern innovations in inter-professional education, research and service. The College includes the Departments of Clinical Laboratory Science (1929), Health Informatics and Information Management (1936), Medical Imaging and Radiation Therapeutics (1981), Nutrition and Dietetics (1934), Occupational Science and Occupational Therapy (1992), Physician Assistant Education (1971), Physical Therapy and Athletic Training (PT-1933, AT-2008) and the Program in Health Science (2010). The College offers undergraduate, graduate, and certificate programs in these departments. Many of the programs are nationally ranked and all of them have a reputation for excellence in professional education.

## BIOMEDICAL LABORATORY SCIENCE

---

**Tim R. Randolph, Ph.D., MT (ASCP)**

*Department Chair*

### **Program Faculty**

Donna Duberg, M.A., M.S., MT(ASCP)SM

Uthayashanker Ezekiel, Ph.D., MB(ASCP)<sup>CM</sup>

Elizabeth Gockel-Blessing, Ph.D., MLS(ASCP)<sup>CM</sup>,

Mona Hebert, B.S., MLS(ASCP)<sup>CM</sup>

Rita M. Heurtz, Ph.D., MT(ASCP)

Larry List, M.S., PA(ASCP)CT<sup>CM</sup>, *CCT Program Director*

Tim R. Randolph, Ph.D., MT(ASCP)

Amanda Reed, EdM, MLS(ASCP)<sup>CM</sup> *CMLS Program Director*

The Department of Biomedical Laboratory Science offers three separate baccalaureate degree programs: medical laboratory science (MLS), cytotechnology (CT), and investigative and medical sciences (IMS). Pre-medicine, pre-physician assistant and other pre-professional curricular tracks are options in all three programs. The department also offers four certificate programs in the areas of clinical chemistry, clinical hematology, clinical microbiology and cytotechnology.

## Certificate in Clinical Chemistry/Hematology/Microbiology

### **Program Description**

The Biomedical Laboratory Science (BLS) department offers *post-baccalaureate* certificate (categorical) programs in three laboratory-specific disciplines: clinical chemistry, clinical hematology, and clinical microbiology. Each of the certificate curricula provides students with a strong science background, medically applied courses, and corresponding practicum experiences in the clinical laboratory. Each program consists of two full semesters of didactic coursework at the undergraduate level and a subsequent clinical practicum that varies in length between 5-7 weeks. Clinical experiences are scheduled at the convenience of BLS Department affiliate sites. Thus, the typical program takes between 12-18 months to complete.

Graduates of a certificate program are prepared to conduct and manage a wide spectrum of laboratory testing relative to the laboratory discipline studied. Results of these tests are used to evaluate the health status of individuals, diagnose disease, and monitor treatment efficacy. Progression through the program is based on meeting academic, psychomotor, and professional behavior requirements. Upon successful completion of the program, students are eligible for national certification by the American Society for Clinical Pathology (ASCP) as a categorical medical laboratory professional. In addition to working in diagnostic, research and other laboratories, many graduates continue their education in medical school, graduate school, and other professional programs.

## **General Prerequisites**

Completion of a conferred degree from a regionally accredited college/university is required. Students must complete a combination of 30 credits (45 quarter hours) of biology, chemistry and/or medical sciences for program admission consideration.

Science-based required coursework consists of a minimum of 30 credits and must contain concepts in biology, inorganic chemistry, organic chemistry, and human physiology. Courses in genetics, cellular and molecular biology, and biochemistry are recommended. Other required coursework includes a minimum of 3 credits of mathematics at a level of pre-calculus or above and 3 credits of statistics. Depending on the certificate program chosen, students may be able to take the math or statistics requirement while completing the program.

Applicants wishing to apply for a certificate program must have a college 2.5 minimum cumulative grade point average on a 4.0 scale to include a 2.5 minimum science/math GPA with at least a "C" in all biological sciences, chemistry, and math for admission consideration.

## **Clinical Chemistry Certificate**

### Fall Semester

BLS.4110 Medical Chemistry I  
BLS.4410 Medical Immunology  
MLS.4150 Analytical Chemistry Lab  
PHIL/THEO Elective (2000 level or above)

### Optional Fall Enhancement Courses

BLS.4210 Hematology  
MLS.4250 Hematology Lab

### Spring Semester

MLS.4620 Advanced Topics/Case Correlation-Clinical Chemistry  
BLS.4120 Medical Chemistry II  
BLS.3110 Urinalysis & Body Fluids  
MLS.3150 Urinalysis & Immunology Lab  
MLS.3200 Principles of Clinical Education

MLS.3300 Clinical Laboratory Management  
BLS.4130 Principles & Techniques in Molecular Biology  
IPE.1100 Introduction to Interprofessional Education  
HCE.2010 Healthcare Ethics

### Optional Spring Enhancement Courses

BLS.4310 Immunohematology  
MLS.4350 Immunohematology Lab

### Summer/Fall Semester

MLS.4160 Molecular Biology Lab  
MLS.4700 Clinical Chemistry Routine Practicum  
MLS.4710 Clinical Chemistry Routine Testing  
MLS.4720 Clinical Chemistry Special Testing Practicum  
MLS.4730 Clinical Chemistry Special Testing  
MLS.4770 Clinical Phlebotomy Practicum  
MLS.4820 Clinical Urinalysis Practicum

## **Clinical Hematology Certificate**

### Fall Semester

BLS.4410 Medical Immunology  
BLS.4210 Hematology  
MLS.4250 Hematology Lab  
XXX PHIL/THEO Elective (2000 level or above)

### Optional Fall Enhancement Courses

BLS.4110 Medical Chemistry I  
MLS.4150 Analytical Chemistry Lab

### Spring Semester

BLS.4220 Hemostasis and Thrombosis  
BLS.3110 Urinalysis & Body Fluids  
MLS.3150 Urinalysis & Immunology Lab  
MLS.3200 Principles of Clinical Education  
MLS.3300 Clinical Laboratory Management  
BLS.4130 Principles & Techniques in Molecular Biology

MLS.4630 Advanced Topics & Case Correlations-Clinical Hematology  
IPE.1100 Introduction to Interprofessional Education (IPE)  
HCE.2010 Healthcare Ethics

### Optional Spring Enhancement Courses

BLS.4120 Medical Chemistry II  
BLS.4310 Immunohematology  
MLS.4350 Immunohematology Lab

### Summer/Fall Semester

MLS.4160 Molecular Biology Lab  
MLS.4740 Clinical Hematology Practicum  
MLS.4750 Clinical Hematology  
MLS.4820 Clinical Urinalysis Practicum  
MLS.4760 Clinical Hemostasis Practicum  
MLS.4770 Clinical Phlebotomy Practicum

## Clinical Microbiology Certificate

### Fall Semester

BLS.4410 Medical Immunology  
BLS.4510 Medical Microbiology  
XXX PHIL/THEO Elective (2000 level or above)  
HCE.2010 Healthcare Ethics

### Spring Semester

IPE.1100 Introduction to Interprofessional Education (IPE)  
MLS.4520 Medical Bacteriology  
MLS.4550 Medical Bacteriology Laboratory  
MLS.4640 Advanced Topics & Case Correlations-Clinical Microbiology  
MLS.4530 Medical Mycology  
MLS.4540 Medical Parasitology  
MLS.4560 Medical Mycology Lab  
MLS.4570 Medical Parasitology Lab  
MLS 3200 Principles of Clinical Education  
MLS 3300 Clinical Laboratory Management  
BLS.4130 Principles & Techniques in Molecular Biology

### Summer/Fall Semester

MLS.4160 Molecular Biology Lab  
MLS.4800 Clinical Microbiology Practicum  
MLS.4810 Clinical Microbiology  
MLS.4770 Clinical Phlebotomy Practicum

### **Program Accreditation**

The programs are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) | 5600 N. River Rd., Suite 720, Rosemont, IL 60018-5119 | (847) 939-3597 or (773) 714-8880.

## Certificate in Cytotechnology

### **Program Description**

The Biomedical Laboratory Science (BLS) department offers a one year *post-baccalaureate* certificate program in cytotechnology. The certificate curriculum provides students with a strong science background, medically applied courses, and corresponding practicum experiences in the cytotechnology laboratory. The cytotechnologist is a health care professional whose primary responsibility is the microscopic examination of cell samples for morphologic changes that indicate infectious disease or malignancy. Cytotechnologists detect clues to disease in the delicate patterns of the cytoplasm and nucleus of the cells. The majority of the workload of a cytotechnologist is in the evaluation of PAP smears, fine needle biopsies from lymph nodes and other tissues. Results of cytotechnology analyses assist in the diagnosis of infectious, pre-cancerous and malignant disease. Progression through the certificate program is based on completing academic, psychomotor, and professional behavior requirements. The didactic curriculum culminates in an 8 week practicum in cytotechnology laboratories. Upon successful completion of the certificate program, the graduate is eligible for national certification as a cytotechnologist by the American Society for Clinical Pathology (ASCP). In addition to working in clinical cytotechnology labs many graduates continue their education in medical school, graduate school, and other professional programs.

### **General Prerequisites**

A conferred degree from a regionally accredited college/university is required for program admission consideration. Students must have completed at least 28 credits in the biological sciences and chemistry of which at least 20 credits must be in biology and at least 8 credits in chemistry. In addition, students must have at least 3 credits of mathematics at a level of pre-calculus or above and at least 3 credits in statistics. Applicants wishing to apply for the certificate program must have a 2.5 minimum cumulative grade point average on a 4.0 scale to include a 2.5 minimum science/math GPA with at least a "C" in all biological sciences, chemistry, and math for admission consideration.

### **Required Medical Laboratory Science Courses**

BLS.4130 Principles & Techniques in Molecular Biology  
MLS.4160 Molecular Biology Lab

MLS.330 Clinical Laboratory Management

**Required Cytotechnology Courses**

CYTO.4000 Foundations of Cytology  
CYTO.4100 Female Genital Tract I  
CYTO.4110 Female Genital Tract II  
CYTO.4200 Female Genital Tract III  
CYTO.4300 The Processing Laboratory

CYTO.4400 Respiratory and Oral Cytology  
CYTO.4600 Body Fluid Cytology  
CYTO.4700 Gastrointestinal & Genitourinary Cytology  
CYTO.4800 Fine Needle Aspiration Cytology  
CYTO.4900 Advanced Practices in Cytology Practicum

**Program Accreditation**

The program is accredited by Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the American Society of Cytopathology (ASC), Cytotechnology Programs Review Committee (CPRC) | 400 West 9<sup>th</sup>, Street Suite 201 | Wilmington, DE 19801-1555 | (312) 553-9355

# HEALTH SCIENCES AND INFORMATICS

---

**Amy Harkins, Ph.D.**  
*Interim Department Chair*

## Master of Science in Health Informatics

**Program Faculty**  
Deborah E. Seale, M.A., Ph.D.

**Please note: Saint Louis University is currently not taking applications for admission to the Master of Science in Health Informatics (M.S.H.I.) degree program.**

The Master of Science in Health Informatics (M.S.H.I.) degree is a 30 credit, non-thesis, interdisciplinary degree that prepares individuals to apply fundamentals from information science, computer science, management science, and health science to professional practice in the field of health informatics. The program prepares graduates to take leadership roles in the design, development, adoption and application of information systems in healthcare services delivery, management and planning. The program is designed for individuals with previous experience or education in healthcare, information technology, or administration. Course schedules are tailored to enhance existing knowledge and skills in one disciplinary area with knowledge and skills in the other disciplinary areas.

### **General Prerequisites**

Baccalaureate degree from an accredited institution  
A minimum 3.0 grade point average in the last 60 credits of undergraduate study

### **Required Courses**

MHI.5200 Introduction to Health Informatics  
MHI.5250 Strategic Leadership in Health Informatics  
MHI.5300 Information Security  
MHI.5400 Clinical Decision Support  
MHI.5500 Regulations and Standards  
MHI.5600 Resource Management  
MHI.5900 Applied Project I  
MHI.5910 Applied Project II  
HMP.5930 Healthcare Project Management  
ITM.6300 Database Management Systems

### **Elective Courses**

Elective courses may be substituted if a required course was previously taken at the post-baccalaureate level or if students have documented work experience in the subject area. Approval to substitute a course must be given by the Department Chair.

### **Additional Requirements**

Medical Terminology-completion of a college level course or demonstrated competency in medical terminology.

## Master of Science in Health Sciences

**Program Faculty**  
Elizabeth A. Gockel-Blessing, Ph.D., MLS(ASCP)<sup>CM</sup>  
Jeanne Melton, DHA, M.H.A.  
Elaina Osterbur, Ph.D., M.A.

**Please note: Saint Louis University is currently not taking applications for admission to the Master of Science in Health Sciences (M.S.H.S.) degree program.**

Saint Louis University's Master of Science in Health Sciences (M.S.H.S) program is designed for individuals with an undergraduate degree, preferably in a health sciences discipline. The M.S.H.S. is a 36 credit degree program that will equip graduates with the tools and skills necessary to assume a variety of roles in health care that may involve teaching and administrative responsibilities. It is important to note that this program is not an MCAT preparation course. Rather, the program is in alignment with the rigor expected of students in post-baccalaureate level professional programs. The program has the potential to enhance applications to such programs

by way of exposure to directed research. Students will complete a significant research project potentially suitable for publication in a peer-reviewed journal, professional presentation or scholarly equivalent by program completion. The ultimate goal of the program is to advance students' knowledge of health sciences fields and critical inquiry.

**Required Courses**

- HSCI.5000 Science and Philosophy
- HSCI.5050 Foundations of the US Healthcare System
- HSCI.5250 Qualitative Methods for Health Sciences Research
- HSCI.5280 Research Methods
- HSCI 5290 Research Techniques
- HSCI.5500 Advanced Consortium
- HSCI.5550 Applied Epidemiology
- HSCI.5560 Applied Statistics
- HSCI.5991 Thesis I
- HSCI.5992 Thesis II
- HSCI.5993 Thesis III
- HSCI.5410 Research Application or XXX Elective
- XXX XXX Elective\*

\*Elective courses are determined by students in consultation with their research faculty mentor and are designed to allow students to select 6 credits of course work pertinent to their thesis research topic.



# MEDICAL IMAGING AND RADIATION THERAPEUTICS

---

**William Hubble, M.A., CNMT, RT(R)(N)(CT), FSNMMITS**  
*Department Chair*

## Master of Science in Molecular Imaging and Therapeutics

**Medhat Osman, M.D., Ph.D.**  
*Program Director*

**Debra Hewing, M.B.A., CNMT, RT (N), NCT, CCRP**  
*Program Coordinator*

### Program Faculty

William Hubble, M.A., CNMT, RT (R)(N)(CT), FSNMMITS  
Kathleen Kienstra, M.A.T, RT (R)(T)  
Marcey Kennedy, M.A., ARTMRIT, RT (MR)  
Sherry Bicklein, MHI, RT (R)(T)  
Crystal Botkin, M.P.H., CNMT, PET  
J. Austin Turner, B.S., CNMT, PET, RT (MR)

Saint Louis University's Master of Science (M.S.) in Molecular Imaging and Therapeutics (MIT) program is for students with a background in imaging or radiologic science who want to pursue a new area of study for educational and research purposes.

This degree is a 12-month, three-semester program with a rigorous curriculum and three separate educational pathways. This degree option combines a collaborative research component with individual areas of imaging and therapeutic sciences to make it a unique offering in the radiologic sciences.

Students choose to study one of the following: magnetic resonance imaging, nuclear medicine technology or radiation therapy. The program includes a required Masters Seminar course each semester which will contain an advanced scholarly component designed to enhance the content of other courses in their chosen area of study. The masters seminar courses are completed under the direction of a scholarly mentor and will result in a scholarly project suitable for publication in a peer reviewed journal, professional presentation or scholarly equivalent by program completion.

Students with a baccalaureate degree in a radiologic science discipline can apply to the one year program online at [mit.slu.edu](http://mit.slu.edu). The admissions process is competitive. To be considered in the first round of applicant review, applications should be received by March 1<sup>st</sup> for fall entry. Progression through the program is based on meeting academic and professional behavior requirements.

### General Prerequisites

Bachelor of Science degree in a radiologic science discipline (MRI, NMT, RT, etc.). It is preferred that applicants had followed a pre-physician assistant or pre-medicine track and maintained a grade point average of 3.0 or above on a 4.0 scale. Course prerequisites including biology, chemistry, physics, human anatomy and physiology, ethics, and statistics (must be within the last 5 years) with a B or above in all discipline specific courses is desired. Applicants must also be registered in their discipline of radiology or be registered within 6 months of completing their entry level program to proceed in the program. A GRE is required, but will be waived for students who have a baccalaureate degree from Saint Louis University.

### Required Courses

#### Magnetic Resonance Imaging Concentration

MIT.5110 MRI Physical Principles  
MIT.5120 MRI Cross Sectional Anatomy  
MIT.5130 MRI Instrumentation / QA  
MIT.5140 MRI Clinical / Image Production  
MIT.5150 MRI Patient Care / Safety  
MIT.6000 Masters Seminar I

ORES.5300 Foundation Outcomes Research  
MIT.5210 Clinical MRI Practicum I  
MIT.5220 Advanced / Emerging Technologies  
MIT.6100 Masters Seminar II  
MIT.5890 Clinical MRI Practicum II  
MIT.6200 Masters Seminar III

## *Nuclear Medicine Technology Concentration*

MIT.5510 NMT Radiation Physics and Radiation Protection  
MIT.5520 NMT Radiochemistry / Radiopharmacy  
MIT.5530 NMT Nuclear Medicine Instrumentation  
MIT.5540 NMT Clinical Nuclear Medicine  
MIT.5550 NMT Nuclear Medicine Information Systems  
MIT.6000 Masters Seminar I  
ORES.5300 Foundation Outcomes Research

MIT.5610 NMT Imaging Practicum  
MIT.5620 NMT Radiopharmacy Clinical Practicum  
MIT.5630 NMT Emerging Technologies  
MIT.6100 Masters Seminar II  
MIT.5880 NMT Clinical Practicum  
MIT.6200 Masters Seminar III

## *Radiation Therapy Concentration*

MIT.5310 XRT Radiation Physics  
MIT.5320 XRT Radiation Therapy Practice I  
MIT.5330 XRT Treatment Technique  
MIT.5340 XRT Treatment Planning  
MIT.5360 XRT Emerging Technologies  
MIT.5400 XRT Radiation Oncology Patient Care and QM  
MIT.5410 XRT Radiobiology and Radiation Protection  
MIT.6000 Masters Seminar I  
ORES.530 Foundation Outcomes Research  
MIT.5350 XRT Clinical Practicum I  
MIT.5420 XRT Radiation Therapy Practice II  
MIT.5440 XRT Clinical Dosimetry  
MIT.6100 Masters Seminar II  
MIT.5450 XRT Clinical Practicum II  
MIT.6200 Masters Seminar II

# NUTRITION AND DIETETICS

---

**Mildred Mattfeldt-Beman, Ph.D.**

*Department Chair*

*Coordinator of Medical Dietetics Emphasis*

**Steven Jenkins, M.A., Chef,**

*Director of Food Innovation and Entrepreneurship Program*

*Coordinator of Culinary Entrepreneurship Emphasis*

**Edward Weiss, Ph.D.,**

*Coordinator of Nutrition and Physical Performance Emphasis*

**Lori Jones, M.S., M.P.H.,**

*Coordinator of dual M.S./M.P.H. Program*

**Rabia Rahman, M.S.**

*Dietetic Internship Director*

**Program Faculty**

Dan Brewer, M.S., Chef

Katie Eliot, Ph.D.

Kathy Kress, M.S.

Lauren Landfried, M.S.

Whitney Linsenmeyer, M.S., Chef

Amy Moore, Ph.D.

Melissa Ramel, M.S.

Marjorie Sawicki, M.S.

Mardell A. Wilson, Ed.D., RD, LDN

The Department of Nutrition and Dietetics offers a dietetic internship program leading to the Master of Science in Nutrition and Dietetics degree. All interns register as graduate students, and thirty credits of Post-Baccalaureate Courses are incorporated into the internship. Upon completion of the internship, students will receive their Master's degree and are eligible to sit for the national registration exam.

Medical dietetics, culinary entrepreneurship, food innovation and entrepreneurship, and nutrition and physical performance are available as areas of emphasis in the Master's program. Students in both the culinary and food innovation and entrepreneurship emphasis complete a one semester, 20 hour per week practicum arranged to provide experience in sustainable food systems, culinary and entrepreneurship, as well as research. Students in the nutrition and physical performance emphasis complete a one semester, 20 hour per week practicum arranged to provide experience in exercise/nutrition testing and measurement, as well as research.

The department, in conjunction with the College for Public Health and Social Justice, also offers a dual M.S. in Nutrition and Dietetics/M.P.H. degree program. Students in the dual Master of Science in nutrition and dietetics/ M.P.H. program take the core courses from each of the two programs to provide a solid base in both fields. The total credit requirement is 54. Students will complete a one-semester, 20-hour per week practicum in an area combining dietetics and public health designed to strengthen their area of primary interest as well as research. Graduates are prepared to conduct health promotion programs, provide nutrition care and counseling, formulate specific dietary plans, participate in food systems management, and may engage in biochemical and nutrition research in universities and in industry.

## Dietetic Internship

**General Prerequisites**

Bachelor of Science degree in dietetics or related area of study, with certification of completion of the didactic program requirements (DPD) of the Academy of Nutrition and Dietetics, and Inferential Statistics or equivalent. Additional Prerequisite for Nutrition & Physical Performance Internship: Human Anatomy. Additional Prerequisite for Culinary Entrepreneurship Internship: minimum of an Associate Degree in Culinary Arts or the equivalent coursework in culinary arts.

**Required Courses**

DIET.5100 Human Nutrition in Physiology and Metabolism I

DIET.5130 Human Nutrition in Physiology and Metabolism II

DIET.5350 Clinical Systems Management

DIET.XXX Emphasis Specific Elective(s)

DIET.5870 Seminar in Dietetics Research  
DIET.5880 Research in Nutrition and Dietetics I  
DIET.5890 Research in Nutrition and Dietetics II

DIET.5910 Dietetic Internship (three semesters)  
Other required courses based on concentration.

## Master of Science in Nutrition and Dietetics

### General Prerequisites

Bachelor of Science degree in dietetics or related area of study, biochemistry, basic nutrition, Nutrition in the Life Cycle, advanced nutrition, medical nutrition therapy I and II, and Inferential Statistics or equivalent.

### Medical Dietetics Concentration

#### Required Courses

DIET.5100 Human Nutrition in Physiology and Metabolism I  
DIET.5130 Human Nutrition in Physiology and Metabolism II  
DIET.5350 Clinical Systems Management  
DIET.5500 Nutrition Counseling

ORES.5120 **or** Advanced Statistics course  
DIET.5870 Seminar in Dietetics Research  
DIET.5880 Research in Nutrition and Dietetics I  
DIET.5890 Research in Nutrition and Dietetics II

#### Twelve credits selected from

DIET.5030 Sustainable Food Systems  
DIET.5060 Maternal & Child Nutrition & Health  
DIET.5070 Culinary and Medicinal Herbs  
DIET.5210 Pediatric Nutrition

DIET.5220 Gerontological Nutrition  
DIET.5300 Community Nutrition  
DIET.5400 Nutrition Education  
DIET.5550 Nutrition and Physical Performance

### Culinary Entrepreneurship Concentration

#### Additional Prerequisites

Minimum of an Associate Degree in Culinary Arts or the equivalent coursework in culinary arts; human physiology; and foundations in community nutrition or equivalent.

#### Required Courses

DIET.5030 Sustainable Food Systems  
DIET.5100 Human Nutrition in Physiology and Metabolism I  
DIET.5130 Human Nutrition in Physiology and Metabolism II  
DIET.5870 Seminar in Dietetics Research  
DIET.5880 Research in Nutrition and Dietetics I

DIET.5890 Research in Nutrition and Dietetics II  
DIET.5900 Culinary Practicum  
MGT.6200 New Venture Initiation  
MGT.6210 Advanced Business Planning for New Ventures  
ACCT.5010 **or** MKT.6000 **or** Approved course

#### Six credits selected from

DIET.5750 Gastronomy  
DIET.5850 Mediterranean Diet / Lifestyle  
DIET.5XXX Creating Sustainable American Cuisine  
DIET.5050 Food Processing: Farm to Institution  
DIET.5350 Clinical Systems Management

### Food Innovation and Entrepreneurship Concentration

#### Additional Prerequisites

Minimum of an Associate Degree in Culinary Arts or the equivalent coursework in culinary arts.

#### Required Courses

DIET.5010 Survey of Nutrition for AHP  
DIET.5030 Sustainable Food Systems  
DIET.5050 Food Processing: Farm to Institution  
DIET.5750 Gastronomy  
DIET.5900 Culinary Practicum  
MGT.6200 New Venture Initiation  
MGT.6210 Advanced Business Planning for New Ventures  
ACCT.5010 **or** MKT.6000 **or** Approved course

DIET.5870 Seminar in Dietetics Research  
DIET.5880 Research in Nutrition and Dietetics I  
DIET.5890 Research in Nutrition and Dietetics II

**Three credits selected from**

DIET.5850 Mediterranean Diet / Lifestyle  
 DIET.5XXX Creating Sustainable American Cuisine

***Nutrition and Physical Performance Concentration*****Additional Prerequisites**

Human anatomy; human physiology; and foundations in community nutrition or equivalent.

**Required Courses**

DIET.5100 Human Nutrition in Physiology and Metabolism I	DIET.5810 NPP Practicum
DIET.5130 Human Nutrition in Physiology and Metabolism II	DIET.5690 Bioenergetics of Exercise
DIET.5500 Nutrition Counseling	DIET.5870 Seminar in Dietetics Research
DIET.5550 Nutrition and Physical Performance	DIET.5880 Research in Nutrition and Dietetics I
DIET.5700 Exercise Testing and Prescription	DIET.5890 Research in Nutrition and Dietetics II
DIET.5800 Cardiovascular & Metabolic Aspects of Exercise Physiology	

**Three credits selected from**

DIET.5030 Sustainable Food Systems  
 DIET.5220 Gerontological Nutrition  
 DIET.5350 Clinical Systems Management  
 DIET.5300 Community Nutrition  
 DIET.5400 Nutrition Education

## Master of Science in Nutrition and Dietetics & Master of Public Health Dual Degree Program

**Additional Prerequisites**

Foundations in Community Nutrition or equivalent; and Nutrition Counseling.

**Required Courses**

DIET.5100 Human Nutrition in Physiology and Metabolism I	DIET.5870 Seminar in Dietetics Research
DIET.5130 Human Nutrition in Physiology and Metabolism II	DIET.5880 Research in Nutrition and Dietetics I
DIET.5300 Community Nutrition	DIET.5890 Research in Nutrition and Dietetics II
DIET.5400 Nutrition Education	
DIET.5450 Public Health Nutrition Practicum	

**Three credits selected from**

DIET.5030 Sustainable Food Systems  
 DIET.5070 Culinary and Medicinal Herbs  
 DIET.5210 Pediatric Nutrition  
 DIET.5220 Gerontological Nutrition  
 DIET.5350 Clinical Systems Management  
 DIET.5550 Nutrition and Physical Performance

**Additional Requirements**

Core courses for M.P.H. program; course list is available in the course catalog

**Program Accreditation**

The Dietetic Internship program is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) for the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, IL, 60606-6995, (1-800-877-1600 x5400) .

# OCCUPATIONAL SCIENCE AND OCCUPATIONAL THERAPY

---

**Debra A. Rybski, Ph.D., M.S.HCA, OTR/L**  
*Department Chair*

## **Program Faculty**

S. Omar Ahmad, Ph.D., OTD/L  
Rebecca M. Aldrich, Ph.D., OTR/L  
Karen F. Barney, Ph.D., OTR/L, FAOTA, Emerita  
Jeanne R. Eichler, M.O.T., OTR/L, MT  
Lenin C. Grajo, Ph.D., Ed.M., OTR/L, OTRP  
Julia Henderson-Kalb, M.S., OTR/L  
Lisa Jaegers, Ph.D., OTR/L  
S. Margaret Maloney, Ph.D., OTR/L  
Cynthia S. Matlock, Ph.D., M.B.A., OTR/L  
Sherry L. Muir, M.O.T., OTR/L, ABD  
Kathleen L. Serfas, OTD, OTR/L  
Sarah Walsh, M.O.T., OTR/L

This program offers three degrees: a Bachelor of Science in Occupational Science (B.S.O.S.), a Master of Occupational Therapy (M.O.T.) degree, and a Post-Professional Doctor of Occupational Therapy (OTD). Occupational science is the study of the forms and meaning of human activity, and how everyday activities influence individuals' sense of identity and roles within families and communities. Occupational therapy is a health profession that employs everyday activities in the service of helping people to live healthy and satisfying lives. Services are provided to individuals who experience risk, illness, disabling conditions, or life circumstances that prevent full participation in the roles and activities that they need and value.

Students have guaranteed entry into the post-baccalaureate level Master's program if they have successfully completed all the requirements of the undergraduate program. The combined B.S.O.S. and M.O.T. program is five years of study.

Qualified post-baccalaureate students with degrees in other fields may apply to the M.O.T. program for an additional two years of study (including one summer semester).

The Post-Professional Doctor of Occupational Therapy is for Bachelor's or Master's educated OT practitioners designed to prepare them for roles as academicians, advanced practitioners, policy-makers, program evaluators and advocates of the profession.

## **Non-Academic Requirements**

Fieldwork experiences in community and clinical practice settings are required in occupational therapy education. Regulations require all students to complete a criminal background check and a drug test at least once during the Program, either or both of these may be repeated as agency requirements demand. Positive results from the criminal background check or drug tests may result in ineligibility to graduate from the program. A felony conviction will affect a graduate's eligibility for professional certification and licensure.

## Master of Occupational Therapy

### **Required Courses**

ANAT.4000 Gross Anatomy  
OCS.4620 Clinical Conditions & Phenomenology  
MOT.5000 Fundamentals of OS for Post-Bac. Students  
MOT.5020 Professional Development I  
MOT.5030 Professional Development II  
MOT.5040 Professional Development III  
MOT.5150 Kinesiology  
MOT.5170 Neuroscience in Occupational Therapy  
MOT.5200 Clinical Conditions & Phenomenology  
MOT.5250 OT Policy & Administration  
MOT.5260 Problem Based Learning  
MOT.5300 Fundamentals of Occupational Therapy Practice

MOT.5350 Theoretical Foundations of Occupational Therapy  
MOT.5400 Occupational Therapy for Adults with Physical Dysfunction  
MOT.5410 Occupational Therapy in Behavioral Health I  
MOT.5450 Occupational Performance & Assessment of Children & Youth  
MOT.5460 Occupational Therapy with Aging Adults  
MOT.5480 OT & Upper Extremity  
MOT.5490 Applied Research I  
MOT.5500 Applied Research II  
MOT.5550 Occupational Therapy in Neurological Rehabilitation

MOT.5560 Occupational Therapy in Behavioral Health II  
MOT.5600 Occupational Therapy with Children & Youth  
MOT.5650 Applied Research III

MOT.5660 Applied Research IV  
MOT.5700 Level II Fieldwork (12 weeks)  
MOT.5750 Level II Fieldwork (12 weeks)

### **Graduation**

Upon completion of all requirements, students receive the Master's in occupational therapy (M.O.T.) degree and are eligible to sit for the national certification examination administered by the National Board for Certification in Occupational Therapy (NBCOT). In addition to passing the national exam, all states require licensure in order to practice.

NOTE: All Level II Fieldwork must be complete within 18 months following completion of academic preparation.

## **Post-Professional Doctor of Occupational Therapy**

### **General Prerequisites**

Bachelor's or Master's degree in Occupational Therapy, 1 year of clinical experience as an Occupational Therapist, successful completion of the National Board Certification in Occupational Therapy (NBCOT) examination or equivalent, a GPA of 3.2 or higher.

All students must have taken and passed with a "B" an upper-level composition course within last 5 years or provide writing sample of graduate writing ability.

Students with Bachelor's degree must take: upper level composition course, OCTH 5010: Foundations of OT (summer), OCTH 5011: Fundamentals of Occupational Science (summer), one 4000 or 5000 level elective that prepares them for intended concentration in OTD program.

Students with Master's must provide evidence of comparable transfer coursework taken within previous 5 years for OCTH 5010 and OCTH 5011, pass a competency exam for the two courses with a 75%, or take the courses in the summer through the department.

### **Required Courses**

OCTH.5010 Foundations of OT: Theories, Domains & Processes  
OCTH.5011 Fundamentals of Occupational Science  
OCTH.6100 Occupational Science in Practice and Society  
OCTH.6200 Professional Leadership and Public Policy  
OCTH.6300 Conceptualizations and Applications of Occupational Injustice  
ORES.5010 Introduction to Biostatistics for Health Outcomes Research  
ORES.5300 Foundations of Outcome Research  
EDI.5600 Models of Teaching  
OCTH.6400 OT Practicum  
OCTH.6500 OT Practicum  
Six credit-hours of advisor-approved electives

### **Program Accreditation**

The Master of Occupational Therapy program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA) located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220; ACOTE's telephone number is (301) 652-AOTA

# PHYSICIAN ASSISTANT EDUCATION

---

**Anne C. Hart Garanzini, M.Ed., PA-C**

*Department Chair*

**Carol R. Danter, M.P.A.S., PA-C**

*PA Program Director*

**Genevieve A. DelRosario, M.H.S., PA-C,**

*Director of Clinical Education*

**Michael J. Cox, MD., FACP, FCCP,**

*Medical Director*

## **Program Faculty**

A. Caroline Chang, M.M.S., PA-C

Chezna W. Warner, M.S.W., MHS, PA-C

Jennifer Storm, M.S., PA-C

Christine M. Werner, Ph.D., RD, PA-C

Mary White, ascj, M.S., PA-C

The Department of Physician Assistant Education (PA) offers a 27 month, full-time, year round, competency-based program with a rigorous didactic and clinical curriculum leading to a Master of Medical Science (M.M.S.) degree. During the didactic phase (4 semesters), students study the basic medical sciences of anatomy and physiology, as well as applied behavioral sciences and the foundations of clinical medicine. A significant portion of the curriculum is presented through organ system- based courses/modules which support the integration of complex disease processes with diagnosis and treatment. The clinical phase (3 semesters) consists of rotations in Internal Medicine, General Surgery, Pediatrics, Emergency Medicine, Women's Health, Family Medicine, Psychiatry/Behavioral Medicine and two rotations in student choice clinical specialties (Clinical Elective and EBM Clerkship). While working clinically with the supervision of a physician or other preceptor, students actively participate in the care of patients of all ages and backgrounds. Graduates of this program are eligible to sit for the Physician Assistant National Certifying Exam (PANCE). Certified PAs work with a supervising physician, are licensed by state and they diagnose and treat all types of patients. PAs work in many different healthcare settings and are employed in primary care and in essentially every medical and surgical specialty and subspecialty in which physicians are employed.

## Master of Medical Science

### **General Prerequisites**

Baccalaureate degree earned by May prior to matriculation. Minimum science grade point average of 3.0 and minimum overall grade point average of 3.0. Minimum 500 hours of direct patient care experience at time of application - credentialed paid work experience providing direct patient care is more competitive. Successful completion of the following prerequisite courses or equivalents: medical terminology; statistics; college chemistry I & II; organic chemistry I & II; microbiology; vertebrate or human anatomy; vertebrate or human physiology; genetics. Admissions considerations also include the number of science prerequisites completed by the time of application, the number of science prerequisites completed at a 4-year university, the date of the applicant's undergraduate degree conferral, and more. The GRE is recommended.

### **Required Courses**

BLS. 4900 Clinical Laboratory Medicine

ANAT 41004000 Human Gross Anatomy

PAED 5010 Professional and Psychosocial Issues of PA Practice

PAED 5040 Physiology

PAED 5070 Principles of the Medical Interview

PAED 5110 Introduction to the Systems Approach & Integument

PAED.5120 Principles and Practice of Hematology

PAED.5130 Principles & Practice of Otorhinolaryngology & Ophthalmology

PAED.5150 Clinical Pharmacology I

PAED.5200 Clinical Pharmacology II

PAED.5210 Principles and Practice of Pulmonology

PAED.5220 Principles and Practice of Cardiovascular Medicine

PAED.5230 Principles and Practice of Gastroenterology & Nutrition

PAED.5240 Principles and Practice of Nephrology & Genitourinary Medicine

PAED.5250 Principles and Practice of Endocrinology

PAED.5300 Evidence-Based Medicine

PAED.5310 Principles and Practice of Orthopedics & Rheumatology



PAED.5320 Principles and Practice of Neurology  
PAED.5330 Essentials of Surgery  
PAED.5340 Essentials of Emergency Medicine  
PAED.5360 Essentials of Pediatrics  
PAED.5370 Essentials of Behavioral Medicine  
PAED.5380 Essentials of Obstetrics & Gynecology  
PAED.5400 Internal Medicine  
PAED.5420 Family Medicine

PAED.5510 General Surgery  
PAED.5600 Pediatrics  
PAED.5700 Psychiatry and Behavioral Medicine  
PAED.5750 Women's Health  
PAED.5800 Emergency Medicine  
PAED.5860 EBM Clerkship  
PAED.5930 Clinical Elective  
PAED.6000 Senior Seminar

### **Additional Requirements**

In addition to meeting all the prerequisites outlined above, graduates of an international college/university are also required to successfully complete at least 9 credits (3 classes) of social-behavioral science courses (e.g., psychology, sociology) and 12 credits (4 classes) of upper division science courses at an accredited, four-year U.S. college or university (online coursework is not acceptable). International medical graduates must have at least 500 hours of healthcare experience and at least 250 of those hours must be earned in the U.S. by the time of application. Applicants whose native language is other than English are required to take the TOEFL® Internet-based Test by November 1. A combined minimum score of **100** is required, with minimum component scores of 22-Reading, 22-Listening, 26-Speaking and 24-Writing.

### **Program Accreditation**

The Accreditation Review Commission on Education for the Physician Assistant has granted Accreditation-Continued to the Physician Assistant Program sponsored by Saint Louis University. Accreditation-Continued is an accreditation status granted when a currently accredited program is in compliance with the ARC-PA Standards.

Accreditation remains in effect until the program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the Standards. The approximate date for the next validation review of the program by the ARC-PA will be March 2020. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy.

# PHYSICAL THERAPY AND ATHLETIC TRAINING

---

**Tricia Austin, PT, Ph.D., ATC**  
*Interim Department Chair*

The Department of Physical Therapy & Athletic Training includes two separate professional programs, the program in physical therapy and the athletic training program.

## Doctor of Physical Therapy

**Randy Richter, PT, Ph.D.**  
*Interim Program Director*

**Chris Sebelski, PT, D.P.T. Ph.D., OCS, CSCS**  
*Interim Assistant Program Director*

**Carol Beckel, PT, Ph.D.,**  
*Director of Clinical Education*

### Program Faculty

Jason Bennett, PT, Ph.D., SCS, ATC  
Mary Jo Davenport, PT, Ph.D.  
Jill FitzGerald, PT, D.P.T., GCS, CSCS  
Alicia Flach, PT, D.P.T., NCS  
Ethel Frese, PT, D.P.T., CCS  
Dave Gutekunst, Ph.D.  
Kelly Hawthorne, PT, D.P.T., GCS  
Ann Marcolina Hayes, PT, D.P.T., OCS  
Ginge Kettenbach, PT, Ph.D.  
Kim Levenhagen, PT, D.P.T., WCC  
Gretchen Salsich, PT, Ph.D.  
Sara Scholtes, PT, D.P.T., Ph.D.  
Barbara Yemm, PT, D.P.T., OCS

The program in physical therapy is a freshman entry six-year curriculum leading to a Bachelor of Science in Exercise Science (B.S.E.S.) degree after the fourth year and a Doctor of Physical Therapy (D.P.T.) degree after the sixth year. *Students with a baccalaureate degree can apply to the three-year D.P.T. program but transfer admission is on a space available basis and is historically very limited.* The admissions process in physical therapy is competitive and post-baccalaureate students must apply through the Physical Therapy Centralized Application Service ([www.ptcas.org](http://www.ptcas.org)). Progression through the program is based on meeting academic and professional behavior requirements.

### General Prerequisites

Bachelor of science degree with course prerequisites including biology, chemistry, physics, human anatomy and physiology, ethics, statistics, general psychology, abnormal psychology, and exercise physiology. Refer to the program in physical therapy website for further information.

### Required Courses

ANAT.4000 Gross Anatomy	DPT.4241 Clinical Research & Design
ANAT.4300 Neuroscience	DPT.4247 Human Growth & Development
DPT.4021 Kinesiology I	DPT.4276 Documentation
DPT.4122 Kinesiology II	DPT.4290 Skills Practicum
DPT.4125 Therapeutic Modalities	DPT.5115 Professional Development I
DPT.4127 Basic Exam	DPT.5123 Clinical Gait
DPT.4131 Survey of Disease	DPT.5132 Pharmacology
DPT.4146 Developmental Biology	DPT.5133 Lab Studies & Imaging
DPT.4226 Therapeutic Exercise	DPT.5134 Multisystem Management
DPT.4228 Basic Procedures	DPT.5135 Cardiopulmonary Conditions

DPT.5137 Aspects of Nutrition in PT  
 DPT.5142 Evidence Based Practice  
 DPT.5149 Applied Neuroscience  
 DPT.5162 Musculoskeletal Conditions II  
 DPT.5218 Components of Effective Communication & Teaching  
 DPT.5250 Neuropathology  
 DPT.5251 Neurological Conditions I  
 DPT.5261 Musculoskeletal Conditions I  
 DPT.5263 Musculoskeletal Conditions III  
 DPT.5271 Patient Management I  
 DPT.5291 Clinical Rotation IA (5 wks)  
 DPT.6072 Patient Management II  
 DPT.6077 Departmental Administration

DPT.6091 Clinical Rotation IB (5 wks)  
 DPT.6092 Clinical Rotation IIA (5 wks)  
 DPT.6116 Professional Development II  
 DPT.6124 Biomechanical Interventions  
 DPT.6138 Concepts of Wellness  
 DPT.6152 Neurological Conditions II  
 DPT.6164 Musculoskeletal Conditions IV  
 DPT.6173 Patient Management III  
 DPT.6178 Applied Administration & Management  
 DPT.6192 Clinical Rotation IIB (5 wks)  
 DPT.6217 Professional Development III  
 DPT.6243 Applied Evidence Based Practice  
 DPT.6293 Clinical Internship A (10 weeks)  
 DPT.6294 Clinical Internship B (10 weeks)

### Program Accreditation

The program in physical therapy at Saint Louis University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, Virginia 22314; telephone: (703) 706-3245; email: accreditation@apta.org ; website: [www.capteonline.org](http://www.capteonline.org)

## Master of Athletic Training

**Anthony Breitbach, Ph.D., ATC**

*Program Director*

**Timothy Howell, EdD, ATC, CSCS**

*Clinical Education Coordinator*

**L. Tyler Wadsworth, M.D.**

*Medical Director*

### Program Faculty

Mike Markee, PT, DPT, OCS, COMT, ATC

Katherine Newsham, Ph.D., ATC

The Athletic Training (AT) Program is a freshman entry five-year curriculum leading to a B.S.E.S. degree after the fourth year and a Master of Athletic Training (M.A.T.) degree after the fifth year. *Students with a baccalaureate degree can apply to the two year professional program but transfer admission is on a space available basis and is limited.* Application information is available on the athletic training program website. Progression through the program is based on meeting academic and professional behavior requirements.

### General Prerequisites

Bachelor of science degree with course prerequisites including biology, chemistry, physics, human anatomy and physiology, exercise physiology, ethics, general psychology, pre-calculus, statistics and medical terminology.

### Required Courses

ANAT.4000 Gross Anatomy

MAT.4125 Therapeutic Modalities

MAT.5010 Principles of Athletic Training

MAT.5100 Athletic Training Kinesiology

MAT.5133 Lab Studies and Imaging

MAT.5160 Bioenergetics of Athletic Performance

MAT.5240 Musculoskeletal Assessment & Mgmt I

MAT.5250 Musculoskeletal Assessment & Mgmt II

MAT.5500 Rehabilitation in Athletic Training I

MAT.5550 Rehabilitation in Athletic Training II

MAT.5600 Athletic Training Administration

MAT.5620 Psychology of Sport and Injury

MAT.5650 Research in Athletic Training

MAT.5700 AT Clinical Practicum I

MAT.5750 AT Clinical Practicum II

MAT.5800 Medical Conditions in Athletic Training

MAT.5900 AT Field Experience

MAT.6160 Enhancing Athletic Performance

MAT.6700 AT Clinical Practicum III

MAT.6750 AT Clinical Practicum IV

MAT.6800 Seminar in Athletic Training

MAT.6960 AT Capstone Project

**Program Accreditation**

The program is accredited through the 2024-25 academic year by the Commission on Accreditation of Athletic Training Education (CAATE) as a Graduate Professional Program. The Master of Athletic Training program is one of more than 350 CAATE accredited programs nationally and one of approximately 35 accredited Graduate Professional programs in the country. More information is available from the CAATE at (844) 462-2283, <https://www.caate.net> or 6836 Austin Center Blvd., Suite 250, Austin, TX 78731-3193.

# COLLEGE FOR PUBLIC HEALTH AND SOCIAL JUSTICE

---

**Donald M. Linhorst, Ph.D., MS.W., ACSW**

*Interim Dean*

**Collins O. Airhihenbuwa, Ph.D., M.P.H.**

*Dean (as of January 1, 2016)*

**Darcell Scharff, Ph.D.**

*Associate Dean*

The College for Public Health and Social Justice (C.P.H.S.J.), founded as the School of Public Health in 1991, is accredited by the Council on Education for Public Health (C.E.P.H.). The College provides undergraduate, Master's and Doctoral education. The areas of study include applied behavioral analysis, criminology and criminal justice, emergency management, health management and administration, public health, and social work. The degree programs prepare students for private, voluntary, and public-sector careers in practice and research. The C.P.H.S.J. is committed to translating the latest evidence into actions, programs and solutions to improve population health and well-being. With its strong Jesuit tradition of caring and advocating for the underserved and marginalized, the C.P.H.S.J. is committed to eliminating health disparities and increasing health and social equity.

The School of Social Work at Saint Louis University began in 1930 and has a long-standing reputation of preparing professionals who excel in practice and have strong social justice commitments. The School offers three post-baccalaureate degrees: the Master of Social Work (M.S.W.), the Master of Science in Applied Behavior Analysis (M.S.ABA) and the Master of Science in Criminology and Professional Practice (M.S.CPP).

The C.P.H.S.J. is composed of five departments and one school that administer our academic programs and conduct state-of-the-art research:

**Elizabeth Baker, Ph.D., M.P.H.**

*Chair, Behavioral Science and Health Education*

**John Fu, Ph.D., M.D.**

*Chair, Biostatistics*

**Zhengmin Qian, Ph.D., M.D.**

*Chair, Epidemiology*

**Alexander Garza, M.D., M.P.H.**

*Interim Chair, Environmental and Occupational Health*

**Keith Elder, Ph.D., M.P.H.**

*Chair, Health Management and Policy*

**Donald M. Linhorst, Ph.D., MS.W., ACSW**

*Director, School of Social Work*

As required by C.E.P.H., all of the academic programs at the C.P.H.S.J. are constructed based on competency sets. The College offers Master's degrees in health administration (M.H.A.), public health (M.P.H.), and social work (M.S.W.); Master of Science degrees in applied behavior analysis (M.S.ABA), biosecurity and disaster preparedness (M.S.BSDP), criminology and professional practice (M.S.CPP), and public health (M.S.P.H.); and Doctoral programs (Ph.D.) in public health studies and social work. The M.P.H. program is more than 35 years old, while the M.H.A. is more than 65 years old and ranked in the top ten in the country. The M.S.W. has been offered at Saint Louis University since the 1930s and is ranked in the top 25% of programs nationally. C.P.H.S.J. offers the only ABA program (established in 2011) within a School of Social Work.

A number of joint concentration degree programs in the M.P.H. (e.g., biostatistics and epidemiology), as well as three M.S.W. concentrations (applied behavior analysis, clinical, and community and organization) are offered by the C.P.H.S.J. In addition, dual degree programs are available with the School of Social Work (M.P.H./M.S.W.), the School of Law (M.P.H./J.D., M.H.A./J.D., M.S.W./J.D.), the School of Medicine (M.P.H./M.D.), the Doisy College of Health Sciences Department of Nutrition and Dietetics (M.P.H./M.S.), the John Cook School of Business (M.H.A./M.B.A.), and the College of Arts and Sciences Department of Political Science (M.S.W./M.P.A.) and the Clinical Psychology Doctoral Program (M.S.P.H./Ph.D.). The College also collaborates with the Aquinas Institute of Theology to offer a dual Master of Social Work and Master of Arts in Pastoral Studies (M.S.W./M.A.P.S.) and with Concordia Seminary to offer a dual Master of Social Work and Master of Arts in Deaconess Studies (M.S.W./M.Deac.), dual Master of Social Work and Master of Divinity (M.S.W./M.Div.), and dual Master of Social Work and Master of Arts in Theology (M.S.W./M.A.). The College also offers two graduate certificate programs: Post-Baccalaureate Certificate in Biosecurity and Disaster Preparedness and Post-Master's Certificate in Applied Behavioral Analysis. Two non-traditional programs provide educational opportunities for working professionals: 1) Master of Science (M.S.) degree in Biosecurity and Disaster Preparedness offered in a

distance learning format; and 2) Executive Master of Health Administration (EM.H.A.) offered in a hybrid format.

The C.P.H.S.J. offers a number of accelerated degree program options (B.S.P.H./M.P.H., B.S.H.M./M.H.A., B.S.S.W./M.S.W.) and collaborates with Augustana College to offer a B.A./M.P.H., with Fontbonne University to offer a B.S.S.W./M.S.W., and with Maryville University to offer a B.A./M.S.W.

The Ph.D. in Public Health Studies allows students to choose from several different public health concentrations: behavioral science and health education; biosecurity and disaster preparedness; biostatistics; environmental and occupational health; epidemiology; health management and policy; and health services research. The Ph.D. in Social Work is designed to offer rigorous methodological and interdisciplinary training for social workers and related professionals.

The C.P.H.S.J. offers Bachelor of Science (B.S.) degrees in biostatistics, emergency management, health management, public health, and social work; and a Bachelor of Arts (B.A.) degree in Criminology and Criminal Justice.

## Doctor of Philosophy in Public Health Studies

**Mario Schootman, Ph.D.**

*Doctoral Program Co-Director*

**Enbal Shacham, Ph.D., Med; MPE**

*Doctoral Program Co-Director*

The Doctoral program in public health studies at Saint Louis University College for Public Health and Social Justice allows students to choose from several public health concentrations: behavioral science and health education; biosecurity and disaster preparedness; biostatistics: environmental and occupational health; epidemiology; health management and policy; and health services research.

The specific knowledge and skills provided within the Doctoral program are based on a set of core and concentration-specific competencies. These competencies reflect the expectations of accrediting bodies as well as the faculty. There are three components to the Doctoral studies curriculum.

The first is the core Doctoral curriculum, shared across all concentrations and required of all students, comprised of a total of 15 credits:

BST.5100 Introduction to General Linear Modeling

PHS.6010 Design and Analysis in Public Health

PHS.6050 Science, Theory and Public Health

PHS.6060 Applied Research Skills

PHS.6900 Professional Development

The second is the concentration curriculum comprised of courses totaling 45 credits. Within the concentration, some of these credits may be for specific required courses and some may be for courses that are tailored for students in order to provide the knowledge and skills needed to achieve their research and professional goals. The Doctoral Program Committee will be consulted on curricula decisions for their careers, and will provide guidance and direction to the Director(s).

The third component consists of the dissertation, including 12 dissertation credits.

## Doctor of Philosophy in Social Work

**Michael G. Vaughn, Ph.D.**

*Doctoral Program Director*

There are three components to the Doctoral program in social work at Saint Louis University College for Public Health and Social Justice. The objective of the first component is to develop a strong foundation in the interrelated nature of theory, research, and analysis. An additional objective is to develop a dissertation topic. One objective of the second component of the program is to build on the foundation established in the first component by developing knowledge and skills that are directly linked to the dissertation topic and specific to career goals. An additional objective is to add breadth and depth in a specialization area through the use of elective coursework. The objectives of the third component are to deepen and integrate the knowledge and skills obtained in the first and second components as demonstrated by tangible progress on the dissertation, passing of a written exam, and writing and orally defending a dissertation.

The first component includes the core Doctoral curriculum required of all students, comprised of a total of 18 credits:

SWRK.6000 Foundations of Social Work Theory  
Development

SWRK.6010 Principles of Statistics and Data Analysis

SWRK.6020 Research Design and Measurement

SWRK.6030 Multivariate Data Analysis

SWRK.6040 Research Area Synthesis

PUBH.5010 Mission and Practice of Global Public Health

In addition, students are required to participate in teaching practicums that prepare students to teach their own course in either the B.S.S.W. or M.S.W. program or in the Applied Behavior Analysis and Criminology degree programs. Further, there are required professional development workshops that provide students with the opportunity to build their unique professional skills outside of formal coursework or research.

The second is the elective curriculum comprised of courses totaling 42 credits. Some of these credits may be for specific required methods courses and some may be for courses that are tailored for students in order to provide them with the knowledge and skills needed to achieve their research and professional goals. Students can petition to have up to 24 credits of electives count toward the 72 credit total from an approved M.S.W. or closely-related Master's degree.

The third component consists of the dissertation, including 12 dissertation credits.

## Master of Health Administration

**Jason Turner, Ph.D., MAE**

*Resident MHA Program Director*

**Kevin Broom, Ph.D., M.B.A.**

*Resident MHA Program Associate Director*

**Michael Counte, Ph.D.**

*Executive MHA Program Director*

The M.H.A. degree, which is accredited by the Commission on Accreditation of Healthcare Management Education (CAHME), has as its foundation the areas of knowledge basic to health management and policy. The M.H.A. is offered as a resident program and, in order to meet the needs of working professionals, as an executive program (E.M.H.A.) that blends distance learning with monthly face-to-face classes. For students wishing to specialize their training, the resident M.H.A. program allows students to use electives to focus on one of two concentration areas: Health Care Finance or Health Care Operations.

### **Resident MHA. Prerequisites**

A bachelor's degree or the equivalent from an accredited college or university that includes completion of at least one college-level course in Microeconomics with a grade of B or higher.

### **Resident MHA. Requirements (60 total credits)**

The resident M.H.A. degree requires the completion of the following curriculum as revised if a concentration is desired:

#### **Resident MHA. Curriculum (60 credits)**

HMP.5000 Health Care Organization	HMP.5700 Health Care Financial Management
HMP.5030 Introduction to Health Care Accounting	HMP.5710 Financial Aspects of Health Care
HMP.5110 Health Operations Management	HMP.5800 Strategic Management in Health Care Organizations
HMP.5130 Health Information Systems	HMP.5900 Health Management and Policy Rounds
HMP.5190 Analytical Methods for Health Management	HMP.5910 Internship
HMP.5200 Health Economics	HMP.5950 Special Study for Exams
HMP.5300 Management of Health Care Organizations	PUBH.5010 Mission and Practice of Global Public Health
HMP.5340 Health Care Marketing	Twelve credits of advisor-approved electives*
HMP.5380 Management of Human Resources in Health Care	*Nine credits may be used to satisfy the optional concentration requirements.
HMP.5390 Ethical Leadership in Health Management and Policy	
HMP.5400 Legal Aspects of Health Services Management	
HMP.5500 Health Policy	

### **Health Care Finance Concentration (9 credits)**

HMP.XXXX Advanced Health Care Finance

#### **Three accounting credits from the following courses:**

ACCT.6140 Seminar in Accounting and Social Responsibilities  
ACCT.5930 Special Topics: Managing Enterprise Risk

ACCT.6030 Contemporary Financial Reporting  
ACCT.6190 Financial Statement Analysis  
ACCT.6210 Issues in Strategic Cost Management

#### **Three finance credits from the following courses:**

FIN.6150 Finance Theory and Application

FIN.6350 Advanced Corporate Finance

**Non-course requirements:**

Membership in Healthcare Financial Membership Association (HFMA);  
 Concentration-specific comprehensive exam (HMP.5950 does not count towards this requirement); and  
 Publishable paper *or* culminating project

**Health Care Operations Concentration (9 credits)**

HMP.5100 Quality Improvement in Health Care Management

**Six credits from the following courses:**

HMP.5160 Health Care Supply Chain Management

HMP.5820 Health Care Project Management

HMP.5810 Six Sigma Green Belt

**Non-course requirements:**

Concentration-specific comprehensive exam (HMP.5950 does not count towards this requirement); and  
 Publishable paper *or* culminating project

**Executive M.H.A. (E.M.H.A.) Prerequisites**

A bachelor's degree or the equivalent from an accredited college or university. The E.M.H.A. is limited to established professionals looking to advance their careers.

**Executive M.H.A. (E.M.H.A.) Requirements (60 total credits)**

The E.M.H.A. requires the completion of the following curriculum:

**Executive M.H.A. Curriculum (60 credits)**

HMP.5000 Health Care Organization

HMP.5390 Ethical Leadership in Health Management and Policy

HMP.5030 Introduction to Health Care Accounting

HMP.5400 Legal Aspects of Health Services Management

HMP.5040 Fundamentals of Economics and Finance

HMP.5500 Health Policy

HMP.5100 Quality Improvement in Health Care Management

HMP.5700 Health Care Financial Management

HMP.5110 Health Operations Management

HMP.5800 Strategic Management in Health Care

HMP.5130 Health Information Systems

Organizations

HMP.5190 Analytical Methods for Health Management

HMP.5820 Health Care Project Management

HMP.5200 Health Economics

PUBH.5010 Mission and Practice of Global Public Health

HMP.5300 Management of Health Care Organizations

Six credits of advisor-approved electives

HMP.5340 Health Care Marketing

HMP.5380 Management of Human Resources in Health Care

**Master of Health Administration & Juris Doctor Dual Degree**

The M.H.A./J.D. dual degree program is offered in collaboration with the School of Law, which is accredited by the American Bar Association. This integrated program requires completion of professional law school requirements as well as the fulfillment of a complete resident M.H.A. degree (60 credits), which includes fifteen credits of coursework from the School of Law J.D. degree requirements. Dual degree students may elect to pursue a concentration in the resident M.H.A. degree program; however, the pursuit of a concentration may increase the time to degree and/or increase the total number of credits required.

**Dual Degree Prerequisites**

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Individuals may apply to the M.H.A. degree program concurrently with application to or following admission to the School of Law; however, admission to the dual degree program is contingent upon admission to both the M.H.A. and the J.D. degree programs.

**Resident M.H.A. Prerequisites**

A bachelor's degree or the equivalent from an accredited college or university that includes completion of at least one college-level course in Microeconomics with a grade of B or higher.

**Resident M.H.A. Requirements (60 total credits)**

The M.H.A. requires the completion of the resident M.H.A. curriculum as revised here:

**Exceptions to Resident M.H.A. Curriculum**

Fifteen credits of advisor-approved coursework from the School of Law J.D. degree requirements substitute for HMP.5400 Legal Aspects of Health Services Management and twelve credits of advisor-approved electives.



# Master of Health Administration & Master of Business Administration Dual Degree

The M.H.A./M.B.A. dual degree program is offered in collaboration with the John Cook School of Business, which is accredited by the Association to Advance Collegiate Schools of Business (AACSB) International. This integrated program requires completion of professional business school requirements as well as the fulfillment of a complete resident M.H.A. degree (60 credits), which includes fifteen credits of coursework from the John Cook School of Business M.B.A. degree requirements. Dual degree students may elect to pursue a concentration in the resident M.H.A. degree program; however, the pursuit of a concentration may increase the time to degree and/or increase the total number of credits required.

## Dual Degree Prerequisites

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Application to the individual programs should be made simultaneously; however, admission to the dual degree program is contingent upon admission to both the M.H.A. and the M.B.A. degree programs.

## Resident M.H.A. Prerequisites

A bachelor's degree or the equivalent from an accredited college or university.

## Resident M.H.A. Requirements

The resident M.H.A. degree requires the completion of the resident curriculum as revised here:

## Exceptions to Resident M.H.A. Curriculum

MBA.6310 Legal Aspects of Business, MBA.6320 Financial Accounting and MBA.6380 Managerial Accounting substitute for HMP.5030 Introduction to Health Care Accounting;  
MBA.6420 Data and Decisions substitutes for HMP.5190 Analytical Methods for Health Management; and  
MBA.6430 The Organization: Governance, Compliance and Strategy, MBA.6530 Integrated Consulting Module and a three-credit MBA elective substitute for nine credits of advisor-approved electives

# Master of Public Health

**Carole Baskin, DVM, MSc, CPIA**

*M.P.H. Program Director*

**Kristin Wilson, Ph.D., M.H.A.**

*M.P.H. Health Management and Policy Program Director*

**Pamela Xaverius, Ph.D.**

*M.P.H. Maternal and Child Health Program Director*

The Master of Public Health (M.P.H.) degree has as its foundation the five areas of knowledge basic to the field of public health. All M.P.H. degrees require the completion of the following M.P.H. core curriculum and the concentration curriculum indicated.

## MP.H. Core Curriculum (21 credits)

BSH.5000 Behavioral Science and Public Health

BST.5000 Principles of Biostatistics

EOH.5000 Environmental and Occupational Health

EPI.5000 Principles of Epidemiology

PUBH.5010 Mission and Practice of Global Public Health

PUBH.5020 Ethical Issues in Public Health

PUBH.5110 Managerial Aspects of Public Health Practice *or*

HMP.5300 Management of Health Care Organizations

PUBH.5900 Public Health Rounds *or*

HMP.5900 Health Management and Policy Rounds

PUBH.5910 Practice Experience in Public Health *or*

HMP.5910 Internship

PUBH.5950 Special Study for Examinations *or*

HMP.5950 Special Study for Exams

## Behavioral Science and Health Education Concentration

### Prerequisites

A bachelor's degree or the equivalent in a social or biomedical science or a closely-related discipline. Professional experience in a health-related field is highly valued.

### Requirements (48 total credits)

Completion of the M.P.H. core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (27 credits)**

BSH.5100 Health Promotion Program Planning  
 BSH.5200 Historical, Philosophical and Political Bases of  
 Public Health and Health Education  
 BSH.5310 Health Communication  
 BSH.5400 Community Diagnosis

BSH.6000 Health Promotion Program Evaluation  
 BSH.5960 Capstone in Behavioral Science and Health  
 Education  
 Nine credits of advisor-approved electives

**Behavioral Science and Health Education & Epidemiology Joint Concentration****Prerequisites**

A bachelor's degree or the equivalent in a social or biomedical science or a closely related discipline. Professional experience in a health-related field is highly valued.

**Requirements (54 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (33 credits)**

BSH.5100 Health Promotion Program Planning  
 BSH.5310 Health Communication  
 BSH.5400 Community Diagnosis  
 BSH.6000 Health Promotion Program Evaluation

BSH.5960 Capstone in Behavioral Science and Health  
 Education  
 BST.5100 Introduction to General Linear Modeling  
 EPI.5020 Epidemiology Methods II  
 Twelve credits of advisor-approved electives

**Biosecurity and Disaster Preparedness Concentration****Prerequisites**

A bachelor's degree or the equivalent in the physical, chemical or biological sciences, or six credits of college-level courses individually in chemistry, biology and the physical sciences, with an overall grade point average of 3.0 or better in the science courses; however, applicants will be considered on an individual basis.

**Requirements (48 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (27 credits)**

BSDP.5100 Public Health and Disasters  
 BSDP.5101 Fundamentals of Disaster Planning  
 BSDP.5103 Communicable Diseases and Infection Control  
 BSDP.5106 Disaster Communications and Media Relations  
 BSDP.5203 Disaster Planning for Infectious Disease Disasters

BSDP.5205 Behavioral and Cultural Aspects of Disaster  
 Response  
 BSDP.5206 Disaster Management and Risk Analysis  
 BSDP.5960 Capstone in Biosecurity and Disaster  
 Preparedness  
 Three credits of advisor-approved electives

**Biosecurity and Disaster Preparedness & Epidemiology Joint Concentration****Prerequisites**

A bachelor's degree or the equivalent in the physical, chemical or biological sciences, or six credits of college-level courses individually in chemistry, biology and the physical sciences, with an overall grade point average of 3.0 or better in the science courses; however, applicants will be considered on an individual basis.

**Requirements (54 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum, which begins in the summer semester with BSDP.5101 Fundamentals of Disaster Planning, as follows:

**Concentration Curriculum (33 credits)**

BSDP.5100 Public Health and Disasters  
 BSDP.5101 Fundamentals of Disaster Planning  
 BSDP.5103 Communicable Diseases and Infection Control  
 BSDP.5203 Disaster Planning for Infectious Disease Disasters  
 BSDP.5205 Behavioral and Cultural Implications of Disasters  
 BSDP.5206 Disaster Management and Risk Analysis

BSDP.5960 Capstone in Biosecurity and Disaster  
 Preparedness  
 BST.5100 Introduction to General Linear Modeling  
 EPI.5020 Epidemiology Methods II  
 Six credits of advisor-approved electives

## Biostatistics Concentration

### **Prerequisites**

A bachelor's degree or the equivalent in a social or biomedical science with coursework that includes Calculus I, either Calculus II or linear algebra, basic coursework in the principles of biology and computer science, and an upper-level or equivalent course in statistics, each with a grade of B or better.

### **Requirements (48 total credits)**

Completion of the M.P.H. core curriculum as revised and the concentration curriculum as follows:

### **Exceptions to the M.P.H. Core Curriculum**

The prerequisite upper-level or equivalent course in statistics satisfies the BST.5000 Principles of Biostatistics course requirement (3 credits) and decreases the M.P.H. core curriculum credits to 18.

### **Concentration Curriculum (30 credits)**

BST.5020 Theory of Biostatistics

BST.5030 Statistical Programming and Study Planning: SAS

BST.5100 Introduction to General Linear Modeling

BST.5200 Survival Data Analysis

BST.5210 Categorical Data Analysis

BST.5400 Applied Data Management

BST.5960 Capstone in Biostatistics

EPI.5020 Epidemiology Methods II

Six credits of advisor-approved electives

## Biostatistics & Epidemiology Joint Concentration

### **Prerequisites**

A bachelor's degree or equivalent with coursework that includes Calculus I, either Calculus II or linear algebra, and basic coursework in the principles of biology and computer science, and an upper-level or equivalent course in statistics, each with a grade of B or better.

### **Requirements (54 total credits)**

Completion of the M.P.H. core curriculum as revised and the concentration curriculum as follows:

### **Exceptions to the M.P.H. Core Curriculum**

The prerequisite upper-level or equivalent course in statistics satisfies the BST.5000 Principles of Biostatistics course requirement (3 credits) and decreases the M.P.H. core curriculum credits to 18.

### **Concentration Curriculum (36 credits)**

BST.5020 Theory of Biostatistics

BST.5030 Statistical Programming and Study Planning: SAS

BST.5100 Introduction to General Linear Modeling

BST.5200 Survival Data Analysis

BST.5210 Categorical Data Analysis

BST.5400 Applied Data Management

BST.5960 Capstone in Biostatistics

EPI.5020 Epidemiology Methods II

Twelve credits of advisor-approved electives

## Emergency Management and Crisis Leadership Concentration

No longer accepting applications. Refer to past catalogs for degree requirements.

## Environmental and Occupational Health Concentration

### **Prerequisites**

A bachelor's degree or the equivalent in the physical, chemical or biological sciences, or six credits of college-level courses individually in chemistry, biology and the physical sciences, with an overall grade point average of 3.0 or better in the science courses; however, applicants will be considered on an individual basis.

### **Requirements (48 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows:

### **Concentration Curriculum (27 credits)**

EOH.5100 Human Toxicology and Environmental Health

EOH.5200 Evaluation of Environmental Hazards

EOH.5300 Biological Hazards in Modern and Developing Countries

EOH.5400 Human Health Risk Analysis

EOH.5600 Policy, Science and Decisions in Environmental Health

EOH.5960 Capstone in Environmental and Occupational Health

EPI.5500 Environmental and Occupational Epidemiology

Six credits of advisor-approved electives

## Environmental and Occupational Health & Biosecurity and Disaster Preparedness Joint Concentration

### **Prerequisite**

A bachelor's degree or the equivalent in the physical, chemical or biological sciences, or six credits of college-level courses individually in chemistry, biology and the physical sciences, with an overall grade point average of 3.0 or better in the science courses however, applicants will be considered on an individual basis.

### **Requirements (54 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum, which begins in the summer semester with BSDP.5101 Fundamentals of Disaster Planning, as follows:

#### **Concentration Curriculum (33 credits)**

BSDP.5100 Public Health and Disasters	EOH.5200 Evaluation of Environmental Hazards
BSDP.5101 Fundamentals of Disaster Planning	EOH.5400 Human Health Risk Analysis
BSDP.5103 Communicable Diseases and Infection Control	EOH.5960 Capstone in Environmental and Occupational Health
BSDP.5203 Disaster Planning for Infectious Disease Disasters	EPI.5500 Environmental and Occupational Epidemiology
BSDP.5206 Disaster Management and Risk Analysis	Three credits of advisor-approved electives
EOH.5100 Human Toxicology and Environmental Health	

## Environmental and Occupational Health & Epidemiology Joint Concentration

### **Prerequisites**

A bachelor's degree or the equivalent in the physical, chemical or biological sciences, or six credits of college-level courses individually in chemistry, biology and the physical sciences, with an overall grade point average of 3.0 or better in the science courses; however, applicants will be considered on an individual basis.

### **Requirements (54 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows:

#### **Concentration Curriculum (33 credits)**

BST.5100 Introduction to General Linear Modeling	EOH.5960 Capstone in Environmental and Occupational Health
EOH.5100 Human Toxicology and Environmental Health	EPI.5020 Epidemiology Methods II
EOH.5200 Evaluation of Environmental Hazards	EPI.5500 Environmental and Occupational Epidemiology
EOH.5400 Human Health Risk Analysis	Nine credits of advisor-approved electives
EOH.5600 Policy, Science and Decisions in Environmental Health	

## Epidemiology Concentration

### **Prerequisites**

A bachelor's degree or the equivalent in a biomedical science, one of the social sciences or a closely-related discipline. Professional experience in a health-related field is highly valued.

### **Requirements (48 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows:

#### **Concentration Curriculum (27 credits)**

BST.5030 Statistical Programming and Study Planning: SAS	EPI.5020 Epidemiology Methods II
BST.5100 Introduction to General Linear Modeling	EPI.5960 Capstone in Epidemiology
BST.5200 Survival Data Analysis	Nine credits of advisor-approved electives
BST.5210 Categorical Data Analysis	

## Global Health Concentration

### **Prerequisites**

A bachelor's degree or the equivalent in a biomedical science, one of the social sciences or a closely-related discipline. Professional experience in a health-related field is highly valued.

### **Requirements (48 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows as well as the indicated non-course requirements:

**Concentration Curriculum (27 credits)**

EPI.5110 Epidemiology of Infectious Disease  
 EPI.5120 Chronic Disease Epidemiology  
 GLOH.5100 Global Health Assessment and Evaluation

GLOH.5200 Global Health Diplomacy and Policy  
 SWRK.5705 Practice in Global Issues  
 Twelve credits of advisor-approved electives

**Non-course Requirements**

Interagency Language Roundtable (ILR) Level 2 or 3 Foreign Language Proficiency; and  
 International Experience

**Global Health & Environmental and Occupational Health Joint Concentration****Prerequisites**

A bachelor's degree or the equivalent in a biomedical science, one of the social sciences or a closely-related discipline. Professional experience in a health-related field is highly valued.

**Requirements (54 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows as well as the indicated non-course requirements:

**Concentration Curriculum (33 credits)**

EOH.5100 Human Toxicology and Environmental Health  
 EOH.5200 Evaluation of Environmental Hazards  
 EOH.5300 Biological Hazards in Modern and Developing Countries  
 EOH.5400 Human Health Risk Analysis  
 EOH.5960 Capstone in Environmental and Occupational Health

EPI.5110 Epidemiology of Infectious Disease  
 EPI.5120 Chronic Disease Epidemiology  
 EPI.5500 Environmental and Occupational Epidemiology  
 GLOH.5100 Global Health Assessment and Evaluation  
 GLOH.5200 Global Health Diplomacy and Policy  
 SWRK.5705 Practice in Global Issues

**Non-course Requirements**

Interagency Language Roundtable (ILR) Level 2 or 3 Foreign Language Proficiency; and  
 International Experience

**Global Health & Epidemiology Joint Concentration****Prerequisites**

A bachelor's degree or the equivalent in a biomedical science, one of the social sciences or a closely-related discipline. Professional experience in a health-related field is highly valued.

**Requirements (54 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows as well as the indicated non-course requirements:

**Concentration Curriculum (33 credits)**

BST.5100 Introduction to General Linear Modeling  
 EPI.5020 Epidemiology Methods II  
 EPI.5110 Epidemiology of Infectious Disease  
 EPI.5120 Chronic Disease Epidemiology  
 EPI.5960 Capstone in Epidemiology

GLOH.5100 Global Health Assessment and Evaluation  
 GLOH.5200 Global Health Diplomacy and Policy  
 SWRK.5705 Practice in Global Issues  
 Nine credits of advisor-approved electives

**Non-course Requirements**

Interagency Language Roundtable (ILR) Level 2 or 3 Foreign Language Proficiency; and  
 International Experience

**Global Health & Maternal and Child Health Joint Concentration****Prerequisites**

A bachelor's degree or the equivalent in a biomedical science, one of the social sciences or a closely-related discipline. Professional experience in a health-related field is highly valued.

**Requirements (54 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows as well as the indicated non-course requirements:

**Concentration Curriculum (33 credits)**

DIET.5060 Maternal and Child Nutrition and Health  
 EPI.5110 Epidemiology of Infectious Disease  
 EPI.5120 Chronic Disease Epidemiology  
 EPI.5220 Maternal and Child Epidemiology *or*  
 EPI.5280 Perinatal Epidemiology  
 GLOH.5100 Global Health Assessment and Evaluation  
 GLOH.5200 Global Health Diplomacy and Policy

MCH.5000 Maternal and Child Health I: Foundations of Maternal Child Health  
 MCH.5010 Maternal and Child Health II: Programs, Policy and Advocacy  
 PUBH.5960 Capstone in Public Health Practice  
 SWRK.5705 Practice in Global Issues  
 Three credits of advisor-approved electives

**Non-course Requirements**

Interagency Language Roundtable (ILR) Level 2 or 3 Foreign Language Proficiency; and International Experience

**Health Management and Policy Concentration****Prerequisites**

A bachelor's degree or the equivalent from an accredited college or university that includes completion of at least one college-level course in Microeconomics with a grade of B or higher.

**Requirements (51 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (30 credits)**

HMP.5000 Health Care Organization  
 HMP.5200 Health Economics  
 HMP.5210 Economic Evaluation  
 HMP.5500 Health Policy  
 HMP.5510 Health Policy and Law

HMP.5720 Government Financing of Health and Health Care  
 HMP.5960 Capstone Seminar in Health Management and Policy  
 Nine credits of advisor-approved electives

**Health Management and Policy & Epidemiology Joint Concentration****Prerequisites**

A bachelor's degree or the equivalent from an accredited college or university that includes completion of at least one college-level course in Microeconomics with a grade of B or higher.

**Requirements (54 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (33 credits)**

BST.5100 Introduction to General Linear Modeling  
 EPI.5020 Epidemiology Methods II  
 HMP.5000 Health Care Organization  
 HMP.5200 Health Economics  
 HMP.5210 Economic Evaluation  
 HMP.5500 Health Policy

HMP.5510 Health Policy and Law  
 HMP.5720 Government Financing of Health Care  
 HMP.5960 Capstone Seminar in Health Management and Policy  
 Six credits of advisor-approved electives

**Health Management and Policy Concentration & Juris Doctor Dual Degree**

The M.P.H./HMP/J.D. dual degree program is offered in collaboration with the School of Law, which is accredited by the American Bar Association. This integrated program requires completion of professional law school requirements as well as the fulfillment of a complete M.P.H./HMP degree (51 credits), which includes twelve credits of coursework from the School of Law J.D. degree requirements.

**Dual Degree Prerequisites**

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Individuals may apply to the M.P.H./HMP degree program concurrently with application to the School of Law or following admission to the School of Law; however, admission to the dual degree program is contingent upon admission to both the M.P.H./HMP and the J.D. degree programs.

### **M.H.P.HMP Prerequisites**

A bachelor's degree or the equivalent from an accredited college or university that includes completion of at least one college-level course in Microeconomics with a grade of B or higher.

### **M.H.P.HMP Requirements (51 total credits)**

The M.P.H.HMP requires the completion of the M.P.H. core curriculum and the concentration curriculum as follows:

#### **Concentration Curriculum (30 credits)**

HMP.5000 Health Care Organization	HMP.5960 Capstone Seminar in Health Policy
HMP.5200 Health Economics	LAW.8000 Health Care Law substitutes for HMP.5510 Health Policy and Law
HMP.5210 Economic Evaluation	Nine credits of advisor-approved coursework from the School of Law J.D. degree requirements
HMP.5500 Health Policy	
HMP.5720 Government Financing of Health and Health Care	

### **Maternal and Child Health Concentration**

#### **Prerequisites**

A bachelor's or first professional degree in most fields from an accredited college or university.

#### **Requirements (48 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows:

#### **Concentration Curriculum (27 credits)**

BSH.5100 Health Promotion Program Planning	MCH.5000 Maternal and Child Health I: Foundations of Maternal Child Health
BSH.5400 Community Diagnosis	MCH.5010 Maternal and Child Health II: Programs, Policy and Advocacy
BSH.6000 Health Promotion Program Evaluation	PUBH.5620 Politics and Public Health Advocacy
DIET.5060 Maternal and Child Nutrition and Health	PUBH.5960 Capstone in Public Health Practice
EPI.5220 Maternal and Child Health Epidemiology <i>or</i>	
EPI.5280 Perinatal Epidemiology	

### **Maternal and Child Health & Epidemiology Joint Concentration**

#### **Prerequisites**

A bachelor's or first professional degree in most fields from an accredited college or university.

#### **Requirements (54 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows:

#### **Concentration Curriculum (33 credits)**

BST.5030 Statistical Programming and Study Planning: SAS	MCH.5000 Maternal and Child Health I: Foundations of Maternal Child Health
BST.5100 Introduction to General Linear Modeling	MCH.5010 Maternal and Child Health II: Programs, Policy and Advocacy
DIET.5060 Maternal and Child Nutrition and Health	PUBH.5620 Politics and Public Health Advocacy
EPI.5020 Epidemiology Methods II	Six credits of advisor-approved electives
EPI.5220 Maternal and Child Health Epidemiology <i>or</i>	
EPI.5280 Perinatal Epidemiology	
EPI.5960 Capstone in Epidemiology	

### **Public Health Practice Concentration**

#### **Prerequisites**

A bachelor's or Master's degree in a health or related field and substantial and relevant experience equivalent to three years in public health or health care.

#### **Requirements (42 total credits)**

The M.P.H.PRFP requires the completion of the M.P.H. core curriculum and the concentration curriculum as follows:

#### **Concentration Curriculum (21 credits)**

BSDP.5100 Public Health and Disasters	PUBH.5620 Politics and Public Health Advocacy
HMP.5000 Health Care Organization	PUBH.5960 Capstone in Public Health Practice
HMP.5500 Health Policy	Six credits of advisor-approved electives

## Public Health Practice Concentration & Doctor of Medicine Dual Degree

The M.P.H.PRFP/M.D. dual degree program is conducted under the joint auspices of the College for Public Health and Social Justice and the School of Medicine, which is accredited by the Liaison Committee for Medical Education (LCME). The M.P.H. is offered as an accelerated program that can be completed in three consecutive semesters (summer, fall, spring) devoted entirely to M.P.H. coursework. The program requires completion of professional medical school requirements as well as the fulfillment of a complete M.P.H.PRFP degree (42 credits), which may include up to nine credits of coursework from the School of Medicine M.D. degree requirements.

### Dual Degree Prerequisites

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Individuals may apply to the M.P.H. degree program concurrently with application to medical school or following admission to the School of Medicine; however, admission to the dual degree program is contingent upon admission to both the M.P.H. and the M.D. degree programs.

### MP.HPRFP Prerequisites

A bachelor's degree or equivalent of a professional degree from an accredited college or university.

### MP.HPRFP Requirements (42 total credits)

The M.P.H.PRFP requires the completion of the M.P.H. core curriculum and the concentration curriculum as follows:

#### Concentration Curriculum (21 credits)

BSDP.5100 Public Health and Disasters

HMP.5000 Health Care Organization

HMP.5500 Health Policy

PUBH.5620 Politics and Public Health Advocacy

PUBH.5960 Capstone in Public Health Practice

Six credits of advisor-approved electives

## Public Health Practice Concentration & Master of Science in Nutrition and Dietetics Dual Degree

The M.P.H.PRFP/M.S. dual degree program is offered in collaboration with the Doisy College of Health Sciences Department of Nutrition and Dietetics. This integrated program requires completion of M.S. degree requirements as well as the fulfillment of a complete M.P.H.PRFP degree (42 credits), which includes nine credits of coursework from the Doisy College of Health Sciences M.S. degree.

### Dual Degree Prerequisites

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Individuals may apply to the M.P.H. degree program concurrently with application to or following their admission to the Doisy College of Health Sciences; however, admission to the dual degree program is contingent upon admission to both the M.P.H. and the M.S. degree programs.

### MP.HPRFP Prerequisites

A bachelor's degree or equivalent of a professional degree from an accredited college or university.

### MP.HPRFP Requirements (42 total credits)

The M.P.H. requires the completion of the M.P.H. core curriculum as revised and the concentration curriculum as follows:

#### Exceptions to the M.P.H. Core Curriculum

DIET.5450 Patient/Client Nutrition Management Practicum (3 credits) substitutes for PUBH.5910 Practice Experience in Public Health (zero credits) and increases the M.P.H. core curriculum credits to 24.

#### Concentration Curriculum (18 credits)

BSDP.5100 Public Health and Disasters

DIET.5300 Community Nutrition

DIET 5400 Nutrition Education

HMP.5000 Health Care Organization

PUBH.5620 Politics and Public Health Advocacy

PUBH.5960 Capstone in Public Health Practice

## Public Health Practice Concentration & Master of Social Work, Clinical Concentration Dual Degree

Please refer to the dual M.S.W. Clinical Concentration/M.P.H. entry.



# Master of Science in Applied Behavior Analysis

**Alyssa Wilson, Ph.D., BCBA-D**

*Director of ABA Programs*

Applied Behavior Analysis is the scientific study of human behavior in relationship to the environment. The Master of Science in Applied Behavior Analysis (M.S.ABA) degree prepares students for professional practice using behavioral science to promote positive social change and learning in people with autism, intellectual disabilities, substance abuse problems, and other health and mental health conditions. Successful completion of the degree provides eligibility to complete the examination for national certification as a Board Certified Behavior Analyst (BCBA) and for licensure in Missouri and some other states.

The first six courses listed below must be taken in order of presentation throughout the year. That is, two courses in the fall, two courses in the spring, and two courses in the summer. Other requirements for the degree may be scheduled in collaboration between students and their advisor, with full-time and part-time options available. The M.S.ABA is a 39-credit degree.

## **Prerequisites**

A bachelor's degree from an accredited college or university with some coursework in social sciences. The Graduate Record Exam (GRE) is not required.

## **Required Courses (39 credits)**

ABA.5746 Principles and Concepts in Behavior Analysis	ABA.5827 Practicum II
ABA.5774 Measurement and Experimental Design	ABA.5820.49 Integrative Seminar
ABA.5747 Assessment and Selecting Interventions	ABA.5828 Practicum III
ABA.5748 Behavior Change and Processes	ABA.5820.50 Integrative Seminar
ABA.5749 Behavior Change and Ethics	ABA.5990 Thesis (6 credits)
ABA.5931 Special Topics I in ABA	ABA.5950 Special Study for Exams
ABA.5826 Practicum I	ABA.5932 Special Topics II in ABA
ABA.5820.48 Integrative Seminar	PUBH.5010 Mission and Practice of Global Public Health

# Master of Science in Biosecurity and Disaster Preparedness

**Terri Rebmann, Ph.D., R.N., CIC**

*M.S.BSDP Program Director*

The M.S.BSDP program is offered in a distance-learning format.

## **Prerequisites**

A bachelor's degree or the equivalent that includes at least 12 college-level credits in the biological, chemical or physical sciences in total, and three or more credits in mathematics such as college algebra, statistics or first-semester calculus; however, applicants will be considered on an individual basis in the absence of these prerequisites. Professional experience in a health-related field, law enforcement or emergency preparedness is recommended but not required. Strong writing and critical thinking skills are essential for success, especially given the distance-learning format of the program.

## **Requirements (42-45 total credits)**

The M.S.BSDP requires the completion of the M.S.BSDP core curriculum and one concentration curriculum as follows:

### **Core Curriculum (24 credits)**

BSDP.5100 Public Health and Disasters	BSDP.5206 Disaster Management and Risk Analysis
BSDP.5102 Introduction to Biostatistics and Decision Analysis	BSDP.5207 Legal and Ethical Implications of Disasters
BSDP.5204 Epidemiological Methods and Infectious Disease Surveillance	BSDP.5208 Facing the Challenge of International Bioterrorism
BSDP.5205 Behavioral and Cultural Implications of Disasters	BSDP.5960 Capstone in Biosecurity and Disaster Preparedness

## **Management and Response Concentration**

### **Concentration Curriculum (18 credits)**

BSDP.5101 Fundamentals of Disaster Planning	BSDP.5201 Terrorist Organizations and Their Motivations
BSDP.5103 Communicable Diseases and Infection Control	BSDP.5203 Disaster Planning for Infectious Disease Disasters
BSDP.5106 Disaster Communications and Media Relations	PUBH.5110 Managerial Aspects of Public Health Practice

## Infection Prevention Concentration

### **Concentration Curriculum (21 credits)**

BSDP.5101 Fundamentals of Disaster Planning  
BSDP.5103 Communicable Diseases and Infection Control  
BSDP.5104 Public Health Ecology  
BSDP.5203 Disaster Planning for Infectious Disease Disasters

BSDP.5209 Emerging Infections: Epidemiology and Public Health Importance  
BSDP.5210 Preparing for Disasters: Resiliency and Stress Inoculation  
BSDP.5211 Business Continuity and Pandemic Planning

## Medical and Public Health Intelligence Concentration

### **Concentration Curriculum (21 credits)**

BSDP.5104 Public Health Ecology  
BSDP.5105 Medical and Public Health Intelligence  
BSDP.5200 Writing for Intelligence  
BSDP.5201 Terrorist Organizations and Their Motivations  
BSDP.5209 Emerging Infections: Epidemiology and Public Health Importance

Six transfer credits from coursework at the Mercyhurst University, Erie, PA, Master of Science in Applied Intelligence program: Intelligence Theory Application (INTL510) and Advanced Analytical Techniques (INTL520).

## Master of Science in Criminology and Professional Practice

### **Noelle Fearn, Ph.D.**

*M.S.CPP Program Director*

Communities and organizations in the 21st century require professionals with interdisciplinary skills and preparation to handle many complex challenges. The Master of Science in Criminology and Professional Practice (M.S.CPP) degree prepares students to meet these challenges by providing them with a core criminological knowledge foundation and the opportunity to gain further skills and enhance their Graduate Education by selecting one of three diverse concentrations: 1) the administration of justice, 2) emergency management, and 3) treatment and rehabilitation. The MSCPP degree prepares graduates to be advanced practitioners in a variety of community and justice agency/organizational settings. The program is offered in variable formats: most classes are offered on campus but one concentration, emergency management, is currently offered online only.

### **Prerequisites**

A bachelor's degree or the equivalent from an accredited college or university. A grade point average of 3.0 or above is preferred but not required. The Graduate Record Exam (GRE) is not required.

### **Requirements (33 total credits)**

The M.S.CPP requires the completion of the M.S.CPP core curriculum and fulfillment of one concentration curriculum as follows:

### **M.S.CPP Core Curriculum (18 credits)**

CCJ.5000 Applying Criminological Theory  
CCJ.5100 Ethics in the Administration of Justice  
CCJ.5200 Methodological and Statistical Literacy in CCJ  
PUBH.5010 Mission and Practice of Global Public Health

*Six credits of faculty advisor-approved electives, with at least 3 credits from the following courses:*

CCJ.6000 Issues in Law Enforcement  
CCJ.6100 Issues in Corrections  
CCJ.6200 Issues in Juvenile Justice Administration  
SWRK.5771 Intimate Partner Violence

## Administration of Justice Concentration

### **Concentration Curriculum (15 credits)**

CCJ.6400 Issues in Jurisprudence  
HMP.5380 Management of Human Resources in Health Care  
SWRK.5785 Organizational and Program Planning

SWRK.5798 Introduction to Non-Profit Organization Management  
SWRK.5815 Introduction to Public Sector Budgeting

## Emergency Management Concentration (Online)

### **Concentration Curriculum (15 credits)**

BSDP.5100 Public Health and Disasters  
BSDP.5101 Fundamentals of Disaster Planning

BSDP.5206 Disaster Management and Risk Analysis

**Select two of the following:**

BSDP.5103 Communicable Diseases and Infection Control  
BSDP.5105 Medical and Public Health Intelligence  
BSDP.5106 Disaster Communication and Media Relations  
BSDP.5201 Terrorist Organizations and Their Motivations

BSDP.5207 Legal and Ethical Implications of Disasters  
BSDP.5208 Facing the Challenge of International  
Bioterrorism  
BSDP.5210 Preparing for Disasters: Resiliency and Stress  
Inoculation

*Treatment and Rehabilitation Concentration*

**Concentration Curriculum (15 credits)**

SWRK.5734 Human Behavior and the Social Environment Pt.  
II  
SWRK.5742 Evidence-Based Practices in Community Mental  
Health

SWRK.5744 Substance Abuse Interventions  
SWRK.5772 Cognitive Behavior Therapy for Social Work  
Practice  
SWRK.5778 Motivational Interviewing

## Master of Science in Public Health

**Darcell P. Scharff, Ph.D.**

*M.S.P.H. Program Director*

The Master of Science in Public Health is designed for those with terminal degrees who seek training in population-based research methods to support their clinical research activities.

**Prerequisites**

A Doctoral degree, e.g., M.D., Ph.D., in the field of health or a health-related social science. In the case of a medical degree, full eligibility for medical licensure in the United States is required.

**M.S.P.H. Core Curriculum (12 credits)**

BST.5000 Principles of Biostatistics  
BST.5100 Introduction to General Linear Modeling  
EPI.5000 Principles of Epidemiology

PUBH.5010 Mission and Practice of Global Health  
PUBH.5990 Research Project

*Behavioral Science and Health Education Concentration*

**Requirements (36 total credits)**

Completion of the M.S.P.H. core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (24 credits)**

BSH.5000 Behavioral Science and Public Health  
BSH.6000 Health Promotion Program Evaluation  
BSH.5960 Capstone in Behavioral Science and Health  
Education

BST.5400 Applied Data Management  
PUBH.5020 Ethical Issues in Public Health  
Nine credits of advisor-approved electives

*Epidemiology Concentration*

**Requirements (36 total credits)**

Completion of the M.S.P.H. core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (24 credits)**

BST.5030 Statistical Program and Study Planning: SAS  
BST.5200 Survival Data Analysis  
BST.5210 Categorical Data Analysis

EPI.5020 Epidemiology Methods II  
EPI.5960 Capstone in Epidemiology  
Nine credits of advisor-approved electives

## Behavioral Science and Health Education Concentration & Doctor of Philosophy in Clinical Psychology Dual Degree

The M.S.P.H./Ph.D. dual degree program is offered in collaboration with the College of Arts and Sciences Clinical Psychology Doctoral Program whose Ph.D. program has been accredited by The American Psychological Association since 1965. This integrated program requires completion of Ph.D. requirements as well as the fulfillment of a complete M.S.P.H./BSHE degree (36 credits), which includes 12 credits of coursework from the College of Arts and Sciences Clinical Psychology Ph.D. degree requirements.

### **Dual Degree Prerequisites**

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Applicants are required to be initially accepted to the Clinical Psychology program. Students must then apply for and fulfill all admission requirements for the M.S.P.H.BSHE degree program in order to gain admission to the dual degree program.

### **M.S.P.HBSHE Prerequisites when taken as part of the dual degree**

A bachelor's degree or equivalent from an accredited college or university.

### **M.S.P.HBSHE Requirements (36 total credits)**

The M.S.P.H.BSHE requires the completion of the M.S.P.H.BSHE curriculum as revised here:

#### **Exceptions to the M.S.P.HBSHE Curriculum**

PSY.5080 Advanced Quantitative Research Methods substitutes for 3 credits of advisor-approved electives;

PSY.5790 Applied Univariate Statistics in Behavioral Science substitutes for BST.5000 Principles of Biostatistics;

PSY.6500 Applied Multivariable and Multivariate Statistics in Behavioral Science substitutes for BST.5100 Introduction to General Linear Modeling;

PSY.6800 Ethics and Professional Issues substitutes for PUBH.5020 Ethical Issues in Public Health; and

PSY.6990 Dissertation Research substitutes for PUBH.5990 Research Project but no credits from PSY.6990 are used towards the minimum total credits required for the M.S.P.H.BSHE degree.

## **Master of Social Work**

### **Stephen Edward McMillin, Ph.D.**

*M.S.W. Program Director*

The M.S.W. degree prepares social work professionals for work with vulnerable populations facing health, social, and economic challenges. Social workers are educationally prepared to provide services including therapy, policy advocacy, case management, group work, crisis intervention, children and family practice, and leadership for nonprofit organizations. M.S.W. - level social workers work in a wide variety of human service organizations including family and community centers, mental health and treatment centers, hospitals, schools, nonprofit agencies, residential children's or adult centers, justice centers, and many more organizations. The M.S.W. Program has been accredited continuously by the Council on Social Work Education (CSWE).

The M.S.W. curriculum includes generalist foundation courses, advanced practice courses in an area of concentration, and field practicum. The generalist foundation courses provide the basic social work theory and methods for working with individuals, families, and groups, organizations, and communities. Students then select an advanced practice area of concentration and proceed with taking these courses. The School of Social Work offers three concentrations: Applied Behavior Analysis, Clinical, and Community and Organization. During the coursework, students will also be mentored by a M.S.W. field instructor while working in a social work capacity in the community. The M.S.W. degree is 57 credits, with full-time and part-time options available. Students with a Bachelor of Social Work degree from a CSWE accredited program may earn up to 18 credits of advanced standing toward the M.S.W. degree.

### **Prerequisites**

A bachelor's degree from an accredited college or university with at least 24 credits in liberal arts and the social sciences. The Graduate Record Exam (GRE) is not required.

### **Requirements**

The M.S.W. requires the completion of the M.S.W. core curriculum and the concentration curriculum as follows.

### **M.S.W. Core Curriculum (30 credits)**

#### **Foundation (12 credits)**

SWRK.5702 Social Policy

SWRK.5725 Human Behavior and the Social Environment

SWRK.5750 Social Work Practice with Individuals, Families, and Groups

SWRK.5751 Social Work Practice with Communities and Organizations

#### **Research (6 credits)**

SWRK.5787 Research Methods for Social Work Practice I

SWRK.5788 Research Methods for Social Work Practice II

#### **Hallmark (9 credits)**

PUBH.5010 Mission and Practice of Global Public Health

SWRK.5700 Values and Ethics in Social Work Practice

SWRK.5707 Policy Practice for Social Justice

#### **Foundation Practica (3 credits)**

SWRK.5819 Foundation Integrative Seminar (1 credit)

SWRK.5841 Foundation Practicum I (2 credits)

## Applied Behavior Analysis Concentration

This concentration focuses on evidenced-based methods to assist children, adults, and organizations in changing behavior. Curriculum prepares students to be eligible to become a Board Certified Behavior Analyst.

### **Requirements (57 total credits)**

The completion of the M.S.W. core curriculum as revised and the concentration curriculum as follows:

### **Exceptions to Core Curriculum**

SWRK.5749 Behavior Change and Ethics in Applied Behavior Analysis substitutes for SWRK.5700; SWRK.5788 Research Methods for Social Work Practice II is waived, which reduces the M.S.W. core curriculum to 27 credits.

### **Concentration Curriculum (30 credits)**

ABA.5931 Special Topics in ABA	SWRK.5822 Concentration Practicum II (2 credits)
SWRK.5746 Principles and Concepts in Behavior Analysis	SWRK.5823 Concentration Practicum III
SWRK.5747 Assessment and Selecting Interventions	SWRK.5824 Concentration Practicum IV
SWRK.5748 Behavior Change and Processes	SWRK.5830 ABA Integrative Seminar (0 credits)
SWRK.5774 Measurement and Experimental Design	SWRK.5840 ABA Integrative Seminar (0 credits)
SWRK.5820 Concentration Integrative Seminar (1 credit)	Six credits of advisor-approved electives

## Clinical Concentration

This concentration focuses on assessment, intervention, and outcomes in clinical work with individuals, families, groups, or larger systems. Courses focus on working with diverse families and family systems across a developmental life span using core clinical approaches to engagement, assessment, intervention, and evaluation of outcomes in a variety of clinical practice settings.

### **Requirements (57 total credits)**

The completion of the M.S.W. core curriculum and the concentration curriculum as follows:

### **Concentration Curriculum (27 credits)**

SWRK.5731 Fall Inter-Professional Team Seminar (0 credit)	SWRK.5820 Concentration Integrative Seminar (1 credit)
SWRK.5732 Spring Inter-Professional Team Seminar (0 credit)	SWRK.5842 Clinical Practicum II (2 credits)
SWRK.5733 Advanced Clinical Social Work Practice	SWRK.5843 Clinical Practicum III
SWRK.5734 Human Behavior and the Social Environment Part II	15 credits of advisor-approved electives.

## Master of Social Work, Clinical Concentration & Juris Doctor Dual Degree

The Master of Social Work, Clinical Concentration and the Juris Doctor in the Saint Louis University School of Law remain separate degrees. For students who want to seek both degrees, nine credits of each degree plan are accepted by each program as electives. In pursuit of these degrees, students are required to be admitted by both programs and they begin their first year as a full time law student.

### **Dual Degree Prerequisites**

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Individuals may apply to the M.S.W. degree program concurrently with application to law school or following admission to the School of Law; however, admission to the dual degree program is contingent upon admission to both the M.S.W. and the J.D. degree programs.

### **M.S.W. Prerequisites**

A bachelor's degree from an accredited college or university with at least 24 credits in liberal arts and the social sciences.

### **M.S.W. Requirements (57 total credits)**

The M.S.W. requires the completion of the M.S.W. core curriculum and the concentration curriculum as follows,

### **Concentration Curriculum (27 credits)**

SWRK.5731 Fall Inter-Professional Team Seminar (0 credit)	SWRK.5734 Human Behavior and the Social Environment Part II
SWRK.5732 Spring Inter-Professional Team Seminar (0 credit)	SWRK.5820 Concentration Integrative Seminar (1 credit)
SWRK.5733 Advanced Clinical Social Work Practice	SWRK.5842 Clinical Practicum II (2 credits)

**Exceptions to the Concentration Curriculum**

In place of 9 credits of social work electives, dual degree J.D./M.S.W. students take 9 credits of School of Law J.D. courses.

Students will have Faculty Advisors in both schools to assist them in course planning to meet each school's degree requirements. In the School of Social Work, in addition to a Faculty Advisor, students have a field education Practicum Liaison to assist them in field education planning.

B.S.S.W. students granted full advanced standing for the M.S.W. complete 27 credits of the 57 required with M.S.W. courses. The remaining nine credits of M.S.W. electives are fulfilled with law courses.

The School of Law allows nine credits of M.S.W. courses to fulfill elective requirements for the J.D.. Students will need to speak directly with the School of Law regarding curriculum requirements for the J.D. and which M.S.W. courses fulfill their J.D. requirements.

The M.S.W. degree requirements for J.D./M.S.W. begin in the second year of law school and are taken throughout the rest of the matriculation over the next 3 years.

## Master of Social Work, Clinical Concentration & Master of Arts in Deaconess Studies (Concordia Seminary) Dual Degree

The Master of Social Work, Clinical Concentration and Master of Arts in Deaconess Studies is a dual degree program with Concordia Seminary. With this dual degree, students are able to prepare to provide social work in Lutheran missions and social service agencies. Students gain knowledge and skills in blending Lutheran faith beliefs, spirituality, and religious service with the professional practice of social work.

**Dual Degree Prerequisites**

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Individuals may apply to the M.S.W. degree program concurrently with the M.Deac. degree program.

**M.S.W. Prerequisites**

A bachelor's degree from an accredited college or university with at least 24 credits in liberal arts and the social sciences.

**M.S.W. Requirements (57 total credits)**

The M.S.W. requires the completion of the M.S.W. core curriculum and the concentration curriculum as follows.

**Concentration Curriculum (27 credits)**

SWRK.5731 Fall Inter-Professional Team Seminar (0 credit)  
 SWRK.5732 Spring Inter-Professional Team Seminar (0 credit)  
 SWRK.5733 Advanced Clinical Social Work Practice  
 SWRK.5734 Human Behavior and the Social Environment Part II

SWRK.5820 Concentration Integrative Seminar (1 credit)  
 SWRK.5842 Clinical Practicum II (2 credits)  
 SWRK.5843 Clinical Practicum III  
 15 credits of advisor-approved social work electives

**Exceptions to the Concentration Curriculum**

In place of 12 credits of social work electives, dual degree M.Deac./M.S.W. students take 12 credits of deaconess studies courses.

## Master of Social Work, Clinical Concentration & Master of Arts in Pastoral Studies (Aquinas Institute of Theology) Dual Degree

The School of Social Work and the Aquinas Institute of Theology offer a dual Master of Social Work, Clinical Concentration (M.S.W.) and Master of Arts in Pastoral Studies (M.A.P.S.) program. Through a dual track of coursework and fieldwork, this program is designed to:

- Prepare students for professional social work practice while providing a solid foundation in theology, ministry, and biblical studies.
- Enable students to integrate the psychosocial, economic, political, and spiritual dimensions of societal and health care problems.
- Inspire students to serve individuals, families, and communities through social action for the common good.

The program provides the framework, skills, and resources for a spiritually sensitive social work practice while deepening professional commitment to social justice based upon the Gospels. The program also creates an opportunity for church ministers to obtain clinical professional licensure and develop micro and macro skills for community service. The combination of the M.S.W. degree and the M.A.P.S. degree requires a minimum total of 78 credits.

### **Dual Degree Prerequisites**

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Individuals may apply to the M.S.W. degree program concurrently with the M.A.P.S. degree program at Aquinas Institute.

### **M.S.W. Prerequisites**

A bachelor's degree from an accredited college or university with at least 24 credits in liberal arts and the social sciences.

### **M.S.W. Requirements (57 total credits)**

The M.S.W. requires the completion of the M.S.W. required courses and the concentration curriculum as follows:

#### **Clinical Concentration Curriculum (27 credits)**

SWRK.5731 Fall Inter-Professional Team Seminar (0 credit)  
SWRK.5732 Spring Inter-Professional Team Seminar (0 credit)  
SWRK.5733 Advanced Clinical Social Work Practice  
SWRK.5734 Human Behavior and the Social Environment Part II

SWRK.5820 Concentration Integrative Seminar (1 credit)  
SWRK.5842 Clinical Practicum II (2 credits)  
SWRK.5843 Clinical Practicum III  
Fifteen credits of advisor-approved social work electives

#### **Exceptions to the Concentration Curriculum**

In place of 12 credits of social work electives, dual degree M.A.P.S./M.S.W. students take 12 credits of M.A.P.S. courses.

## **Master of Social Work, Clinical Concentration & Master of Arts in Theology (Concordia Seminary) Dual Degree**

The Master of Social Work, Clinical Concentration and Master of Arts in Theology is a dual degree program with Concordia Seminary. With this dual degree, students are able to prepare to provide social work in Lutheran missions and social service agencies. Students gain knowledge and skills in blending Lutheran faith beliefs, spirituality, and religious service with the professional practice of social work.

### **Dual Degree Prerequisites**

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Individuals may apply to the M.S.W. degree program concurrently with the M.A.Th. degree program.

### **M.S.W. Prerequisites**

A bachelor's degree from an accredited college or university with at least 24 credits in liberal arts and the social sciences.

### **M.S.W. Requirements (57 total credits)**

The M.S.W. requires the completion of the M.S.W. core curriculum and the concentration curriculum as follows.

#### **Clinical Concentration Curriculum (27 credits)**

SWRK.5731 Fall Inter-Professional Team Seminar (0 credit)  
SWRK.5732 Spring Inter-Professional Team Seminar (0 credit)  
SWRK.5733 Advanced Clinical Social Work Practice  
SWRK.5734 Human Behavior and the Social Environment Part II

SWRK.5842 Clinical Practicum II (2 credits)  
SWRK.5820 Concentration Integrative Seminar (1 credit)  
SWRK.5843 Clinical Practicum III  
Fifteen credits of advisor-approved social work electives.

#### **Exceptions to the Concentration Curriculum**

In place of 12 credits of social work electives, dual degree M.A.Th./M.S.W. students take 12 credits of theology courses.

# Master of Social Work, Clinical Concentration & Master of Divinity (Concordia Seminary) Dual Degree

The Master of Social Work, Clinical, and Master of Divinity is a dual degree program with Concordia Seminary. With this dual degree, students are able to prepare to provide social work in Lutheran missions and social service agencies. Students gain knowledge and skills in blending Lutheran faith beliefs, spirituality, and religious service with the professional practice of social work.

## Dual Degree Prerequisites

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Individuals may apply to the M.S.W. degree program concurrently with the M.Div. degree program.

## Dual Degree Prerequisites

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Individuals may apply to the M.S.W. degree program concurrently with the M.Div. degree program.

## M.S.W. Prerequisites

A bachelor's degree from an accredited college or university with at least 24 credits in liberal arts and the social sciences.

## M.S.W. Requirements (57 total credits)

The M.S.W. requires the completion of the M.S.W. core curriculum and the concentration curriculum as follows.

### Clinical Concentration Curriculum (27 credits)

SWRK.5731 Fall Inter-Professional Team Seminar (0 credit)  
SWRK.5732 Spring Inter-Professional Team Seminar (0 credit)  
SWRK.5733 Advanced Clinical Social Work Practice  
SWRK.5734 Human Behavior and the Social Environment Part II

SWRK.5842 Clinical Practicum II (2 credits)  
SWRK.5820 Concentration Integrative Seminar (1 credit)  
SWRK.5843 Clinical Practicum III  
Fifteen credits of advisor-approved social work electives

### Exceptions to the Concentration Curriculum

In place of 12 credits of social work electives, dual degree M.Div./M.S.W. students take 12 credits of M.Div. courses.

# Master of Social Work, Clinical Concentration & Master of Public Health, Public Health Practice Concentration Dual Degree

The Master of Social Work, Clinical, and Master of Public Health, Public Health Practice, is a dual degree program in the College for Public Health and Social Justice, which is accredited by the Council on Education for Public Health. This integrated program requires completion of both the M.S.W. and M.P.H. degree requirements.

## Dual Degree Prerequisites

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Individuals may apply to the M.P.H. degree program concurrently with application to the School of Social Work or following their admission to the School of Social Work; however, admission to the dual degree program is contingent upon admission to both the M.P.H. and the M.S.W. degree programs.

## M.S.W. Prerequisites

A bachelor's degree from an accredited college or university with at least 24 credits in liberal arts and the social sciences.

## M.S.W. Requirements (57 total credits)

The M.S.W. requires the completion of the M.S.W. core curriculum and the concentration curriculum as follows,

### Concentration Curriculum (27 credits)

SWRK.5731 Fall Inter-Professional Team Seminar (0 credit)  
SWRK.5732 Spring Inter-Professional Team Seminar (0 credit)  
SWRK.5733 Advanced Clinical Social Work Practice  
SWRK.5734 Human Behavior and the Social Environment Part II

SWRK.5820 Concentration Integrative Seminar (1 credit)  
SWRK.5842 Clinical Practicum II (2 credits)  
SWRK.5843 Clinical Practicum III  
Fifteen credits of advisor approved social work electives



### **Exceptions to the Concentration Curriculum**

In place of 12 credits of social work electives, dual degree M.S.W./M.P.H. students take:

BSH.5000 Behavioral Science and Public Health  
BST.5000 Principles of Biostatistics

EPI.5000 Principles of Epidemiology  
PUBH.5010 Mission and Practice of Global Public Health

### **M.P.H. Prerequisites**

A bachelor's degree or equivalent of a professional degree from an accredited college or university.

### **M.P.H. Requirements**

The M.P.H. requires the completion of the M.P.H. core curriculum as revised and the concentration curriculum as follows:

### **Exceptions to the M.P.H. Core Curriculum**

SWRK.5820 Concentration Integrative Practice Seminar, SWRK.5842 Clinical Practicum II and SWRK.5843 Clinical Practicum III (6 total credits) substitute for PUBH.5910 Practice Experience in Public Health (zero credits), which increases the M.P.H. core curriculum credits to 27.

### **Public Health Practice Concentration Curriculum (15 credits)**

BSDP.5100 Public Health and Disasters  
HMP.5000 Health Care Organization  
HMP.5500 Health Policy

PUBH.5620 Politics and Public Health Advocacy  
PUBH.5960 Capstone in Public Health Practice

## **Community and Organization Concentration**

The concentration courses focus on leadership, advocacy, and administration roles in social work. Students develop knowledge and skills in policy advocacy, nonprofit administration, or community organization and development.

### **Requirements (57 total credits)**

The completion of the M.S.W. core curriculum and the concentration curriculum as follows:

### **Concentration Curriculum (27 credits)**

SWRK.5721 Community Theory and Practice  
SWRK.5785 Organizational Planning and Programming  
SWRK.5820 Concentration Integrative Seminar (1 credit)

SWRK.5832 Concentration Practicum II (2 credits)  
SWRK.5833 Concentration Practicum III  
15 credits of advisor-approved electives

## **Master of Social Work, Community and Organization Concentration & Master of Public Administration Dual Degree**

The Master of Social Work, Community & Organization Concentration, and the Master of Public Administration, both offered by Saint Louis University, is a dual degree program that prepares students for careers in the non-profit or governmental sector primarily. Students will focus on administrative and management skills, social and public policy analysis, and advocacy strategies to improve social welfare. Students entering must meet the admission requirements of both programs. The combination of the M.S.W. and M.P.A. degrees require a minimum total of 72 credits.

### **Dual Degree Prerequisites**

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue a dual degree program. Individuals may apply to the M.S.W. degree program concurrently with the M.P.A. degree program.

### **M.S.W. Prerequisites**

A bachelor's degree from an accredited college or university with at least 24 credits in liberal arts and the social sciences.

### **M.S.W. Requirements (57 total credits)**

The M.S.W. requires the completion of the M.S.W. core curriculum and the concentration curriculum as follows.

### **Community & Organization Concentration Curriculum (27 credits)**

SWRK.5721 Community Theory and Practice  
SWRK.5785 Organizational and Program Planning  
SWRK.5832 Concentration Practicum II (2 credits)

SWRK.5820 Concentration Integrative Seminar (1 credit)  
SWRK.5833 Concentration Practicum III  
Fifteen credits of advisor-approved social work electives.

### **Exceptions to the Concentration Curriculum**

In place of up to 12 credits of social work electives, dual degree M.P.A./M.S.W. students may choose to take 12 credits of public administration electives.

## Family Concentration

No longer accepting applications. Refer to past catalogs for degree requirements.

## Health and Mental Health Concentration

No longer accepting applications. Refer to past catalogs for degree requirements.

# Post-Baccalaureate Certificate in Biosecurity and Disaster Preparedness

### **Prerequisites**

A bachelor's degree in any discipline. Experience in health-related fields is preferred, but is not required. Certificate may be completed concurrently with any M.P.H. degree other than the M.P.H.BSDP or a joint concentration degree that includes BSDP. Certificate coursework can be applied towards an M.S. in BSDP if students matriculate into the M.S. program within 2 years of completing the Certificate and assuming that the Certificate courses were not part of a prior degree (such as an M.P.H.).

### **Required Courses (15 credits)**

BSDP.5100 Public Health and Disasters	BSDP.5203 Disaster Planning for Infectious Disease Disasters
BSDP.5101 Fundamentals of Disaster Planning	BSDP.5206 Disaster Management and Risk Analysis
BSDP.5103 Communicable Diseases and Infection Control	

# Post-Master's Certificate in Applied Behavior Analysis

Students take seven regular classroom courses (21 credits), and may elect to engage in three practicum courses (9 credits). Successful completion of coursework and practicum experience provides eligibility to complete the examination for national certification as a Board Certified Behavior Analyst (BCBA) and for licensure in Missouri and some other states.

The first six courses listed below must be taken in order of presentation throughout the year. That is, two courses in the fall, two courses in the spring, and two courses in the summer. Special Topics II may be taken at any time at SLU. The practicum credit, if taken, may be scheduled in collaboration between students and their advisor, with full-time and part-time options available.

### **Prerequisites**

A Master's degree from an accredited college or university with a degree in behavior analysis, psychology or education. The Graduate Record Exam (GRE) is not required

### **Required Courses (21 credits)**

ABA.5746 Principles and Concepts in Behavior Analysis	ABA.5749 Behavior Change and Ethics
ABA.5774 Measurement and Experimental Design	ABA.5931 Special Topics I in ABA
ABA.5747 Assessment and Selecting Interventions	ABA.5932 Special Topics II in ABA
ABA.5748 Behavior Change and Processes	

### **Optional Practicum Courses (9 credits)**

ABA.5826 Practicum I	ABA.5820.49 Integrative Seminar
ABA.5820.48 Integrative Seminar	ABA.5828 Practicum III
ABA.5827 Practicum II	ABA.5820.50 Integrative Seminar

# SCHOOL FOR PROFESSIONAL STUDIES

---

**Beth Winfrey Freeburg, Ph.D.**

*Dean*

**John P. Buerck, Ph.D.**

*Associate Dean of Academic Affairs*

**Matthew J. Grawitch, Ph.D.**

*Associate Dean of Graduate and Professional Education*

**Steven Winton, Ph.D.**

*Graduate Program Director, Leadership and Organizational Development Program*

**Srikanth Mudigonda, Ph.D.**

*Graduate Program Director, Applied Analytics Program*

As a Jesuit institution, Saint Louis University has a longstanding, nearly 200-year-old tradition of serving students of all ages. Saint Louis University enhanced its focus on adult students in 1963, when it launched one of the first schools in the country dedicated to adult learners. Since then, the School for Professional Studies has evolved into one of the most innovative, adult-focused programs in the country.

## **SPS Mission**

The School for Professional Studies offers globally accessible, academic, professional, and continuing education programs for adult learners and working students in Saint Louis University's Jesuit tradition of excellence. Our faculty and staff promote a student-centered, innovative, and enterprising environment built on a foundation of integrity, accountability, and collaboration.

## Master of Arts in Leadership & Organizational Development

### **Available Online**

The Leadership and Organizational Development (LOD) Master's degree is a 36-hour program designed for working professionals wishing to pursue a professional Master's degree while maintaining part- or full-time employment. The program can be completed in 2.5 years taking one course at a time, straight through the program. With courses offered in an online format in an accelerated 8-week term, these leadership development courses make advanced education more accessible for working professionals.

### **Learning Outcomes of Leadership & Organizational Development**

- Coaching and mentoring to assist in employee development
- Strategic visioning, with an emphasis on future-focused leadership
- Evidence-based decision making
- Leveraging current leadership competencies and managing future leadership development
- Integrating project management logistical needs with interpersonal leadership needs
- Leading change initiative efforts in an organization

### **Learning Modalities of Leadership & Organizational Development**

Entirely online curriculum of 36 credit hours of which 6 hours consist of the design and implementation of an action research capstone project in a business/organizational setting, to emphasize the applied, real-world nature of the capstone course.

Each course involves completion of weekly assignments and term projects, weekly online interactive sessions with the instructor, recorded video lectures, and discussion forums moderated by the instructor.

## Admissions Criteria

Minimal qualifications for obtained acceptance into the program are the following:

Work Experience: Applicant must be employed on at least a part-time basis (20 hours or more per week) and have at least 3 years of work experience.

Undergraduate GPA: 3.0 or higher on a 4.0 scale- Students with a GPA less than 3.00 will be considered for probationary admission. They must obtain a minimum grade of "B" in each of the first two classes to become a fully Classified student. The GPA requirement applies even to students bridging from undergraduate programs in the School for Professional Studies.

Course work in the following areas:

- At least 1 undergraduate leadership or organizational theory course;
- At least 1 basic statistics or research methods course;
- At least 1 psychology course, General Psychology accepted;
- At least 1 business-related course.

Students missing any of the pre-requisites will be permitted to fulfill those at SPS prior to acceptance into the LOD program.

It is expected that incoming students have a basic, working knowledge of a standard word processing program (e.g., Microsoft Word), a standard spreadsheet or database program (e.g., Microsoft Excel, Microsoft Access, SPSS), and a standard presentation program (e.g., Microsoft PowerPoint).

Three references through the Personal Potential Index (PPI) are required as part of your application. The PPI is free. It requires that you provide e-mail contact information for up to five references (you can use employers and other individuals who can judge your personal attributes). The PPI can be found at <https://www.ets.org/ppi>.

### Transcripts

Provide a personal goal statement (max of 5 pages) describing: (a) why a Master's degree in Leadership and Organizational Development is needed within the applicant's job or career area, (b) why the applicant feels the M.A. program at SLU will help meet that need, and (c) evidence to support the students assertions, utilizing appropriate citations as necessary.

All applicants will be required to submit a current resume or curriculum vita with application materials.

## Careers in Leadership & Organizational Development

In today's business environment of technological change, globalization, competition and social responsibility, there is a tremendous need for individuals who can lead organizations through difficult choices and drive actions toward valued goals. The U.S. Bureau of Labor Statistics expects high-level executive and management jobs to grow much faster than average nearly across the board. Additionally, employees with a Master's degree earn \$200-\$300 more per week and have a lower turnover rate than those with a bachelor's degree.

Organizations are searching for professionals capable of facilitating strategic change, fluent in designing cross-cultural interventions, and experienced in work designs that are both productive and satisfying.

Saint Louis University's Master's Degree in Leadership & Organizational Development prepares you to pursue careers in today's dynamic multi-disciplinary work place. Through our Leadership & Organizational Development program, at our St. Louis, Missouri campus and online, you will develop a portable set of knowledge and skills that aren't about how to perform your job, but are about how to be a leader as it applies to your current job, your future job and all areas of your life.

What's more, leadership is a competency that can make a strong positive contribution at all levels of any organization. The benefits to you, your organization, and your career increase significantly with a Master's degree from our Leadership & Organizational Development program when your work role involves any of the following requirements.

### 1. Does your role involve managing the talent of an organization?

Most supervisory and management roles in an organization involve finding ways to identify talented workers and create an engaging work environment. In the Leadership & Organizational Development Program, at the Saint Louis, Missouri campus and online, you will learn how to better motivate and inspire others, as a way to increase engagement and optimize results.

### 2. Does your role involve human resource functions?

Human resource roles involve working with employees across the organization, from sales and marketing to production to finance. These roles focus on improving the way employees interface with the organization. In many cases, human resource professionals also design and deliver training throughout the organization. In the Leadership & Organizational Development Program, you will take leadership and management courses at Saint Louis University as well as learn how to create a work environment that supports employee development - one that optimizes both organizational effectiveness and employee well-being.

### 3. Does your role involve developing a strategy and seeking commitment to that strategy?

Key decision makers in organizations are required to think and act strategically. Strategic thinking and action requires attention to the long-term, the big picture so to speak. Unfortunately, most people are not naturally-inclined to think and act strategically, and many key decision makers have never had the opportunity to actually develop their strategic competencies. In the Leadership & Organizational Development Program, you will be provided developmental opportunities to sharpen your strategic leadership skills, emphasizing such areas as visioning, empowerment, scenario planning, and strategic planning.

### 4. Does your role involve designing, overseeing, or leading change initiatives in the organization?

Many roles within an organization require involvement in change initiatives. Organizational development functions often have the primary responsibility for change management; but human resource professionals, managers, and executives often are required to develop, oversee, lead, and obtain buy in for new change initiatives. In the Leadership & Organizational Development Program you will learn the skills and competencies necessary to effectively lead change initiatives through leadership and management courses. Whether those changes are small (such as a departmental training program) or large (such as organizational re-structuring), the program will provide you with opportunities to improve the way you think about, plan, and execute change in your organization.

Obtaining a Master's in Leadership & Organizational Development through Saint Louis University's online Master's program is an important step in both advancing professional development and enhancing career opportunities and satisfaction.

#### All courses offered online

Courses for M.A. in Leadership & Organizational Development

#### Foundation Courses

ORLD 5000 Organizational Dynamics 3  
ORLD 5010 Contemporary Organizational Leadership 3  
ORLD 5020 Applied Research Methods 3  
ORLD 5030 Applied Analytics 3  
credit hours:12

#### Leadership Development Courses

ORLD 5100 Professional Leadership Development 3  
or  
ORLD 5150 Talent Management and Development 3  
ORLD 5250 Leading a Healthy Organization 3  
ORLD 5350 Team Leadership 3  
ORLD 5450 Leading Organizational Change 3  
ORLD 5650 Future-Focused Leadership 3  
ORLD 5750 Contemporary Issues in Leadership 3  
credit hours:18

#### Capstone Courses

ORLD 5900 Action Research I 3  
ORLD 5950 Action Research II 3  
credit hours:6  
total credit hours: 36

## Master of Science in Applied Analytics

#### Available Online

If you've wondered why airline prices change every hour, or how Netflix recommends the movie you want to see, or how Facebook finds the stories that interest you most, then you have seen the power of analytics. If you have a mind for mathematics and statistical programming, and a passion for working with data to solve challenging problems, then this is your program.

Analytics is the process of using data relationships and computer models to drive business value, improve decision making, and understand human relationships. Individuals with analytics skills are in short supply. Employer demand for analytics talent is projected to intensify in the coming years as the amount of data continues to grow. Choosing the right graduate degree is an important step in both advancing professional development and enhancing career opportunities and satisfaction.

Saint Louis University's Master's Degree Online in Applied Analytics immerses students in a comprehensive and applied curriculum exploring the underlying data science, information technology and business of analytics. The curriculum is a carefully calibrated and continually updated mix of applied statistics, computing technologies, and business disciplines.

Discover the Meaning within Big Data and become Fluent in Data Analysis

SLU's M.S. in Applied Analytics provides you with skills in data mining, data visualization, predictive analysis, and data management. Upon graduating the program, you will be ready to discover the patterns within large quantities of data and implement solutions from such insights with courses covering the areas of:

Programming and Problem Solving  
Applied Research Methods  
Applied Analytics  
Information Retrieval  
Information Visualization and Representation  
Project Management  
Leadership and Organizational Development  
M.S. in Applied Analytics

This online Master's degree is a 36-credit program designed for working professionals wishing to pursue a professional Master's degree in the Analytics field, while maintaining part- or full-time employment. With courses offered in online and blended formats in accelerated 8-week terms, this program makes advanced education more accessible for working professionals.

### **Learning Outcomes of Applied Analytics**

- Programming and problem solving to aid various analytical procedures
- Statistical and analytical techniques for analyzing datasets of various sizes
- Designing and implementing analytics projects to solve complex organizational problems using evidence obtained systematically from multiple sources
- Communicating pertinent information effectively in written, oral, and visual forms to facilitate understanding of complex data
- Project management
- Leadership and organizational development skills to function effectively in decision-making roles and/or support organizational leaders

### **Learning Modalities of Applied Analytics**

- Entirely online curriculum of 36 credit hours of which 6 hours consist of the design and implementation of a capstone project in analytics in a business/organizational setting, to emphasize the applied, real-world nature of the capstone course
- Each course involves completion of weekly assignments and term projects, weekly online interactive sessions with the instructor, recorded video lectures, and discussion forums moderated by the instructor.

### **Admissions Criteria**

Completed student applications will be evaluated by an admissions committee if the following minimum requirements are met by an applicant:

Undergraduate degree: An undergraduate degree from an accredited institution.

Work experience: Applicant must be employed on at least a part-time basis (20 hours or more per week) and have at least 3 years of work experience.

Undergraduate GPA: 3.0 or higher on a 4.0 scale. Students with a GPA less than 3.00 will be considered for probationary admission. They must obtain a minimum grade of "B" in each of the first two classes to become a fully-classified student. The GPA requirement also applies to students bridging from the School for Professional Studies Computer Information Systems program.

*Course work in the following areas:*

At least one course in information systems/technology or a programming language.

At least one basic statistics or research methods course.

It is expected that incoming students have a working knowledge of a standard word processing program (e.g., Microsoft Word), a standard spreadsheet or database program (e.g., Microsoft Excel, Microsoft Access), and a standard presentation program (e.g., Microsoft PowerPoint).

Three references through the Personal Potential Index (PPI) are required as part of your application. The PPI is free. It requires that you provide e-mail contact information for up to five references (you can use employers and other individuals who can judge your personal attributes). The PPI can be found at <https://www.ets.org/ppi>.

Official transcripts of all prior post-secondary education, sent directly by the student's prior academic institutions to SLU

A 500-word personal statement articulating:

- Why a Master's degree in Applied Analytics is needed within the applicant's job or career area
- How the applicant feels that the M.S. program at SLU will meet that need
- Evidence and well-reasoned argument to support the student's assertions, along with appropriate citations

A current resume

## Careers in Applied Analytics

Saint Louis University's Master's Degree in Applied Analytics prepares you to pursue careers in today's dynamic multi-disciplinary work place. Through our Applied Analytics program, at our St. Louis, Missouri campus and online, you will combine the use knowledge and technology skills related to Analytics with organizational leadership to support knowledge discovery and dissemination, assisting the organizational decision-maker across a variety of academic disciplines and professional fields and preparing you for jobs in:

Business & Industry

Private for Profit and Not-for-Profit

Government

Information Technology

Health Care

Life Sciences

Education

Security & Intelligence

Military

And many more...

Recent trends in the job market data and expert predictions indicate that data analytics, business analytics, and similarly-named skillsets will be sought increasingly by employers seeking to optimize their business processes and improve their profitability by relying on data analysts for providing them with actionable insights. Typical roles that require education in Analytics include:

Business Analyst

Business Intelligence Developer

Business Systems Analyst

Consultant

Communications Manager

Data Analyst

Data Architect

Data Modeler

Financial Analyst

Market Research Analyst

Network Administrator

Project Manager

Sales Engineer

Solutions Architect

Sr. Programmer

System Administrator

Systems Analyst

Vice President of Solutions

Obtaining a Master's in Applied Analytics through Saint Louis University's organizational development program is an important step in both advancing professional development and enhancing career opportunities and satisfaction.

### All courses offered online

Courses for M.S. in Applied Analytics

#### Foundation Courses

AA 5000 Foundations of Analytics 3

AA 5050 Programming and Problem Solving 3

AA 5100 Information Retrieval 3

Credit hours:9

**Technology and Leadership Development Courses**

AA 5150 Evidence-Based Decision Making 3  
AA 5200 Information Visualization and Presentation 3  
AA 5250 Project Management 3  
AA 5750 Contemporary Issues in Analytics 3  
ORLD 5000 Organizational Dynamics 3  
ORLD 5010 Contemporary Organizational Leadership 3  
ORLD 5020 Applied Research Methods 3  
ORLD 5030 Applied Analytics 3  
AA 5300Advanced Analytics 3

*Students should take any 4 of the 5 AA courses, ORLD 502, ORLD 503, and either ORLD 500 or ORLD 501 credit hours:21*

**Capstone Courses**

ORLD 5900Action Research I 3  
ORLD 5950Action Research II 3

Credit hours: 6

Total credit hours: 36



# SCHOOL OF EDUCATION

---

**Ann M. Rule, Ph.D.**

*Interim Dean*

## **Graduate Program Directors:**

**Susan Everson, Ph.D.**

*Educational Leadership*

**Nikki Murdick, Ph.D.**

*Curriculum & Instruction, Educational Foundations, and Special Education*

**Karen A. Myers, Ph.D.**

*Higher Education Administration*

**Amrita Chaturvedi, Ph.D.**

*International Programs*

**John James, Ed.D.**

*Catholic Education*

Originally established in 1925, the School of Education is the academic home for all post-baccalaureate programs in education in the University. As a school within a Catholic, Jesuit institution, the School of Education offers its students an excellent professional education and a sound background within the broad and liberal curriculum of Graduate Education. The main objective of all programs is to prepare dedicated, reflective practitioners who exhibit the knowledge, skills, and dispositions embedded in the conceptual framework of the School. The shared values (or the 5Cs) that guide the programs include competence, conscience, compassion, commitment, and community. Students are prepared to be reflective educators who are able to implement educational programs consistent with their areas of expertise.

The School of Education offers degree programs in Educational Leadership, Higher Education Administration, Curriculum and Instruction, Educational Foundations, and Special Education; the curricula for each program are detailed below. Graduate work in the School of Education is designed for those individuals interested in pursuing advanced degrees in the specialties of Curriculum and Instruction, Educational Foundations, Educational Leadership, Higher Education Administration, Special Education, Disability Education, and Teaching. The School offers the M.A., M.A./M.B.A., M.A.T., Ed.S., Ed.D., and Ph.D. In addition, certification for the principalship, director of special education, and superintendency are offered through the programs. The following programs are accredited by the Missouri Department of Elementary and Secondary Education and the National Council for the Accreditation of Teacher Education (NCATE): elementary-, middle-, and secondary-school principal, director of special education, and superintendent of schools. All programs must be planned with an advisor.

## **Programs of Study**

### *Curriculum and Instruction*

M.A., M.A.T., Ed.D., Ph.D.

Students accepted into this specialty, focus on curriculum and related instructional processes and tools (including technology). Students who choose this area of study typically plan to pursue jobs as professional curriculum specialists or educational training specialists. The typical program in Curriculum and Instruction includes Curriculum Theory, Curriculum Design, Instructional Design, and Curriculum and/or Program Evaluation. Students in the Curriculum and Instruction program may select an area of emphasis outside the School of Education.

### *Educational Foundations*

M.A., Ed.D., Ph.D.

Foundations of Education is a program designed to support critical inquiry into the nature of education. Graduate students typically study the disciplines of psychology, theory, history, philosophy, and sociology to analyze issues in education.

### *Educational Leadership*

M.A., Ed.S., Ed.D., Ph.D.

The professional and certification programs in Educational Leadership prepare individuals for leadership positions at the school and

district levels. The Ph.D. program also prepares students for academic positions in universities and research institutions. Certification programs are offered for the following positions: School Principal and Superintendent of Schools. Those in non-certification programs focus on trends and issues in educational leadership. An emphasis in Catholic School Leadership is also available at the Master's degree level.

## *Higher Education Administration*

Student Personnel Administration Professional Development Specialty Program (18-hour online program)  
Student Personnel Administration (M.A.)  
Higher Education Administration (Ph.D.)

Programs in Higher Education Administration and Student Personnel Administration prepare individuals for careers in academic, administrative, institutional, public policy and student affairs departments of two- and four- year colleges and universities, multi-campus systems, foundations and government agencies. The programs emphasize the interplay of theory and practice in higher education.

## *Special Education*

M.A., Ph.D.

The professional programs in Special Education at the Master's degree level are designed to provide individuals with expanded knowledge in a specific disability area: Early Childhood Special Education; Behavior Disorders; Learning Disabilities; or Intellectual Disability. The Ph.D. in Special Education focuses on developing knowledge and skills in issues in special education at the national and international level and on policy development for inclusive special education programs.

## **Graduate degree programs**

# Doctor of Philosophy

The Doctor of Philosophy (Ph.D.) program in the School of Education emphasizes the interplay of theory and practice in education as well as a strong emphasis on research. Graduate students may choose an area of concentration in Curriculum and Instruction, Educational Foundations, Special Education, Educational Leadership, or Higher Education Administration.

### **Prerequisites**

A Master's degree in education or a related field and research requirements for the M.A. degree in the School of Education.

### **Required Courses**

A minimum of 72 credits beyond the baccalaureate with a minimum of 42 credits beyond the Master's degree including 12 credits of dissertation research. Three advanced research courses approved by the School are required; demonstrated competency in a foreign language (not students' native tongue) may substitute for one of the required advanced research courses. Students must also pass a written comprehensive exam, a preliminary oral examination of the dissertation proposal, and a public oral defense of the dissertation.

### **Additional Requirements**

Doctoral Residency is required for some programs and should be arranged with an advisor on a contract basis to extend personal and professional development.

# Doctor of Education

The Doctor of Education (Ed.D.) program emphasizes a practical, problem-oriented curriculum. Students may choose an area of concentration in Curriculum and Instruction, Educational Foundations, or Educational Leadership.

### **Prerequisites**

A Master's degree in Education or a related field and 6 credits of research preparation (the same courses as those required for the Master of Arts degree or their equivalents).

### **Required Courses**

A minimum of 70 credits of academic work beyond the baccalaureate, including 40 credits in education, an internship or practicum, and 3 credits of Project Guidance for the Ed.D. in Educational Leadership. A minimum of 72 credits of academic work beyond the baccalaureate including, 38 credits in education and 4 credits of Project Guidance for Curriculum & Instruction, and Educational Foundations. Research requirements include those required for the Master of Arts degree (6 credits) and 1 advanced research course selected from those approved by the School. A minimum of 38 credits, excluding assigned prerequisites (if any), must be taken at Saint Louis University. The Ed.D. degree program encourages students to begin their projects early in their program-tenure. Three to 4

credits of Project Guidance will be included in the total credit requirement. Students should consult their advisors for course requirements, which differ in each of the programs (Educational Leadership, Curriculum and Instruction, and Educational Foundations).

#### **Additional Requirements**

Doctoral Residency is program dependent and should be arranged with an advisor on a contract basis to extend personal and professional development. Students must also take and pass written and oral comprehensive exams.

## Master of Arts

The Master of Arts (M.A.) program is designed for those individuals seeking a degree in school leadership leading to certification as an elementary, middle, or high school principal, or post-baccalaureate work with an area of concentration in Curriculum and Instruction, Educational Foundations, Student Personnel Administration, Educational Leadership or Special Education.

#### **Prerequisites for Curriculum & Instruction, Educational Foundations, Special Education, and Educational Leadership**

Eighteen credits of advanced undergraduate coursework in education or related areas approved by the School of Education.

#### **Prerequisites for Student Personnel Administration**

A bachelor's degree in education or related fields approved by the School of Education.

#### **Required Courses**

Coursework in Educational Leadership, Higher Education Administration, Curriculum and Instruction, Special Education, and/or Educational Foundations; 6 credits in research-preparation coursework selected from those approved by the School.

#### **Additional Requirements**

A theme paper or written examination (program dependent)

An oral examination (program dependent)

Total required credits: 32

## Master of Arts & Master of Business Administration Dual Degree

The School of Education and the John Cook School of Business jointly administer a dual degree program leading to the degrees of Master of Arts in Educational Leadership and Master of Business Administration. These programs provide an awareness of the functional relationships between the educational system and business administrative organizations. Prospective students must apply separately to each program. This program includes scholarship opportunities.

#### **Prerequisites**

Eighteen credits of advanced undergraduate coursework in education or related areas approved by the School of Education and the prerequisites for the M.B.A. in the John Cook School of Business.

#### **Required Courses**

Thirty credit hours of graduate coursework required in Educational Leadership. Courses and hours may vary.

## Master of Arts in Teaching

The Master of Arts in Teaching (M.A.T.) program is designed to offer classroom teachers three broad areas of development: knowledge in subject-matter; current educational developments; and the processes of teaching and learning. The course of study is for classroom teachers interested in professional growth.

#### **Prerequisites**

Eighteen credits of advanced undergraduate coursework in education or related areas approved by the School of Education.

#### **Required Courses**

A carefully constructed program, including not more than six credits from outside the School of Education, planned with an advisor.

#### **Additional Requirements**

A theme paper

An oral examination

Total credits: 32

# Specialist in Education

The Specialist in Education (Ed.S.) program is offered for persons interested in developing competencies necessary for certification as superintendents of schools or advanced certification as elementary, middle, or high school principals.

## Required Courses

A minimum of 30 credits at SLU beyond the Master's degree and 6 credits of research-preparation (the same courses as those required for the Master of Arts degree or their equivalents).

## Course listing post baccalaureate courses

### CURRICULUM AND INSTRUCTION

#### Upper-Division Undergraduate Courses

EDI.4210 Methods of Technology Integration (2)  
EDI.4250 School Curriculum and Instruction PreK-6 (3)  
EDI.4260 Middle School Curriculum and Instruction (3)  
EDI.4270 Secondary School Curriculum and Instruction (3)  
EDI.4290 Mathematics for Diverse Learners (3)  
EDI.4420 Assessing Classroom Performance (3)  
EDI.4440 Assessment in Early Childhood (3-4)  
EDI.4480 Integrated Early Childhood Curriculum I (3)

EDI.4490 Integrated Early Childhood Curriculum II (3)  
EDI.4540 Field Experience: Early Childhood Practicum (5)  
EDI.4550 Practicum: Elementary Education (4)  
EDI.4560 Practicum: Middle School (4)  
EDI.4570 Practicum: Secondary Education (4)  
EDI.4720 Families as Educational Partners (3)  
EDI.4790 Seminar: Early Childhood (3)  
EDI.4800 Educational Institute (2)

#### Post-Baccalaureate Courses

EDI.5240 Seminar: Innovations in Elementary Math Methods (3)  
EDI.5390 Psychology of Reading (3)  
EDI.5430 Basic Human Anatomy for Teachers (3)  
EDI.5440 Human Physiology for Teachers (2)  
EDI.5600 Models of Teaching (3)  
EDI.5620 The Changing Roles of the Classroom Teacher (3)  
EDI.5700 Math for the Exceptional Child (3)  
EDI.5830 Techniques of Teaching Reading in the Content Area (3)  
EDI.5950 Special Study for Exams (0)  
EDI.5980 Graduate Reading Course (1-3)  
EDI 6000 Foundations of Doctoral Study (3)  
EDI.6010 Doctoral Residency (0-3)  
EDI.6040 Seminar: Children's Literature (3)  
EDI.6230 Seminar in Instruction (3)

EDI.6250 Practicum: Curriculum and Instruction (3)  
EDI.6310 The Supervisory Process in the Elementary School (3)  
EDI.6320 The Supervisory Process in the Secondary School (3)  
EDI.6410 The Elementary School Curriculum (3)  
EDI.6420 The Secondary School Curriculum (3)  
EDI.6430 Middle School Curriculum and Instruction (3)  
EDI.6440 Curriculum Development in Parochial Schools (3)  
EDI.6450 Curriculum Development (3)  
EDI.6460 Curriculum Theory (3)  
EDI.6480 Seminar in Curriculum (3)  
EDI 6550 Principles of Assessment for Education Settings (3)  
EDI.6950 Special Study for Exams (0)  
EDI.6960 Project Guidance (0-4)  
EDI.6980 Graduate Reading Course (1-3)

### EDUCATIONAL LEADERSHIP

EDL.5100 Foundations of Educational Administration (3)  
EDL.5150 Special Dimensions of Educational Administration (1-3)  
EDL.5200 School-Community Relations (2)  
EDL.5300 School Law (1-3)  
EDL.5450 Managing the Building Level Curriculum (3)  
EDL.5630 The Principalship (3)  
EDL.5660 Principalship II (3)  
EDL.5730 Professional Staff Development and Evaluation (2-3)  
EDL.5913 Internship: Building Principal (0-6)  
EDL.5914 Internship: Ed Admin-Superintendent (2-6)  
EDL.5930 Special Topics (1-3)  
EDL.5950 Special Studies for Exams (0)  
EDL.5980 Graduate Reading Course (1-3)  
EDR6000  
EDL.6100 Theory of Administration (3)

EDL.6110 School District Administration (3)  
EDL.6140 The Politics of Educational Leadership (2-3)  
EDL.6200 Ethics of Educational Leadership (3)  
EDL.6300 Advanced School Law (2)  
EDL.6390 Seminar: Gateway Leadership Institute (0, 2, 3)  
EDL.6400 Seminar: Human Resources Administration (2-3)  
EDL.6450 Managing the District Curriculum (3)  
EDL.6470 School Facilities (3)  
EDL.6500 School Finance (3)  
EDL.6690 School Business Administration (2-3)  
EDL.6930 Special Topics (3)  
EDL.6950 Special Study for Exams (0)  
EDL.6960 Project Guidance (0-3)  
EDL.6980 Graduate Reading Course (1-3)

### HIGHER EDUCATION ADMINISTRATION

EDH.5250 History of Higher Education (3)  
EDH.5350 Student Development Theory I (3)  
EDH.5360 Student Development Theory II (3)  
EDH.5400 Law and Higher Education (3)  
EDH.5470 Legal and Ethical Issues In Student Personnel Admin (3)  
EDH.5600 Student Personnel Administration (3)  
EDH.5640 The Student in Higher Education (3)

EDH.5650 Intervention Skills for Student Personnel Admin (3)  
EDH.5910 Internship: Higher Education Administration (1-3)  
EDH.5915 Internship: Student Personnel Admin in Higher Ed (1-3)  
EDH.5916 Internship: College Teaching (1-3)  
EDH.5750 Current Issues in Higher Education (3)  
EDH.5930 Special Topics (1-3)  
EDH.5950 Special Studies for Exams (0)

EDH.5980 Graduate Reading Course (1-3)  
EDH.6050 Disability in Higher Education and Society (3)  
EDH.6150 Org & Admin of Higher Ed (3)  
EDH.6580 Financial Administration in Higher Education (3)  
EDH.6600 Higher Education Curriculum (3)

EDH.6700 College Teaching (3)  
EDH.6930 Special Topics (1-3)  
EDH.6950 Special Study for Exams (0)  
EDH.6980 Graduate Reading Course (1-3)

## SPECIAL EDUCATION

### **Upper-Division Undergraduate Courses**

EDSP.4240 Behavior Management: EC, EL, or SpEd. (2)  
EDSP.4250 Behavior Management: Mid, Sec, or SpEd. (2)  
EDSP.4310 Education and Psychology of the Exceptional Individual (3)  
EDSP.4380 Supervised Practicum in Early Childhood Special Education: Practice Teaching (6-10)  
EDSP.4390 Institute in Special Education (1-3)  
EDSP.4400 Speech and Language Development of the Exceptional Child (2-4)  
EDSP.4470 Teaching Methods for Inclusive Classrooms: EC and EL (3)

EDSP.4480 Teaching Methods for Inclusive Classrooms: Mid and Sec (3)  
EDSP.4510 Counseling in Special Education (2)  
EDSP.4530 Curriculum, Methods, and Materials in Early Childhood Special Education – Advanced (3)  
EDSP.4560 Special Education Process (2)  
EDSP.4600 Medical Implications in Special Education (3)  
EDSP.4640 Seminar in Early Childhood Special Education (3)  
EDSP.4650 Education of the Gifted (3)

### **Post-Baccalaureate Courses**

EDSP.5260 Practicum in Special Education (1-3)  
EDSP.5300 Teaching the Gifted (3)  
EDSP.5310 Advanced Studies in Psychology and Education of the Exceptional Individual (3)  
EDSP.5450 Advanced Counseling in Special Education (3)  
EDSP.5530 Fundamentals of Neurology (3)  
EDSP.5540 Individual Intelligence Testing (3)  
EDSP.5550 Advanced Assessment Procedures in Special Education (3)  
EDSP.5600 Seminar: Special Education (3)  
EDSP.5610 Seminar: Intellectual Disability (3)  
EDSP.5620 Seminar: Learning Disabilities (3)  
EDSP.5630 Seminar: Behavioral Disorders (3)

EDSP.5640 Seminar in Early Childhood Special Education (3)  
EDSP.5940 Special Education Internship (3)  
EDSP.5950 Special Study for Exams (0)  
EDSP.5980 Graduate Reading Courses (1-3)  
EDSP.6000 Foundations of Doctoral Study (3)  
EDSP.6010 Doctoral Residency (0-3)  
EDSP.6110 Special Education Administration (3)  
EDSP.6120 Comparison of International Special Education Programs (3)  
EDSP.6150 Advanced Professional Development (3)  
EDSP.6500 Advanced Seminar: Special Education (3)  
EDSP.6950 Special Study for Exams (0)  
EDSP.6980 Graduate Reading (0-3)

## EDUCATIONAL FOUNDATIONS

### **Post-Baccalaureate Courses**

EDF.5000 Theory of Education (2)  
EDF.5200 The Learning Process (2)  
EDF.5210 Individual Differences in Ability (2)  
EDF.5230 Motivation in Learning (2)  
EDF.5270 Personality Development and Adjustment (3)  
EDF.5300 Advanced Educational Psychology (3)  
EDF.5600 Foundations of Urban Education (3)  
EDF.5610 Foundations of Catholic Education (2-3)  
EDF.5700 Advanced Growth and Development (3)  
EDF.5950 Special Study for Exams (0)  
EDF.5980 Graduate Reading Course (1-3)  
EDF.6000 Foundations of Doctoral Study (3)  
EDF.6010 Doctoral Residency (0-3)  
EDF.6050 Multicultural Issues for Public Service Settings: Theory & Practice (3)  
EDF.6100 Studies in Educational Philosophy (3)  
EDF.6110 Seminar: Philosophy of Education (3)  
EDF.6200 Reading in Educational Classics (3)  
EDF.6300 Studies: Catholic Education (3)

EDF.6310 Seminar: Catholic Education (3)  
EDF.6400 History of European Ed Through the Sixteenth Century (3)  
EDF.6410 History of European Ed Since the Sixteenth Century (3)  
EDF.6420 Seminar: History of European Education (3)  
EDF.6450 History of American Education to 1865 (3)  
EDF.6460 History of American Education Since 1865 (3)  
EDF.6500 Seminar: Education Psychology (3)  
EDF.6550 Principles of Assessment in Educational Settings (3)  
EDF.6600 Education in American Culture (3)  
EDF.6650 Seminar: History of American Education (3)  
EDF.6850 Seminar: Comparative Education (3)  
EDF.6870 Seminar: Current Educational Problems (3)  
EDF.6950 Special Study for Exams (0)  
EDF.6960 Project Guidance (0-4)  
EDF.6980 Graduate Reading Course (1-3)

## RESEARCH

### **Post-Baccalaureate Courses**

EDR.5100 Intro to Inferential Statistics for Educators (3)  
EDR.5200 Test Construction Techniques  
EDR.5400 Qualitative Research in Education (3)

EDR.5500 Evaluation of Educational Programs (3)  
EDR.5600 General Research Methods for Educators (3)  
EDR.5950 Special Study for Examinations (0)

EDR.5980 Graduate Reading Course (1-3)  
EDR.5990 Thesis Research (0-6)  
EDR.6000 Professional Writing (3)  
EDR.6010 Doctoral Residency (0-3)  
EDR. 6060 Research Design and Analysis (3)  
EDR.6070 Evidence Based Decision Making in Education (3)  
EDR.6090 Qualitative Research for Educational Leaders (3)  
EDR.6100 Intermediate Applied Statistics for Educators (3)  
EDR. 6230 Action Research  
EDR. 6250 Curriculum Evaluation

EDR.6400 Intermediate Qualitative Research for Educators (3)  
EDR.6650 Seminar: Reading Research (3)  
EDR.6710 Seminar: Current Research in Educational Psychology (3)  
EDR.6950 Special Study for Examinations (0)  
EDR.6960 Project Guidance (0)  
EDR.6970 Research Topics (1-3)  
EDR. 6971 Research Topics for the Ed.D. Student (1-3)  
EDR.6980 Graduate Reading Course (1-3)  
EDR.6990 Dissertation Research (0-12)

# ALBERT GNAEGI CENTER FOR HEALTH CARE ETHICS

---

**Jeffrey P. Bishop, M.D., Ph.D.**

*Center Director and Department Chair*

**Erica K. Salter, Ph.D.**

*Ph.D. Program Director*

## Doctor of Philosophy

The Doctor of Philosophy (Ph.D.) program presents an integrated, interdisciplinary curriculum in Health Care Ethics that prepares students to work as scholars, clinicians, and corporate ethicists. Students may tailor aspects of their coursework and their dissertation research to focus on biotechnological, clinical, organizational, or research ethics. Students pursuing the J.D./Ph.D., M.D./Ph.D., or the M.A./Ph.D. follow a modified curriculum. Students entering the Ph.D. program from baccalaureate studies pursue additional coursework as described below.

### Admissions

Typically, students entering the Ph.D. program in Health Care Ethics will have an undergraduate or graduate degree in a relevant field, for instance philosophy, theology, a clinical field, social sciences or law. Successful applicants usually have a high GPA, high GRE percentiles (especially in the verbal and analytical writing categories), a strong normative writing sample and a demonstration of overall fit with the program's educational objectives.

### Required Courses

Students register for courses in five areas: Foundations, Context of Health Care, Topics and Scholars, Practica, and Dissertation Research. Please refer to the CHCE website for course descriptions.

#### *Foundations of Health Care Ethics (12 credits)*

The Foundations courses establish the research competencies required for the scholarly analysis of health care ethics. These required courses examine philosophical (HCE.6010), religious (HCE.6020), and interdisciplinary (HCE.6040) methods in health care ethics. Additionally, students are required to complete 1 of the following 3 foundations courses: HCE.6050 Philosophical Foundations in Ethics, HCE.6060 Psychosocial Foundations in Ethics, HCE.6070 Foundations of Catholic Morality.

#### *Context of Health Care (12 credits)*

Five Context courses are required: Intro-Medicine for Ethicists (HCE.6110, 1 credit) and Bioethics and the Law (HCE.6120, 2 credits), HCE.6130 Clinical Ethics, HCE.6140 Research Ethics, and HCE.6150 Practicum. These courses provide practical knowledge and skills relevant to the various real world contexts of health care ethics.

#### *Topics and Scholars in Health Care Ethics (12 credits)*

Students will complete 12 credits of Topics and Scholars courses. Preferably some electives will be in areas related to students' anticipated dissertation research.

#### *Dissertation Research (12 credits)*

After passing the comprehensive examinations, students prepare a dissertation proposal and write a dissertation while registered for 12 credits of dissertation research (HCE.6990).

**Additional requirements in the curriculum include the following:**

### Research Tools

These competencies are essential for success in health care ethics. Students may develop these competencies through different mechanisms.

1. Competency in medical terminology
2. Competency in library database skills
3. Competency in reading statistics and study design

## **Comprehensive Examinations**

The comprehensive examinations occur after completing all course work and practica. For more information about comprehensive examinations. You may 'click' on the website listed above or on the highlighted 'comprehensive examinations' text to link directly to the relevant web page.

## **Dissertation Proposal**

After passing the oral and written comprehensive examinations, students prepare a formal dissertation proposal. The dissertation proposal is a distinct requirement of the program and it must be approved in writing by all members of the dissertation committee and the Center Director. In their dissertation proposals, Ph.D. candidates must present substantial evidence of their ability to extend the knowledge base in the major field and demonstrate how the research competencies in the program are to be integrated with the proposed research of the dissertation.

## **Oral Defense of the Dissertation**

Upon completion of the dissertation, students publicly present and defend their dissertation before their dissertation committee, CHCE faculty and Doctoral students.

## **Additional coursework requirement for students entering directly from baccalaureate studies**

Students entering the Ph.D. Program directly from baccalaureate studies additionally complete 12 credits of coursework.

HCE.6050 Philosophical Foundations of Ethics or a suitable 3-credit graduate-level foundations of ethics course

HCE.6060 Psychosocial Foundations in Ethics or a suitable 3-credit graduate-level applied ethics course available in another department

HCE.6070 Catholic Foundations of Morality or a suitable 3-credit graduate-level applied ethics course available in another department

PUBH.5020 Ethical Issues in Public Health or a suitable 3-credit graduate-level applied ethics course available in another department

And 1 upper level ethics elective either within HCE or another department.

Note: This lists 5 courses; however, one of the first 3 courses listed is required as a selective for all Ph.D. students and does not count toward the additional 12 credits required.

## **Concentration in Catholic Tradition**

Students enrolled in the Ph.D. program in health care ethics may take 15 credits with an emphasis on health care ethics in the Catholic tradition and write a dissertation (12 credits) in the Catholic tradition to develop expertise in the area of Catholic health care ethics. *Note:* The Catholic Health Association has recommended that ethicists working in Catholic health care with an interdisciplinary Ph.D. degree should additionally hold an M.A. in Theology. We strongly recommend that students who do not already hold an M.A. in theology complete our dual degree program, offered in collaboration with the Aquinas Institute of Theology. Alternately, students should plan on completing an M.A. prior to commencing work in Catholic health care. The concentration requirements are outlined below.

### **Prerequisite**

As a prerequisite, students must complete HCE.6070 Foundations of Catholic Morality or demonstrate that they have completed an equivalent course at the 5000 or 6000 level.

HCE.6020 Methods in Religious Ethics (3 credits)

Concentration students will focus their paper and receive special mentoring in the Catholic tradition.

HCE.6310 Health Care Ethics in the Catholic Tradition (3 credits)

HCE.6980 Graduate Reading Course (3 credits)

Students will complete at least one directed reading course on the Catholic tradition in health care ethics.

Elective related to Health Care and the Catholic Tradition (3 credits)

Concentration students would be required to take a course in an area relevant to health care and the Catholic tradition. [Note: This will be treated as one of the Topics and Scholars electives required as part of the Ph.D. program.]

Practicum (3 credits)

Students will complete a practicum in Catholic health care.

Dissertation (12 credits)

Students will write a dissertation on health care ethics in the Catholic Tradition.

## ***Concentration in Empirical Research Methods***

Students enrolled in the Ph.D. program in health care ethics may take 15 credits with an emphasis on health care ethics in the Catholic tradition and write a dissertation (12 credits) in the Catholic tradition to develop expertise in the area of Catholic health care ethics.

The Ph.D. Program was designed to produce graduates who are competent in *normative* health care ethics. Completion of the



Empirical Research Methods concentration is meant to indicate special research competencies over and above those gained in the Ph.D. program. These specific competencies pertain to empirical research in the field of bioethics.

The Certificate Program has two tracks: Quantitative and Qualitative. Both tracks require the completion of 15 credits of coursework.

The capstone course for this concentration requires students to gather original data that will be incorporated into the Doctoral dissertation. The course will provide students with the mentoring necessary to integrate this data into the Doctoral dissertation proposal in a way that is sensitive to the interdisciplinary nature of this endeavor.

## COURSE OF STUDY FOR THE QUALITATIVE TRACK

- SOC.5600 Research Methodology (or equivalent, such as SW.5787 Social Work Research)
- SOC.5800 Survey Research Methods [Topics and Scholars Elective]
- NR-N610 Qualitative Methods in Nursing Research (or an equivalent post-baccalaureate level, introduction to qualitative methods course, such as SW-S776)
- A suitable course on Intermediate Qualitative Research
- HCE.6530 Qualitative Research in Descriptive Ethics [Topics requirement]
- Dissertations Incorporating Original Empirical Research

## COURSE OF STUDY FOR THE QUANTITATIVE TRACK

- SOC.5600 Research Methodology (or equivalent, such as SW-S775 Social Work Research)
- SOC.5800 Survey Research Methods [Topics and Scholars Elective]
- PSY.625 Analysis of Variance and Experimental Design
- PSY.6500 Multivariate Statistical Analysis
- HCE.6520 Quantitative Research in Descriptive Ethics [Topics requirement]
- Dissertations Incorporating Original Empirical Research

As most courses build upon each other, course work is ordinarily to be completed in the order indicated above.

## Concentration in Research Ethics

Students enrolled in the Ph.D. program in health care ethics may take 15 credits with an emphasis in research ethics and write a dissertation (12 credits) in research ethics to develop expertise in the area of human research ethics.

The concentration requirements are outlined below:

- HCE.6040 Interdisciplinary Research in Health Care Ethics (3 credits)
  - Concentration students will focus their paper in the area of human subjects research. [Note: Both courses are required for the Ph.D. program. Students in the Human Research concentration would be required to focus on research ethics in at least one of the two classes.]
- HCE.6140 Research Ethics (3 credits)
- HCE.6980 Graduate Reading (3 credits)
  - Students will complete at least one directed reading course in research ethics.
- Elective in Research Methodology (3 credits)
  - Concentration students would be required to take a class in research methodology or would be required to demonstrate advanced standing in this area. [Note: This will be treated as one of the Topics and Scholars electives required as part of the Ph.D. program.]
- Practicum (3 credits)
  - Students will complete their practicum in the area of human subjects research.
- Dissertation (12 credits)
  - Students will write a dissertation in research ethics.

## Juris Doctor & Doctor of Philosophy Dual Degree

Students begin their dual degree studies at the School of Law as traditional first-year students. In their second and third years of study, students are primarily law students but take six credits of courses at the Center for Health Care Ethics. In addition to the six credits at the CHCE, students enroll in a three credit directed research course that is cross-listed by both programs. The directed research project is supervised by faculty from both programs and is treated as a traditional law school directed research project.

Dual degree students ordinarily graduate with the J.D. in three years of full-time study. It is recommended that they sit the bar exam in the summer following their graduation.

Beginning in the fall following their graduation from the School of Law, all academic work is dedicated to the Ph.D. program. The Ph.D. program recognizes 9 credits of law school courses towards the Ph.D. (See details below.) Additionally, students will have completed 9 credits of Health Care Ethics classes during the J.D. program. Thus it is expected that students will complete their Ph.D. coursework in two semesters following their J.D. program. Comprehensive exams and the dissertation ordinarily require an additional three semesters.

During the entire time that students are enrolled in the dual degree program, it is expected that they will be engaged in both programs. Starting with their second year of law school, students will take part in Ph.D. seminars and other extracurricular programs offered by the Doctoral program. Once they have completed their J.D. and are enrolled in the Doctoral program, it is expected that they will remain engaged in relevant health law activities at the School of Law.

#### **Prerequisites for Admission to Ph.D. Program through the J.D./Ph.D. Program**

Ordinarily, J.D./Ph.D. students are required to satisfy the same prerequisites as students admitted to the Ph.D. program on the postgraduate admission track.

#### **Curricular detail**

Students complete the usual curriculum in both the Juris Doctor (J.D.) and Ph.D. programs. However, as indicated below, 18 credits of coursework satisfies requirements in both of the dual degree programs.

#### **Law Courses Counted toward Ph.D. Degree (7 credits)**

LAW.8000 Health Care Law [3 credits; replaces Topics and Scholars Elective]

LAW.8005 Bioethics and the Law [2 credits; Context Requirement]

LAW.86H22 Research Ethics [2 credits; replaces HCE.6140 Research Ethics]

#### **Ph.D. Courses Counted toward J.D. Degree (9 credits)**

HCE.6530 Directed Research in Health Law and Ethics [Cross listed with LAW.8620: Directed Research (3)] [Required]

#### **Plus two of the following five additional Ph.D. courses:**

HCE.6040 Interdisciplinary Research in Health Care Ethics (3)

HCE.6050 Philosophical Foundations of Ethics (3)

HCE.6060 Psychosocial Foundations in Ethics (3)

HCE.6070 Catholic Foundations of Morality (3)

HCE.6340 Health Care Reform (3)

\* Note: Dual degree students complete the Masters-level Ph.D. program track, not the more extensive B.A.-level track.

## Doctor of Medicine & Doctor of Philosophy Dual Degree

Students begin their dual degree studies as traditional first year students in the School of Medicine. After the second year of medical school, students begin full-time study in Health Care Ethics. Students are expected to complete the Ph.D. in three years, after which they return to the School of Medicine to complete the third and fourth years of medical studies.

A minimum of 48 credits is required for the Ph.D. This ordinarily includes 33 credits of course work, three credits of practicum, and 12 credits of dissertation research. CHCE accepts 7 credits from Phase 1 and Phase 2 of the M.D. curriculum. The required courses HCE.6110 Introduction to Medicine for Ethicists, one 3-credit Topics and Scholars elective and the HCE.6150 Practica are waived based on medical school coursework in Patient, Physician, and Society I and II, and in Fundamentals of Biomedical Science. M.D./Ph.D. students will be recognized as having satisfied all three Research Tools requirements based on trainee knowledge of medical terminology, biostatistics, and library database searches. The remaining 27 credits of Ph.D. coursework, comprehensive exams, the dissertation, and the public defense of the dissertation must be completed during the three years of Ph.D. study.

\* Note: Dual degree students complete the Masters-level Ph.D. program track, not the more extensive B.A.-level track.

## Master of Arts & Doctor of Philosophy Dual Degree

Ordinarily, students begin their M.A. studies at Aquinas Institute of Theology (AIT) during their first year of the program. In year 1, students will complete 30\* credits of 36 credits required for the M.A. from AIT:

- 6 credits Biblical Studies
- 3 credits Historical Studies
- 12 credits Systematic Theology
- 9 credits Moral Theology

During the second year, students enter the Ph.D. program at Saint Louis University and follow the Ph.D. curriculum for students who

already hold Master's degrees. In Year 2, dual degree students become eligible for assistantship funding. AIT will count 6 credits from the Ph.D. coursework completed in Year 2 toward completion of the M.A..

**The following Ph.D. courses may be used to fulfill the final 6 credits toward the M.A.:**

HCE.6020 (Methods in Religious Ethics) or HCE.6310 (Health Care Ethics in the Catholic Tradition) [Dual degree students must enroll in both of these courses during their time in the Ph.D. program. Completion of 1 of the courses is required for completion of the M.A. These courses are offered in alternating spring semesters. Therefore, students will complete only one of them in Year 2 of the dual degree program.]

A 3-credit elective in HCE

A total of 6 credits taken toward the M.A. at AIT will count towards fulfillment of the Topics and Scholars elective requirements in the Ph.D. program.

**Two of the following M.A. courses may be treated as Topics and Scholars electives for the Ph.D.:**

Justice and Catholic Social Teaching

Ethics of Human Sexuality

Christian Anthropology

(Any substitutions to these courses must be approved by the M.A. advisor and the Center Director.)

After the end of Year 2 and completion of the major paper and comprehensive exams required for the M.A. degree, students are awarded the M.A. in Theology from AIT. The timing for completion of the major paper and the comprehensive exams is to be determined in consultation with the M.A. advisor at AIT.

In Year 3, students begin the coursework required for the Ph.D.

# CENTER FOR ADVANCED DENTAL EDUCATION (CADE)

---

**John F. Hatton, D.M.D.**

*Executive Director*

The Center for Advanced Dental Education (CADE) at Saint Louis University is the academic division through which advanced training in dentistry is administered. The Center is committed to advancing the science and the art of all dental specialties through outstanding education, patient care, and research while promoting a multidisciplinary focus. At the present time, CADE is comprised of three post-baccalaureate dental training programs: Endodontics, Orthodontics, and Periodontics. The Orthodontic program is wholly based at Saint Louis University, while the Endodontic and Periodontic programs are offered in close affiliation with Southern Illinois University School of Dental Medicine, Alton, Illinois. All advanced dental training programs are fully accredited by the Commission on Dental Accreditation of the American Dental Association.

The prerequisite for matriculation in any CADE dental training program is possession of a D.D.S., D.M.D., or equivalent general dental degree. Selection for admission is based upon the completed application file and a personal interview. Successful completion of all CADE dental program requirements results in a Master of Science in Dentistry degree and a specialty certificate of completion of didactic and clinical requirements. Each individual specialty program demands full-time participation at SLU. The three programs vary in length and differ in educational goals. Requirements include courses from the core listings below, as well as specialty courses unique to the individual discipline (listed subsequently). The goal of the core curriculum is to provide advanced concepts in the sciences that comprise the foundation of post-baccalaureate dental education.

## **Post-Baccalaureate Courses**

CAD.5010 Pain: Anatomy, Physiology, Psychology, Diagnosis & Treatment (1)	CAD.5110 Principles of Practice Management (1)
CAD.5030 Advanced Oral Microbiology (2)	CAD.5140 TMJ Disorders (0-1)
CAD.5040 Molecular Biology of the Cell (2)	CAD.5160 Advanced Oral Medicine (1)
CAD.5050 Introduction to Statistical Inference (3)	CAD.5170 Advanced Oral Pathology (1)
CAD.5060 Ethics in Dental Research and Practice (0)	CAD.5190 Advanced Head and Neck Anatomy (2)
CAD.5080 Multidisciplinary Diagnosis and Treatment Planning I (1)	CAD.5220 Clinical Immunology (1)
CAD.5090 Research in Graduate Dentistry (1)	CAD.5240 Implants & Temporary Anchorage Devices (1)
CAD.5100 Dental Therapeutics (1)	CAD.G5950 Special Study for Examinations (0)
	ORES.5100.02 Research Methods in Health and Medicine (3)

## ENDODONTICS

---

**Karl F. Woodmansey, D.D.S.**

*Program Director*

The Center for Advanced Dental Education at Saint Louis University offers a 24-month program in the specialty of Endodontics that leads to a Master of Science in Dentistry degree. The didactic and clinical phases of the program are conducted at both Saint Louis University and Southern Illinois University School of Dental Medicine, Alton, Illinois. Focus of the training program is three-fold: a comprehensive clinical experience involving diagnosis and treatment of all categories of nonsurgical and surgical endodontic cases; the didactic core and specialty courses encompassing biomedical and clinical concepts; and research related to the discipline of endodontics. The program is fully accredited by the Commission on Dental Accreditation of the American Dental Association. Following completion of the program, graduates are educationally qualified for certification by the American Board of Endodontics.

# Master of Science in Dentistry

## Prerequisites

D.D.S., D.M.D., or equivalent general dental degree.

## Required Courses

All core courses described under the section entitled Center for Advanced Dental Education, except CAD.5140 and CAD.5240. In addition, endodontic specialty courses include all courses described below.

## Additional Requirements

Supervised clinical endodontic treatment of patients; comprehensive endodontic specialty examinations utilizing written, oral, and practical clinical formats; teaching practicum. Total required credits: 52

*No formal minor is permitted.*

## Post-Baccalaureate Courses

ENDG.5000 Preclinical Endodontic Technique (1)	ENDG.5520 American Board of Endodontics Review (1)
ENDG.5200 Literature Review (1)	ENDG.5600 Clinical Endodontics (1)
ENDG.5210 Literature Review II (1)	ENDG.5610 Clinical Endodontics II (2)
ENDG.5220 Literature Review III (1)	ENDG.5620 Clinical Endodontics III (2)
ENDG.5230 Literature Review IV (1)	ENDG.5630 Clinical Endodontics IV (1)
ENDG.5240 Literature Review V (1)	ENDG.5640 Clinical Endodontics V (2)
ENDG.5300 Preclinical Teaching Practicum (0)	ENDG.5650 Clinical Endodontics VI (2)
ENDG.5310 Clinical Teaching Practicum (0)	ENDG.5660 Clinical Endodontics VII (1)
ENDG.5410 Pulp Biology (1)	ENDG.5910 Endodontic Journal Club (0-1)
ENDG.5470 Concepts in Biomedical Science (1)	ENDG.5950 Special Study for Examinations (0)
ENDG.5510 Principles of Endodontic Surgery (1)	ENDG.5990 Thesis Research (0-6)

# ORTHODONTICS

---

**Rolf G. Behrents, D.D.S., M.S., Ph.D.**

*Program Director*

The Center for Advanced Dental Education at Saint Louis University offers a post-baccalaureate training program in Orthodontics that is 30 months in length. The program offers three basic areas of training: an extensive and comprehensive clinical experience that involves diagnosis, treatment planning, active treatment and retention of patients representing a variety of malocclusions and craniofacial deformities; a didactic core and specialty education that encompasses biomedical sciences as well as clinical concepts; and research related to the discipline. The program is fully accredited by the Commission on Dental Accreditation of the American Dental Association. Following completion of the program, graduates are educationally qualified for certification by the American Board of Orthodontics.

## Master of Science in Dentistry

### Prerequisite

D.D.S., D.M.D., or equivalent general dental degree.

### Required Courses

All core courses described under the section entitled Center for Advanced Dental Education are required except for CAD.5030, CAD.5100, and CAD.5220. In addition, specialty courses required include all courses described below.

### Additional Requirements

Supervised active and retention clinical orthodontic treatment of patients; comprehensive orthodontic specialty examinations utilizing written, oral, and practical clinical formats. Total required credits: 85.

*No formal minor is permitted.*

### Post-Baccalaureate Courses

ORTH.5010 Fundamentals of Orthodontics (2)	ORTH.5700 Clinical Procedures (1)
ORTH.5030 Facial Development (2)	ORTH.5710 Clinical Orthodontics I (2)
ORTH.5100 Biomechanics (2)	ORTH.5720 Clinical Orthodontics II (3)
ORTH.5250 Clinical Cephalometrics (2)	ORTH.5730 Clinical Orthodontics III (1)
ORTH.5350 Surgical Orthodontics (1)	ORTH.5740 Clinical Orthodontics IV (3)
ORTH.5370 Orthodontic Problems Related to Cleft Palate Patient (1)	ORTH.5750 Clinical Orthodontics V (3)
ORTH.5390 Speech Problems Related to the Oral Mechanism (1)	ORTH.5760 Clinical Orthodontics VI (1)
ORTH.5400 History of Orthodontics (1)	ORTH.5770 Clinical Orthodontics VII (3)
ORTH.5490 Diagnostic Procedures in Orthodontics (1)	ORTH.5780 Clinical Orthodontics VIII (0-3)
ORTH.5500 Diagnosis and Treatment Planning I (1)	ORTH.5800 Seminar: Child and Adolescent Psychology (1)
ORTH.5530 Clinical Diagnosis I (1)	ORTH.5840 Diagnostic Seminars on Early & Mixed Dentition Treatment (1)
ORTH.5540 Clinical Diagnosis II (1)	ORTH.5850 Diagnostic Seminars on Adult & Interdisciplinary Treatment (2)
ORTH.5550 Orthodontic Analysis and Treatment Modalities (1)	ORTH.5890 Review for the ABO Examination (0)
ORTH.5560 Clinical Case Conference (0-1)	ORTH.5910 Literature Review (1)
ORTH.5580 Clinical Specialty Seminars (1)	ORTH.5950 Special Study for Examinations (0)
ORTH.5600 Introduction to Clinical Orthodontics (1)	ORTH.5970 Research Topics (1-2)
ORTH.5610 Introduction to Clinical Orthodontics II (1)	ORTH.5990 Thesis Research (0-6)
ORTH.5620 Principles of Orthodontic Techniques (2)	
ORTH.5630 Principles of Orthodontic Techniques II (2)	

# PERIODONTICS

---

**D. Douglas Miley, D.M.D., M.S.D.**

*Program Director*

The 36-month program in Periodontics, offered by the Center for Advanced Dental Education, leads to the Master of Science in Dentistry degree. Didactic and clinical education in Periodontics occurs at the host institution, Saint Louis University, as well as at an affiliate institution, Southern Illinois University School of Dental Medicine, Alton, Illinois. Focus of the training program is three-fold: an extensive and comprehensive clinical experience involving diagnosis and treatment of patients representing a wide variety of periodontal problems; the didactic component that encompasses the biomedical sciences as well as clinical concepts; and research related to the study of periodontology. The program is fully accredited by the Commission on Dental Accreditation of the American Dental Association. Following completion of the program, graduates are educationally qualified for certification by the American Board of Periodontology.

## Master of Science in Dentistry

### Prerequisites

D.D.S., D.M.D., or equivalent general dental degree.

### Required Courses

All CADE core courses described within the section entitled Center for Advanced Dental Education, except CAD.5110 and CAD.5240. In addition, required periodontal specialty courses include all courses described below.

### Additional Requirements

Supervised clinical periodontal treatment of patients; comprehensive periodontal specialty examinations utilizing written, oral, and practical clinical formats; teaching practicum; oral defense of the thesis. Total required credits: 63.

*No formal minor is permitted.*

### Post-Baccalaureate Courses

PERI.5000 Principles of Periodontics (1)  
PERI.5010 Periodontal Literature Reviews I (1)  
PERI.5020 Periodontal Literature Reviews II (1)  
PERI.5030 Periodontal Literature Reviews III (1)  
PERI.5040 Periodontal Literature Reviews IV (1)  
PERI.5050 Periodontal Literature Reviews V (1)  
PERI.5060 Periodontal Literature Reviews VI (1)  
PERI.5100 Conscious Sedation I (1)  
PERI.5110 Conscious Sedation II (1)  
PERI.5200 Introduction to Graduate Implant Dentistry I (1)  
PERI.5210 Introduction to Graduate Implant Dentistry II (1)  
PERI.5220 Advanced Implant Surgery I (1)  
PERI.5230 Advanced Implant Surgery II (1)  
PERI.5300 Clinical Teaching Practicum (0)  
PERI.5400 Periodontal Case Presentation Seminar (1)  
PERI.5600 Clinical Periodontics I (1)  
PERI.5610 Clinical Periodontics II (2)  
PERI.5620 Clinical Periodontics III (2)  
PERI.5630 Clinical Periodontics IV (1)  
PERI.5640 Clinical Periodontics V (2)  
PERI.5650 Clinical Periodontics VI (2)  
PERI.5660 Clinical Periodontics VII (1)  
PERI.5670 Clinical Periodontics VIII (2)  
PERI.5680 Clinical Periodontics IX (2)  
PERI.5700 Periodontal Systemic Interrelationships (0)  
PERI.5800 Orthodontic-Periodontic Interrelationships (0)  
PERI.5910 Current Literature in Periodontics (1)  
PERI.5950 Special Study for Examinations (0)  
PERI.5990 Thesis Research (0-6)

# CENTER FOR SUSTAINABILITY

---

**John Wooschlager,**  
*Ph.D., Director*

Sustainability focuses on meeting the social, economic, and environmental needs of present-day society and future generations without damaging the planet's regenerative capacity. Inherent in this description is a focus on service to others, which aligns with Saint Louis University's Jesuit mission.

Saint Louis University's Center for Sustainability was established in 2010 by a grant from the Alberici Foundation. The program offers in-demand degrees and expertise on critical environmental, social, and economic challenges. Through innovative academic programs, applied research, and community engagement, the Center for Sustainability's students and faculty develop creative, collaborative solutions to improve the world around them.

## Master of Science in Sustainability

The Master of Science (M.S.) degree in Sustainability trains students to be leaders who understand the cascading issues surrounding our increasing use of decreasing resources. Core courses provide students with an integrated view of sustainability that incorporates cross-disciplinary knowledge in environmental and social science, technology, business, and policy. Given the unique interdisciplinary nature of sustainability, the Center for Sustainability and its partner schools offer a variety of electives.

Because sustainability is an expansive field of study, we have built a flexible program that caters to each student's interests and career goals. We encourage students to set up advising appointments with faculty and staff, who can help them navigate their choices and craft a program of study. The M.S. is a 30-credit degree program that students can pursue on a part-time or full-time basis.

### Required Courses (15 credits)

SUS.5010 Sustainability Foundations (3)

SUS.5020 Environmental Aspects of Sustainability (3)

SUS.5040 Sustainable Business Practices (3)

SUS.5030 Sustainability in Society and Cultures (3)

UPD.5100 Research Methods (3)

### Electives

Students select 15 credits in consultation with an advisor.

### Capstone and Thesis Option

Students may take 3 credits of SUS.5960 Capstone or 6 credits of SUS.5990 Thesis Research in lieu of 3-6 credits of electives in consultation with an advisor.

## Accelerated Master of Science in Sustainability

Undergraduate students can complete up to one full year of post-baccalaureate coursework (15 credits) before entering the masters program by taking courses offered through the Center for Sustainability. More information and a list of requirements are available.

## Master of Business Administration & Master of Science in Sustainability Dual Degree

### Master of Business Administration and Master of Science in Sustainability

This dual-degree program is one of the first of its kind offered by an AACSB-accredited institution. It provides broad coverage of business and sustainability concepts. The Master of Business Administration (M.B.A.) degree prepares students to be effective leaders in a global economy, and the M.S. in Sustainability provides insights into how businesses can enhance economic, social, and environmental performance. This is a full-time program in which it is expected that students will complete both degrees in 18 months.

### Required Courses – M.B.A. (38 credits)

MBA.6210 Information Technology in Organizations (1)

MBA.6220 Operations Management of Sustainability (2)

MBA.6230 Supply Chain Management (1)

MBA.6250 Essentials of Marketing Strategy (2)

MBA.6270 Foundations in Strategy and Management (2)

MBA.6280 Integrated Decision Making (2)

MBA.6300 Applied Statistics (2)

MBA.6310 Legal Aspects of Business (1)



MBA.6320 Financial Accounting (1)  
MBA.6330 Managerial Economics (2)  
MBA.6340 Nexus I (1)  
MBA.6360 Financial Management (3)  
MBA.6370 Ethical Environment of Business (1)  
MBA.6380 Managerial Accounting (1)  
MBA.6410 Global Business Integration (2)

MBA.6420 Data and Decisions (3)  
MBA.6430 The Organization: Governance, Compliance, and Strategy (3)  
MBA.6440 Nexus II (1)  
MBA.6510 Study Abroad (3)  
MBA.6530 Integrated Consulting Module (3)  
MBA.6540 Nexus III (1)

#### **Additional Electives**

Students select 6 credits in consultation with advisor.

#### **Required Courses – M.S. in Sustainability (15 credits)**

SUS.5010 Sustainability Foundations (3)  
SUS.5020 Environmental Aspects of Sustainability (3)  
SUS.5030 Sustainability in Society and Cultures (3)  
SUS.5040 Sustainable Business Practices (3)  
UPD.5100 Research Methods (3)

#### **Additional Electives**

Students select 15 credits in consultation with an advisor.

#### **Capstone and Thesis Option**

Students may take 3 credits of SUS.5960 Capstone or 6 credits of SUS.5990 Thesis Research in lieu of 3-6 credits of electives in consultation with an advisor.

## Master of Science in Urban Planning and Development

The Master of Science (M.S.) degree in Urban Planning and Development (UPD) is the only degree of its kind in Missouri. The program is interdisciplinary and operates in conjunction with the John Cook School of Business and the School of Law. Our intimate classes emphasize skill building, discussion, and debate. The learning experience offered by Saint Louis University and the Center for Sustainability allows UPD graduates to become leaders in the public and private sectors and make positive impacts in planning and development.

The M.S. is a 48 credit degree program that students can pursue on a full- or part-time basis. Students who attend full-time, including the summer session, can complete the degree in two years. Those who attend part-time, with a minimum participation of six credits per semester, can complete the degree in 3.5 years.

#### **Required Courses (35 credits)**

GIS 5010 Introduction to GIS (3)	UPD.5110 Spatial Methods and Analysis (3)
LAW.7700 Land Use Control (3)	UPD.5200 Local Economic Development Policy & Practice (3)
UPD.5000 Foundations of Planning (3)	UPD.5220 Infrastructure Planning and Processes (3)
UPD.5010 Planning and Development Theory (3)	UPD.5500 Real Estate Finance (3)
UPD.5020 Land Use Planning and Analysis (3)	UPD.5900 Planning and Development Studio (3)
UPD.5100 Research Methods (3)	UPD.5960 Capstone Project (2)

#### **Additional Requirements**

UPD.5910 Internship for Pre-Service Students (1)

#### **Electives**

Students select 12 credits in consultation with an advisor. We encourage students to use electives to pursue one of the following specializations:

- Community Development
- Economic Development
- Real Estate Development
- Environmental and Sustainability Planning

# Juris Doctor & Master of Science in Urban Planning & Development Dual Degree

## Juris Doctor of Law and Master of Science in Urban Planning and Development

This dual-degree program combines the rigorous legal education of the juris doctorate (J.D.) of law program with training in spatial and policy analysis unique to urban planning and development. We expect students to complete the requirements of this dual degree in four years.

### Required Courses – J.D. (39 credits)

LAW.720 Contracts I (3)	LAW.801 Civil Procedure II (3)
LAW.721 Contracts II (2)	LAW.819 Constitutional Law (3)
LAW.740 Torts (4)	LAW.822 Criminal Law (3)
LAW.760 Property (4)	LAW.835 State and Local Government Law (3)
LAW.768 Land Use Control (3)	LAW.880 Legal Research Writing (3)
LAW.770 Real Estate Transactions (3)	LAW.881 Legal Research Writing II (3)
LAW.800 Civil Procedure I (2)	

### Electives

Students select a total of 52 credits of electives—including a professional ethics elective (3), a professional skills elective (3), UPD electives (9), and general law electives (37)—in consultation with an advisor.

### Required Courses – M.S. in Urban Planning and Development (41 credits)

GIS.5010 Introduction to GIS (3)	UPD.5100 Research Methods (3)
LAW.7160 Real Estate Transactions (3)	UPD.5110 Spatial Methods and Analysis (3)
LAW.7700 Land Use Control (3)	UPD.5200 Local Economic Development Policy & Practice (3)
LAW.7705 State and Local Government Law (3)	UPD.5220 Infrastructure Planning and Processes (3)
UPD.5000 Foundations of Planning (3)	UPD.5500 Real Estate Finance (3)
UPD.5010 Planning and Development Theory (3)	UPD.5900 Planning and Development Studio (3)
UPD.5020 Land Use Planning and Analysis (3)	UPD.5960 Capstone Project (2)

### Electives

Students select 9 credits in consultation with an advisor.

### Internship

Students may be required to complete a 1-credit internship depending on professional or practicum experience.

## Certificate in Advanced Remote Sensing and Geographic Information Systems

We developed the certificate program in Advanced Remote Sensing and Geographic Information Systems (GIS) to fill a growing demand for geospatial science skills in today's job market. The program trains students to become expert GIS users who are well grounded in theoretical knowledge and have practical skills to develop new applications in various disciplines of geospatial analysis and remote sensing. The program emphasizes applying advanced remote sensing and GIS methods and technologies to spatial problems. Students are required to complete 15 credits of GIS and remote sensing courses that are selected in consultation with the student's academic advisor and approved by the Director of the Center for Sustainability

## Master of Science in Geographic Information Science

The interdisciplinary Master of Science (M.S.) in Geographic Information Science (GIScience) is offered in cooperation with the Department of Sociology and Anthropology and other departments that offer GIScience courses (e.g., Department of Biology). It combines geospatial theory and practical training in geographic information systems (GIS) and remote sensing software. The program prepares students to become experts well-qualified to meet the increasing demand for experts in geospatial analysis. As an interdisciplinary program within the Center for Sustainability, the M.S. in GIScience focuses on research to address environmental, social, and economic issues.

Students apply GIS, remote sensing, geovisualization, spatial analysis and statistics, database management, and GIS programming within natural science, social science, and integrative human-environment domains using innovative technologies and software programs (e.g., ArcGIS, ENVI+IDL, SARscape, R).

**Required Courses (18 credits)**

GIS.5010/SOC.5650 Introduction to GIS (3)

GIS.5020/SOC.5660 Intermediate GIS (3)

GIS.5040 Introduction to Remote Sensing (3)

GIS.5060 Geospatial Methods in Environmental Studies (3)

GIS.5070 Research Methods (3)

GIS.5080 Digital Cartography and Geovisualization (3)

**Electives**

Students select 12 credits in consultation with an advisor.

**Capstone and Thesis Option**

Students may take 3 credits of GIS.5970/SOC.5970 Research Topics or 6 credits of GIS.5990/SOC.5990 Thesis Research in lieu of 3-6 credits of electives in consultation with an advisor.

## Doctor of Philosophy in Sustainability Science and Geographic Information Science

The Center for Sustainability offers Ph.D. programs in Sustainability Science and Geographic Information Science as concentrations within the Integrated & Applied Sciences Ph.D. program. These are research-intensive program with an emphasis in specific concentrations of the student's primary advisor. Students must select and be selected by an advisor and must have a funding plan approved before they are admitted to the program. See the Integrated & Applied Sciences Ph.D. program description in this catalog for details about the program requirements

# CENTER FOR OUTCOMES RESEARCH (SLUCOR)

---

**Thomas Burroughs, Ph.D.,**  
*Executive Director*

**Leslie Hinyard, Ph.D., MS.W.,**  
*Associate Director of Academic Affairs*

**Eric Westhus, Ph.D.,**  
*Program Director, Health Data Science*

**Divya Subramaniam, Ph.D., M.P.H.,**  
*Program Director, Health Outcomes Research and Evaluation Sciences*

## About SLUCOR

Saint Louis University's Center for Outcomes Research (SLUCOR) is a scholarly community of faculty, staff, and students committed to strengthening the delivery and outcomes of medical care through education and training programs, innovative research, and consulting services. As a national leader in research and education SLUCOR improves the health of our communities by informing health care and policy decisions with scientific information about quality and effectiveness.

The mission of SLUCOR is to be a national resource that informs health care and policy decisions with scientific information about quality and effectiveness. We solve complex design and analysis problems in medicine and public health. We are engaged in state-of-the-science evaluations of the services, medications, devices, and diagnostics that can optimize individual health and well-being. SLUCOR is also committed to translating research into policies and practices that improve health outcomes across the population.

SLUCOR offers a Master of Science in Health Data Science, a Master of Science in Health Outcomes Research and Evaluation Sciences, a dual degree program with the School of Law (M.S. /J.D.), and a Post-Graduate Certificate in Health Outcomes Research. SLUCOR also offers a dual degree M.D. /Ph.D. in Health Outcomes Research with the School of Medicine.

## Master of Science in Health Data Science

The healthcare industries are increasingly turning to their ever-growing data stores to meet new mandates for performance monitoring and quality improvement. Healthcare systems must strategically leverage their operational and clinical data in order to ensure their financial stability and optimize patient outcomes. However, most healthcare organizations here in the United States do not have the essential expertise required to successfully turn this *big data* into usable information.

Today's new *data scientists* working within IT, QA/QI, and R&D departments across the US healthcare system use sophisticated analytic and computing expertise to leverage the information contained in enormous datasets spanning multiple, and often disparate, data sources. Their data management strategies must be forward-looking so historical data can be used by the continually evolving software tools of today and tomorrow. Utilizing unique analytic methods, data scientists also need clinical knowledge to address regulatory requirements, inform evaluation questions and create studies to support the plan-do-study-act cycle. These healthcare system staff must be able communicate what they learn from data in a way that is accessible to everyone. This can be particularly challenging for individuals working in healthcare industries where terminology can be hyper-specific and analysis is highly regulated by federal laws, such as HIPAA, ACA and Common Rule 45 CFR § 46.101<sup>1</sup>. Our degree program seeks to train individuals in three core areas of data science: computing, analytics, and healthcare industry standards. There are very few programs in the country that

---

<sup>1</sup> Health Insurance Portability and Accountability Act (HIPAA). Affordable Care Act (ACA). *The Health and Human Services Policy for the Protection of Human Research Subjects* (Common Rule) describes in detail the operation of the Institutional Review Board (45 CFR § 46.101)

provide hands-on training and education in these increasingly critical areas. Yet, demand for professionals with these advanced skills is rising as healthcare organizations must utilize large complex operational and clinical data for accreditation, strategic and operational purposes and to guide data-driven decision-making and policy.

The Master of Science (M.S.) in Health Data Science program offered by SLUCOR will provide traditional students and working professionals with the expertise and hands-on skills needed to meet this increasing demand in the healthcare systems. Focus will be placed on highly sought-after skills in health data manipulation, data visualization, data mining, machine learning and predictive analytics. Students will build programming skills in R, SAS, SQL and Python; as well as gain experience working with advanced computing tools such as Hadoop and MapReduce. This program capitalizes on the existing teaching and research strengths of current SLUCOR faculty, most of whom have experience in the corporate world, in addition to academia. The development of this program will further enable SLUCOR to expand faculty expertise in these high-growth areas that are directly related to SLUCOR's mission.

The Health Data Science curriculum and academic training compliments other existing programs and course offerings at Saint Louis University, including Health Informatics (Doisy College), Biostatistics (College for Public Health & Social Justice), and Biomedical Informatics and Computational Biology (College of Arts & Sciences). Students will have the opportunity to take courses from each of these other SLU programs. The goal of the M.S. in Health Data Science program is to provide graduates with the expertise and necessary skills needed to manage, manipulate and analyze large-scale clinical and operational databases. Most core courses will be offered onsite at SLU during hours convenient to working professionals. Some core and elective courses will be available through SLUCOR's established online graduate programs. The program may be completed on a full-time or part-time basis.

### **Prerequisites**

B.S. or B.A. in Health Sciences, Nursing, Biology, Chemistry, Psychology, Mathematics, Management Information Systems, Business, Public Health, Health Management, Statistics, Computer Science, or related.

### **Required Course Work**

Students will be required to complete **30 credit hours of core coursework** from our curriculum's three fields of study: Applied Statistics, Practical Computing and Health Science Applications.

### **Analytics Block**

Analytics and Statistical Programming (3)  
Inferential Modeling of Health Outcomes (3)  
Predictive Modeling and Machine Learning (3)

### **Computing Block**

Programming for Data Scientists (3)  
Health Data Management and Standards (3)  
High Performance Computing in the Healthcare Industry (3)

### **Health Sciences Block**

ORES.5300 Foundations of Outcomes Research I (3)  
ORES.5210 Foundations of Medical Diagnosis and Treatment (3)  
Communication and Leadership in the Healthcare Industry (3)  
Capstone Experience (3)

## **Master of Science in Health Outcomes Research and Evaluation Sciences**

Health outcomes research is a rapidly expanding, interdisciplinary field that provides evidence and guidance for understanding the endpoints of treatments, interventions, and health care practices, be they clinical, functional, quality of life, or economic. It builds evidence about benefits, risks, and results of treatments, as well as cost and quality of care, that allow clinicians and patients to make informed health care decisions and for policy makers to implement best practices.

At SLUCOR, we solve complex design and analysis problems in medicine and the healthcare system. We are engaged in state-of-the-science evaluations of the services, medications, devices, and diagnostics that can optimize individual health and well-being. SLUCOR is also committed to translating research into policies and practices that improve health outcomes across the population. SLUCOR embraces the university's educational mission through courses, student mentorship, training programs for School of Medicine residents and fellows, and directing the health services research/health outcomes research concentration in the public health studies Doctoral program, offered through the College for Public Health and Social Justice.

The Masters of Science (M.S.) in Health Outcomes Research and Evaluation Sciences program is an entirely online program created in response to the current healthcare climate and need for researchers trained in the areas of health outcomes research, health services research, and program evaluation to meet the changing needs of our healthcare system. The primary goal of the program is to enhance the regional and national workforce with analytical capabilities and expertise necessary to conduct health outcomes research. An M.S. in Health Outcomes Research and Evaluation Sciences positions students to become leaders in the diverse areas of health outcomes research. Students receive a solid foundation in research methodology, data management and statistical analysis, and scientific writing and presentation.

All SLUCOR programs are offered in a distance-learning, online format to provide scheduling flexibility and to meet the needs of working professionals. The M.S. and the post-graduate certificate may be completed on a part-time or full-time basis. The M.S./J.D. dual degree program must be completed as a full-time student. The M.S. and the M.S./J.D. require the completion of a capstone research project.

The M.S. in Health Outcomes Research and Evaluation Sciences has two available concentrations: 1) General Health Outcomes Research and 2) Clinical Investigation. Both concentrations require completion of the Core Curriculum (24 credits), the concentration-specific curriculum (12 credits), and the completion of a capstone research project. Students complete a total of 36 credit hours of coursework. The program may be completed on a full-time or part-time basis.

### **Requirements**

Bachelor's degree from an accredited college or university in a social science, biomedical science, or related discipline.

Note: ORES.5300 and ORES.5310 must be taken consecutively.

### **Required Core Coursework (24 credit hours):**

ORES.5010 Introduction to Biostatistics for Health Outcomes Research (3)

ORES.5150 Multivariate Analysis for Health Outcomes Research (3)

ORES.5160 Data Management (3)

ORES.5300 Foundations of Outcomes Research I (3)

ORES.5310 Foundations of Outcomes Research II (3)

ORES.5320 Scientific Writing and Communication (2)

HCE.5330 Research Ethics (1)

ORES.5400 Pharmacoeconomics (3)

ORES.5960 Health Outcomes Research Capstone (3)

## *General Concentration*

### **Requirements**

Students must complete the core coursework and the concentration curriculum as follows:

### **Concentration Curriculum (12 credit hours)**

Students choose 4 of the following electives:

ORES.5210 Foundations of Medical Diagnosis and Treatment (3)

ORES.5260 Pharmacoepidemiology (3)

ORES.5410 Evaluation Sciences (3)

ORES.5420 Clinical Trials Design and Analysis (3)

ORES.5430 Health Outcomes Measurement (3)

ORES.5440 Comparative Effectiveness Research (3)

ORES.5580 Qualitative Research Methods (3)

## *Clinical Investigation Concentration*

### **Requirements**

Students must complete the core coursework and the concentration curriculum as follows:

### **Concentration Curriculum (12 credit hours)**

Students must complete: ORES.5420 Clinical Trials Design and Analysis (3)

Students must complete one of the following courses:

ORES.5430 Health Outcomes Measurement (3) *or* ORES.5440 Comparative Effectiveness Research (3)

Students choose **two** of the following electives:

ORES.5210 Foundations of Medical Diagnosis and Treatment (3)  
ORES.5260 Pharmacoepidemiology (3)

ORES.5580 Qualitative Research Methods (3)  
ORES.5410 Evaluation Sciences (3)

## Master of Science & Juris Doctor Dual Degree

The M.S./J.D. dual degree program is offered in collaboration with the School of Law, which is accredited by the American Bar Association. This integrated program requires completion of the professional law school requirements as well as fulfillment of a complete M.S. degree (36 credits), which includes 9 credits from the School of Law J.D. degree requirements.

### Dual Degree Prerequisites

Students must meet the admission requirements and be admitted into both degree programs according to the processes of each of the participating academic units in order to pursue the dual degree program. Individuals may apply to the M.S. program concurrently with application to the School of Law or following admission to the School of Law; however, admission into the dual degree program is contingent upon admission into both the M.S. and J.D. programs.

### Requirements

Students must complete the M.S. core curriculum as revised here:

#### Required Core Coursework (21 credit hours):

ORES.5010 Foundations of Medical Diagnosis and Treatment (3)  
ORES.5300 Foundations of Outcomes Research I (3)  
ORES.5310 Foundations of Outcomes Research II (3)

ORES.5150 Multivariate Analysis for Health Outcomes Research (3)  
ORES.5160 Data Management (3)  
ORES.5400 Pharmacoeconomics (3)  
ORES.5960 Health Outcomes Research Capstone (3)

#### Concentration Curriculum (6 credit hours):

Students must complete at least 6 credits from the following:

ORES.5410 Evaluation Sciences (3)  
ORES.5440 Comparative Effectiveness Research (3)  
ORES.5420 Clinical Trials Design and Analysis (3)

Students must complete 3 credits from the following electives:

ORES.5210 Foundations of Medical Diagnosis and Treatment (3)  
ORES.5430 Health Outcomes Measurement (3)  
ORES.5260 Pharmacoepidemiology (3)

### Students complete:

Nine credits of advisor-approved coursework from the School of Law J.D. degree requirements

## Post-Graduate Certificate in Health Outcomes Research

### Requirements

A Bachelor's degree from an accredited college or university in a social science, biomedical science, or related discipline.

### Curriculum (18 credit hours)

Students must complete the following core courses (15 credit hours):

ORES.5010 Introduction to Biostatistics for Health Outcomes Research (3)  
ORES.5300 Foundations of Outcomes Research I (3)  
ORES.5310 Foundations of Outcomes Research II (3)

ORES.5400 Pharmacoeconomics (3)  
ORES.5150 Multivariate Analysis for Health Outcomes Research (3)

Choose one course (3 credit hours) from the following electives:

ORES.5260 Pharmacoepidemiology (3)  
ORES.5410 Evaluation Sciences (3)  
ORES.5420 Clinical Trials Design and Analysis (3)  
ORES.5580 Qualitative Research Methods (3)

ORES.5430 Health Outcomes Measurement (3)  
ORES.5440 Comparative Effectiveness Research (3)  
ORES.5210 Foundations of Medical Diagnosis and Treatment (3)

# Doctor of Medicine & Doctor of Philosophy in Health Outcomes Research Dual Degree

The M.D. /Ph.D. in Health Outcome Research dual degree program is offered in collaboration with the School of Medicine. This integrated program requires completion of medical school requirements as well as fulfillment of Ph.D. requirements (50 credit hours).

## Dual Degree Prerequisites

Students will be required to be admitted to the M.D. /Ph.D. program at the School of Medicine.

## Curriculum Requirements

The M.D. /Ph.D. program includes 50 credit hours:

- 29 credit hours of coursework, drawn from required courses (20 credits) and electives (9 credits)
- 12 credit hours of dissertation research
- 9 credit hours accepted from MS1/MS2 of the M.D. curriculum

## Required Courses (20 required credit hours)

- ORES.5010 Introduction to Biostatistics (3)
- ORES.5160 Data Management (3)
- ORES.5300 Foundations of Outcomes Research I (3)
- ORES.5320 Scientific Writing & Communication (2)
- ORES.5430 Health Outcomes Measurement (3)
- ORES.5310 Foundations of Outcomes Research II (3)
- ORES.5150 Multivariate Analysis (3)

## Elective Courses (Students choose 9 credit hours)

- ORES.5400 Pharmacoeconomics (3)
- ORES.5410 Evaluation Sciences (3)
- ORES.5260 Pharmacoepidemiology (3)
- ORES.5420 Clinical Trials (3)
- ORES.5440 Comparative Effectiveness Research (3)
- HCE.6120 Health Care Law (3)
- ORES.6980 Graduate Readings Course (1-3)
- BCH-G628 Intro to Bioinformatics and Genomics (3)
- BCH-G625 Preparation and Evaluation of Scientific Research Proposals (3)

## Dissertation Research (12 credit hours)

- ORES.6990 Dissertation Research

## 9 credit hours accepted from the MS1/MS2 of the MD curriculum, as follows:

- Principles of Pharmacology (3)
- Fundamentals of Biomedical Science (3)
- Biostatistics (1)
- Elective in Clinical Research (1)
- Health Care Ethics (1)

## Additional Post-Baccalaureate coursework offered by SLUCOR

In addition to the courses and electives offered for the SLUCOR programs, SLUCOR also offers post-baccalaureate level courses in research methods and statistics for students across the universities that are not part of a SLUCOR degree program are as follows:

- ORES.5100 Research Methods in Health and Medicine (3)
- ORES.5120 Practical Applications of Statistical Methods (3) (open only to M.S. in Nutrition and Dietetics students)
- ORES.5200 Introduction to Statistics in the Biomedical Sciences (3)
- ORES.5550 SAS Programming I (3)
- ORES.5560 R Programming (3)
- ORES.5570 US Health System Reform (2-3)