



SAINT LOUIS UNIVERSITY  
CATALOG  
GRADUATE EDUCATION  
2016 - 2017



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# General Information

## INTRODUCTION

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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. Graduate Education's Webpage: <https://www.slu.edu/academics/graduate/index.php>

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

## HISTORY

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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 North Campus, located in the Grand Avenue midtown area, and the South Campus, 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 Health Outcomes Research (SLUCOR) (2012)

# MISSION

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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

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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

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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

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The Associate Provost for Academic Affairs 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

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Collins O. Airhihenbuwa, Ph.D., M.P.H.  
Dean, 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

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

Heather Bednarek, Ph.D.  
Associate Dean, John Cook School of Business  
bednarhl@slu.edu, (314) 977-2476

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

Thomas E. Burroughs, Ph.D.  
Executive Director for the Center for Health 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

Jennifer Giancola, Ph.D.  
Interim Dean, School for Professional Studies  
kohlerjm@slu.edu, 314.977.3349

Elizabeth Gockel-Blessing, Ph.D.  
Associate Dean for Student and Academic Affairs, 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., F.SEI  
Associate Dean for Graduate Education & Research, Parks College of Engineering, Aviation and Technology  
rhindi@slu.edu, 314.977.8547

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

Jason Knouft, Ph.D.  
Interim Director, Center for Sustainability  
jknouft@slu.edu, 314.977.2745

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

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

Michelle Sabick, Ph.D.  
Dean, Parks College of Engineering, Aviation and Technology  
sabickmb@slu.edu, 314.977.2850

Erica Salter, Ph.D.  
Director of the Ph.D. Program, Albert 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

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 Provost for Academic Affairs, School of Nursing  
jthanava@slu.edu, 314.977.8908

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  
mwolff3@slu.edu, 314.977.2774

Robert M. Wood, Ph.D.  
Associate Provost, Academic Affairs  
wood2@slu.edu, 314-977-3904

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

# Campus Resources and Services

## ACADEMIC SUPPORT RESOURCES

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### 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 North Campus, in the School of Medicine Building (Schwitalla Hall) on the South Campus, 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 North 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. 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 Vincent C. Immel 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

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## 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 students can be terminated from the assistantship by the department. 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 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. Exceptions to the policy may be granted by the Dean of the 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, Graduate Teaching Assistants, and Graduate Research 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 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 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. These loans will be granted a maximum of three times provided the previous ones have been repaid.

# STUDENT LIFE AND SERVICES

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## 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 North 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 North and South Campuses. Bannister House, located at 3824 Lindell, also provides breakfast, lunch, and catered meetings to faculty, staff, and alumni. The North Campus offers seven dining locations, and the South Campus 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 graduate 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 Academic Affairs 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 located on the North and South Campuses for a fee. The Billiken Bus Line provides transportation within and between the North and South Campuses 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 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 University Counseling Center

The Student Health 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.

University Counseling Center located on the second floor of Wuller Hall offers individual, group, and couples counseling services. Counseling services are also available to all students in Madrid. 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. Students are permitted 10 individual therapy sessions per academic year. To schedule an appointment students can call (314) 977-TALK (8255).

## 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 on assistantships or fellowships, but not for student spouses or dependent(s). As well, health coverage support may be offered for only a portion of a semester or academic year. 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

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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. If students later advance to Classified status, they may petition that coursework completed while in Unclassified status, exclusive of courses taken to eliminate any prerequisite deficiencies, may apply toward partial fulfillment of degree requirements. 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.

**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. Students must receive permission from the program to take courses and consult with the program regarding courses to take. This option is not available for international students. Students admitted under Probationary status are not eligible for University assistantships or fellowships. 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 courses taken to eliminate any prerequisite deficiencies, may be applied toward partial fulfillment of degree requirements.

**Conditional** 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. Students may remain in Conditional status for only one academic term. The coursework completed during that term may subsequently be applied 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 North 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 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 (J.D.) and Master of Laws (LLM) students in the School of Law and Doctor of Medicine (M.D.) 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).

## Immunization Policy

All Classified students at the North and South Campuses 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](#).

## Bereavement

Upon request to the Dean of Students students shall be given up to five (5) consecutive days (not including weekends or holidays) of excused absence for bereavement.

Each faculty member will excuse students from class and provide an opportunity to complete missed exams, quizzes, and other required work. Ultimately, students are responsible for all material covered in class and must work with each individual instructor as soon as they return to complete any required work.

Note: Students should also contact their Advisor and/or Academic Department/Program.

## 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 Academic Affairs. 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 Academic Affairs 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 Academic Affairs. GAAC may annually review each multidisciplinary Master's program and the progress therein, and make recommendations to the Associate Provost for Academic Affairs. 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 Academic Affairs. 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 Affairs Committee (GAAC). The Associate Provost for Academic Affairs 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 Academic Affairs. GAAC may annually review each multidisciplinary Doctoral program and the progress therein, and make recommendations to the Associate Provost for Academic Affairs.

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 2016-2017 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.

Check the [webpage](#) 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 indebtedness 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. Please note that if you receive any type of award from the University and have a balance on your account, the balance will be cleared prior to release of the award.

# ACADEMIC STANDARDS

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## 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 Academic Affairs 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/Time to Degree

Time period to degree begins at the start of the academic term when the first course is taken in Classified status. For students pursuing a Master's degree, the 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." Students may obtain credit toward degrees for limited numbers of credits in courses numbered 4000 (upper-division, undergraduate). 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 students' department or program. Departments and programs are required to file a copy of their review process with their appropriate Graduate Dean or Director. 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.

## Grade Appeal

Final grade appeals follow the procedures of the college/school of the course. All appeals must be initiated within six months of the grade assignment and completed within one calendar year.

Students may appeal a grade only for one or more of the following reasons:

1. Miscalculation of grade.
2. The assignment of a grade to a particular student on some basis other than performance in the course.
3. The assignment of a grade to a particular student by more exacting or demanding standards than were applied to other students in that section.
4. The grade assigned results from different standards than the criteria for performance and evaluation outlined in the course syllabus.

## 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 that are 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" = 3.00), 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.

Graduate 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 3.00.

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 System

The post-baccalaureate grading system 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 below for additional information)
W	Withdrawal (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. Courses excluded from the Repeating Course policy are courses that may be repeated for credit, for example All School of Law courses, Special Topics, Independent Study, 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 2016-2017 are the following:

#### Fall 2016

Fall Degree Conferral #1- October 21, 2016  
Fall Degree Conferral #2 - December 17, 2016

#### Spring 2017

Spring Degree Conferral #1- March 17, 2017  
Spring Degree Conferral #2 - May 20, 2017

#### Summer 2017

Summer Degree Conferral #1- June 14, 2017  
Summer Degree Conferral #2- July 5, 2017  
Summer Degree Conferral #3- August 2, 2017  
Summer Degree Conferral #4- August 16, 2017

# ADMISSION POLICIES

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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.

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.

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 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 complete a minimum of 80% of post-baccalaureate work at SLU. Ed.D. students must complete at least 38 credits of credits at 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

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## Continuous Enrollment

Matriculated Classified students must maintain continuous enrollment during each nine-month academic year until graduation. Students holding eleven-month appointments with the University must also enroll each summer. 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 sl.u.edu email account, access to mySLU.sl.u.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 Academic Affairs.

### *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 Academic Affairs, in consultation with students' advisor.

# REGISTRATION

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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. 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.

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 normal or extended time-to-degree period).

If a student's research-degree degree program becomes protracted such that an extension of the time-to-degree period is necessary, approval of the extension 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.

## 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, <https://www.slu.edu/medicine//index.php>

School For Professional Studies: (314) 977-2330, <https://www.slu.edu/school-for-professional-studies/index.php>

Madrid Campus: <https://www.slu.edu/madrid/admissions/tuition-and-fees/index.php>

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.

The deadline to drop a course without a "W" appearing on the transcript will be 5:00 pm Friday of the second week of the semester for full semester courses.

- During the first week of the semester students are able to drop individual courses through Banner Self-Service.
- During the second week of the semester students must use the Change of Registration Form and receive permission from their academic advisor.

The period to withdraw from a course is the Saturday of the second week of the semester through 5:00 pm Friday of the tenth week of the semester for full semester courses.

- During the third week through the tenth week of the semester students must complete the Form #8 - Petition to Withdraw from Course(s) after the Late Registration Period and receive permission from their academic advisor.

For students intending to drop/withdraw all courses see the policy for Withdrawing from the University for additional information. 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 taking a formal leave of absence from a program are required to submit a petition for a leave, routing the petition through the major field and to the Office of the Registrar.

# GRADUATION REQUIREMENTS AND POLICIES

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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.

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 unstructured undergraduate coursework.

### 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 Specialist 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. The written work must follow a composition format within guidelines established by the major field and the *Formatting Guide*. The Master's Candidacy Specialist 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.

### 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 Academic Affairs. Extensions are granted for no longer than one calendar year at a time. 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

Students holding a Master's degree from another institution may petition for "advanced standing" toward the Doctoral degree for academic work completed during the Masters. Additional graduate-level academic work, not part of any earned advanced degree, may be formally transferred into the Doctoral program, but may not exceed 20% of the structured coursework required for the Doctorate.

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

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. Doctoral students may not enroll in unstructured undergraduate coursework.

### 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 student may proceed to the oral exam.

### *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. The committee for the oral examination/proposal defense consists of a minimum of five faculty members; some programs have received approval from the Office of Graduate Education for fewer committee members. The committee for the dissertation defense may have fewer members than the committee for the oral examination/proposal defense; that decision lies with the program. Members of the oral examination/proposal defense committee and the dissertation defense committee need not be the same.

### *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 Specialist at least two weeks prior to the date of the exam. Upon receipt of the form, the Doctoral Candidacy Specialist will send a decision result form to the committee chairperson prior to the exam or proposal defense. No examination or proposal defense is to occur without the result form in hand. 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. The second attempt may 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 successful completion of the comprehensive oral exam. Graduate Education policy requires that students be enrolled in at least one hour of dissertation credit upon achieving candidacy until completion of required credits.

### *Dissertation*

The Candidate for a Ph.D. must write a dissertation and present and defend this original and independent research. 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.

Once the dissertation has been successfully defended and all required revisions are complete, The Doctoral Candidacy Specialist will conduct 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 Specialist 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. Upon receipt of the form, the Doctoral Candidacy Specialist will send decision result forms to the committee chairperson prior to the defense. No defense is to occur without the result forms in hand. 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. 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 research mentor, and major-field chairperson or program director, Associate Dean or Center Director, and the Associate Provost for Academic Affairs must approve the petition. A maximum of two extensions beyond the normal time to degree will be permitted. Extensions are granted for one calendar year, but can be given for less if the student is only missing a defense or exam date. Approval is accompanied by the requirement of enrollment in one additional Dissertation Research credit per semester (beyond twelve, which should have already been taken).

## 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 Specialist, 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

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## 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

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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.

Education Leadership and Business Administration	MA   MBA
Health Administration and Business Administration	MHA   MBA
Law and Business Administration	JD   MBA
Law and Health Administration	JD   MHA
Law and Health Care Ethics	JD   PhD
Law and Health Outcomes Research	JD   MS
Law and Master of Accounting	JD   MACC
Law and Political Science	JD   MA
Law and Public Administration	JD   MPA
Law and Public Health in Health Management and Policy	JD   MPH
Law and Social Work	JD   MSW
Law and Sociology	JD   MA
Law and Urban Planning and Development	JD   MA
Medicine and Basic Biomedical Sciences	MD   PhD
Medicine and Business Administration	MD   MBA
Medicine and Health Care Ethics	MD   PhD
Medicine and Public Health	MD   MPH
Public Health and Clinical Psychology	MSPH   PhD
Public Health and Nutrition and Dietetics	MPH   MS
Public Health and Social Work	MPH   MSW
Public Administration and Political Science	MPA   MS
Public Administration and Social Work	MPA   MSW
Social Work and Pastoral Studies through Aquinas Institute of Theology	MSW   MAPS
Social Work and Master of Divinity through Concordia Seminary	MSW   MDiv
Social Work and Theology through Concordia Seminary	MSW   MATH
Social Work and Deaconess Studies through Concordia Seminary	MSW   MDeac
Sustainability and Business Administration	MA   MBA
Theology and Health Care Ethics	MA   PhD
French and French through the University of Poitiers, France	MA   MA

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

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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.

# Curricula and Courses

## INTRODUCTION

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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

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**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

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**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. Current faculty strengths include: urban studies; race, gender and ethnicity in American history, culture and literature; African American history, transnationalism; religion; women's literature; space, region, and place; St. Louis history.

### Master of Arts

#### **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 5000-level seminar offered by the Department

At least one 6000-level seminar offered by the Department

Six credits of ASTD.5990 Thesis Research (Thesis option only; no additional coursework for Portfolio option)

*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. Relevant M.A.s may transfer some credits, but all Ph.D. students will receive an M.A. as well.

#### **Required Courses**

ASTD.5000 Perspectives in American Studies;

ASTD.5900 The Practice of American Studies; and

ASTD.6100 Dissertation Colloquium

At least two 5000-level seminar offered by the Department

At least two 6000-level seminar offered by the Department

## **Additional Requirements**

Reading proficiency in one foreign language

Portfolio Paper for M.A.

## **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

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

*Interim Department Chairperson*

**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 North 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. Full information on graduate programs in the Biology Department can be found in our [graduate handbook](#).

## 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.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

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**Maureen J. Donlin, 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, Computer Science, and Mathematics & Statistics 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.1240/1245/1260/1265)  
General Chemistry I & II (e.g., CHEM.1110/1115/1120/1125)  
Molecular & Cellular Biology (e.g., BIOL.3020 or 3040)  
Genetics (e.g., BIOL.3030)

#### *Computer Science*

Introduction to Programming (e.g., CSCI.1300)  
Data Structures (e.g., CSCI.2100)

#### *Mathematics*

Calculus I & II (e.g., MATH.1510/1520)  
Discrete Mathematics (e.g., MATH.1660)  
Introduction to Statistics (e.g., MATH.1300, 3850, or 4860)

Students who have most, but not all, of the above prerequisite courses may be admitted on a probational basis 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.  
BCB.5200 Introduction to Bioinformatics I (3)  
BCB.5250 Introduction to Bioinformatics II (3)  
BCB.5300 Algorithms in Computational Biology (3)  
BIOL.5030 Genomics (3)

### Additional Biology courses (1 or more)

BIOL.5090 Biometry (3)  
BIOL.5100 Cellular and Molecular Genetics (3)  
BIOL.5700 Advanced Molecular Biology (3)

BIOL.5780 Molecular Phylogenetic Analysis (3)

**Additional Computer Science courses (1 or more)**

CSCI.5710 Databases (3)

CSCI.5750 Machine Learning (3)

CSCI.5850 High-Performance Computing (3)

**Internship/Research Experience (3 hours)**

BCB.5910 Internship in Bioinformatics (0-3)

BIOL.4911 Integrated Bioinformatics Internship (0-3)

BCB.5970 Research Topics (0-3)

BIOL.5970 Research Topics (0-3)

CHEM.5970 Research Topics (0-3)

CSCI.5970 Research Topics (0-3)

IAS.6970 Research Topics (0-3)

**Bioinformatics Colloquium**

BCB.5810 Bioinformatics Colloquium (1)

**Other electives (to reach 30 hours)**

BCB.5100 Advanced Scripting for Life Sciences (3)

BCB.5930 Topics in Bioinformatics (3)

BIOL.5050 Molecular Technique Lab (3)

BIOL.5070 Advanced Biological Chemistry (3)

BIOL.5170 Introduction to GIS (3)

BIOL.5180 Intermediate GIS (3)

BIOL.5190 GIS in Biology (3)

CSCI.5150 Computational Geometry (3)

CSCI.5830 Image Processing (3)

CSCI.5930 Topics in Computer Science (3)

MATH.4850 Mathematical Statistics (3)

CHEM.4610/4615 Biochemistry I + Lab (3)

CHEM.4620/4625 Biochemistry II + Lab (3)

# CHEMISTRY

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**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. program is for part-time coursework students who want a non-research-based M.A. degree or full-time research students who want to transition into the Ph.D. program prior to earning a Master's degree 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 18 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 30 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. Part-time students usually take 3 credits of CHEM.5970 Research Topics in addition to 3 credits of CHEM.5980 Graduate Reading Course.

*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. Students also 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 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.5150 Statistical Methods for Physical Scientists (3)  
CHEM.5160 Advances in Synthetic Chemistry (3)  
CHEM.5170 Advances in Analysis and Modeling of Chemical Systems (3)  
CHEM.5200 Instrumental Analysis (3)  
CHEM.5230 Mass Spectrometry (3)  
CHEM.5250 Bioanalytical Methods of Analysis (3)  
CHEM.5260 Analytical Separations (3)  
CHEM.5270 Electroanalytical Chemistry (3)  
CHEM.5280 Chemical Sensors (3)  
CHEM.5290 Special Topics in Analytical Chemistry (3)  
CHEM.5299 Introduction to Analytical Research (1-3)  
CHEM.5330 Advanced Physical Chemistry (3)  
CHEM.5340 Advanced Thermodynamics (3)  
CHEM.5350 Elements of Surface and Colloid Science (3)  
CHEM.5370 Computational Chemistry (3)  
CHEM.5390 Special Topics in Physical Chemistry (3)  
CHEM.5399 Introduction to Physical Research (1-3)  
CHEM.5400 Organic Spectroscopy (3)  
CHEM.5440 Bioorganic Chemistry (3)  
CHEM.5450 Advanced Organic Chemistry (3)  
CHEM.5460 Synthetic Organic Chemistry (3)  
CHEM.5470 Principles of Medicinal Chemistry (3)  
CHEM.5480 Heterocyclic Chemistry (3)  
CHEM.5499 Introduction to Organic Research (1-3)  
CHEM.5500 Inorganic Chemistry (3)  
CHEM.5550 Organometallic Chemistry (3)  
CHEM.5560 Solid State Chemistry (3)  
CHEM.5570 Chemical Applications of Group Theory and Spectroscopy (3)  
CHEM.5590 Special Topics in Inorganic Chemistry (3)  
CHEM.5599 Introduction to Inorganic Research (1-3)  
CHEM.5620 Biophysical Chemistry (3)  
CHEM.5630 Introduction to Chemical Biology and Biotechnology (3)  
CHEM.5700 Environmental Chemistry (3)  
CHEM.5800 Fundamentals & Design of Nanoarchitectures (3)  
CHEM.5850 Polymer Chemistry (3)  
CHEM.5920 Research Seminar (0-1)  
CHEM.5950 Special Study for Examinations (0)  
CHEM.5970 Research Topics (1-3)  
CHEM.5980 Graduate Reading Course (1-3)  
CHEM.5990 Thesis Research (0-6)  
CHEM.6900 Intro to Proposal Writing & Oral Presentations (3)  
CHEM.6990 Dissertation Research (0-12)

# COMMUNICATION

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**April Trees, Ph.D.**

*Department Chairperson*

**Matt Carlson, 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. Coursework options allow students to deepen their understandings of communication theory and research 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.

### Post-Baccalaureate Courses

CMM.5000 Graduate Study of Communication (3) (Offered every Fall semester)	occasionally)
CMM.5010 Reading Foundations in Communication Theory (3) (Offered every Fall semester)	CMM.5400 Contemporary Issues in Media (3) (Offered yearly)
CMM.5020 Interpersonal Communication (3) (Offered every other year)	CMM.5410 Foundations of Journalism (3) (Offered occasionally)
CMM.5050 Rhetorical Theory and Criticism (3) (Offered occasionally)	CMM.5440 Communication Ethics (3) (Offered occasionally)
CMM.5070 Contemporary Theories in Communication (3) (Offered occasionally)	CMM.5450 Studies in Mass Media (3) (Offered occasionally)
CMM.5080 Philosophy of Communication (3) (Offered occasionally)	CMM.5600 Strategic Communication (3) (Offered every other year)
CMM.5090 Health Communication (3) (Offered yearly)	CMM.5800 Research Methods in Communication (3) (Offered every Spring semester)
CMM.5200 Organizational Communication (3) (Offered yearly)	CMM.5810 Digital Storytelling (3) (Offered occasionally)
CMM.5300 Culture and Public Dialogue (3) (Offered occasionally)	CMM.5820 Advanced Research Methods (3) (Offered occasionally)
CMM.5340 Language and Cultural Diversity (3) (Offered	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)

# EARTH & ATMOSPHERIC SCIENCES

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

*Department Chairperson*

The Department of Earth and Atmospheric Sciences has a tradition of combining strong classroom and field-based instruction with internationally recognized research across a broad spectrum of the physical sciences, including seismology and solid earth geophysics, tectonics, synoptic meteorology, environmental systems, and the study of modern and ancient climate change. We offer degrees in *Environmental Science, Environmental Studies, Geology, Geophysics, and Meteorology*. Although growing, we are small enough to provide a warm, collegial atmosphere that promotes extensive interaction between students and faculty. Our students also have the opportunity to work directly with faculty on their research and pursue internships through our growing network of contacts in the public and private sector.

## 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, 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, contaminant transport, wetland biogeochemistry, hydro-geochemistry, fluvial geomorphology, coastal geomorphology and processes.

Research facilities include 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 with focus on the new Madrid Seismic Zone, high performance computing clusters, rock preparation and mineral separation facilities, and renovated stable isotope geochemistry, elemental analysis, gas chromatography, water quality and soils laboratories.

## 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 (3)

EAS.5170 Divergent and Convergent Margins (3) or EAS.5180 Transform margins and Plate Interiors (3)

### *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 (3)

EAS.5170 Divergent and Convergent Margins (3) or EAS.5180 Transform Margins and Plate Interiors (3)

and 2 of the following:

EAS.5040 Potential Theory (3), EAS.5400 Continuum Mechanisms (3) and/or EAS.5510/5520 Seismic Exploration Methods with Laboratory (3)

### 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 (3)

EAS.5170 Divergent and Convergent Margins (3) or EAS.5180 Transform Margins and Plate Interiors (3), and 2 of the following:

EAS.5040 Potential Theory (3), EAS.5400 Continuum Mechanisms (3) and/or EAS.5510/5520 Seismic Exploration Methods with Laboratory

Students in seismology must take:

EAS.5120 Time Series Analysis in Geophysics (3)

EAS.5390 Seminar in Seismology (2)

EAS.6310 Advanced Seismology I (3)

EAS.6320 Advanced Seismology II (3)

### 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 (2-3)

EAS.5200 Numerical Methods of Prediction (3)

EAS.5230 Boundary Layer Meteorology (3)

EAS.5240 Tropical Meteorology (3)

EAS.5270 Meteorology of Severe Storms (3)

EAS.5290 Mesometeorology (3)

EAS.5340 Cloud Physics (3)

EAS.5380 Statistical Methods in Meteorology (3)

EAS.5360 Principles of Radiation Transfer I (3)

EAS.5470 Turbulence and convection (3)

EAS.5600 Atmospheric Chemistry (3)

EAS.5610 Satellite Meteorology (3)

EAS.5650 Radar Meteorology (3)

EAS.5700 Convection in the Atmosphere (3)

EAS.5981 Independent Study (1-3)

EAS.5890 Research Seminar (3)

EAS.5930 Special Topics in Meteorology (1-3)

EAS.5970 Research Topics (1-3)

EAS.5980 Graduate Reading Course (1-3)

EAS.6480 General Circulation of the Atmosphere (3)

GIS.5010 Introduction to GIS (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 Requirements

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 (2-3)

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

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**Toby Benis, Ph.D.**

*Department Chairperson*

**Georgia K. Johnston, 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.

### Distributive Requirements

Beyond ENGL.5000 and ENGL.5110, M.A. candidates must take 12 of 30 required hours in four of the following five fields:

1. Anglo-Saxon and/or Medieval Literature (3 hrs.)
2. Renaissance/Early Modern Literature (ca. 1500-1800) (3 hrs.)
3. Literature of the Long 19th Century (ca. 1789-1914): British, American, African American, or Transatlantic (3 hrs.)
4. Modern and/or Contemporary Literature: British, Irish, American, African American, Transatlantic, or Postcolonial (3 hrs.)
5. Rhetoric and/or Composition exclusive of ENGL.5010 (3 hrs.)

## Master of Arts (Thesis)

The Master of Arts (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.

### Transferring into the Doctoral Program

Applications by SLU M.A. students seeking to transfer into the doctoral program are made by separate application at the beginning of the spring semester of the Master's candidate's second year following a protocol described in the English Department Graduate Handbook.

Both internal and external applicants to the Ph.D. program are strongly encouraged to have completed, or be in the process of completing, a master's thesis or to have undertaken another outsized research project as part of their M.A. studies, since the ability to independently frame and conduct a major research project will be demanded of them as doctoral students.

# Doctor of Philosophy

## Prerequisites

An M.A. or 30 credits in English course work 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, ENGL.5010, and ENGL.5110 are required of all students who have not taken equivalent courses in another program as part of their prior training. Students are also required to take ENGL.5970 (Professionalization Practicum) in the year they are beginning to seek professional employment, whether in an academic or “alt-ac” setting.

## Distributive Requirements

Beyond these courses, Ph.D. candidates who have taken course work in four of the five following fields as Master’s students need only take 9 of 24 required hours in three of the five fields as part of their doctoral course work. Doctoral students who have not met the threshold Master’s level criterion must take 12 hours in four of the following five fields:

1. Anglo-Saxon and/or Medieval Literature (3 hrs.)
2. Renaissance/Early Modern Literature (ca. 1500-1800) (3 hrs.)
3. Literature of the Long 19th Century (ca. 1789-1914): British, American, African American, or Transatlantic (3 hrs.)
4. Modern and/or Contemporary Literature: British, Irish, American, African American, Transatlantic, or Postcolonial (3 hrs.)
5. Rhetoric and/or Composition exclusive of ENGL.5010 (3 hrs.)

In addition, all Ph.D. students, after their first year, must distribute registrations for 12 credits of ENGL.6990 Dissertation Research over several terms.

## 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 take a Doctoral Competency Exam, that has written and oral components and is described in the English Department Graduate Handbook. Completed dissertations are assessed by the student’s committee and are formally accepted after a public defense.

## 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 18th-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)  
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.5970 Professionalization Practicum  
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)

## 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.6250 Chaucer: The Canterbury Tales (3)  
ENGL.6260 Studies in Chaucer (3)  
ENGL.6270 Middle English Literature (3)  
ENGL.6300 16th-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

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**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

### **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

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**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 Biology, Chemistry, Environmental Sciences & G.I.S., Physics, and Sustainability Sciences, and to prepare graduates to confidently assume multi-faceted roles in the changing scientific community. Students specialize in a concentration depending on their primary mentor's research area.

The distribution of courses in the various I.A.S. areas is determined by students' dissertation committees with a minimum total of 42 credits between all three areas. A total of 30 coursework 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. Program Director.

### **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 a minimum of 18 credits of lecture or laboratory-based 5000 and 6000-level courses (with 9-12 credits from the core department). Students are also required to complete the following courses for four semesters, typically in the 2<sup>nd</sup> and 3<sup>rd</sup> years of the program:

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

### **Additional Requirements**

Students must complete 6-9 credits in lecture or laboratory-based courses selected from outside the core department. These may be taken from: I.A.S., Chemistry, Earth & Atmospheric Science, Engineering, Physics, Mathematics & Computer Science, Biology, Biomedical Sciences, Public Health, G.I.S., or Sustainability Sciences. 12 credits of Dissertation Research (IAS.6990) are required.

### **Post-Baccalaureate Courses**

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)

## *Concentration in Environmental Sciences and G.I.S.*

This concentration is for students interested in the application of geographic information systems (G.I.S.) in the field of environmental sciences. Required course are taken in the Earth and Atmospheric Sciences Department as well as the G.I.S. program based in the Center for Sustainability.

EAS.4350 Ground Water Hydrology (3)	GIS.5060 Geospatial Methods in Environmental Studies (3)
EAS.4500 Scientific Communication (2)	GIS.5070 Research Methods (3)
EAS.5190 Seminar in Geoscience (3)	GIS.5080 Digital Cartography & Geovisualization (3)
EAS.5900 Geoscience Journal Club (1)	GIS.5090 Programming for Remote Sensing/GIS (3)
EAS.5170 Divergent/Convergent Margins (3)	GIS.5100 Microwave Remote Sensing: SAR Principles, Data Processing and Applications (3)
EAS.5180 Transform/Plate Interiors (3)	GIS.5110 Interferometric Synthetic Aperture Radar (3)
EAS.5600 Atmospheric Chemistry (3)	GIS.5120 Geographic Information Science, Society and Sustainability (3)
GIS.5010 Introduction to GIS (3)	GIS.5970 Research Topics (0-6)
GIS.5020 Intermediate GIS (3)	
GIS.5040 Introduction to Remote Sensing (3)	

Students will also choose 2-3 courses from pre-approved lists from affiliated departments which should be taken in the research emphasis area, outside the research specialization of the Ph.D. candidate. A sample of these courses includes:

BIOL.4680 Landscape Ecology and Management (3)  
BIOL.5190 GIS in Biology (3)  
BIOL.5480 Conservation Biology (3)  
BIOL.5500 Problems in Ecology (3)  
CHEM.5700 Environmental Chemistry (3)

SOC.5205 Science, Technology, & Public Policy (3)  
BSDP.5101 Fundamentals of Disaster Planning (3)  
EOH.5970 Research Topics in Environmental & Occupational Health (3)  
EAS.5340 Cloud Physics (3)

### Concentration in Sustainability Science

Students build on a foundation of Sustainability Science core coursework with courses taken from the following:

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)  
SUS.5100 Environmental Politics and Policy (3)  
SUS.5930 Special Topics (3)

Students will also choose 2-3 courses from pre-approved lists from affiliated departments which should be taken in the research emphasis area, outside the research specialization of the Ph.D. candidate. A sample of these courses includes:

UPD.5100 Research Methods (3)  
GIS.5010 Introduction to G.I.S. (3)  
GIS.5020 Intermediate G.I.S. (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 & Geovisualization (3)  
GIS.5090 Programming for Remote Sensing/G.I.S. (3)  
GIS.5100 Microwave Remote Sensing: S.A.R. Principles, Data Processing and Applications (2 or 3)  
GIS.5110 Interferometric Synthetic Aperture Radar (3)  
GIS.5120 Geographic Information Science, Society and Sustainability (3)  
GIS.5970 Research Topics (0-6)

UPD.5000 Foundations of Planning (3)  
UPD.5020 Land Use Planning and Analysis (3)  
UPD.5200 Local Economic Development Policy and Practice (3)  
UPD.5220 Infrastructure Planning and Process (3)  
UPD.5250 Planning and Development in St. Louis (3)  
UPD.5260 Real Estate and Economic Development (3)  
UPD.5350 Environmental Planning (3)  
UPD.5360 Sustainability and the Built Environment (3)  
UPD.5370 Sustainable Site Planning (3)  
UPD.5450 Community Development Finance (3)  
UPD.5500 Real Estate Finance (3)  
UPD.5900 Planning and Development Studio (3)

### Concentration in Physics – Nanomaterials and Condensed Matter

This concentration is geared towards students interested in the physics of solid state and nanomaterials. Required core courses may be taken in the Physics Department.

PHYS.5010 Nanoscience and Nanofabrication Frontiers (3)  
PHYS.5020 Experimental Physics (3)  
PHYS.5030 Mathematical Methods in Physics (3)

PHYS.5040 Fundamentals of Electricity & Magnetism (3)  
PHYS.5050 Quantum Mechanics (3)  
PHYS.5070 Condensed Matter Physics (3)

Students may take 2-3 courses outside the core department from the following:

CHEM.5570 Group Theory & Spectroscopy (3)  
CHEM.5340 Advanced Thermodynamics (3)  
CHEM.5370 Computational Chemistry (3)  
CHEM.5800 Fundamentals and Design of Nanoarchitectures (3)  
CHEM.5560 Solid State Chemistry (3)

ECE.5131 Low Noise Electronics Design (3)  
ECE.5132 Analog Integrated Circuit Design (3)  
ECE.5142 Microwave Theory & Techniques (3)  
ECE.5143 Antenna Theory and Design (3)  
ECE.5150 Advanced Filter Design (3)  
ECE.5235 Digital I.C. Design (3)

### Concentration in Biology – Bioinformatics or Integrated Geospatial Biology

This concentration is geared toward biological research with substantial computational or geographic information systems (G.I.S.) components. Required core courses may be taken in the Biology Department.

BIOL.4060 Structure and Function of Ecosystems (3)  
BIOL.4090 Plant Ecology (3)

BIOL.4260 Biology of Amphibians and Reptiles (4)  
BIOL.4270 Field Studies with Amphibians and Reptiles (1)

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.4450 Ecological Risk Assess/Risk Management (3)  
 BIOL.4480 Conservation Biology (3)  
 BIOL.4600 Developmental Biology (3)  
 BIOL.4630 Foundations of Immunobiology (3)  
 BIOL.4640 General Microbiology (3)  
 BIOL.4650 Microbiology Lab (2)  
 BIOL.4670 Population Biology (3)  
 BIOL.4680 Landscape Ecology and Management (3)  
 BIOL.4700 Molecular Biology (3)  
 BIOL.4760 Plant Biochemistry (4)  
 BIOL.4910 Internship in Conservation (3)  
 BIOL.5060 Advanced Topics in Molecular Biology (4)  
 BIOL.5070 Advanced Biological Chemistry  
 BIOL.5100 Cellular and Molecular Genetics (3)  
 BIOL.5120 Signal Transduction (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  
 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.5460 Systematic Biology (3)  
 BIOL.5480 Conservation Biology (3)  
 BIOL.5500 Problems in Ecology (2-4)  
 BIOL.5550 Advanced Ecology (3)  
 BIOL.5600 Development Genetics (3)  
 BIOL.5670 Advanced Population Biology (3)  
 BIOL.5700 Advanced Molecular Biology (3)  
 BIOL.5770 Coevolution (3)  
 BIOL.5840 Graduate Seminar in Ecol., Evol., and System (2)  
 BIOL.6040 Current Topics in Developmental Biology (3)  
 BIOL.6150 Neural Basis of Behavior (3)  
 BIOL.6510 Plant-Water Relationships (3)  
 BIOL.6970 Research Topics (1-3)  
 BIOL.6980 Graduate Reading Course (1-3)  
 BIOL.5810 Department Seminar (0)  
 BIOL.5820 Graduate Seminar/Cell and Molec. Regulation (2)  
 BIOL.5860 Scientific Communication Practicum (3)

Students will also choose 2-3 courses from Earth & Atmospheric Sciences, Engineering, Physics, Mathematics, Chemistry, Biomedical Engineering, or Biomedical Sciences, Center for Sustainability, or G.I.S. courses.

### Concentration in Chemistry

This concentration is for students interested in chemical research with substantial overlap with other biological or physical science and engineering disciplines. Students will choose at least 1 course from the following list for the *Chemical Synthesis & Materials Science* area:

CHEM.5160 Advanced Synthetic Chemistry (3)	CHEM.5560 Solid State Chemistry (3)
CHEM.5460 Synthetic Organic Chemistry (3)	CHEM.5590 Special Topics in Inorganic Chemistry (3)
CHEM.5470 Principles of Medicinal Chemistry (3)	CHEM.5800 Fundamentals and Design of Nanoarchitectures (3)
CHEM.5500 Advanced Inorganic Chemistry (3)	CHEM.5850 Polymer Chemistry (3)
CHEM.5550 Organometallic Chemistry (3)	

Students will choose at least 1 course from the following list for the *Chemical Analysis & Physical Characterization* area:

CHEM.5150 Statistical Methods for Physical Scientists (3)	CHEM.5330 Advanced Physical Chemistry (3)
CHEM.5170 Advances in Analysis and Modeling of Chemical Systems (3)	CHEM.5340 Advanced Thermodynamics (3)
CHEM.5200 Analytical Chemistry II (3)	CHEM.5350 Elements of Surface and Colloid Science (3)
CHEM.5205 Analytical Chemistry III Lab (1)	CHEM.5370 Computational Chemistry (3)
CHEM.5250 Bioanalytical Methods of Analysis (3)	CHEM.5390 Special Topics in Physical Chemistry (3)
CHEM.5260 Analytical Separations (3)	CHEM.5400 Organic Spectroscopy (3)
CHEM.5270 Electroanalytical Chemistry (3)	CHEM.5450 Advanced Organic Chemistry (3)
CHEM.5280 Chemical Sensors (3)	CHEM.5570 Group Theory & Spectroscopy (3)
CHEM.5290 Special Topics in Analytical Chemistry (3)	CHEM.5700 Environmental Chemistry (3)

Students will also choose 2-3 courses from Earth & Atmospheric Sciences, Engineering, Physics, Mathematics, Chemistry, Biomedical Engineering, or Biomedical Sciences, Center for Sustainability, or G.I.S. courses. Students should register for zero credit hours in Seminar (CHEM.5920) each semester of their first two years before registering for IAS.6010 in years 3 and 4.

# LANGUAGES, LITERATURES, & CULTURES

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**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

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**James Hebda, Ph.D.**

*Department Chairperson*

**Bradley Currey, Ph.D.**

*Graduate Director*

The Department of Mathematics and Statistics 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.*

### 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

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**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 credits of undergraduate upper-division philosophy coursework.

### **Required Courses**

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

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

Completion of the systematic synthesis course (three credits).

One-hour defense of synthesis paper.

## Master of Arts (Thesis option)

### **Prerequisites**

Eighteen credits of upper-division philosophy coursework.

### **Required Courses**

Thirty post-baccalaureate credits, 12 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 credits that count toward the 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 credits of upper-division undergraduate coursework.

### **Required Courses**

Sixty-six 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: (1) the relationship between the dissertation topic and the broader discipline, whether contemporary or historical, and (2) the philosophical importance 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.*

## 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.5980 Graduate Reading Course (1-3)
PHIL.5100 Problems in Epistemology (3)	PHIL.5990 Thesis Research (0-6)
PHIL.5200 Problems in Metaphysics (3)	PHIL.6000 Seminar on a Major Philosopher in Ethics (3)
PHIL.5300 Problems in Ethical Theory (3)	PHIL.6050 Seminar on a Major Philosopher in Political Philosophy (3)
PHIL.5400 Problems in Social and Political Philosophy (3)	PHIL.6100 Seminar on a Major Philosopher in Metaphysics (3)
PHIL.5800 Systematic Synthesis (3)	PHIL.6150 Seminar on a Major Philosopher in Epistemology (3)
PHIL.5930 Special Topics in Philosophy (3)	
PHIL.5950 Special Study for Examinations (0)	

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

PHIL.6200 Philosophy of Science (3)	PHIL.6320 Advanced Metaphysics (3)
PHIL.6220 Advanced Logic (3)	PHIL.6340 Advanced Epistemology (3)
PHIL.6260 Problems in the Philosophy of Religion (3)	PHIL.6360 Seminar in Political Philosophy (3)
PHIL.6300 Advanced Ethics (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.6950 Special Study for Examinations (0)
PHIL.6450 Medieval Philosophy (3)	PHIL.6970 Special Topics in Philosophy (1-3)
PHIL.6500 Modern Philosophy (3)	PHIL.6980 Graduate Reading Course (1-3)
PHIL.6550 Contemporary Philosophy (3)	PHIL.6990 Dissertation Research (0-6)
PHIL.6800 Prospectus (3-6)	

# POLITICAL SCIENCE

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

**Wynne Moskop, Ph.D.**  
*Director of Graduate Studies*

**Robert Croff, 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

- 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

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

*Department Chairperson*

**Kimberly K. Powlishta, Ph.D.**

*Graduate Director, Experimental Program*

**Jillon S. Vander Wal, Ph.D.**

*Graduate Director, Clinical Program*

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

*Graduate Director, Industrial-Organizational Program*

## 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 5080 and 5090: Research Methodology (6)

PSY.5100 History and Systems (3)

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

PSY.5130 or 5930 Biological Aspects of Behavior (3)

PSY.5220 Lifespan Developmental Psychology (3)

PSY.5300 Social Aspects of Behavior (3)

PSY 5790 and 6500: Statistics (6)

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)

# 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. A terminal Master's degree is not offered, so applicants to the program are expected to have admissions credentials indicating the ability and desire to do Ph.D.-level work. Students entering the Experimental Psychology program without a psychology Master's degree must apply to the M.S. degree program and complete the requirements for the Master of Science (M.S.) degree at Saint Louis University before petitioning for entry into the Ph.D. program.

### **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 Neuroscience

Social Psychology: PSY.5300 Social Psychology

### **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 (3)

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.

### **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.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

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**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 M.A. in Sociology, M.A. 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

Required courses for the M.A. degree are:

SOC.6320 Organizational Theory and Behavior  
SOC.5050 Quantitative I: Applied Inferential Statistics  
SOC.5100 Pro-seminar  
SOC.5600 General Research Methodology

Elective courses for the M.A. degree are listed below. With the consent of your advisor and the director of the program, students may also count other courses as electives.

SOC.5200 Urbanization  
SOC.5250 Urban Ecology: Neighborhood  
SOC.5500 Social Inequality  
SOC.5510 Constructing Social Problems  
SOC.5520 Sociological Social Psychology  
SOC.5530 Urban Ethnography  
SOC.5540 Environmental Impact of the City  
SOC.5550 Comparative Theories of Race & Ethnic Relations  
SOC.5590 Law and Society  
SOC.5610 Death Investigation  
SOC.5640 Demography Methods: Measuring and Modeling  
SOC.5650 Introduction to GIS

SOC.5660 Intermediate GIS  
SOC.5670 Spatial Demography  
SOC.5680 Spatial Analytics of Injustice: Crime and Deviance  
SOC.5700 Applied Spatial Analysis  
SOC.5750 Intermediate Qualitative Research  
SOC.5800 Survey Design and Sampling  
SOC.5850 Program Evaluation and Assessment  
SOC.5890 Reading Statistics in Research  
SOC.6100 Regression Analysis and Non-linear Models  
SOC.6200 Nonparametric Statistical Analysis  
SOC.6500 Confirmatory Factor Analysis

## 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

Saint Louis University's public and social policy doctoral program prepares you to work in academic and leadership roles in government, universities, research and public service organizations to tackle some of the biggest problems of our times, including poverty, urban renewal, racial and ethnic inequality, and health disparities. SLU's Ph.D. in public and social policy provides you with multiple disciplinary perspectives, advanced methodological skills, and the ability to conduct original research in an academic or applied setting. Whether you choose to shape public policy practice, tackle the challenges of cities in crisis or make an impact on international development, the Ph.D. in public and social policy provides the necessary tools to make a real difference. Alumni from SLU's public and social policy program have gone on to become leaders in the private and public sectors, excelling in such areas as business, commerce, governmental affairs, health and human services, criminal justice and academia.

### Prerequisites and Admission Criteria

To be admitted into the Ph.D. in public and social policy, applicants must already hold a master's degree in the social sciences or a related professional degree. Other requirements for admission include: an undergraduate degree from an accredited institution with a GPA of at least 3.2 on a 4.0 scale; a master's degree in a social science or related discipline or a professional degree (M.B.A., M.P.A., J.D., M.S.W., etc.) with a GPA of at least 3.4. (Lower GPAs accepted for law schools where grading is on a forced mean.); verbal and analytic GRE scores of at least 156. Prerequisite courses include: At least nine hours of undergraduate or graduate social science theory or methods classes; undergraduate microeconomics; a graduate-level research methods course; intermediate inferential statistics with use of a large dataset and competence in analytic software. For students planning to take courses in economics, calculus also is required. If prerequisites have not been completed prior to admission, they may be fulfilled at SLU, but the courses will not count toward the Ph.D. program.

All applications require: transcripts; three letters of recommendation (at least two of which are from faculty in the applicant's master's program); GRE G or GMAT or LSAT scores; a writing sample; a résumé; a personal statement of purpose; and an in-person or video-conference interview. International students must also submit: a completed Declaration of Financial Support packet with all accompanying documents; a paper-based TOEFL (PBT) score of at least 550; an 80 on the computer-based TOEFL (iBT); a 6.5 on the IELTS; and a 4+ on SLU's own Writing Exam. Students who want to be considered for an assistantship must submit their application by February 1.

### Required Courses

SLU's doctoral degree in public and social policy requires 33 hours of graduate courses above previous master's-level work and 12 hours of dissertation credit.

You can choose whether to enroll in the program as a part-time or full-time student. Most courses are offered in the evening to accommodate both the part-time and full-time programs.

All students complete seven courses:

SOC/POLS.5060 Qualitative Research

SOC.5650 Introduction to GIS

SOC/POLS.5850 Policy Evaluation and Assessment

SOC/POLS.6100 Regression Analysis and Nonlinear Models

SOC/POLS.6310 Policy Process

SOC/POLS.6330 Public Finance Theory

A core class specific to the area of concentration

You'll complete 12 additional hours in your area of concentration, selected in cooperation with your mentor and the program director. You must also register for 12 hours of dissertation research. From the time you enter the public and social policy program, you'll participate in a research pro-seminar, which meets monthly. Participation is required throughout your time in the program, and credit will be given once the dissertation is defended. Other public and social policy program requirements include a written exam after you've completed the seven core courses and an oral dissertation defense.

There are six concentrations available within SLU's doctoral program in public and social policy, each with diverse classes and research opportunities.

### *Health Policy*

Students interested in all dimensions of health policy, whether in the United States or internationally, will profit from the health policy concentration. They will explore legislative health policy, health care organization, health economics and health disparities.

### *International Development Policy*

This concentration addresses the challenges of international development, including persistent poverty, global differences in development, urban growth in the developing world, racial and ethnic inequality, trade and economic development strategies, and political challenges. Students study the development of the state as the dominant form of political organization in the contemporary world and the role it plays in economic development, political competition and international relations.

### *Law, Crime, and Policy*

This concentration is designed to produce academic scholars and leaders in public policy and applied settings. It combines leading-edge social science methods with the disciplines of political science, sociology, law and criminology. Students who choose this concentration gain the knowledge and methodological skills to conduct policy-relevant research. They also have the opportunity to work with agencies to address contemporary issues related to law and crime.

### *Policy and Geospatial Analysis*

This concentration prepares you to work with big data and geospatial statistics to address applied social and public policy questions at the local, national and global level. It focuses on three burgeoning areas of knowledge: geographic information science in e-government; accountability, ethics, the law and spatial data; and integrated decision support and spatial science. Students create spatial data and develop spatial methodologies; interpret advanced spatial statistics; write statistical programs for spatial analysis; create complex and creative visual analytics; and offer scientific spatial analysis for public policy challenges.

### *Public Administration*

Public administration is concerned with how governments are organized, how policies are developed and implemented, and the political reality that citizens encounter daily. This concentration helps students acquire proficiency in management principles and techniques, research and evaluation skills, and the analysis of social, economic and political behavior.

### *Urban and Community Development Policy*

The concentration in urban and community development policy prepares students to address the challenges facing people Western societies and newly developing countries. It focuses on the process of city building and all the economic and political conditions involved

in the development of urban areas. This concentration allows students to explore the dimensions of urban and community change and social justice from a diverse set of perspectives, including urban ecology, demography and immigration.

## 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. As per Graduate Education policy, at least 80% of the courses included in the minor must be taken at Saint Louis University and all courses must be graded courses (i.e. no pass/fail or satisfactory/unsatisfactory coursework will be accepted).

### 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, a student 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

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**Peter Martens, Ph.D.**

*Department Chairperson*

**Mary Dunn, Ph.D.**

*Director of Graduate Studies*

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. The program at once equips students with the methodological and conceptual tools necessary for understanding classic theological texts within their historical, cultural, and ecclesial contexts and at the same time encourages students to bring these texts into critical conversation with the contemporary world, giving students the opportunities and skills necessary to engage in the project of theological reflection.

### Prerequisites

An undergraduate major in theology or religious studies is recommended but not required. Applicants with a strong background (at least 18 hours of upper-level coursework) in theology or religious studies will also be considered.

### Required Courses

There are two tracks in the M.A. in Theology program: Research and Religious Education (“RE”). The research track consists of a two-year program of study that includes 36 credits of coursework and a 50-70 page thesis. The RE track consists of a two-year program of study that includes 33 credits of coursework [including 2 semesters (200 hours) of supervised internship] and comprehensive exams. The requirements of each track are described in detail below.

### Additional Requirements

Students in the research track must demonstrate competency in at least one foreign language and must write a 50-70 page thesis. Students in the RE track must complete 200 hours of supervised internship and pass comprehensive examinations in 3 areas.

## Research Track

The Research track consists of a 36 credit-hour program of study 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 Theology, Theological Ethics, Historical Theology, and scripture to deepen their understanding of the historical roots and practical implications of theological reflection. The Research track offers three areas of specialization: Systematic Theology, Theological Ethics, and Historical Theology.

### ***Specialization: Systematic Theology***

This specialization offers a core of courses (9 credit hours) in the sub-discipline of Systematic Theology, supplemented by additional courses in Theological Ethics, Historical Theology, and scripture. Students specializing in this area must demonstrate competency in one foreign language (i.e., Latin, Greek, German, French, or Spanish).

### Required Courses

THEO.5400 Resources & Methods in Theology (3)

THEO.54xx/55xx Systematic Theology (9 hours)

THEO.56xx Theological Ethics (3 hours)

THEO.52xx Historical Theology (3 hours)

THEO.50xx/51xx Scripture (3 hours)

Electives (9 hours)

THEO.5990 Thesis Research (6 hours)

THEO.5950 Special Study for Exam (0)

### ***Specialization: Theological Ethics***

This specialization offers a core of courses (9 credit hours) in the sub-discipline of Theological Ethics, supplemented by additional courses in Systematic Theology, Historical Theology, and scripture. Students specializing in this area must demonstrate competency in one foreign language (i.e., Latin, Greek, German, French, or Spanish).

#### **Required Courses**

THEO.5400 Resources & Methods in Theology (3)  
THEO.56xx Theological Ethics (9 hours)  
THEO.54xx/55xx Systematic Theology (3 hours)  
THEO.52xx Historical Theology (3 hours)  
THEO.50xx/51xx Scripture (3 hours)  
Electives (9 hours)  
THEO.5990 Thesis Research (6 hours)  
THEO.5950 Special Study for Exam (0)

### ***Specialization: Historical Theology***

This specialization offers a core of courses (9 credit hours) in the sub-discipline of Historical Theology, supplemented by additional courses in Systematic Theology, Theological Ethics, and scripture. Students specializing in this area theology choose a concentration in either early, medieval, or modern Christianity and must demonstrate competency in two foreign languages, one ancient (i.e., Latin, Greek) and one modern (i.e., German, French, or Spanish).

#### **Required Courses**

THEO.5400 Resources & Methods in Theology (3)  
THEO.5200 Introduction to Historical Method (3)  
THEO.52xx Historical Theology (9 hours)  
THEO.56xx Theological Ethics (3 hours)  
THEO.54xx/55xx Systematic Theology (3 hours)  
THEO.50xx/51xx Scripture (3 hours)  
Electives (6 hours)  
THEO.5990 Thesis Research (6 hours)  
THEO.5950 Special Study for Exam (0)

### **Religious Education Track**

The Religious Education track consists of a 33 credit-hour program of study designed to provide students with a strong background in the discipline of theology, as well as training in the specific theological and pedagogical tasks of a religious educator.

#### **Required Courses**

THEO.5400 Resources & Methods in Theology (3)  
THEO.5150 Biblical Interpretation Study (3)  
THEO.5810 Ignatian Spirituality & Pedagogy (3)  
THEO.5911 Internship Preparation (0)  
THEO.5910 Internship in Religious Education (6 hours)  
THEO.54xx/55xx Systematic Theology (6 hours)  
THEO.56xx Theological Ethics (3 hours)  
THEO.50xx/51xx Scripture (3 hours)  
Electives (6 hours)  
THEO 5950 Special Study for Exam (0)

## **Doctor of Philosophy in Historical Theology**

The doctorate in Historical Theology offers students advanced training in the discipline of theology with a focused attention on the dialogue and dialectic between theological doctrines and ideas, on the one hand, and historical context, on the other. The program aims to form students as both scholars and teachers, equipping students with the skills to do research that matters in the field of Historical Theology and preparing students to teach a range of courses at the undergraduate level.

#### **Prerequisites**

An M.A. degree in Historical Theology or the equivalent is required for admission. Applicants must also have 9 credits of upper-level philosophy courses, 9 credits of upper-level history courses and be proficient in at least one research language besides English. (typically Greek, Latin, Syriac, French, or German).

## **Required Courses**

The doctoral program consists of a 54 credit-hour program of study designed to train students in the discipline of Historical Theology. Within the first two years of study, all students take THEO.6010, as well as survey courses in Early Christianity (THEO.6020), Medieval Christianity (THEO.6030), and Modern Christianity (THEO.6040). Remaining coursework includes 4 seminars in the major area of specialization, as well as 1 seminar in each of the minor areas, and two electives. In the third year of study, students take 6 credit hours of THEO.6210 (Dissertation Prospectus) and 12 credit hours of THEO.6990 (Dissertation Research).

The 54 credits derive from the following options:

THEO.6010 Methods in Historical Theology (3)  
THEO.6020 Survey of Early Christianity (3)  
THEO.6030 Survey of Medieval Christianity (3)  
THEO.6040 Survey of Modern Christianity (3)  
THEO.6110 Early Christianity Seminar (3)  
THEO.6120 Medieval Christianity Seminar (3)  
THEO.6130 Modern Christianity Seminar (3)  
Electives (6 hours)  
THEO.6210 Dissertation Prospectus (6 hours)  
THEO.6990 Dissertation Research (12 hours)

## **Additional Requirements**

In addition to coursework, degree requirements include competency in at least three foreign languages, comprehensive examinations, and a dissertation that presents an original thesis in response to a question of significance to the field of Historical Theology.

## **Post-Baccalaureate Courses**

THEO.5000 Old Testament (3)  
THEO.5020 Pentateuch (3)  
THEO.5040 Prophets (3)  
THEO.5060 The Psalms (3)  
THEO.5090 Special Topics: Old Testament (3)  
THEO.5100 New Testament (3)  
THEO.5110 The Synoptics (3)  
THEO.5120 Luke & Acts (3)  
THEO.5130 Studies in Christian Scripture (3)  
THEO.5140 Johannine Literature (3)  
THEO.5150 Biblical Interpretation Study (3)  
THEO.5190 Special Topics: New Testament (3)  
THEO.5200 Intro to Historical Method (3)  
THEO.5210 Survey of Early Christian History (3)  
THEO.5220 Survey of Medieval Christian History (3)  
THEO.5230 Survey of Modern European Christian History (3)  
THEO.5240 Survey of American Christian History (3)  
THEO.5250 Survey of History of Religions (3)  
THEO.5260 Comparative Theology (3)  
THEO.5360 Intro to Theological Method (3)  
THEO.5390 Special Topics: Historical Theology (3)  
THEO.5400 Resources and Methods in Theology (3)  
THEO.5420 God (3)  
THEO.5440 Christology (3)  
THEO.5450 Theology of the Human Person (3)  
THEO.5460 Mariology (3)  
THEO.5470 Church (3)  
THEO.5500 Sacraments (3)  
THEO.5520 Christianity Today (3)  
THEO.5540 Christian Anthropology (3)  
THEO.5590 Catholicism Today (3)  
THEO.5600 Moral Systems (3)  
THEO.5610 Morals & the New Testament (3)  
THEO.5620 Forming the Christian Conscience (3)  
THEO.5630 Social Morality (3)

THEO.5640 Sexual Morality (3)  
THEO.5650 Bioethics (3)  
THEO.5660 Death, Suffering, & Afterlife (3)  
THEO.5680 History of Moral Theology (3)  
THEO.5690 Special Topics: Moral or Pastoral Theology (3)  
THEO.5700 Theo Method: Spirituality (3)  
THEO.5730 Spirituality and Psychology (3)  
THEO.5780 Spirituality & Art (3)  
THEO.5790 Special Topics: Spirituality (3)  
THEO.5800 Theo & Catechetical Ministry (3)  
THEO.5810 Ignatian Spirituality & Pedagogy (3)  
THEO.5820 Admin of Religious Education Programs (3)  
THEO.5830 Element of Religious Education Curriculum (3)  
THEO.5900 Teaching Theology (0)  
THEO.5910 Internship in Religious Education (3)  
THEO.5911 Internship Preparation (0)  
THEO.5920 Essay Guidance (0-6)  
THEO.5950 Special Study for Exams (0)  
THEO.5970 Research Topics (1-3)  
THEO.5980 Graduate Reading Course (1-3)  
THEO.5990 Thesis Research (0-6)  
THEO.6010 Methods in Historical Theology (3)  
THEO.6020 Survey of Early Christianity (3)  
THEO.6030 Survey of Medieval Christianity (3)  
THEO.6040 Survey of Modern Christianity (3)  
THEO.6110 Early Christianity Seminar (3)  
THEO.6120 Medieval Christianity Seminar (3)  
THEO.6140 Modern Christianity Seminar (3)  
THEO.6210 Dissertation Prospectus (0-3)  
THEO.6930 Special Topics in Historical Theology (3)  
THEO.6950 Special Study for Exams (0)  
THEO.6970 Research Topics (1-3)  
THEO.6980 Graduate Reading Course (1-3)  
THEO.6990 Dissertation Research (0-9)

# WOMEN'S AND GENDER STUDIES

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**Penny Weiss, Ph.D.**

*Department Chairperson*

**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.

### Post-Baccalaureate Courses

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

One graduate-level 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

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**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, entrepreneurship, finance, health, international, intellectual property, 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. Experiential learning 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.

## Juris Doctor Programs

### **Application requirements**

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.

## Two-Year J.D. for Foreign Lawyers

SLU Law offers a Two-Year J.D. for Foreign Lawyers program enabling highly qualified candidates who have received their first degree in law outside of the United States to earn their J.D. in four semesters by granting them advanced standing based on their prior law studies. The Two-Year J.D. is designed for foreign lawyers who would like to enhance their professional training by earning the same degree held by U.S. lawyers, but in a shorter amount of time. Two-Year J.D. students attend classes with students in the traditional J.D. program and can participate fully in other academic and co-curricular opportunities. In addition to earning a credential that may enhance their home country practice, Two-Year J.D. students may sit for the bar exam in any state after successful completion of the program, although additional eligibility requirements must be satisfied in all states.

Click [here](#) for more information about the Two-Year J.D. for Foreign Lawyers program, including application, curriculum and program requirements.

## 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 Law and Sociology & Anthropology](#)

[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 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 Management and 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](#) offers an opportunity 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

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**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 are offered by the Center for Anatomical Science and Education. M.A. (Research or non-Research) and Ph.D. degrees are offered by the Medical Family Therapy Program.

## BASIC BIOMEDICAL SCIENCE

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**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; Pharmacology and Physiology]. 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)  
BCHM.6280 Intro to Genomics and Bioinformatics (2)  
ORES.5200 Introduction to Biostatistics in Biomedical Sciences (3)

# BIOCHEMISTRY & MOLECULAR BIOLOGY

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**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

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 (two

semesters)

BBS.5970 Introduction to Basic Biomedical Research (two

semesters)

ORES 5200 Introduction to Statistics in Biomedical Sciences

BCHM.6280 Introduction to Genomics & Bioinformatics

BCHM.6230 Macromolecules: Structure, Function, and Interactions

BCHM.6920 Biochemistry and Molecular Biology Colloquium

BCHM.6240 Molecular Basis of Human Disease

BCHM.6250 Preparation and Evaluation of Scientific Research Proposal

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.5990 Thesis Research (0-6)

BCHM.6230 Macromolecules: Structure, Function, & Interactions (4)

Prerequisite: Permission of Instructor.

BCHM.6240 Molecular Basis of Human Disease (3)

Prerequisite: Permission of Instructor.

BCHM.6250 Preparation of Scientific Research Proposals (3)

Prerequisite: Permission of Instructor.

BCHM.6280 Introduction to Genomics and Bioinformatics (2)

Prerequisites: BBS.5010 and BBS.5020 or consent of the Instructor.

BCHM.6920 Biochemistry and Molecular Biology Colloquium (1)

Prerequisite: Permission of Instructor.

BCHM.6950 Special Study for Examinations (0)

BCHM.6970 Research Topics (1-3)

Prior permission of guiding professor and department/program chairperson required.

BCHM.6980 Graduate Reading Course (1-3)

Prior permission of guiding professor and department/program chairperson required.

BCHM.6990 Dissertation Research (0-6)

Prerequisite: Permission of Instructor.

# MOLECULAR MICROBIOLOGY & IMMUNOLOGY

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**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 Molecular 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

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**Carole Vogler, M.D.,**  
*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 live cell imaging microscopy, laser scanning, multiphoton and super-resolution 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  
PATH.5350 Introduction to Microscopy Techniques

### Additional Requirements

BBS.5920 Basic Biomedical Science Colloquium (two semesters)  
BBS.5970 Introduction to Basic Biomedical Research (two semesters)  
BCHM.6280 Introduction to Genomics and Bioinformatics  
ORES.5200 Introduction to Statistics in Biomedical Sciences  
PATH.6900 Molecular Pathobiology Journal Club  
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 (3)	PATH.6930 Special Topics in Pathology (1-3)
PATH.5020 Molecular Pathobiology (3)	PATH.6950 Special Study for Examinations (0)
PATH.5350 Introduction to Microscopy Techniques (3)	PATH.6970 Research Topics (1-3)
PATH.6900 Molecular Pathobiology Journal Club (1)	PATH.6980 Graduate Reading Course (1-3)
PATH.6920 Pathology Research Colloquium (1)	PATH.6990 Dissertation Research (0-6)

# PHARMACOLOGICAL & PHYSIOLOGICAL SCIENCE

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**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 Introduction to Pharmacology  
PPY.5120 Systems Physiology and Pharmacology I  
PPY.5130 Systems Physiology and Pharmacology II  
PPY.5140 Fundamentals of Effective Grant Construction

### Additional Requirements

BBS.5920 Basic Biomedical Science Colloquium (two semesters)  
BBS.5970 Introduction to Basic Biomedical Research (two semesters)  
PPY.6800 Pharmacology and Physiology Seminar (0-1)  
PPY.6900 Pharmacology and Physiology Journal Club (0-1)  
PPY.6970 Direct Research in Pharmacology and Physiology (1-3)

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 Introduction to Pharmacology (1)  
PPY.5120 Systems Physiology and Pharmacology I (2)  
PPY.5130 Systems Physiology and Pharmacology II (3)  
PPY.5140 Fundamentals of Effective Grant Construction (1)  
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 Pharmacology and Physiology Seminar (0-1)  
PPY.6900 Pharmacology and Physiology Journal Club (0-1)  
PPY.6950 Special Study for Examinations (0)  
PPY.6970 Direct Research in Pharmacology and Physiology (1-3)  
PPY.6980 Graduate Reading Course (1-3)  
PPY.6990 Dissertation Research (0)

# CENTER FOR ANATOMICAL SCIENCE AND EDUCATION

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**John R. Martin, III, Ph.D.**

*Graduate Program Director*

*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. A concentration in Neurobiology provides training for students preparing for academic or professional careers in neuroscience-related areas. 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

*Thesis 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.5990 Thesis Research

ANAT.6900 Journal Club

BBS.5100 Ethics for Research Scientists

## 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.5960 Master's Project  
ANAT.6900 Journal Club

## 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  
ANAT.5100 Human Histology and Ultrastructure  
ANAT.5200 Human Embryology  
ANAT.5300 Human Systems Neurobiology  
ANAT.5400 Human Systems Physiology  
ANAT.5440 Basic Research Techniques in Anatomy

BBS.5100 Ethics for Research Scientists  
BST.5000 Principles of Biostatistics  
ANAT.6900 Journal Club  
ANAT.6950 Special Studies for Exams  
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.*

## Concentration in Neurobiology

For a concentration in Neurobiology, students must conduct dissertation research in neurobiology and are required to complete at least 7 hours from the following courses:

ANAT.6300 Advanced Systems Neurobiology  
ANAT.6320 Developmental Neurobiology  
ANAT.6670 Visual Neuroscience  
PPY.5110 Advanced Topics in Pharmacological and Physiological Science I  
PATH.5010 Pathobiology

### **Post-Baccalaureate Courses**

ANAT.5000 Human Gross Anatomy (8)  
ANAT.5100 Human Histology and Ultrastructure (5)  
ANAT.5200 Human Embryology (2)  
ANAT.5300 Human Systems Neurobiology (5)  
ANAT.5400 Human Systems Physiology (4)  
ANAT.5440 Basic Research Techniques in Anatomy (2)  
ANAT.5500 Advanced Dissections in Human Anatomy (2-4)  
ANAT.5750 Introduction to Anatomical Research (2)  
ANAT.5960 Master's Project (0-4)  
ANAT.5970 Research Topics (1-3)

ANAT.5980 Graduate Reading (1-3)  
ANAT.5990 Thesis Research (0-6)  
ANAT.6300 Advanced Systems Neurobiology (1)  
ANAT.6320 Developmental Neurobiology (2)  
ANAT.6670 Visual Neuroscience (2)  
ANAT.6900 Anatomy Journal Club (0-1)  
ANAT.6950 Special Study for Examinations (0)  
ANAT.6970 Research Topics (1-3)  
ANAT.6980 Graduate Reading Course (1-3)  
ANAT.6990 Dissertation Research (12)

# MEDICAL FAMILY THERAPY

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**F. David Schneider, M.D.**

*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.

## 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 Human Growth and Development (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.6760 Families, Health, and Illness (3)  
A post-baccalaureate level statistics course (3)  
A post-baccalaureate level research methods course (3)

*A formal minor is not permitted.*

### Concentration in Medical Family Therapy

The M. A. concentration in medical family therapy prepares students to address the emotional and physical needs of individuals and

families as part of an integrated care team. A portion of the internship is completed in a primary or specialty care setting working collaboratively with physicians and allied health professionals in delivering behavioral and mental health services to patients and their families.

Required courses in addition to required core courses are:

MFT.6740 Theories and Models of Medical Family Therapy (3)

MFT.6770 Behavioral Medicine and Integrative Care (3)

## 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 Human Growth and Development (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

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**Mark Higgins, Ph.D.**

*Dean*

**Heather Bednarek, Ph.D.**

*Associate Dean & Professor*

**Brad Carlson, Ph.D.**

*Director of Ph.D. Program & Professor*

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 seven-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, applied business statistics, 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, addressing product design, sourcing, transportation, storage, ecommerce and delivery of the final goods to the customers. Information technology plays an important role making transactions efficient (cost saving) and effective (meeting customer's needs). Global nature of supply chain makes this discipline exciting and rewarding.

# 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 as little as one calendar year (September - August). The program consists of nine credits of foundation coursework in economics, accounting, and applied business statistics, part or all of which may be waived for students demonstrating competency through previously completed coursework. Students needing foundation courses have the ability to complete the program full-time in four semesters. 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. 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.

## Prerequisites

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.

## Required Courses

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)

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)

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

PSY.5790 Applied Univariate Statistics in Behavioral Science

Prerequisite: Ph.D. program

PSY.6500 Applied Multivariable and Multivariate Statistics in Behavioral Science

Prerequisite: Ph.D. program

Two Approved Research Tool electives

# DUAL-DEGREE DESCRIPTIONS

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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 seven-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 seven-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 seven-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 seven-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 seven-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./MACC). 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.

# BUSINESS CERTIFICATES

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## 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: 314.977.6221, or e-mail: [gradbiz@slu.edu](mailto:gradbiz@slu.edu)

### 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.6000

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.6000

ACCT.6310 Tax Planning for Individual & Entrepreneurial Bus. (3)

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  
Prerequisite: ACCT.5010

ACCT.6450 Forensic and Investigative Accounting (3)  
Prerequisite: ACCT.4400  
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.6103 The Leadership Challenge (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)  
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

### 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

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

## 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)  
IB.5510 Asia Pacific Business Strategy (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)

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.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.6300 Database Management Systems (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.6500 Managing Cybersecurity in Organizations (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.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.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

### **One-Year M.B.A. Students Only**

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.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.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

# PARKS COLLEGE OF ENGINEERING, AVIATION, AND TECHNOLOGY

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**Michelle Sabick, Ph.D.**

*Dean*

**Riyadh Hindi, Ph.D., P.Eng., F.SEI**

*Associate Dean for Graduate Education & Research*

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**

Graduate students in Engineering at Parks College of Engineering, Aviation and Technology will demonstrate: 1) enhanced professional and analytical skills through the development of an in-depth understanding of theoretical and practical concepts; 2) excellent communications skill through written and oral presentations; 3) creative thinking skills through mastery of topics required to solve complex engineering problems; and 4) depth of knowledge required to pursue advanced work in a modern, ever-changing world through entrepreneurial experiences woven into their program.

These attributes will be assessed during the required examination milestones. For a Master's of Science (M.S.) degree, the required milestone is a written research report/thesis and corresponding oral defense presentation. The M.S. course only option can be assessed through a portfolio process by the housing department. For a Ph.D. degree, the required milestones include a qualifying exam, a written dissertation proposal and corresponding oral defense, and a written dissertation and corresponding oral defense presentation.

Graduate students in Aviation at Parks College of Engineering, Aviation and Technology will demonstrate: 1) enhanced professional, social and analytical skills through the development of an in-depth understanding of theoretical and practical concepts; 2) excellent communications skill through written and oral presentations and related in-course projects; 3) creative thinking skills through mastery of topics required to solve complex aviation problems; and 4) depth of knowledge required to pursue advanced work in a modern, ever-changing world through entrepreneurial experiences woven into their program.

These attributes will be assessed during the required examination milestones. For a Master's of Science degree, the required milestone is the exit examination. For a Ph.D. degree, the required milestones include a qualifying exam, a written dissertation proposal and corresponding oral defense, and a written dissertation and corresponding oral defense presentation.

## **Admission**

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. For deadlines on admission and assistantships, please visit our website.

## **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
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.) in Engineering requires minimum of 30 credits beyond a Bachelor's degree; the M.S. in Aviation requires a minimum of 32 credits beyond a Bachelor's degree. The M.S. in Aviation is non-thesis, a course only degree. For the M.S. in Engineering, students can choose between 1 of 3 options for their Master of Science: 1) course only, 2) project option, or 3) thesis option. 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 should satisfy two semesters of Graduate Seminar beyond a Bachelor's degree.

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.

The Accelerated B.S.-M.S. (ABM) Program in Engineering is a discrete accelerated program that allows high achieving students to complete both B.S. and M.S. degrees in a total of 5 years. Six credits of qualifying coursework can be used to satisfy both the undergraduate and graduate degree requirements. The B.S. degree is in the student's undergraduate major (aerospace engineering, biomedical engineering, civil engineering, computer engineering, electrical engineering, engineering physics, or mechanical engineering), and the M.S. degree is in engineering in the student's home department. The Master's degree provides additional technical depth and specialization that can lead to expanded career opportunities and responsibilities, as well as preparation for doctoral (Ph.D.) studies. Students interested in the B.S.-M.S. Accelerated Program should contact their home department for more information.

### 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.

## 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 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 up to 24 hours from the associated Master of Science degree, but not the thesis or project credits, in the 60 credits which are needed for the Ph.D. degree. Ph.D. students should also satisfy four semesters of Graduate Seminar beyond a Bachelor's 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 of coursework 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, but all portions of the Qualifying Exam should be completed in one day.

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 Education website.

### **Dissertation Proposal & Doctoral Oral Examination**

Typically, after a year following the Qualifying Exam, students will present and defend a Dissertation Proposal, called a Doctoral Oral Examination. 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 Doctoral Oral Examination 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, the student defending and his or her 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**

Independent Study courses are reserved for specialized topics individual to a graduate student that the student and advisor both agree fits into the program of study. Like Independent Study courses, Special Topics courses are not regularly offered courses in the catalog. Special Topics courses, however, are not specially written to match a student's research interests, but rather a course the department offers to a limited number of students for one semester. Since both types of courses are not in the catalog, the Graduate Education office requires a copy of the outline or syllabus will be kept in the student's file. All independent studies and special topics courses must be

submitted and approved by the mentor/advisor of students prior to registration.

## Annual Student Review

All active students are expected to check in with their Faculty Advisor regularly regarding coursework and research, and to conduct an Annual Student Review. New students who start in the Summer and Fall semesters will conduct their Reviews by the end of January, and every academic year thereafter by the end of May. New students who start in the Spring semester will conduct their Reviews by the end of May. All students conduct their reviews annually in consultation with the Faculty Advisor and submitted to a respective Department Chair and then the Graduate Education office by the end of May.

The Annual Student Review form can be obtained from the Parks College Graduate Programs Office.

### Post-baccalaureate Course Listing

#### Aerospace Engineering

**Michael Swartwout, 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.5964 Masters Project
AENG.5410 Flight Simulation (3)	AENG.5984 Independent Study (1-3)
AENG.5450 Space Dynamics and Control (3)	AENG.5994 Master's Thesis Research (0-6)
AENG.5460 Modern Control Systems (3)	AENG.6910 Co-op with Industry (0-3)
AENG.5470 Advanced Control Systems (3)	AENG.6915 Internship with Industry (0-3)
	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.5930 Special Topics (1-3)
ASCI.5020 Aviation Safety Data Analysis (3)	ASCI.5960 Project Guidance (3)
ASCI.5030 Aviation Security Management (3)	ASCI.5980 Graduate Reading Course (1-3)
ASCI.5040 Human Factors in Aviation Safety (3)	ASCI.5984 Independent Study (1-3)
ASCI.5080 Management of Aviation Safety Programs (3)	ASCI.6010 Federal and International Regulatory Environment (3)
ASCI.5100 Aviation Safety Career and Personal Development (3)	ASCI.6020 Flight Operations Business and Administration (3)
ASCI.5120 Aviation Safety Quality Issues (3)	ASCI.6030 Aviation and Public Policy (3)
ASCI.5130 Aviation Safety Ethics (3)	ASCI.6050 Legal and Ethical Issues in Collegiate Flight Education (3)
ASCI.5150 Aviation Incident/Accident Analysis (3)	ASCI.6060 Aviation Curriculum Development and Management (3)
ASCI.5210 Aviation Org. Theory and Management (3)	ASCI.6070 Aviation Training Methods and Practice (3)
ASCI.5220 Aviation Safety Programs (3)	ASCI.6990 Doctoral Dissertation Research (0-6) 100
ASCI.5230 Professional Ethics and Standards (3)	FSCI.5230 Economics of Air Transportation (3)
ASCI.5460 Qualitative Analysis (3)	
ASCI.5470 Quantitative Analysis (3)	
ASCI.5910 Graduate Internship (3)	

## Biomedical Engineering

**J. Gary Bledsoe, 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.5320 Drug Delivery (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.5910 Co-op with Industry (0-3)  
BME.5915 Internship with Industry (0-3)  
BME.5930 Special Topics (1-3)  
BME.5955 Capstone Project 1 (3)  
BME.5960 Project Guidance (1-3)  
BME.5965 Capstone Project 2 (3)  
BME.5970 Research Topics (1-3)  
BME.5980 Graduate Reading Course (1-3)  
BME.5990 Master's Thesis Research (0-6)  
BME.6910 Co-op with Industry (0-3)  
BME.6915 Internship with Industry (0-3)  
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 Resources Management (3)  
CVNG.5230 Biological Treatment Systems (3)  
CVNG.5250 Physical/Chemical Treatment Systems (3)  
CVNG.5310 Air Pollution (3)

CVNG.5330 Open-Channel Flow (3)  
CVNG.5350 Hydraulic Modeling (3)  
CVNG.5370 River Engineering (3)  
CVNG.5450 Traffic Engineering (3)  
CVNG.5470 Urban Transportation Planning (3)  
CVNG.5910 Co-op with Industry (0-3)  
CVNG.5915 Internship with Industry (0-3)  
CVNG.5930 Special Topics (1-3)  
CVNG.5960 Master's Project (1-3)  
CVNG.5990 Master's Thesis Research (0-6)  
CVNG.6910 Co-op with Industry (0-3)  
CVNG.6915 Internship with Industry (0-3)  
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.5910 Co-op with Industry (0-3)  
PHYS.5915 Internship with Industry (0-3)  
PHYS.5930 Special Topics (1-3)  
PHYS.5960 Masters Project (1-3)  
PHYS.5980 Independent Study (1-3)  
PHYS.5990 Thesis Research (0-6)

### Mechanical Engineering

**Michael Swartwout, 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.5964 Masters Project  
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

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**Teri A. Murray, Ph.D.**

*Dean*

**Joanne L. Thanavaro, D.N.P.**

*Associate Dean, Graduate Education*

*Advanced Practice Nursing Program Director*

The baccalaureate, Master's and DNP programs at Saint Louis University School of Nursing are accredited by the Commission on Collegiate Nursing Education (<http://www.aacn.nche.edu/ccne-accreditation>) 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.

Advanced nursing practice Master's degree programs and post-Master's certificate programs are available online for the Adult-Gerontological Primary Care, Adult-Gerontological Acute Care, Family, Pediatric Primary Care, and Family Psychiatric/Mental Health Nurse Practitioner options.

## NURSE PRACTITIONER

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### Master of Science in Nursing (Nurse Practitioner)

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.

Role preparation as a nurse practitioner is offered in the following specialties: Adult-Gerontological Acute Care, Adult Gerontological Primary Care, Family, Family Psychiatric-Mental Health Nursing, and Nursing of Children. Educator tracks are available in all specialties.

#### **Prerequisites**

A baccalaureate degree in nursing from a program accredited by a nationally recognized accrediting agency is required.

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 a practicum.

Completion of a beginning-level-health assessment course or the equivalent thereof is required.

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.

#### **Required Courses**

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.5110 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.5260 Advanced Clinical Studies in the Acute Care  
Setting I (4)

NURS.5270 Advanced Clinical Studies in the Acute Care  
Setting II (5)  
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.5240 Advanced Clinical Studies I: Adolescents  
and Adults (4)

NURS.5250 Advanced Clinical Studies II: Adults and  
Older Adults (5)  
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.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)  
Elective (2)  
NURS.5810 Nursing Practicum (4)  
NURS.5950 Special Study for Exams (0)

**Total MSN (Advanced Nursing Practice) Degree 41 credit hours**

### Pediatric Primary Care 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 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)  
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 MSN (Advanced Nursing Practice) Degree 41 credit hours**

## Post-Master's Certificate, Nurse Practitioner

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 Adult-Gerontological Primary Care, Adult-Gerontological Acute Care, Family, Pediatric Primary Care, or Family 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 practica, or clinical rotation/experience.

Additional prerequisites are specific for the role option chosen by the student. Please contact the Associate Dean, Graduate Nursing Education for additional prerequisites.

**Required Courses**

Course work is dependent upon the requirements for the specific specialty or specific role.

# CLINICAL NURSE LEADER

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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.

## Accelerated Master of Science in Nursing (Clinical Nurse Leader)

### Prerequisites

A baccalaureate degree from an accredited university.

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 Promotion(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 Health Care  
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)

**Total MSN (Clinical Nurse Leader) Degree 72 credit hours**

## 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.5140 Health Promotion (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.5000 Epidemiology (3)  
NURS.5025 Informatics and Quality Improvement (3)  
HCE.5500 Ethics in Nursing and Health Care (2)  
NURS.5080 Advanced Pharmacology (3)  
NURS.5604 Advanced Clinical Studies (3)  
NURS.5605 Practicum in Clinical Leadership (3)

**Total MSN (Clinical Nurse Leader) Degree 32 Credit Hours**

### Educator Option

The Nurse Educator courses provide an opportunity for course work and practicum experience in nursing education. **Students enrolled in any of the Master of Science tracks may elect to also take the educator option.**

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:  
NURS 5560. Evidence-Based Approaches for the Nurse Educator (2)

## 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 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 Approaches for the Nurse Educator (2)

NURS.5580 Instructional Strategies and Evaluation for Nurse Educator (2)

NURS.5570 Curriculum Development in Nursing Education (3)

NURS.5590 Practicum in Nursing Education (2)

# NURSING PRACTICE

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## Doctor of Nursing Practice

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.

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 practicum, 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)
NURS 5040 Role Acquisition (1)	NURS.5160 Principles of Practice Management (2)
HCE.5500 Ethics in Nursing and Health Care (2)	NURS.5170 Advanced Pathophysiology (3)
NURS.5080 Advanced Pharmacology (3)	NURS.5200 General Research Methods (3)
NURS.5110 Advanced Health Assessment & Clinical Decision Making (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.6160 Evidence Based Practice I (3)
NURS.6110 Health Care Delivery Systems (3)	NURS 6000: DNP Forum (0)
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.6150 Clinical Informatics (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.5260 Advanced Clinical Studies in the Acute

Care Setting I (4)

NURS.5270 Advanced Clinical Studies in the Acute Care Setting II (5)

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.5240 Advanced Clinical Studies I:  
Adolescents and Adults (4)

NURS.5250 Advanced Clinical Studies II: Adults and  
Older Adults (5)  
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 Primary Care 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)

**Total D.N.P. Degree 28 credit hours**

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)

# NURSING

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## Doctor of Philosophy in Nursing

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.

### *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 4.00 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.5140 Health Promotion (3)

NURS.5170 Advanced Pathophysiology (3)

NURS.5200 General Research Methods (3)

Declared specialty in advanced nursing: Specialty cognates: 4-6 credits

NURS.6805 Applied Univariate Statistics in Nursing Research (3)

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

**Total D.N.P. Degree 69 - 71 credit hours**

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).*

### *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 4.00 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.

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)

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)

**Total D.N.P. Degree 69 credit hours**

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)

NURS 6805: Applied Univariate in Nursing Research (3)

NURS 6959: Qualifying Examination (0)

*Students may pursue a formal minor in lieu of an area of concentration (15).*

# DOISY COLLEGE OF HEALTH SCIENCES

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**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

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**Tim R. Randolph, Ph.D., MT (ASCP)**

*Department Chair*

**Larry List, M.S., PA(ASCP)CT<sup>CM</sup>**

*CCT Program Director*

**Amanda Reed, MAE, MLS(ASCP)<sup>CM</sup>**

*CMLS Program Director*

The Department of Biomedical Laboratory Science offers three 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.

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

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 program consists of two semesters of didactic coursework at the undergraduate level followed by a clinical practicum that varies in length between 5-7 weeks. 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. 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.

#### **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

#### **Required Courses (34 credit hours)**

BLS.4110 Medical Chemistry I (3)  
BLS.4410 Medical Immunology (4)  
MLS.4150 Analytical Chemistry Lab (2)  
PHIL/THEO Elective (2000 level or above) (3)  
MLS.4620 Advanced Topics/Case Correlation-Clinical Chemistry (1)  
BLS.4120 Medical Chemistry II (2)  
BLS.3110 Urinalysis & Body Fluids (2)  
MLS.3150 Urinalysis & Immunology Lab (1)  
MLS.3200 Principles of Clinical Education (1)  
MLS.3300 Clinical Laboratory Management (1)  
BLS.4130 Principles & Techniques in Molecular Biology (1)  
IPE.1100 Introduction to Interprofessional Education (1)  
HCE.2010 Healthcare Ethics (3)  
MLS.4160 Molecular Biology Lab (2)  
MLS.4700 Clinical Chemistry Routine Practicum (2)  
MLS.4710 Clinical Chemistry Routine Testing (1)  
MLS.4720 Clinical Chemistry Special Testing Practicum (1)  
MLS.4730 Clinical Chemistry Special Testing (1)  
MLS.4770 Clinical Phlebotomy Practicum (1)  
MLS.4820 Clinical Urinalysis Practicum (1)

#### **Optional Enhancement Courses**

BLS.4210 Hematology (4)  
MLS.4250 Hematology Lab (1)  
BLS.4310 Immunohematology (3)  
MLS.4350 Immunohematology Lab (1)

### Clinical Hematology Certificate

#### **Required Courses (33 credit hours)**

BLS.4410 Medical Immunology (4)  
BLS.4210 Hematology (4)  
MLS.4250 Hematology Lab (1)  
XXX PHIL/THEO Elective (2000 level or above) (3)  
BLS.4220 Hemostasis and Thrombosis (2)  
BLS.3110 Urinalysis & Body Fluids (2)  
MLS.3150 Urinalysis & Immunology Lab (1)  
MLS.3200 Principles of Clinical Education (1)  
MLS.3300 Clinical Laboratory Management (1)  
BLS.4130 Principles & Techniques in Molecular Biology (1)  
MLS.4630 Advanced Topics & Case Correlations-Clinical Hematology (1)  
IPE.1100 Introduction to Interprofessional Education (IPE) (1)  
HCE.2010 Healthcare Ethics (3)  
MLS.4160 Molecular Biology Lab (2)  
MLS.4740 Clinical Hematology Practicum (2)  
MLS.4750 Clinical Hematology (1)  
MLS.4820 Clinical Urinalysis Practicum (1)  
MLS.4760 Clinical Hemostasis Practicum (1)  
MLS.4770 Clinical Phlebotomy Practicum (1)

#### **Optional Enhancement Courses**

BLS.4110 Medical Chemistry I (3)  
MLS.4150 Analytical Chemistry Lab (2)  
BLS.4120 Medical Chemistry II (2)  
BLS.4310 Immunohematology (3)  
MLS.4350 Immunohematology Lab (1)

### Clinical Microbiology Certificate

#### **Required Courses (34 credit hours)**

BLS.4410 Medical Immunology (4)  
BLS.4510 Medical Microbiology (4)  
XXX PHIL/THEO Elective (2000 level or above) (3)  
HCE.2010 Healthcare Ethics (3)  
IPE.1100 Introduction to Interprofessional Education (IPE) (1)  
MLS.4520 Medical Bacteriology (2)

MLS.4550 Medical Bacteriology Laboratory (2)  
MLS.4640 Advanced Topics & Case Correlations-Clinical  
Microbiology (1)  
MLS.4530 Medical Mycology (1)  
MLS.4540 Medical Parasitology (1)  
MLS.4560 Medical Mycology Lab (0.5)  
MLS.4570 Medical Parasitology Lab (0.5)

MLS 3200 Principles of Clinical Education (1)  
MLS 3300 Clinical Laboratory Management (1)  
BLS.4130 Principles & Techniques in Molecular Biology (1)  
MLS.4160 Molecular Biology Lab (2)  
MLS.4800 Clinical Microbiology Practicum (3)  
MLS.4810 Clinical Microbiology (2)  
MLS.4770 Clinical Phlebotomy Practicum (1)

#### **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

The Biomedical Laboratory Science (BLS) department offers a one year *post-baccalaureate* certificate program in cytotechnology. 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. 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.

#### **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 Courses (37 credit hours)**

BLS.4130 Principles & Techniques in Molecular Biology (1)  
MLS.3300 Clinical Laboratory Management (1)  
MLS.4160 Molecular Biology Lab (2)  
CYTO.4000 Foundations of Cytology (3)  
CYTO.4100 Female Genital Tract I (3)  
CYTO.4110 Female Genital Tract II (1)  
CYTO.4200 Female Genital Tract III (3)

CYTO.4300 The Processing Laboratory (2)  
CYTO.4400 Respiratory and Oral Cytology (3)  
CYTO.4600 Body Fluid Cytology (3)  
CYTO.4700 Gastrointestinal & Genitourinary Cytology (3)  
CYTO.4800 Fine Needle Aspiration Cytology (4)  
CYTO.4900 Advanced Practices in Cytology Practicum (8)

#### **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

# COMMUNICATION SCIENCES & DISORDERS

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**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 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). It is a two-year, six-semester program which starts in the Summer semester. The program is designed to prepare professionals to provide evidence based high quality services to persons with communication and swallowing disorders. A focus of the program is to develop clinicians who are prepared to serve culturally and linguistically diverse populations across the life span.

## Master of Arts

### Prerequisites

Undergraduate major in communication sciences and disorders or equivalent coursework in speech, language, hearing, and disorders of communication is required. Students are expected to have coursework in psychology, chemistry or physics, biology, education, and statistics. 46 total credit hours = 42 required credit hours + 4 elective credit hours.

### Required Courses (42 credit hours)

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 Communication 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  
CSDI.5820 Cognitive Communication Disorders  
CSDI.5010 Clinical Practicum  
CSDI.5030 Student Teaching in Communication Disorders  
CSDI.5910 Clinical Internship in Medical Setting  
CSDI.5950 Special Study for Examinations (0)  
CSDI.5960 Essay/Project Guidance (0)

Students must complete Clinical Practicum (CSDI.5010) for five semesters. In the last semester, students complete two 8-week full time externships, one in an educational setting and one in a medical setting (CSDI.5030 and CSDI.5910). In addition to the required courses, students must complete 4 credit hours of electives.

### Post-Baccalaureate Courses (4 credit hours)

CSDI.5440 Linguistics (2)	CSDI.5970 Graduate Readings (1-3)
CSDI.5880 Advanced Audiology (2)	CSDI.5980 Independent Study (1-3)
CSDI.5890 Institute in Communication Disorders (2)	CSDI.5990 Thesis Research (0-6)
CSDI.5930 Special Topics (1-3)	CSDI.5580 Language Based Literacy Disorders (2)
	CSDI.5930 Pediatric Dysphagia (1)

# MEDICAL IMAGING AND RADIATION THERAPEUTICS

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**William Hubble, M.A., CNMT, RT(R)(N)(CT), FSNMMI-TS**  
*Department Chair*

**Medhat Osman, M.D., Ph.D.**  
*Program Director*

## Master of Science

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 12-15 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. 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.

### **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.

### *Magnetic Resonance Imaging Concentration*

#### **Required Courses (25 credit hours)**

MIT.5110 MRI Physical Principles (3)  
MIT.5120 MRI Cross Sectional Anatomy (3)  
MIT.5130 MRI Instrumentation / QA (3)  
MIT.5140 MRI Clinical / Image Production (5)  
MIT.5150 MRI Patient Care / SafetyMIT.5210 Clinical MRI Practicum I (3)  
MIT.5220 Advanced / Emerging Technologies (2)  
MIT.5890 Clinical MRI Practicum II  
MIT.6000 Masters Seminar I (1)  
MIT.6100 Masters Seminar II (2)  
MIT.6200 Masters Seminar III  
ORES.5300 Foundation Outcomes Research (3)

### *Nuclear Medicine Technology Concentration*

#### **Required Courses (35 credit hours)**

MIT.5510 NMT Radiation Physics and Radiation Protection (4)  
MIT.5520 NMT Radiochemistry (3)  
MIT.5530 NMT Nuclear Medicine Instrumentation (2)

MIT.5540 NMT Clinical Nuclear Medicine (5)  
MIT.5550 NMT Nuclear Medicine Information Systems (3)  
MIT.5610 NMT Imaging Practicum (7)  
MIT.5620 NMT Radiochemistry Practicum (3)  
MIT.5630 NMT Emerging Technologies (2)  
MIT.5880 NMT Clinical Practicum  
MIT.6000 Masters Seminar I (1)  
MIT.6100 Masters Seminar II (2)  
MIT.6200 Masters Seminar III  
ORES.5300 Foundation Outcomes Research (3)

### *Radiation Therapy Concentration*

#### **Required Courses (35 credit hours)**

MIT.5310 XRT Radiation Physics (2)  
MIT.5320 XRT Radiation Therapy Practice I (3)  
MIT.5330 XRT Treatment Technique (3)  
MIT.5340 XRT Treatment Planning (2)  
MIT.5350 XRT Clinical Practicum I (6)  
MIT.5360 XRT Emerging Technologies (2)  
MIT.5400 XRT Radiation Oncology Patient Care and QM (3)  
MIT.5410 XRT Radiobiology and Radiation Protection (2)  
MIT.5420 XRT Radiation Therapy Practice II (3)  
MIT 5430 XRT Capstone  
MIT.5440 XRT Clinical Dosimetry (3)  
MIT.5450 XRT Clinical Practicum II  
MIT.6000 Masters Seminar I (1)  
MIT.6100 Masters Seminar II (2)  
MIT.6200 Masters Seminar III  
ORES.5300 Foundation Outcomes Research (3)

# NUTRITION AND DIETETICS

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**Ivis T. Forrester, Ph.D.**

*Department Chair*

*Coordinator of Medical Dietetics Emphasis*

**Steven Jenkins, Ph.D., 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*

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

### 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 (30 credit hours)

DIET.5100 Human Nutrition in Physiology and Metabolism I (3)

DIET.5130 Human Nutrition in Physiology and Metabolism II (3)

DIET.5350 Clinical Systems Management (3)

DIET.XXXX Emphasis Specific Elective(s) (0-3)

DIET.5870 Seminar in Dietetics Research (1)

DIET.5880 Research in Nutrition and Dietetics I (1)

DIET.5890 Research in Nutrition and Dietetics II (2)

DIET.5910 Dietetic Internship (three semesters) (8 total)

Other required courses based on concentration. (9-6)

# Master of Science in Nutrition and Dietetics

## 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

**31 total credit hours = 19 required credit hours + 12 selected credit hours**

### Required Courses (19 credit hours)

DIET.5100 Human Nutrition in Physiology and Metabolism I (3)	DIET.5500 Nutrition Counseling (3)
DIET.5130 Human Nutrition in Physiology and Metabolism II (3)	ORES.5120 <b>or</b> Advanced Statistics course (3)
DIET.5350 Clinical Systems Management (3)	DIET.5870 Seminar in Dietetics Research (1)
	DIET.5880 Research in Nutrition and Dietetics I (1)
	DIET.5890 Research in Nutrition and Dietetics II (2)

### Twelve credits selected from

DIET.5030 Sustainable Food Systems (3)	DIET.5220 Gerontological Nutrition (3)
DIET.5060 Maternal & Child Nutrition & Health (3)	DIET.5300 Community Nutrition (3)
DIET.5070 Culinary and Medicinal Herbs (3)	DIET.5400 Nutrition Education (3)
DIET.5210 Pediatric Nutrition (3)	DIET.5550 Nutrition and Physical Performance (3)

## 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.

**30 total credit hours = 24 required credit hours + 6 selected credit hours**

### Required Courses (24 credit hours)

DIET.5030 Sustainable Food Systems (3)	DIET.5890 Research in Nutrition and Dietetics II (2)
DIET.5100 Human Nutrition in Physiology and Metabolism I (3)	DIET.5900 Culinary Practicum (2)
DIET.5130 Human Nutrition in Physiology and Metabolism II (3)	MGT.6200 New Venture Initiation (3)
DIET.5870 Seminar in Dietetics Research (1)	MGT.6210 Advanced Business Planning for New Ventures (3)
DIET.5880 Research in Nutrition and Dietetics I (1)	ACCT.5010 or Approved course (3)

### Six credits selected from

DIET.5750 Gastronomy (3)  
DIET.5850 Mediterranean Diet / Lifestyle (3)  
DIET.5050 Food Processing: Farm to Institution (3)  
DIET.5350 Clinical Systems Management (3)

## Food Innovation and Entrepreneurship Concentration

### Additional Prerequisites

Minimum of an Associate Degree in Culinary Arts or the equivalent coursework in culinary arts.

**30 total credit hours = 27 required credit hours + 3 selected credit hours**

### Required Courses (27 credit hours)

DIET.5010 Survey of Nutrition for AHP (3)	DIET.5870 Seminar in Dietetics Research (1)
DIET.5030 Sustainable Food Systems (3)	DIET.5880 Research in Nutrition and Dietetics I (1)
DIET.5050 Food Processing: Farm to Institution (3)	DIET.5890 Research in Nutrition and Dietetics II (2)
DIET.5750 Gastronomy (3)	
DIET.5900 Culinary Practicum (2)	

MGT.6200 New Venture Initiation (3)  
MGT.6210 Advanced Business Planning for New Ventures (3)  
ACCT.5010 or Approved course (3)

**Three credits selected from**

DIET.5850 Mediterranean Diet / Lifestyle (3)  
DIET.5350 Clinical Systems Management (3)

***Nutrition and Physical Performance Concentration***

**Additional Prerequisites**

Human Anatomy; Human Physiology; and Foundations in Community Nutrition or equivalent.

**30 total credit hours = 27 required credit hours + 3 selected credit hours**

**Required Courses (27 credit hours)**

DIET.5100 Human Nutrition in Physiology and Metabolism I (3)	Physiology (3)
DIET.5130 Human Nutrition in Physiology and Metabolism II (3)	DIET.5810 NPP Practicum (2)
DIET.5500 Nutrition Counseling (3)	DIET.5690 Bioenergetics of Exercise (3)
DIET.5550 Nutrition and Physical Performance (3)	DIET.5870 Seminar in Dietetics Research (1)
DIET.5700 Exercise Testing and Prescription (3)	DIET.5880 Research in Nutrition and Dietetics I (1)
DIET.5800 Cardiovascular & Metabolic Aspects of Exercise	DIET.5890 Research in Nutrition and Dietetics II (2)

**Three credits selected from**

DIET.5030 Sustainable Food Systems (3)  
DIET.5220 Gerontological Nutrition (3)  
DIET.5350 Clinical Systems Management (3)  
DIET.5300 Community Nutrition (3)  
DIET.5400 Nutrition Education (3)

## Master of Science in Nutrition and Dietetics & Master of Public Health Dual Degree Program

**Additional Prerequisites**

Foundations in Community Nutrition or equivalent; Nutrition Counseling; and Nutrition Education.

**54 total credit hours = 18 required DIET credit hours + 3 selected DIET credit hours + 33 MPH core credit hours**

**Required Courses (18 credit hours)**

DIET.5100 Human Nutrition in Physiology and Metabolism I (3)	DIET.5400 Nutrition Education (3)
DIET.5130 Human Nutrition in Physiology and Metabolism II (3)	DIET.5450 Public Health Nutrition Practicum (2-3)
DIET.5300 Community Nutrition (3)	DIET.5870 Seminar in Dietetics Research (1-0)
	DIET.5880 Research in Nutrition and Dietetics I (1)
	DIET.5890 Research in Nutrition and Dietetics II (2)

**Three credits selected from**

DIET.5030 Sustainable Food Systems (3)  
DIET.5070 Culinary and Medicinal Herbs (3)  
DIET.5210 Pediatric Nutrition (3)  
DIET.5220 Gerontological Nutrition (3)  
DIET.5350 Clinical Systems Management (3)  
DIET.5550 Nutrition and Physical Performance (3)

**Additional Requirements**

Core courses for M.P.H. program; (course list is available at: <https://catalog.slu.edu/> for a total of 54 required course hours.

**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

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**Debra A. Rybski, Ph.D., M.S.HCA, OTR/L**

*Department Chair*

The department 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 an 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.

## Master of Occupational Therapy

### **Required Courses (73 credit hours)**

ANAT.4000 Gross Anatomy (6)  
OCS.4620 Clinical Conditions & Phenomenology (3)  
MOT.5000 Fundamentals of OS for Post-Bac. Students (1)  
MOT.5020 Professional Development I (1)  
MOT.5030 Professional Development II (1)  
MOT.5040 Professional Development III (1)  
MOT.5150 Kinesiology (3)  
MOT.5170 Neuroscience in Occupational Therapy (4)  
MOT.5200 Clinical Conditions & Phenomenology (3)  
MOT.5250 OT Policy & Administration (2)  
MOT.5260 Problem Based Learning (2)  
MOT.5300 Fundamentals of Occupational Therapy Practice (3)  
MOT.5350 Theoretical Foundations of Occupational Therapy (3)  
MOT.5400 Occupational Therapy for Adults with Physical Dysfunction (4)  
MOT.5410 Occupational Therapy in Behavioral Health I (3)  
MOT.5450 Occupational Performance & Assessment of Children & Youth (3)  
MOT.5460 Occupational Therapy with Aging Adults (3)  
MOT.5480 OT & Upper Extremity (2)  
MOT.5490 Applied Research I (1)  
MOT.5500 Applied Research II (1)  
MOT.5550 Occupational Therapy in Neurological Rehabilitation (3)  
MOT.5560 Occupational Therapy in Behavioral Health II (3)  
MOT.5600 Occupational Therapy with Children & Youth (4)  
MOT.5650 Advanced Research in Occupational Therapy I (1)  
MOT.5700 Level II Fieldwork (12 weeks) (6)  
MOT.5750 Level II Fieldwork (12 weeks) (6)

### **Optional Courses (1-6 credit hours)**

MOT.5660 Advanced Research in Occupational Therapy II (1-6)

### **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 may affect a graduate's eligibility for professional certification and licensure.

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.

### **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, Suite 200, Bethesda, MD 20814-3449; ACOTE's telephone number, c/o AOTA, is (301) 652-AOTA

## **Post-Professional Doctor of Occupational Therapy**

### **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 (36 credit hours)**

OCTH.5010 Foundations of OT: Theories, Domains & Processes (3)

OCTH.5011 Fundamentals of Occupational Science (3)

OCTH.6100 Occupational Science in Practice and Society (3)

OCTH.6200 Professional Leadership and Public Policy (3)

OCTH.6300 Conceptualizations and Applications of Occupational Injustice (3)

ORES.5010 Introduction to Biostatistics for Health Outcomes Research (3)

ORES.5300 Foundations of Outcome Research (3)

EDI.5600 Models of Teaching (3)

OCTH.6400 OT Practicum (3)

OCTH.6500 OT Practicum (3)

Six credit-hours of advisor-approved electives

# PHYSICIAN ASSISTANT EDUCATION

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**Anne C. Hart Garanzini, M.Ed., PA-C**

*Department Chair*

**Carol R. Danter, M.P.A.S., PA-C**

*PA Program Director*

**Michael J. Cox, M.D., FACP, FCCP,**

*Medical Director*

The Department of Physician Assistant (PA) Education 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 basic medical sciences like anatomy and physiology, applied behavioral sciences and the foundations of clinical medicine. A significant portion of the curriculum is presented through organ system-based courses which support the integration of complex disease processes with patient assessment and treatment. The clinical phase (one calendar year) consists of clerkships in Emergency Medicine, Family Medicine, General Surgery, Internal Medicine, Pediatrics, Psychiatry/Behavioral Medicine, Women's Health and two rotations in student-choice clinical specialties (Clinical Elective and EBM Clerkship). While working clinically with the supervision of a physician, PA or other preceptor, students actively participate in the daily care of patients of all ages and backgrounds. Graduates of the SLU PA program are eligible to sit for the Physician Assistant National Certifying Exam (PANCE). With a supervising physician, PAs practice medicine as part of a health care team, are certified nationally, and licensed by state. PAs diagnose and treat patients 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

### Prerequisites

PA Program applicants must earn at least a baccalaureate degree by May prior to matriculation. Minimum science grade point average is 3.0 and minimum overall grade point average is 3.0. There is a minimum requirement of 500 hours of direct patient care experience at the time of application. Credentialed and paid work experience providing direct patient care is most competitive. Successful completion of the following prerequisite courses or equivalents is required as a minimum: medical terminology, statistics, college chemistry I & II, organic chemistry I & II, microbiology, vertebrate or human anatomy, vertebrate or human physiology, and genetics. Admission considerations also include the number of science prerequisites completed by the time of application, the number of science prerequisites completed in a classroom/lab setting at a 4-year university, the date of the applicant's undergraduate degree conferral, and more. The GRE is not required.

### 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.

### Required Courses (97 credit hours)

BLS.4900 Clinical Laboratory Medicine (2)

ANAT.4100 Human Gross Anatomy (6)

PAED.5010 Professional & Psychosocial Issues of PA Practice (3)

PAED.5040 Physiology (4)

PAED.5070 Principles of the Medical Interview (2)

PAED.5110 Principles and Practice of Dermatology (2)

PAED.5120 Principles and Practice of Hematology (2)

PAED.5130 Principles & Practice of Otorhinolaryngology & Ophthalmology (3)

PAED.5150 Clinical Pharmacology I (2)

PAED.5200 Clinical Pharmacology II (A, B) (2)  
PAED.5210 Principles and Practice of Pulmonology (I, II) (3)  
PAED.5220 Principles and Practice of Cardiovascular Medicine (I, II) (4)  
PAED.5230 Principles and Practice of Gastroenterology & Nutrition (I, II) (3)  
PAED.5240 Principles and Practice of Nephrology & Genitourinary Medicine (3)  
PAED.5250 Principles and Practice of Endocrinology (3)  
PAED.5300 Evidence-Based Medicine (2)  
PAED.5310 Principles and Practice of Orthopedics & Rheumatology (3)  
PAED.5320 Principles and Practice of Neurology (3)  
PAED.5330 Essentials of Surgery (2)  
PAED.5340 Essentials of Emergency Medicine (2)  
PAED.5360 Essentials of Pediatrics (2)  
PAED.5370 Essentials of Behavioral Medicine (2)  
PAED.5380 Essentials of Obstetrics & Gynecology (2)  
PAED.5400 Internal Medicine (4)  
PAED.5420 Family Medicine (4)  
PAED.5510 General Surgery (4)  
PAED.5600 Pediatrics (3)  
PAED.5700 Psychiatry and Behavioral Medicine (3)  
PAED.5750 Women's Health (3)  
PAED.5800 Emergency Medicine (4)  
PAED.5860 EBM Clerkship (4)  
PAED.5930 Clinical Elective (4)  
PAED.6000 Senior Seminar (2)

#### **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

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**Tricia Austin, PT, Ph.D., ATC**

*Interim Department Chair*

**Randy Richter, PT, Ph.D.**

*Interim Program Director, Physical Therapy*

**Anthony Breitbach, Ph.D., ATC**

*Program Director, Athletic Training*

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

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. 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.

### 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 (114 credit hours)

ANAT.4000 Gross Anatomy for AHP (6)  
ANAT.4300 AHP Neurosciences (5)  
DPT.4001 Professional Residency I (0)  
DPT.4021 Kinesiology I (2)  
DPT.4102 Professional Residency II (0)  
DPT.4122 Kinesiology II (3)  
DPT.4125 Therapeutic Modalities (3)  
DPT.4127 Basic Exam (3)  
DPT.4131 Survey of Disease (3)  
DPT.4146 Developmental Biology (3)  
DPT.4203 Professional Residency III (0)  
DPT.4226 Therapeutic Exercise (2)  
DPT.4228 Basic Procedures (2)  
DPT.4241 Clinical Research & Design (2)  
DPT.4247 Human Growth & Development (3)  
DPT.4276 Documentation (1)  
DPT.4290 Skills Practicum (1)  
DPT.5104 Professional Residency IV (0)  
DPT.5115 Professional Development I (1)  
DPT.5123 Clinical Gait (2)  
DPT.5132 Pharmacology (1)  
DPT.5133 Lab Studies & Imaging (2)  
DPT.5134 Multisystem Management (3)  
DPT.5135 Cardiopulmonary Conditions (3)  
DPT.5137 Aspects of Nutrition in PT (2)

DPT.5142 Evidence Based Practice (2)  
DPT.5149 Applied Neuroscience (2)  
DPT.5162 Musculoskeletal Conditions II (3)  
DPT.5205 Professional Residency V (0)  
DPT.5218 Components of Effective Communication & Teaching (3)  
DPT.5250 Neuropathology (2)  
DPT.5251 Neurological Conditions I (4)  
DPT.5261 Musculoskeletal Conditions I (2)  
DPT.5263 Musculoskeletal Conditions III (4)  
DPT.5271 Patient Management I (3)  
DPT.5291 Clinical Rotation IA (2)  
DPT.6006 Professional Residency VI (0)  
DPT.6072 Patient Management II (1)  
DPT.6077 Departmental Administration (2)  
DPT.6091 Clinical Rotation IB (2)  
DPT.6092 Clinical Rotation IIA (2)  
DPT.6107 Professional Residency VII (0)  
DPT.6116 Professional Development II (2)  
DPT.6124 Biomechanical Interventions (3)  
DPT.6138 Concepts of Wellness (1)  
DPT.6152 Neurological Conditions II (2)  
DPT.6164 Musculoskeletal Conditions IV (3)  
DPT.6173 Patient Management III (2)  
DPT.6178 Applied Administration & Management (2)  
DPT.6192 Clinical Rotation IIB (2)  
DPT.6208 Professional Residency VIII (0)  
DPT.6217 Professional Development III (1)  
DPT.6243 Applied Evidence Based Practice (2)  
DPT.6293 Clinical Internship A (4)  
DPT.6294 Clinical Internship B (3)

### **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](mailto:accreditation@apta.org); website: [www.capteonline.org](http://www.capteonline.org)

## **Master of Athletic Training**

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 ([at.slu.edu](http://at.slu.edu)). Progression through the program is based on meeting academic and professional behavior requirements.

### **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 (70 credit hours)**

ANAT.4000 Gross Anatomy (6)  
MAT.4125 Therapeutic Modalities (3)  
MAT.5010 Principles of Athletic Training (2)  
MAT.5100 Athletic Training Kinesiology (3)  
MAT.5133 Lab Studies and Imaging (2)  
MAT.5160 Bioenergetics of Athletic Performance (3)  
MAT.5240 Musculoskeletal Assessment & Mgmt I (4)

MAT.5250 Musculoskeletal Assessment & Mgmt II (4)  
MAT.5500 Rehabilitation in Athletic Training I (4)  
MAT.5550 Rehabilitation in Athletic Training II (3)  
MAT.5600 Athletic Training Administration (3)  
MAT.5620 Psychology of Sport and Injury (3)  
MAT.5650 Research in Athletic Training (2)  
MAT.5700 AT Clinical Practicum I (3)  
MAT.5750 AT Clinical Practicum II (3)  
MAT.5800 Medical Conditions in Athletic Training (3)  
MAT.5900 AT Field Experience (2)  
MAT.6010 Contemporary Clinical Practice (1)  
MAT.6160 Enhancing Athletic Performance (3)  
MAT.6700 AT Clinical Practicum III (4)  
MAT.6750 AT Clinical Practicum IV (4)  
MAT.6800 Seminar in Athletic Training (3)  
MAT.6960 AT Capstone Project (2)

**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

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**Collins O. Airhihenbuwa, Ph.D., M.P.H.**

*Dean*

**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:

**Ricardo J. Wray, Ph.D., M.S.**

*Interim Chair, Behavioral Science and Health Education*

**John Fu, Ph.D., M.D.**

*Chair, Biostatistics*

**Zhengmin Qian, Ph.D., M.D.**

*Chair, Epidemiology*

**Ricardo J. Wray, Ph.D., M.S.**

*Interim Chair, Environmental and Occupational Health*

**Kathleen Gillespie, Ph.D.**

*Interim Chair, Health Management and Policy*

**Donald M. Linhorst, Ph.D., M.S.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. A non-traditional program provides educational opportunities for working professionals: the Executive Master of Health Administration (E.M.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 concentrations: behavioral science and health education; biostatistics; epidemiology; health management and policy; and health outcomes research. Biosecurity and disaster preparedness and environmental and occupational health concentrations are not accepting applications for 2016-17.

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 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

**Kristin Wilson, Ph.D., M.H.A.**

*Resident MHA Program Director*

**Steven W. Howard, Ph.D., M.B.A**

*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 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 resident M.H.A. degree requires the completion of the following curriculum as revised if a concentration is desired:

#### **Resident M.H.A. Curriculum (60 credits)**

HMP.5000 Health Care Organization

HMP.5030 Introduction to Health Care Accounting

HMP.5110 Health Operations Management

HMP.5130 Health Information Systems

HMP.5190 Analytical Methods for Health Management

HMP.5200 Health Economics

HMP.5300 Management of Health Care Organizations

HMP.5340 Health Care Marketing

HMP.5380 Management of Human Resources in Health Care

HMP.5390 Ethical Leadership in Health Management and Policy

HMP.5400 Legal Aspects of Health Services Management

HMP.5500 Health Policy

HMP.5700 Health Care Financial Management

HMP.5710 Financial Aspects of Health Care

HMP.5800 Strategic Management in Health Care Organizations

HMP.5900 Health Management and Policy Rounds

HMP.5910 Internship

HMP.5950 Special Study for Exams

PUBH.5010 Mission and Practice of Global Public Health

Twelve credits of mentor-approved electives\*

\*Nine credits may be used to satisfy the optional concentration requirements.

### **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.5810 Six Sigma Green Belt

HMP.5820 Health Care Project Management

### **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.5030 Introduction to Health Care Accounting

HMP.5040 Fundamentals of Economics and Finance

HMP.5100 Quality Improvement in Health Care Management

HMP.5110 Health Operations Management

HMP.5130 Health Information Systems

HMP.5190 Analytical Methods for Health Management

HMP.5200 Health Economics

HMP.5300 Management of Health Care Organizations

HMP.5340 Health Care Marketing

HMP.5380 Management of Human Resources in Health Care

HMP.5390 Ethical Leadership in Health Management and Policy

HMP.5400 Legal Aspects of Health Services Management

HMP.5500 Health Policy

HMP.5700 Health Care Financial Management

HMP.5800 Strategic Management in Health Care Organizations

HMP.5820 Health Care Project Management

PUBH.5010 Mission and Practice of Global Public Health

Six credits of mentor-approved electives

## 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 mentor-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 mentor-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 mentor-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.

### **M.P.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

HCE.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.5200 Theory II

BSH.5310 Health Communication

BSH.5400 Assessment, Intervention Development and Evaluation (AIDE) I

BSH.5410 Assessment, Intervention Development and Evaluation (AIDE) II

BSH.5960 Capstone in Behavioral Science and Health Education

BSH XXXX Applied Social Science Methods or BSH XXXX  
Qualitative Methods

Nine credits of mentor-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.5200 Theory II	BSH.5960 Capstone in Behavioral Science and Health Education
BSH.5310 Health Communication	BST.5100 Introduction to General Linear Modeling
BSH.5400 Assessment, Intervention Development and Evaluation (AIDE) I	EPI.5020 Epidemiology Methods II
BSH.5410 Assessment, Intervention Development and Evaluation (AIDE) II	BSH XXXX Applied Social Science Methods or BSH XXXX Qualitative Methods
	Nine credits of mentor-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.5210 Preparing for Disasters: Resiliency and Stress Inoculation
BSDP.5101 Fundamentals of Disaster Planning	BSDP.5960 Capstone in Biosecurity and Disaster Preparedness
BSDP.5103 Communicable Diseases and Infection Control	Three credits of mentor-approved electives
BSDP.5104 Public Health Ecology	
BSDP.5203 Disaster Planning for Infectious Disease Disasters	
BSDP.5206 Disaster Management and Risk Analysis	

### *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.5960 Capstone in Biosecurity and Disaster Preparedness
BSDP.5101 Fundamentals of Disaster Planning	BST.5100 Introduction to General Linear Modeling
BSDP.5103 Communicable Diseases and Infection Control	EPI.5020 Epidemiology Methods II
BSDP.5104 Public Health Ecology	Six credits of mentor-approved electives
BSDP.5203 Disaster Planning for Infectious Disease Disasters	
BSDP.5206 Disaster Management and Risk Analysis	

### *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.5400 Applied Data Management
BST.5030 Statistical Programming and Study Planning: SAS	BST.5960 Capstone in Biostatistics
BST.5100 Introduction to General Linear Modeling	EPI.5020 Epidemiology Methods II
BST.5200 Survival Data Analysis	Six credits of mentor-approved electives
BST.5210 Categorical Data Analysis	

*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.5400 Applied Data Management
BST.5030 Statistical Programming and Study Planning: SAS	BST.5960 Capstone in Biostatistics
BST.5100 Introduction to General Linear Modeling	EPI.5020 Epidemiology Methods II
BST.5200 Survival Data Analysis	Twelve credits of mentor-approved electives
BST.5210 Categorical Data Analysis	

*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.5600 Policy, Science and Decisions in Environmental Health
EOH.5200 Evaluation of Environmental Hazards	EOH.5960 Capstone in Environmental and Occupational Health
EOH.5300 Biological Hazards in Modern and Developing Countries	EPI.5500 Environmental and Occupational Epidemiology
EOH.5400 Human Health Risk Analysis	Six credits of mentor-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 mentor-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 mentor-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 mentor-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

GLOH.5930 Introduction to Global Health  
 GLOH.5960 Capstone in Global Health  
 SWRK.5705 Practice in Global Issues  
 Six credits of mentor-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.5500 Environmental and Occupational Epidemiology  
 GLOH.5100 Global Health Assessment and Evaluation  
 GLOH.5200 Global Health Diplomacy and Policy  
 GLOH.5930 Introduction to Global Health  
 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  
 GLOH.5960 Capstone in Global Health

GLOH.5100 Global Health Assessment and Evaluation  
 GLOH.5200 Global Health Diplomacy and Policy  
 GLOH.5930 Introduction to Global Health  
 SWRK.5705 Practice in Global Issues  
 Six credits of mentor-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  
 GLOH.5930 Introduction to Global Health  
 GLOH.5960 Capstone in Global Health  
 SWRK.5705 Practice in Global Issues

**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 (48 total credits)**

Completion of the M.P.H. core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (27 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  
 Six credits of mentor-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 mentor-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.P.H./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.P.H.HMP Requirements (48 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 (27 credits)**

HMP.5000 Health Care Organization  
HMP.5200 Health Economics  
HMP.5210 Economic Evaluation  
HMP.5500 Health Policy  
HMP.5720 Government Financing of Health and Health Care

HMP.5960 Capstone Seminar in Health Policy  
LAW.8000 Health Care Law substitutes for HMP.5510 Health Policy and Law  
Six credits of mentor-approved coursework from the School of Law J.D. degree requirement

### **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.5400 Assessment, Intervention Development and Evaluation (AIDE) I  
BSH.5410 Assessment, Intervention Development and Evaluation (AIDE) II  
DIET.5060 Maternal and Child Nutrition and Health  
EPI.5220 Maternal and Child Health Epidemiology  
or EPI.5280 Perinatal Epidemiology

MCH.5000 Maternal and Child Health I: Foundations of Maternal Child Health  
MCH.5010 Maternal and Child Health II: Programs, Policy and Advocacy  
HMP.5930-02 Federal Policymaking and Health Policy Advocacy  
MCH.5960 Capstone in Maternal and Child Health  
Three credits of mentor-approved electives

### **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  
BST.5100 Introduction to General Linear Modeling  
DIET.5060 Maternal and Child Nutrition and Health  
EPI.5020 Epidemiology Methods II  
EPI.5220 Maternal and Child Health Epidemiology  
or EPI.5280 Perinatal Epidemiology  
MCH.5960 Capstone in Maternal & Child Care

MCH.5000 Maternal and Child Health I: Foundations of Maternal Child Health  
MCH.5010 Maternal and Child Health II: Programs, Policy and Advocacy  
HMP.5930-02 Federal Policymaking and Health Policy Advocacy  
Six credits of mentor-approved electives

### **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  
HMP.5000 Health Care Organization  
HMP.5500 Health Policy

HMP.5930-02 Federal Policymaking and Health Policy Advocacy  
PUBH.5960 Capstone in Public Health Practice  
Six credits of mentor-approved elective

## 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.

### M.P.H.PRFP Prerequisites

A bachelor's degree or equivalent of a professional degree from an accredited college or university.

### M.P.H.PRFP 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

HMP.5930-02 Federal Policymaking and Health Policy  
Advocacy  
PUBH.5960 Capstone in Public Health Practice  
Six credits of mentor-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 (45 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.

### M.P.H.PRFP Prerequisites

A bachelor's degree or equivalent of a professional degree from an accredited college or university.

### M.P.H.PRFP Requirements (45 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

HMP.5500 Health Policy  
HMP.5930-02 Federal Policymaking and Health Policy  
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 mentor, 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.5774 Measurement and Experimental Design

ABA.5747 Assessment and Selecting Interventions

ABA.5748 Behavior Change and Processes

ABA.5749 Behavior Change and Ethics

ABA.5931 Special Topics I in ABA

ABA.5826 Practicum I

ABA.5820.48 Integrative Seminar

Six transfer credits from coursework at the Mercyhurst University, Erie, PA, Master of Science in Applied

ABA.5827 Practicum II

ABA.5820.49 Integrative Seminar

ABA.5828 Practicum III

ABA.5820.50 Integrative Seminar

ABA.5990 Thesis (6 credits)

ABA.5950 Special Study for Exams

ABA.5932 Special Topics II in ABA

PUBH.5010 Mission and Practice of Global Public Health

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

CCJ.5960 MSCPP Culminating Project (0 credits)

CCJ.5910 CCJ Internship (prior approval required)

CCJ.6000 Issues in Law Enforcement

CCJ.6100 Issues in Corrections

CCJ.6200 Issues in Juvenile Justice Administration

SWRK.5729 Social Work in Corrections

SWRK.5771 Intimate Partner Violence

*Six credits of faculty mentor-approved electives, with at least 3 credits from the following courses:*

## 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.5203 Disaster Planning for Infectious Disease Disasters

BSDP.5206 Disaster Management and Risk Analysis

BSDP.5208 Facing the Challenge of International Bioterrorism

BSDP.5209 Emerging Infections: Epidemiology and Public Health Importance

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 mentor-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 mentor-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.H.BSHE Prerequisites when taken as part of the dual degree**

A bachelor's degree or equivalent from an accredited college or university.

### **M.S.P.H.BSHE 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.H.BSHE Curriculum**

PSY.5080 Advanced Quantitative Research Methods substitutes for 3 credits of mentor-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

### **Jami C. Curley, 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.5746 Principles and Concepts in Behavior Analysis  
SWRK.5747 Assessment and Selecting Interventions  
SWRK.5748 Behavior Change and Processes  
SWRK.5774 Measurement and Experimental Design  
SWRK.5820 Concentration Integrative Seminar (1 credit)

SWRK.5822 Concentration Practicum II (2 credits)  
SWRK.5823 Concentration Practicum III  
SWRK.5824 Concentration Practicum IV  
SWRK.5830 ABA Integrative Seminar (0 credits)  
SWRK.5840 ABA Integrative Seminar (0 credits)  
Six credits of mentor-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 (30 credits)**

SWRK.5762 Clinical Diagnosis  
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  
12 credits of mentor-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 (30 credits)**

SWRK.5762 Clinical Diagnosis	SWRK.5820 Concentration Integrative Seminar (1 credit)
SWRK.5733 Advanced Clinical Social Work Practice	SWRK.5842 Clinical Practicum II (2 credits)
SWRK.5734 Human Behavior and the Social Environment Part II	SWRK.5843 Clinical Practicum III
	12 credits of mentor approved social work electives

#### **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 Mentors 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 Mentor, 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 with a Major in Spiritual Care for 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 (30 credits)**

SWRK.5762 Clinical Diagnosis	SWRK.5820 Concentration Integrative Seminar (1 credit)
SWRK.5733 Advanced Clinical Social Work Practice	SWRK.5842 Clinical Practicum II (2 credits)
SWRK.5734 Human Behavior and the Social Environment Part II	SWRK.5843 Clinical Practicum III
	12 credits of mentor-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 (30 credits)

SWRK.5762 Clinical Diagnosis	SWRK.5820 Concentration Integrative Seminar (1 credit)
SWRK.5733 Advanced Clinical Social Work Practice	SWRK.5842 Clinical Practicum II (2 credits)
SWRK.5734 Human Behavior and the Social Environment Part II	SWRK.5843 Clinical Practicum III
	12 credits of mentor-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 (30 credits)

SWRK.5762 Clinical Diagnosis	SWRK.5842 Clinical Practicum II (2 credits)
SWRK.5733 Advanced Clinical Social Work Practice	SWRK.5820 Concentration Integrative Seminar (1 credit)
SWRK.5734 Human Behavior and the Social Environment Part II	SWRK.5843 Clinical Practicum III
	12 credits of mentor-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 (30 credits)

SWRK.5762 Clinical Diagnosis

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

12 credits of mentor-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 (30 credits)

SWRK.5762 Clinical Diagnosis

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

12 credits of mentor 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 mentor-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 mentor-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 mentor, 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

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**Jennifer Giancola, Ph.D.**

*Interim Dean, School for Professional Studies*

**John P. Buerck, Ph.D**

*Associate Dean of Academic Affairs*

**Matthew J. Grawitch, Ph.D.**

*Associate Dean of Graduate and Professional Education*

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.

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

**Steven Winton, Ph.D.**

*Graduate Program Director*

### 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.

### Prerequisites

Bachelor's degree from an accredited institution with undergraduate GPA of 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.

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.

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).

### All courses offered online

#### 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

### **Srikanth Mudigonda, Ph.D**

*Graduate Program Director*

#### **Available Online**

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. 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.

#### **Prerequisites**

Bachelor's degree from an accredited institution with undergraduate GPA of 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.

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.

Course work in the following areas:

- At least one course in information systems/technology or a programming language;
- At least one basic course in statistics or research methods.

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).

#### **All courses offered online**

##### **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.5300 Advanced Analytics 3

*Students should take any 4 of the 5 AA courses, ORLD.5020, ORLD.5030, and either ORLD.5000 or ORLD.5010*  
Credit hours: 21

**Capstone Courses**

ORLD.5900 Action Research I 3  
ORLD.5950 Action Research II 3  
Credit hours: 6  
Total credit hours: 3

# SCHOOL OF EDUCATION

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**Ann M. Rule, Ph.D.**  
*Interim Dean*

**Maureen A. Wikete Lee, Ph.D.**  
*Associate Dean*

## **Graduate Program Directors:**

**Amrita Chaturvedi, Ph.D.**  
*International Programs*

**Susan Toft Everson, Ph.D.**  
*Educational Leadership*

**John T. James, Ed.D.**  
*Catholic Education*

**Nikki L. Murdick, Ph.D.**  
*Curriculum & Instruction, Educational Foundations, and Special Education*

**Karen A. Myers, Ph.D.**  
*Higher Education Administration*

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 Curriculum and Instruction, Educational Foundations, Educational Leadership, Higher Education Administration, 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, and Teaching. The School offers a specialty program certificate, and the following degrees: M.A., M.A.T., Ed.D., and Ph.D. In addition, certification for the principalship, director of special education, and superintendency are offered through the Educational Leadership program. 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.

## CURRICULUM AND INSTRUCTION

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**Nikki L. Murdick, Ph.D.**  
*Program Director*

The programs in Curriculum and Instruction are ideal for those interested in writing curriculum and/or improving instruction in a variety of fields such as education, physical therapy, and business. Students accepted into this specialty focus on curriculum and related instructional processes and tools, including technology. Students may select an area of emphasis outside the School of Education.

### Master of Arts in Curriculum and Instruction

The Master of Arts degree in Curriculum and Instruction is a non-thesis program that prepares individuals for positions in educational settings where they can focus on issues related to curriculum and instruction. The degree requires completion of 32 credit hours of coursework, an oral examination, and a content-focused theme paper.

#### **Prerequisites**

18 credit hours of upper division undergraduate course work in education or a related area.

**Required Courses**

EDR.5400 Qualitative Research in Education (3)

EDR.5100 Introduction to Inferential Statistics: Ed (3) or EDR 5600 General Research Methods for Educators (3)

Six credit hours selected from: EDI.6450 Curriculum Development (3); EDI.6460 Curriculum Theory (3); EDI.6310/6320

The Supervisory Process (3); EDI.6410/6420/6430/6440 School Curriculum (3); EDI.6230 Seminar in Instruction (3)

Three credit hours in the field of Educational Psychology (3)

Three credit hours in the field of Educational Philosophy or History of Education (3)

**Electives**

Students select 14-15 credit hours in consultation with an advisor.

**Additional Requirements**

Students must complete a theme paper on a topic related to their coursework and an oral examination.

## Master of Arts in Teaching

The Master of Arts in Teaching degree is designed to offer classroom teachers expanded knowledge in three broad areas of development: knowledge in subject-matter areas, current educational developments, and the processes of teaching and learning.

Students may choose one of two focus areas for this program. The degree requires completion of a minimum of 32-34 credit hours of coursework, an oral examination, and a content-focused theme paper (content area focus only).

**Prerequisites**

18 credit hours of upper division undergraduate coursework in education or a related area.

**Required Courses**

Students select 32 credit hours in consultation with an advisor. The coursework should expand the students' knowledge in a specific subject matter area, expand their knowledge in current educational developments in education in general and in their area of emphasis, and expand their knowledge and understanding of the processes of teaching and learning.

**Additional Requirements**

Students must complete a theme paper on a topic related to their coursework and an oral examination.

## Master of Arts in Teaching with Alternative Certification

**Prerequisites**

Bachelor's degree or higher in the area of emphasis or a related field of the desired certificate from a regionally accredited institution.

**Required Courses**

EDSP.4240/4250 Classroom Organization and Management (3)

EDSP.5310 Education and Psychology of the Exceptional Individual (3)

EDI.5390 Psychology of Reading (3)

EDF.5600 Foundations of Urban Education (3)

EDF.5700 Advanced Growth and Development (3)

EDF.6050 Multicultural Issues in Public Service (3)

EDF.6600 Education in American Culture (3) or EDF 5610 Foundations of Catholic Education (3)

EDI.6230 Seminar: Instructional Design (3)

EDI.6250 Supervised Practicum (4)

EDI.6550 Principles of Assessment for Education Settings (3)

**Additional Requirements**

Students must complete the Missouri requirements for a Provisional Certificate, the appropriate certification content test, and participate in the assigned school district's professional development programs and Performance-Based Teacher Evaluation (PBTE) program.

## Doctor of Education in Curriculum and Instruction

This program focuses on the preparation of professionals for leadership positions in educational institutions through a practical, problem-oriented program, shaped largely by career intentions that do not call for a strong research emphasis. The degree requires the completion of 38 credit hours of coursework, including two successive semesters of residency, which are arranged with the advisor on a contract

basis. Additional requirements include: four credit hours of project guidance, a comprehensive written examination, an oral examination/proposal defense, and a doctoral project.

### **Prerequisites**

Students must complete six hours of graduate research coursework as a prerequisite for the doctoral program. If the student does not have some or all of these credit hours, he or she may take the hours during the doctoral program in addition to the program coursework. Students are required to complete two of the following three prerequisite courses prior to enrolling in advanced research courses:

EDR.5100 Intro to Inferential Statistics: Ed (3)

EDR.5400 Qualitative Research in Education (3)

EDR.5600 General Research Methods for Educators (3)

### **Required Courses**

EDI.6010 Doctoral Residency (0)

EDI.6010 Doctoral Residency (3)

EDI.6230 Seminar in Instruction (3)

EDI.6450 Curriculum Development (3)

EDI.6250 Practicum: Curriculum and Instruction (3)

Three credit hours in the field of Educational Foundations (3)

Three credit hours in the field of Curriculum and Instruction (3)

EDI.6950 Special Study for Written Comprehensive Exams (0)

EDI.6960 Project Guidance (4)

### **Research Requirements**

Students must complete the remaining course from the list of prerequisites: EDR.5100 Intro to Inferential Statistics: Ed (3), EDR.5400 Qualitative Research in Education (3), or EDR.5600 General Research Methods for Educators (3)

### **Electives**

Students select 17-18 credit hours in consultation with an advisor.

### **Additional Requirements**

Students must complete a comprehensive written examination and an oral examination of their project proposal.

## **Doctor of Philosophy in Curriculum and Instruction**

This program emphasizes the tools of research and the interplay of theory and practice in education. The degree requires the completion of 30 credit hours of course work, 12 hours of dissertation research, a comprehensive written examination, an oral examination/proposal defense, and a public presentation and defense of the dissertation.

### **Prerequisites**

Students must complete six hours of graduate research coursework as a prerequisite for the doctoral program. If the student does not have some or all of these credit hours, he or she may take the hours during the doctoral program in addition to the program coursework. Students are required to successfully complete two of the following three prerequisite courses prior to enrolling in advance research courses:

EDR.5100 Intro to Inferential Statistics: Ed (3)

EDR.5400 Qualitative Research in Education (3)

EDR.5600 General Research Methods for Educators (3)

### **Required Courses**

Nine credit hours in the field of Curriculum and Instruction (9)

EDI.6950 Special Study for Written Comprehensive Exams (0)

EDR.6990 Dissertation Research (12)

### **Research Requirements**

Students must complete 12 credit hours of research coursework beyond the prerequisite coursework. Required research coursework includes:

The remaining course from the pre-requisite list which was not taken as a pre-requisite for admission: EDR.5100 Introduction to Inferential Statistics: Ed (3), EDR.5400 Qualitative Research in Education (3), or EDR.5600 General Research Methods for Educators (3).

EDR.6970 Research Topics (3)

Students pursuing a quantitative dissertation design must complete EDR.6060 Research Design and Analysis (3) and EDR.6100

Intermediate Applied Statistics for Educators (3).

Students pursuing a qualitative dissertation design must complete EDR.6400 Advanced Qualitative Research for Educators (3) and one of the following: EDR. 5500 Evaluation of Educational Programs (3), EDR.6930 Special Topics: Ethnography, or an approved qualitative research course (3).

### **Electives**

Students select nine credit hours in consultation with an advisor (9).

### **Additional Requirements**

Students must complete a comprehensive written examination, an oral examination/proposal defense, and a public presentation and defense of the dissertation

### **Post-Baccalaureate Courses**

EDI.5390 Psychology of Reading (3)	(3)
EDI.5620 Changing Roles of the Classroom Teacher (3)	EDI.6410 The Elementary School Curriculum (3)
EDI.5930 Special Topics: Seminar in Instructional Design (3)	EDI.6420 The Secondary School Curriculum (3)
EDI.5950 Special Study for Exams (0)	EDI.6430 Middle School Curriculum and Instruction (3)
EDI.5980 Graduate Reading Course (1-3)	EDI.6450 Curriculum Development (3)
EDI.6010 Doctoral Residency (0-3)	EDI.6460 Curriculum Theory (3)
EDI.6250 Practicum: Curriculum and Instruction (3)	EDI.6950 Special Study for Exams (0)
EDI.6310 The Supervisory Process in the Elementary School (3)	EDI.6960 Project Guidance (0-4)
EDI.6320 The Supervisory Process in the Secondary School	EDI.6980 Graduate Reading Course (1-3)
EDR.5400 Qualitative Research in Education (3)	EDR.6070 Evidence Based Decision Making (3)
EDR.5500 Evaluation of Educational Programs (3)	EDR.6100 Intermediate Applied Statistics for Educators (3)
EDR.5600 General Research Methods for Educators (3)	EDR.6400 Intermediate Qualitative Research for Educators (3)
EDR.5980 Graduate Reading Course (1-3)	EDR.6970 Research Topics (3)
EDR.5990 Thesis Research (0-6)	EDR.6971 Research Topics (3)
EDR.6000 Professional Writing (3)	
EDR.6060 Research Design and Analysis (3)	

# EDUCATIONAL FOUNDATIONS

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**Nikki L. Murdick, Ph.D.**

*Program Director*

The programs in Educational Foundations provide an ideal environment for further learning for those who are interested in educational theory, history, and philosophy with a program designed to support critical inquiry into the nature of education. Students accepted into this special area typically study the disciplines of psychology, theory, history, philosophy, and sociology to analyze issues in education.

## Master of Arts in Educational Foundations

The Master of Arts degree in Educational Foundations is a non-thesis program that prepares individuals for positions in educational settings where they can focus on issues related to the theory, history and philosophy of education. The degree requires a completion of 32 credit hours of coursework, an oral examination, and a content-focused theme paper.

### **Prerequisites**

18 hours of upper division undergraduate course work in education or a related area.

### **Required Courses**

EDR.5400 Qualitative Research in Education (3)

EDR.5100 Intro to Inferential Statistics: Ed (3) or EDR.5600 General Research Methods (3)

Three credit hours in the field of Educational Psychology (3)

Three credit hours in the field of Educational Philosophy (3)

Three credit hours in the field of History of Education (3)

Three additional credit hours from Educational Psychology, Educational Philosophy, or History of Education (3)

### **Electives**

Students select 14-15 credit hours in consultation with an advisor.

### **Additional Requirements**

Students must complete a theme paper on a topic related to their coursework and pass an oral examination.

## Doctor of Education in Educational Foundations

This program focuses on the preparation of professionals for leadership positions in educational institutions through a practical, problem-oriented program, shaped largely by career intentions that do not call for a strong research emphasis. The degree requires the completion of 38 credit hours of coursework, including two successive semesters of residency, which are arranged with the advisor on a contract basis. Additional requirements include: four credit hours of project guidance, a comprehensive written examination, an oral examination/proposal defense, and a doctoral project.

### **Prerequisites**

Students must complete six hours of graduate research coursework as a prerequisite for the doctoral program. If the student does not have some or all of these credit hours, he or she may take the hours during the doctoral program in addition to the program coursework. Students are required to complete two of the following three prerequisite courses prior to enrolling in advanced research courses:

EDR.5100 Intro to Inferential Statistics: Ed (3)

EDR.5400 Qualitative Research in Education (3)

EDR.5600 General Research Methods for Educators (3)

### **Required Courses**

EDF.5300 Advanced Educational Psychology (3)

EDF.6100 Studies in Educational Philosophy (3)

Six credit hours in the field of Educational Foundations (6)

EDI.6010 Doctoral Residency (0)

EDI.6010 Doctoral Residency (3)

EDF.6950 Special Study for Written Comprehensive Exams (0)

EDF.6960 Project Guidance (4)

### **Research Requirements**

Students must complete the remaining course from the list of prerequisites: EDR.5100 Intro to Inferential Statistics: Ed (3), EDR.5400

Qualitative Research in Education (3), or EDR.5600 General Research Methods for Educators (3)

### **Electives**

Students select 20 credit hours in consultation with an advisor.

### **Additional Requirements**

Students must pass comprehensive written examination and an oral examination of their project proposal.

## **Doctor of Philosophy in Educational Foundations**

This program emphasizes the tools of research and the interplay of theory and practice in education. The degree requires the completion of 30 credit hours of course work, 12 hours of dissertation research, a comprehensive written examination, an oral examination/proposal defense, and a public presentation and defense of the dissertation.

### **Prerequisites**

Students must complete six hours of graduate research coursework as a prerequisite for the doctoral program. If the student does not have some or all of these credit hours, he or she may take the hours during the doctoral program in addition to the program coursework. Students are required to successfully complete two of the following three prerequisite courses prior to enrolling in advanced research courses:

EDR.5100 Intro to Inferential Statistics: Ed (3)

EDR.5400 Qualitative Research in Education (3)

EDR.5600 General Research Methods for Educators (3)

### **Required Courses**

Nine credit hours in the field of Educational Foundations (9)

EDF.6950 Special Study for Written Comprehensive Exams (0)

EDR.6990 Dissertation Research (12)

### **Research Requirements**

Students must complete 12 credit hours of research coursework beyond the prerequisite coursework. Required research coursework includes:

The remaining course from the pre-requisite list which was not taken as a pre-requisite for admission: EDR.5100 Introduction to Inferential Statistics: Ed (3), EDR.5400 Qualitative Research in Education (3), or EDR.5600 General Research Methods for Educators (3).

EDR.6970 Research Topics (3)

Students pursuing a quantitative dissertation design must complete EDR.6060 Research Design and Analysis (3) and EDR.6100 Intermediate Applied Statistics for Educators (3).

Students pursuing a qualitative dissertation design must complete EDR.6400 Advanced Qualitative Research for Educators (3) and one of the following: EDR.5500 Evaluation of Educational Programs (3), EDR.6930 Special Topics: Ethnography, or an approved qualitative research course (3).

### **Electives**

Students select courses with the consultation an advisor (9).

### **Additional Requirements**

Students must pass comprehensive written examination, an oral examination/proposal defense, and a public presentation and defense of their dissertation.

### **Post-Baccalaureate Courses**

EDF.5200 The Learning Process (3)

EDF.5300 Advanced Educational Psychology (3)

EDF.5600 Foundations of Urban Education (3)

EDF.5700 Advanced Growth and Development (3)

EDF.5835 Foundations of Catholic Education (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.6550 Principles of Assessment in Educational Settings (3)

EDF.6950 Special Study for Written Comprehensive Exams (0)

EDF.6960 Project Guidance (0-4)

EDF.6980 Graduate Reading Course (1-3)

EDR.5400 Qualitative Research in Education (3)  
EDR.5500 Evaluation of Educational Programs (3)  
EDR.5600 General Research Methods for Educators (3)  
EDR.5980 Graduate Reading Course (1-3)  
EDR.5990 Thesis Research (0-6)  
EDR.6000 Professional Writing (3)  
EDR.6060 Research Design and Analysis (3)

EDR.6070 Evidence Based Decision Making (3)  
EDR.6100 Intermediate Applied Statistics for Educators (3)  
EDR.6400 Intermediate Qualitative Research for Educators  
(3)  
EDR.6970 Research Topics (3)  
EDR.6971 Research Topics (3)

# EDUCATIONAL LEADERSHIP

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**Susan Toft Everson, Ph.D.**

*Program Director*

The Educational Leadership Program prepares students to be effective leaders in educational settings. The Program is grounded in evidence regarding excellence in leadership, integrating theory and practice, and is designed to meet the students' needs and professional aspirations. The vast majority of Educational Leadership students work in full-time positions while they are in the program.

## Specialist in Educational Leadership

The specialist is a certification degree, which a student may request. It is a degree used by the Missouri Department of Elementary and Secondary Education (DESE) to qualify students, who do not yet have a doctorate, to take the state certification test for advanced, superintendent certification. An MA plus 30 hours in Educational Leadership coursework is what Missouri DESE requires for a specialist. If a SLU Educational Leadership student has a job opportunity dependent on early certification or a salary increase in a school district salary schedule, he or she may apply to get the specialist degree while completing doctoral coursework.

### Prerequisites

Students must complete six hours of graduate level research coursework as a prerequisite to receiving the specialist degree. The prerequisites do not count as part of the 30 hours required to receive a specialist degree. The prerequisites may be taken at other universities.

The following are examples of acceptable prerequisite courses:

- EDR.5100 Introduction to Inferential Statistics (3)
- EDR.5550 Evaluation of Educational Programs (3)
- EDR.6070 Evidence-Based Decision Making in Education (3)
- EDR.5400 Qualitative Research in Education (3)
- EDR.5600 General Research Methods for Educators (3)

### Required Courses

A minimum of 30 credit hours beyond the M.A. degree is required for the Specialist Degree, as required by the Missouri DESE. The SLU, Educational Leadership Certification Officer reviews the student's transcript, audits the courses that qualify for the 30 hours, and approves the request for the Specialist Degree. The required courses are selected from the following:

- EDR.6971 Research Topics for the Ed.D. (3)
- EDL.6110 School District Administration (3)
- EDL.6400 Human Resource Administration (3)
- EDL.6140 Politics of Educational Leadership (3)
- EDL.6390 Gateway Leadership Institute I and II (3)
- EDL.5200 School and community Relations (2)
- EDL.6450 Managing District Level Curriculum (3)
- EDL.6200 Ethics of Educational Leadership (3)
- EDL.6730 District Professional Personnel Development and Evaluation (3)
- EDL.6300 Advanced School Law (2)
- EDL.6690 School Business Administration (3)
- EDL.6470 School Facilities (3)
- EDL.5914 Internship: Superintendent (3)
- EDL.6690 Project Guidance (2)

## Master of Arts in Educational Leadership

The Master of Arts degree in Educational Leadership Program has a multi-discipline design, enhanced by problem-based learning, evidence-based content that connects theory and practice, and opportunities for practice. Students engage in professional learning by working in partnership with peers on problem-oriented instructional strategies, a curriculum grounded in the literature of effective practice, professionally-guided practice in schools, and in-depth internships in schools with site supervisors. Two M.A. areas of emphasis are offered: General Educational Leadership and Catholic Educational Leadership.

## Area of Emphasis-General

The area of emphasis in General Educational Leadership is designed to prepare students for school-level leadership positions, most commonly the principalship in public, private, charter, and international elementary, middle, and high schools. The area of emphasis requires a completion of 32 credit hours of coursework and culmination examinations, written and oral.

### **Prerequisites**

None

### **Required Courses\***

EDL.5100 Foundations of Education Administration (3)  
EDR.5100 Introduction to Inferential Statistics: Ed (3)  
EDL.5300 School Law (2)  
EDL.5450 Managing the Building Level Curriculum (3)  
EDL.5500 Professional Seminar (2)  
EDR.5500 Evaluation of Education Programs (3)  
EDL.5630 The Principalship (3)  
EDL.5660 Principalship II (3)  
EDL.5730 Building Level Professional Development and Teacher Evaluation (3)  
EDL.5913 Internship: Building Principal (3)  
EDL.5950 Special Study for Written Comprehensive Exams (0)  
EDL.6390 Gateway Leadership Institute I (2)  
EDL.6500 School Finance (2)

### **Additional Requirements**

Students must pass program culmination examinations, oral and written.

\*Some General M.A. students are enrolled in a dual degree program (M.A. and M.B.A.) with the John Cook School of Business. 2 credit hours of M.B.A. coursework are accepted for the M.A. degree. Usually, EDL.6390 Gateway Leadership Institute is not required for dual degree students. Schedules vary and are arranged with advisors and the Program Director.

## Area of Emphasis-Catholic

The area of emphasis in Catholic Educational Leadership is designed to prepare students for school-level leadership positions, most commonly the principalship, in Catholic elementary, middle, and high schools. The area of emphasis requires a completion of 32 credit hours of coursework and culmination examinations, written and oral.

### **Prerequisites**

None

### **Required Courses**

EDL.5100 Foundations of Educational Administration (3)  
EDR.5100 Introduction to Inferential Statistics (3)  
EDL.5150 Special Dimensions of Educational Administration (3)  
EDL.5190 Building Level Administration Community Relations (3)  
EDL.5300 School Law (3)  
EDL.5450 Building Level Curriculum (3)  
EDR.5550 Evaluation of Educational Programs (3)  
EDL.5630 The Principalship (3)  
EDL.5730 Professional Staff Development and Evaluation (3)  
EDL.5913 Internship: Building Principal (3) \* (If seeking Missouri Certification as a Principal)  
EDL.5950 Special Study for Written Comprehensive Exams (0)  
EDL.6500 School Finance (3)  
EDL.6510 Practicum (3)

### **Additional Requirements**

Students must pass program culmination examinations, oral and written.

## Doctor of Education in Educational Leadership

This program is designed to prepare students to become executive level educational leaders. Students enter the program with a master's or specialist degree in educational leadership or related field. The degree requires the completion of 38 credit hours of coursework, a comprehensive written examination, an oral examination, and a doctoral project. Students entering with a specialist degree complete 28 credit hours of coursework.

### Prerequisites

Students must complete six hours of graduate research coursework as a prerequisite to completing the Ed.D. Program. If the student does not have some or all of these credit hours, he or she may take the hours during the doctoral program in addition to program coursework. The prerequisite hours do not count as part of the Ed.D. Program. The following are examples of acceptable prerequisite courses:

EDR.5100 Introduction to Inferential Statistics: Ed (3)  
EDR.5400 Qualitative Research in Education (3)  
EDR.5500 Evaluation of Educational Programs (3)  
EDR.5600 General Research Methods for Educators (3)  
EDR.6070 Evidence Based Decision Making (3)

### Required Courses

The degree requires the completion of 38 credit hours of coursework. Students entering with a specialist degree complete 28 credit hours of coursework. Students without a specialist take all courses on the following list. Students with a specialist degree must take the nine hours of courses that have an asterisk (\*) next to them and an additional 19 hours of coursework from the list below, with advisor approval.

EDL.5200 School-Community Relations (2)  
EDL.5914 Internship: Superintendent (3)  
EDL.6110 School District Administration (3)  
EDL.6140 The Politics of Education (3)  
EDL.6200 Ethics of Educational Leadership (3)  
EDL.6300 Advanced School Law (2)  
EDL.6390 Gateway Leadership Institute I\* (3)  
EDL.6391 Gateway Leadership Institute II\* (3)  
EDL.6400 Seminar: Human Resources Administration (3)  
EDL.6450 Managing the District Level Curriculum (3)  
EDL.6470 School Facilities (3)  
EDL.6690 School Business Administration (3)  
EDL.6730 District Level Professional Development and Evaluation (3)  
EDR.6971 Research Topics for the Ed.D\*. (3)  
EDL.6960 Project Guidance (2)

### Additional Requirements

Students must pass a written comprehensive examination.

Students must pass an oral examination regarding their doctoral project.

## Doctor of Philosophy in Educational Leadership

This program is designed to prepare students to be scholars, professors, and/or organizational leaders. Students enter the program with a M.A. in education, leadership, or related field. The curriculum is based on a selection of core courses in educational leadership and courses that complement students' professional goals. The degree requires the completion of 30 credit hours of coursework, 12 credit hours of dissertation research, a comprehensive written examination, an oral examination/proposal defense, and a public defense of the dissertation.

### Prerequisites

Students must complete six hours of graduate research coursework as a prerequisite for completing the doctoral program. If the student does not have some or all of these credit hours, he or she may take the hours during the doctoral program in addition to program coursework. The prerequisite hours do not count as part of the Ph.D. Program. Students are required to complete two of the following three prerequisite courses prior to enrolling in advance research courses:

EDR.5100 Intro to Inferential Statistics: Ed (3)  
EDR.5400 Qualitative Research in Education (3)  
EDR.5600 General Research Methods for Educators (3)

### **Research Requirements**

Ph.D. students must take 12 hours of research coursework beyond the pre-requisites described above. Students will complete the course not already taken from the list of prerequisites: EDR.5100 Introduction to Inferential Statistics: Ed (3), EDR.5400 Qualitative Research in Education (3), and EDR.5600 General Research Methods for Educators (3).

EDR.6970 Research Topics (3)

Students pursuing a quantitative dissertation design complete: EDR.6060 Research Design and Analysis (3) and EDR.6100 Intermediate Applied Statistics for Educators (3)

Students pursuing a qualitative dissertation design complete: EDR 6400 Advanced Qualitative Research for Educators (3) and an additional advanced research course (3) selected from the following list: EDR.5500 Evaluation of Educational Programs (3), EDR 6930 Special Topics: Ethnography, or another three credit hour advanced research course (for example a research course focusing on historiography) approved by an advisor.

### **Required Courses**

Students plan coursework with their advisor. A program plan is developed for coursework that includes educational leadership courses and other courses that complement students' professional goals. Examples of educational leadership courses, from which students can select, are listed below.

EDL.5200 School-Community Relations (2)  
EDL.5914 Internship: Educational Administration-Superintendent (3)  
EDL.6110 School District Administration (3)  
EDL.6140 The Politics of Education (3)  
EDL.6200 Ethics of Educational Leadership (3)  
EDL.6300 Advanced School Law (2)  
EDL.6390 Gateway Leadership Institute I and II\* (3)  
EDL.6400 Seminar: Human Resources Administration (3)  
EDL.6450 Managing the District Level Curriculum (3)  
EDL.6470 School Facilities (3)  
EDL.6690 School Business Administration (3)  
EDL.6730 District Level Professional Development and Evaluation (3)  
EDR 6990 Dissertation Research (12)

### **Additional Requirements**

Students must pass a written comprehensive examination.  
Students must pass an oral examination/proposal defense.  
Students must pass a public oral presentation and defense of the dissertation.

### **Post-Baccalaureate Courses**

EDL.5100 Foundations of Education Administration (3)	EDL.6110 School District Administration (3)
EDL.5150 Special Dimensions of Education Administration (1-3)	EDL.6140 The Politics of Education (2-3)
EDL.5190 Building Level Administration and Community Relations (3)	EDL.6200 Ethics of Educational Leadership (3)
EDL.5300 School Law (3)	EDL.6300 Advance School Law (2-3)
EDL.5450 Managing the Building Level Curriculum (3)	EDL.6390 Gateway Leadership Institute I (2-3)
EDL.5500 Professional Seminar (2-3)	EDL.6391 Gateway Leadership Institute II (2-3)
EDL.5630 The Principalship (3)	EDL.6400 Seminar: Human Resources (2-3)
EDL.5660 Principalship II (3)	EDL.6450 Managing the District Level Curriculum (3)
EDL.5730 Building Level Professional Development and Teacher Evaluation (3)	EDL.6470 School Facilities (2-3)
EDL.5913 Internship: Building Principal (0-6)	EDL.6500 School Finance (1-3)
EDL.5914 Internship: Educational Administration-Superintendent (2-6)	EDL.6510 Seminar: Advanced Religious Education (3)
EDL.5930 Special Topics (3)	EDL.6690 School Business Administration (2-3)
EDL.5950 Study for Written Comprehensive Exams (0)	EDL.6730 District Level Professional Development and Teacher Evaluation (3)
	EDL.6930 Special Topics (3)
	EDL.6950 Study for Written Comprehensive Exams (0)

EDR.5100 Intro to Inferential Statistics: Ed (3)  
EDR.5400 Qualitative Research in Education (3)  
EDR.5500 Evaluation of Educational Programs (3)  
EDR.5600 General Research Methods for Educators (3)  
EDR.5980 Graduate Reading Course (1-3)  
EDR.5990 Thesis Research (0-6)  
EDR.6000 Professional Writing (3)  
EDR. 6060 Research Design and Analysis (3)

EDR.6070 Evidence Based Decision Making (3)  
EDR.6100 Intermediate Applied Statistics for Educators (3)  
EDR.6400 Intermediate Qualitative Research for Educators  
(3)  
EDR.6970 Research Topics (3)  
EDR.6971 Research Topics (3)  
EDR.6980 Graduate Reading Course (1-3)  
EDR.6990 Dissertation Research (0-12)

# HIGHER EDUCATION ADMINISTRATION

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**Karen A. Myers, Ph.D.**

*Program Director*

The programs in Student Personnel Administration and Higher Education Administration prepare individuals for careers in higher education and/or administration and student personnel administration and/or services.

## Master of Arts in Student Personnel Administration

The Master of Arts degree in Student Personnel Administration (SPA) is a non-thesis program that prepares individuals for professional, entry level, and middle management positions in academic, administrative, institutional, public policy, and student affairs offices in two- and four-year colleges and universities, multi-campus systems, foundations, and government agencies. The degree requires the completion of 32 credit hours of coursework and a comprehensive written examination. Students may choose one of three tracks for the M.A. in SPA: General, Disability Education, or Catholic Higher Education.

### General Track

The General track is designed to prepare individuals for professional management positions in the field of higher education, including the areas of academic and student affairs, enrollment management, administration, and institutional policy.

#### **Prerequisites**

None

#### **Required Courses**

EDR.5100 Intro to Inferential Statistics: Ed (3)  
EDH.5350 Student Development Theory I (3)  
EDH.5360 Student Development Theory II (3)  
EDH.5470 Legal and Ethical Issues (3)  
EDH.5600 Student Personnel Administration (3)  
EDR.5600 General Research Methods for Educators (3)  
EDH.5640 The Student in Higher Education (3)  
EDH.5650 Intervention Skills (3)  
EDH.5915 Internship: Student Personnel Admin in Higher Ed (2)  
EDH.5950 Special Study for Written Comprehensive Exams (0)  
EDH.6050 Disability in Higher Education & Society (3)

#### **Electives**

Students select a course(s) in consultation with an advisor (3).

#### **Additional Requirements**

Students must pass a written comprehensive exam and complete an exit interview.

### Disability Education Track

The Disability Education track is designed to prepare individuals for professional management positions in the field of higher education with focus on disability education, disability services, inclusion, and ability ally development, including the areas of academic and student affairs, enrollment management, administration, and institutional policy. All courses will include projects focused on disability education.

#### **Prerequisites**

None

#### **Required Courses**

EDH.5350 Student Development Theory I (3)  
EDH.5360 Student Development Theory II (3)  
EDH.5470 Legal and Ethical Issues (3)  
EDH.5600 Student Personnel Administration (3)  
EDH.5640 The Student in Higher Education (3)

EDH.5650 Intervention Skills (3)  
EDH.5915 Internship: Student Personnel Admin in Higher Ed (2)  
EDH.6050 Disability in Higher Education & Society (3)  
EDR.5100 Intro to Inferential Statistics: Ed (3)  
EDR.5600 General Research Methods for Educators (3)  
EDH.5950 Special Study for Written Comprehensive Exams (0)  
EDH.6060 Disability Administration in Higher Education (3)

**Additional Requirements**

Students must pass a written comprehensive exam and complete an exit interview.

***Catholic Higher Education Track***

The Catholic Higher Education track is designed to prepare individuals for professional management positions in the field of Catholic higher education with focus on leadership and student development at Catholic colleges and universities, including the areas of academic and student affairs, enrollment management, administration, and institutional policy. All courses will include projects focused on Catholic higher education.

**Prerequisites**

None

**Required Courses**

EDH.5350 Student Development Theory I (3)  
EDH.5360 Student Development Theory II (3)  
EDH.5470 Legal and Ethical Issues (3)  
EDH.5600 Student Personnel Administration (3)  
EDH.5640 The Student in Higher Education (3)  
EDH.5650 Intervention Skills (3)  
EDH.5915 Internship: Student Personnel Admin in Higher Ed (2)  
EDH.6050 Disability in Higher Education & Society (3)  
EDR.5100 Intro to Inferential Statistics: Ed (3)  
EDH.5500 Catholic Higher Education Administration and Leadership (3)  
EDR.5600 General Research Methods for Educators (3)  
EDH.5950 Special Study for Written Comprehensive Exams (0)

**Additional Requirements**

Students must pass a written comprehensive exam and complete an exit interview.

**Specialty Program in Student Personnel Administration (online)**

This 18-hour online non-degree graduate specialty professional development program in Student Personnel Administration is designed for professionals aspiring to obtain student services positions within higher education and those who seek to learn more about the field of student development and student services in the college setting. The program provides knowledge and professional development in the areas of student personnel administration, college student demographics and trends, the college environment, disability education, legal and ethical issues, and college student development. Courses may be applied to the Saint Louis University Master's degree program in Student Personnel Administration.

**Prerequisites**

None

**Required Courses**

EDH.5350 Student Development Theory I (3)  
EDH.5360 Student Development Theory II (3)  
EDH.5470 Legal and Ethical Issues (3)  
EDH.5600 Student Personnel Administration (3)  
EDH.5640 The Student in Higher Education (3)  
EDH.6050 Disability in Higher Education & Society (3)

# Doctor of Philosophy in Higher Education Administration

This program emphasizes the interplay of theory and practice in higher education. The curriculum is based on the combination of core courses in higher education and the independent needs of the students. This program is intended for those students interested in pursuing careers in higher education teaching and/or administration and will be individually tailored to complement students' interests and professional aspirations. The degree requires the completion of 30 credit hours of coursework, 12 credit hours of dissertation research, a comprehensive written examination, an oral examination/proposal defense, and a public presentation and defense of the dissertation.

## Prerequisites

Students must complete six hours of graduate research coursework as a prerequisite for the doctoral program. If the student does not have some or all of these credit hours, he or she may take the hours during the doctoral program in addition to the program coursework. Students are required to successfully complete two of the following three prerequisite courses prior to enrolling in advance research courses:

EDR.5100 Intro to Inferential Statistics: Ed (3)  
EDR.5400 Qualitative Research in Education (3)  
EDR.5600 General Research Methods for Educators (3)

## Required Courses

EDH.5250 History of American Higher Education (3)  
EDH.5350 Student Development Theory I (3)  
EDH.5400 Law and Higher Education (3)  
EDH.6150 Organization & Administration of Higher Education (3)  
EDH.6580 Financial Administration in Higher Education (3)  
EDH.6950 Special Study for Written Comprehensive Exams (0)  
EDR.6990 Dissertation Research (12)

## Research Requirements

Students must complete 12 credit hours of research coursework beyond the prerequisite coursework. Required research coursework includes:

The remaining course from the pre-requisite list which was not taken as a pre-requisite for admission: EDR.5100 Introduction to Inferential Statistics: Ed (3), EDR.5400 Qualitative Research in Education (3), or EDR.5600 General Research Methods for Educators (3).

EDR.6970 Research Topics (3)

Students pursuing a quantitative dissertation design must complete EDR 6060 Research Design and Analysis (3) and EDR 6100 Intermediate Applied Statistics for Educators (3).

Students pursuing a qualitative dissertation design must complete EDR 6400 Advanced Qualitative Research for Educators (3) and one of the following: EDR. 5500 Evaluation of Educational Programs (3), EDR.6930 Special Topics: Ethnography, or an approved qualitative research course (3).

## Electives

Students select a course(s) in consultation with an advisor (3).

## Additional Requirements

Students must pass a comprehensive written examination, an oral examination/proposal defense, and a public presentation and defense of their dissertation.

## Post-Baccalaureate Courses

EDH.5250 History of American Higher Education (3)	EDH.5915 Internship: Student Personnel Admin in Higher Ed (1-3)
EDH.5350 Student Development Theory I (3)	EDH.5916 Internship: College Teaching (1-3)
EDH.5360 Student Development Theory II (3)	EDH.5750 Current Issues in Higher Education (3)
EDH.5400 Law and Higher Education (3)	EDH.5500 Catholic Higher Education Administration and Leadership (3)
EDH.5470 Legal and Ethical Issues (3)	EDH.5930 Special Topics (1-3)
EDH.5600 Student Personnel Administration (3)	EDH.5950 Special Study for Written Comprehensive Exams (0)
EDH.5640 The Student in Higher Education (3)	
EDH.5650 Intervention Skills (3)	
EDH.5910 Internship: Higher Education Administration (1-3)	

EDH.5980 Graduate Reading Course (1-3)  
EDH.6050 Disability in Higher Education and Society (3)  
EDH.6060 Disability Administration in Higher Education (3)  
EDH.6150 Org & Admin of Higher Ed (3)  
EDH.6160 Global Perspectives: Comparative Systems in  
Higher Education (3)  
EDH.6580 Financial Administration in Higher Education (3)

EDR.5400 Qualitative Research in Education (3)  
EDR.5500 Evaluation of Educational Programs (3)  
EDR.5600 General Research Methods for Educators (3)  
EDR.5980 Graduate Reading Course (1-3)  
EDR.5990 Thesis Research (0-6)  
EDR.6000 Professional Writing (3)  
EDR.6060 Research Design and Analysis (3)

EDH.6600 Curriculum in Higher Education (3)  
EDH.6700 College Teaching (3)  
EDH.6930 Special Topics (1-3)  
EDH.6950 Special Study for Written Comprehensive Exams  
(0)  
EDH.6980 Graduate Reading Course (1-3)

EDR.6070 Evidence Based Decision Making (3)  
EDR.6100 Intermediate Applied Statistics for Educators (3)  
EDR.6400 Intermediate Qualitative Research for Educators  
(3)  
EDR.6970 Research Topics (3)  
EDR.6971 Research Topics (3)

# SPECIAL EDUCATION

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**Nikki L. Murdick, Ph.D.**

*Program Director*

The programs in Special Education are designed to provide individuals with skills in policy development and/or expanded knowledge in a specific disability area: early childhood special education, behavior disorders, learning disabilities, or intellectual disability. Students choosing this area will focus on developing knowledge and skills related to special educational issues at the national and international level.

## Master of Arts in Special Education

The Master of Arts degree in Special Education is a non-thesis program that prepares individuals for positions in educational settings where they can focus on issues related to the different areas of special education. The degree requires the completion of 32 credit hours of coursework, an oral examination, and a theme paper. Students may choose one of four areas of emphasis for the Master of Arts in Special Education: Behavior Disorders, Early Childhood Special Education, Intellectual Disability, and Learning Disabilities.

### **Prerequisites**

18 hours of upper division undergraduate course work in education or a related area.

### **Required Courses**

EDSP.4600 Medical Implications in Special Education (3) or EDSP.5530 Fundamentals of Neurology (3)

EDR.5100 Intro to Inferential Statistics: Ed (3) or EDR.5600 General Research Methods (3)

EDR.5400 Qualitative Research in Education (3)

EDSP.5600 Seminar in Special Education (3)

### *Behavior Disorders*

#### **Prerequisites**

18 hours of upper division undergraduate course work in education or a related area.

#### **Required Courses**

EDR.5400 Qualitative Research in Education (3)

EDR.5100 Intro to Inferential Statistics: Education (3) or EDR.5600 General Research Methods (3)

EDSP.4600 Medical Implications in Special Education (3) or EDSP.5530 Fundamentals of Neurology (3)

EDSP.5260 Practicum in Special Education: Behavior Disorders (3)

EDSP.5600 Seminar in Special Education (3)

EDSP.5630 Seminar in Behavior Disorders (3)

Six credit hours chosen from among the following: EDI.6230 Seminar in Instruction (3), EDI.6310/6320 The Supervisory Process (3), EDI.6450 Curriculum Development (3), EDI.6410/6420/6430/6440 School Curriculum (3), EDI.6460 Curriculum Theory (3)

#### **Electives**

Students select courses in consultation with an advisor (8).

#### **Additional Requirements**

Students must complete a theme paper on a topic related to their coursework and pass an oral examination.

### *Early Childhood Special Education*

#### **Prerequisites**

18 hours of upper division undergraduate course work in education or a related area.

#### **Required Courses**

EDR.5400 Qualitative Research in Education (3)

EDR.5100 Intro to Inferential Statistics: Education (3) or EDR.5600 General Research Methods (3)

EDSP.4600 Medical Implications in Special Education (3) or EDSP.5530 Fundamentals of Neurology (3)

EDSP.5600 Seminar in Special Education (3)

EDSP.5640 Seminar in Early Childhood Special Education (3)

EDF.5730 Advanced Educational Psychology (3) or EDF.5700 Advanced Growth & Development (3)  
Courses in Early Childhood or courses in Early Childhood Special Education (6)

**Electives**

Students select courses in consultation with an advisor (8).

**Additional Requirements**

Students must complete a theme paper on a topic related to their coursework and pass an oral examination.

*Intellectual Disability*

**Prerequisites**

18 hours of upper division undergraduate course work in education or a related area.

**Required Courses**

EDR.5400 Qualitative Research in Education (3)

EDR.5100 Intro to Inferential Statistics: Education (3) OR EDR.5600 General Research Methods (3)

EDSP.4600 Medical Implications in Special Education (3) OR EDSP.5530 Fundamentals of Neurology (3)

EDSP.5260 Practicum in Special Education: Intellectual Disability (3)

EDSP.5600 Seminar in Special Education (3)

EDSP.5610 Seminar in Intellectual Disability (3)

Six credit hours chosen from among the following: EDI.6230 Seminar in Instruction (3), EDI.6310/6320 The Supervisory Process (3), EDI.6450 Curriculum Development (3), EDI.6410/6420/6430/6440 School Curriculum (3), EDI.6460 Curriculum Theory (3)

**Electives**

Students select courses in consultation with an advisor (8).

**Additional Requirements**

Students must complete a theme paper on a topic related to their coursework and pass an oral examination.

*Learning Disabilities*

**Prerequisites**

18 hours of upper division undergraduate course work in education or a related area.

**Required Courses**

EDR.5400 Qualitative Research in Education (3)

EDR.5100 Intro to Inferential Statistics: Education (3) OR EDR.5600 General Research Methods

EDSP.4600 Medical Implications in Special Education (3) OR EDSP.5530 Fundamentals of Neurology (3)

EDSP.5600 Seminar in Special Education (3)

EDSP.5620 Seminar in Learning Disabilities (3)

EDSP.5260 Practicum in Special Education: Learning Disabilities (3)

Six credit hours chosen from among the following:

EDI.6230 Seminar in Instruction (3), EDI.6310/6320 The Supervisory Process (3), EDI.6450 Curriculum Development (3),

EDI.6410/6420/6430/6440 School Curriculum (3), EDI.6460 Curriculum Theory (3)

**Electives**

Students select courses in consultation with an advisor (8).

**Additional Requirements**

Students must complete a theme paper on a topic related to their coursework and pass an oral examination.

## Doctor of Philosophy in Special Education

This program emphasizes the interplay of theory and practice in education and 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. The doctorate in curriculum and instruction program emphasizes the tools of research and the interplay of theory and practice in education. The degree requires the completion of 30 credit hours of course work, 12 hours of dissertation research, a comprehensive written examination, an oral examination/proposal defense, and a public presentation and defense of the dissertation.

### **Prerequisites**

Students must complete six hours of graduate research coursework as a prerequisite for the doctoral program. If the student does not have some or all of these credit hours, he or she may take the hours during the doctoral program in addition to the program coursework. Students are required to successfully complete two of the following three prerequisite courses prior to enrolling in advanced research courses:

EDR.5100 Intro to Inferential Statistics: Educators (3)  
EDR.5400 Qualitative Research in Education (3)  
EDR.5600 General Research Methods for Educators (3)

### **Required Courses**

EDSP.5530 Foundations of Neurology (3)  
EDSP.6030 Ethics of Special Education Leadership (3)  
EDSP.6930 Special Topics: Legal Issues in Disability (3)  
EDSP.6950 Special Study for Written Comprehensive Exams (0)  
EDR.6990 Dissertation Research (12)

### **Research Requirements**

Students must complete 12 credit hours of research coursework beyond the prerequisite coursework. Required research coursework includes:

The remaining course from the pre-requisite list which was not taken as a pre-requisite for admission: EDR.5100 Introduction to Inferential Statistics: Ed (3), EDR.5400 Qualitative Research in Education (3), or EDR.5600 General Research Methods for Educators (3).

EDR.6970 Research Topics (3)

Students pursuing a quantitative dissertation design must complete EDR.6060 Research Design and Analysis (3) and EDR.6100 Intermediate Applied Statistics for Educators (3).

Students pursuing a qualitative dissertation design must complete EDR.6400 Advanced Qualitative Research for Educators (3) and one of the following: EDR.5500 Evaluation of Educational Programs (3), EDR.6930 Special Topics: Ethnography, or an approved qualitative research course (3).

### **Electives**

Students select courses in consultation with an advisor (9).

### **Additional Requirements**

Students must pass a comprehensive written examination, an oral examination/proposal defense, and a public presentation and defense of their dissertation.

### **Post-Baccalaureate Courses**

EDSP.5260 Practicum in Special Education (1-3)  
EDSP.5310 Advanced Studies in Psychology and Education of the Exceptional Individual (3)  
EDSP.5530 Foundations of Neurology (3)  
EDSP.5630 Seminar: Behavior Disorders (3)  
EDSP.5950 Special Study for Exams (0)  
EDSP.5980 Graduate Reading Courses (1-3)  
EDSP.6010 Doctoral Residency (0-3)

EDSP.6500 Seminar: Identification of Students with Disabilities (3)  
EDSP.6910 Special Education Internship (3)  
EDSP.6930 Special Topics: Special Education Law (3)  
EDSP.6950 Special Study for Written Comprehensive Exams (0)  
EDSP.6980 Graduate Reading (0)

EDR.5100 Intro to Inferential Statistics: Ed (3)  
EDR.5400 Qualitative Research in Education (3)  
EDR.5500 Evaluation of Educational Programs (3)  
EDR.5600 General Research Methods for Educators (3)  
EDR.5980 Graduate Reading Course (1-3)  
EDR.5990 Thesis Research (0-6)  
EDR.6000 Professional Writing (3)  
EDR.6060 Research Design and Analysis (3)

EDR.6070 Evidence Based Decision Making (3)  
EDR.6100 Intermediate Applied Statistics for Educators (3)  
EDR.6400 Intermediate Qualitative Research for Educators (3)  
EDR.6970 Research Topics (3)  
EDR.6971 Research Topics (3)  
EDR.6980 Graduate Reading Course (1-3)  
EDR.6990 Dissertation Research (0-12)

# ALBERT GNAEGI CENTER FOR HEALTH CARE ETHICS

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**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 or can be found on our webpage <https://catalog.slu.edu>.

### Prerequisites

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: <https://www.slu.edu>.

#### 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

#### 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, go to <https://catalog.slu.edu>. 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.

## **Dissertations: Non-Traditional Format**

Ordinarily doctoral candidates in the Ph.D. program in Health Care Ethics will follow the traditional guidelines for dissertations. However, when appropriate, a student’s dissertation committee may permit the student to write a dissertation using a “non-traditional format”, the body of which consists of at least three thematically related original article-length manuscripts, at least two of which must be accepted for publication. As is always the case, all dissertation content must receive final approval by the student’s dissertation committee. The mere fact that a manuscript has been published or accepted for publication does not guarantee that it can be used toward a non-traditional dissertation. Ordinarily, if a faculty member serves as a co-author on one of the publications, this faculty member would not serve as the student’s dissertation chair. The non-traditional dissertation format requires that:

1. The three incorporated articles be preceded by a substantive introduction chapter and followed by a substantive conclusion chapter, which will integrate the three manuscripts into a coherent whole.
2. Ordinarily, the student is the sole or primary author of all three manuscripts.
3. At least two of the three manuscripts must be fully accepted for publication and the third at least under review.
4. Dissertations must satisfy the formatting requirements dictated by SLU’s “Policies and Procedures for Thesis, Project, and Dissertation Formatting”.
5. All articles incorporated into the dissertation must have been submitted while enrolled in the Ph.D. Program.

## **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

With the approval of the Concentration directors and the Ph.D. program director, students enrolled in the Ph.D. program in health care ethics may opt to complete this concentration to develop an expertise in empirical research methods. The aim of this concentration is to prepare students to incorporate empirical methods into a normative dissertation and future research. The focus of the track will be in *qualitative* research methods (such as ethnography, interviews, focus groups, public deliberation, etc.), though, in consultation with the directors of the concentration, students will have the option of adopting quantitative or mixed methods approaches. Completion of the concentration is meant to indicate special competencies over and above those gained in the Ph.D. Program, specifically those that pertain to qualitative empirical research in the field of bioethics.

Content: Students must elect to pursue this concentration by the end of their first semester *at the latest*. The Empirical Concentration Curriculum plan of each student must be approved by a concentration director. The concentration requires at least 15 hours of coursework.

HCE.6040 Interdisciplinary Methods (3 credit hours)

HCE.6520 Capstone in Empirical Research in Bioethics (3 credit hours) with qualified HCE faculty

HCE.6150 Practicum (3 credit hours) with a focus on the population the student intends to research in their dissertation

Two (preferably three) 3 credit hour graduate-level qualitative methods courses (usually outside HCE)

### 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:

Biblical Studies (6 credits)

Historical Studies (3 credits)

Systematic Theology (12 credits)

Moral Theology (9 credits)

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)

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**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.5140 TMJ Disorders (0-1)
CAD.5030 Advanced Oral Microbiology (2)	CAD.5160 Advanced Oral Medicine (1)
CAD.5040 Molecular Biology of the Cell (2)	CAD.5170 Advanced Oral Pathology (1)
CAD.5050 Introduction to Statistical Inference (3)	CAD.5190 Advanced Head and Neck Anatomy (2)
CAD.5060 Ethics in Dental Research and Practice (0)	CAD.5220 Clinical Immunology (1)
CAD.5080 Multidisciplinary Diagnosis and Treatment Planning I (1)	CAD.5240 Implants & Temporary Anchorage Devices (1)
CAD.5100 Dental Therapeutics (1)	CAD.5950 Special Study for Examinations (0)
CAD.5110 Principles of Practice Management (1)	BBS.5100 Responsible Conduct in Research (1)
	ORES.5100.02 Research Methods in Health and Medicine (3)

## ENDODONTICS

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**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.5200 Literature Review (1)  
ENDG.5210 Literature Review II (1)  
ENDG.5220 Literature Review III (1)  
ENDG.5230 Literature Review IV (1)  
ENDG.5240 Literature Review V (1)  
ENDG.5300 Preclinical Teaching Practicum (0)  
ENDG.5310 Clinical Teaching Practicum (0)  
ENDG.5410 Pulp Biology (1)  
ENDG.5470 Concepts in Biomedical Science (1)  
ENDG.5510 Principles of Endodontic Surgery (1)

ENDG.5520 American Board of Endodontics Review (1)  
ENDG.5600 Clinical Endodontics (1)  
ENDG.5610 Clinical Endodontics II (2)  
ENDG.5620 Clinical Endodontics III (2)  
ENDG.5630 Clinical Endodontics IV (1)  
ENDG.5640 Clinical Endodontics V (2)  
ENDG.5650 Clinical Endodontics VI (2)  
ENDG.5660 Clinical Endodontics VII (1)  
ENDG.5910 Endodontic Journal Club (0-1)  
ENDG.5950 Special Study for Examinations (0)  
ENDG.5990 Thesis Research (0-6)

# ORTHODONTICS

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**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.5630 Principles of Orthodontic Techniques II (2)
ORTH.5030 Facial Development (2)	ORTH.5700 Clinical Procedures (1)
ORTH.5100 Biomechanics (2)	ORTH.5710 Clinical Orthodontics I (2)
ORTH.5250 Clinical Cephalometrics (2)	ORTH.5720 Clinical Orthodontics II (3)
ORTH.5350 Surgical Orthodontics (1)	ORTH.5730 Clinical Orthodontics III (1)
ORTH.5370 Orthodontic Problems Related to Cleft Palate Patient (1)	ORTH.5740 Clinical Orthodontics IV (3)
ORTH.5390 Speech Problems Related to the Oral Mechanism (1)	ORTH.5750 Clinical Orthodontics V (3)
ORTH.5400 History of Orthodontics (1)	ORTH.5760 Clinical Orthodontics VI (1)
ORTH.5490 Diagnostic Procedures in Orthodontics (1)	ORTH.5770 Clinical Orthodontics VII (3)
ORTH.5500 Diagnosis and Treatment Planning I (1)	ORTH.5780 Clinical Orthodontics VIII (0-3)
ORTH.5530 Clinical Diagnosis I (1)	ORTH.5800 Seminar: Child and Adolescent Psychology (1)
ORTH.5540 Clinical Diagnosis II (1)	ORTH.5840 Diagnostic Seminars on Early & Mixed Dentition Treatment (1)
ORTH.5550 Orthodontic Analysis and Treatment Modalities (1)	ORTH.5850 Adult & Interdisciplinary Treatment (2)
ORTH.5560 Clinical Case Conference (0-1)	ORTH.5890 Review for the ABO Examination (0)
ORTH.5580 Clinical Specialty Seminars (1)	ORTH.5910 Literature Review (1)
ORTH.5600 Introduction to Clinical Orthodontics (1)	ORTH.5950 Special Study for Examinations (0)
ORTH.5610 Introduction to Clinical Orthodontics II (1)	ORTH.5970 Research Topics (1-2)
ORTH.5620 Principles of Orthodontic Techniques (2)	ORTH.5990 Thesis Research (0-6)

# PERIODONTICS

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**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

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**Jason Knouft,**

*Ph.D., Interim 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 and the planet, 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 analyze, communicate and understand complexities surrounding interactions between natural and social systems. 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 Master's program by taking courses offered through the Center for Sustainability.

## Master of Business Administration & Master of Science in Sustainability Dual Degree

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 urban planning profession focuses on the organization of the built environment, emphasizing sustainable approaches to old challenges. 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

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.721 Contracts II (2)

LAW.740 Torts (4)

LAW.760 Property (4)

LAW.768 Land Use Control (3)

LAW.770 Real Estate Transactions (3)

LAW.800 Civil Procedure I (2)

LAW.801 Civil Procedure II (3)

LAW.819 Constitutional Law (3)

LAW.822 Criminal Law (3)

LAW.835 State and Local Government Law (3)

LAW.880 Legal Research Writing (3)

LAW.881 Legal Research Writing II (3)

**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)

LAW.7160 Real Estate Transactions (3)

LAW.7700 Land Use Control (3)

LAW.7705 State and Local Government Law (3)

UPD.5000 Foundations of Planning (3)

UPD.5010 Planning and Development Theory (3)

UPD.5020 Land Use Planning and Analysis (3)

UPD.5100 Research Methods (3)

UPD.5110 Spatial Methods and Analysis (3)

UPD.5200 Local Economic Development Policy &amp; Practice (3)

UPD.5220 Infrastructure Planning and Processes (3)

UPD.5500 Real Estate Finance (3)

UPD.5900 Planning and Development Studio (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 programs 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 HEALTH OUTCOMES RESEARCH (SLUCOR)

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**Thomas Burroughs, Ph.D.,**  
*Executive Director*

**Leslie Hinyard, Ph.D., M.S.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 Health 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 to 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 provide hands-on training and

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<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)

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**

HDS.5310 Analytics and Statistical Programming (3)  
HDS.5320 Inferential Modeling of Health Outcomes (3)  
HDS.5xxx Predictive Modeling and Machine Learning (3)

### **Computing Block**

HDS.5210 Programming for Health Data Scientists (3)  
ORES.5160 Data Management (3)  
HDS.5xxx 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)  
HDS.5xxx Communication and Leadership in the Healthcare Industry (3)  
HDS.5xxx 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)

ORES.5560 R Programming (3)

ORES.5550 SAS Programming I (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)  
ORES.5560 R Programming (3)  
ORES.5550 SAS Programming I (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.5560 R Programming (3)

ORES.5430 Health Outcomes Measurement (3)  
ORES.5440 Comparative Effectiveness Research (3)  
ORES.5210 Foundations of Medical Diagnosis and Treatment (3)  
ORES.5550 SAS Programming I (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.5560 R Programming (3)
- ORES.5550 SAS Programming I (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 M.D. 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.5570 US Health System Reform (2-3)