

# Saint Louis University

CATALOG

GRADUATE EDUCATION

2013 - 2014



# CONTENTS

Mission of Graduate Education.....	3
General Information.....	4
The University.....	4
Academic Support Services.....	5
Student Life and Services.....	7
Graduate Education.....	10
Contacts.....	10
General Policies.....	12
Organization and Governance.....	12
Admission Policies and Procedures.....	12
Financial Resources.....	17
Registration.....	19
Academic Standards.....	22
Graduation Requirements.....	26
Curricula and Courses.....	32
Introduction.....	33
College of Arts and Sciences.....	34
College of Education and Public Service.....	85
Center for Sustainability.....	93
Parks College of Engineering, Aviation and Technology.....	97
Center for Advanced Dental Education (CADE).....	102
Albert Gnaegi Center for Health Care Ethics.....	106
Doisy College of Health Sciences.....	113
School of Medicine.....	128
School of Nursing.....	140
College for Public Health and Social Justice.....	146
Saint Louis University Center for Outcomes Research (SLUCOR).....	167
School of Professional Studies.....	171
John Cook School of Business.....	176
School of Law.....	183

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.

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: [www.slu.edu/x52519.xml](http://www.slu.edu/x52519.xml)

# The Mission of Graduate Education at Saint Louis University:

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 graduate 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 graduate students and faculty
- To develop strategies for graduate education that contribute to and enhance undergraduate education
- To serve as an advocate for graduate 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 graduate education
- To support and further the non-academic interests and needs of graduate students

# General Information

## THE UNIVERSITY

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### History

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

The University is physically divided into three campuses. The Frost Campus is located in the Grand Avenue midtown area, and the Health Sciences Campus one mile to the south. The third campus, the home of Saint Louis University in Spain, is in Madrid.

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 schools, colleges, and degree-granting centers.

- 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)
- Doisy College of Health Sciences (1979)
- School of Public Health (1991)
- School for Professional Studies (1996)
- College of Education and Public Service (1998)
- Albert Gnaegi Center for Health Care Ethics (1979)
- Center for Advanced Dental Education (1994)
- Center for Sustainability (2010)
- Center for Outcomes Research (SLUCOR) (2002)
- Center for Intercultural Studies (2011)

### Degrees and Certificates Offered

Saint Louis University offers a wide array of research and professional, post-baccalaureate degree programs and certificates. [Click here](#) to see a complete list of post-baccalaureate degree and certificate programs.

### Accreditation

Saint Louis University's primary accreditation is through the Higher Learning Commission of the North Central Association of Colleges and Schools. Some schools, colleges, and University programs have also attained accreditation from professional disciplinary associations.

### Objectives

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

participate in the community in a spirit of cooperation and mutual respect.

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

The University's commitment to academic excellence is evident in its graduate 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 advances by helping them carry out their responsibilities in an ethical and professional manner.

## Diversity, Affirmative Action, and Disabilities

Affirmative Action 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.

The Director of Diversity and Affirmative Action is also Saint Louis University's Section 504 Coordinator and is responsible for monitoring compliance with the Americans with Disabilities Act. Students may contact the offices in St. Louis or Madrid for assistance with physical, academic, and program accessibility.

# ACADEMIC SUPPORT SERVICES

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## University Libraries

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

[Pius XII Memorial Library](#)

[Medical Center Library](#)

[Omer Poos Law 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.

## Academic Computing

A wide range of computing, networking, training, consulting assistance, and support resources are available on the Frost, Health Sciences and Madrid Campuses for instructional, research, and administrative purposes. Students, staff, faculty members have access to wireless internet all across campus.

## Office of the Registrar

[The Office of the Registrar](#) has primary responsibility for registration, recording of students' academic progress (and maintenance of the students' permanent records), distribution of transcripts, certifications of student status, Veterans' certifications (for benefits), diplomas, and the publication of class schedules, and related academic materials.

## Instructional Technology

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

The Instructional Technology Center in the Caroline building also offers self-service multimedia viewing and materials production to students and faculty at the Health Sciences Campus. Both sites host extensive catalogs of instructional videos for faculty checkout or student reserve viewing.

## The Paul C. Reinert, S.J., Center for Transformative Teaching Learning (CTTL)

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

## Office of International Services

[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, 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.

International Services also provides information and support related to admissions, housing, visas, and Study Abroad Programs

## 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](#) provide instruction at the high intermediate/advanced levels for students needing to improve their language skills in preparation for graduate study. In addition, the ESL program offers instruction in research and writing for graduate 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 the student’s academic program.

## Midwest Catholic Graduate Schools Consortium

The Midwest Catholic Graduate Schools Consortium was created to foster cooperative endeavors in graduate 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 graduate students and from time to time investigates joint research applications. Students should check with their major field departments for details.

## STUDENT LIFE AND SERVICES

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### Graduate Student Association

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

The GSA sponsors the annual Graduate Student Research Symposium which showcases graduate student research, in

both paper and poster formats, throughout the University. Graduate 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 Vice President for Graduate Education serves as the faculty advisor to the GSA.

### Student Health and Counseling Center

[The Student Health and Counseling Center](#) of Saint Louis University, 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 credit hours with MULTI SANITAS medical care during the length of each term. Coverage is extended to all cities and towns where Sanitas has duly authorized centers and/or participating physicians. When services included in the contract are not available in a given area, students are entitled to receive them in another area upon authorization from SANITAS.

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

### University Health Plan

Saint Louis University requires full-time Undergraduate and Graduate/Professional students to have basic health insurance. Unless you waive health insurance via the Health Insurance Waiver Form, you will be charged for coverage, for all semesters and/or terms in which you are registered, under the University Health Plan (UHP) health insurance plan sponsored by Saint Louis University.

Participating students must complete the University Health Plan Enrollment Application Form. Summer coverage is not required.

## Housing and Residential Life

The [Department of Housing and Residence Life \(HRL\)](#) assists graduate 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.

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 HRL at: [reslife@slu.edu](mailto:reslife@slu.edu)

## Bookstores

Bookstores serving the University are located in the [Busch Student Center](#) on the Frost Campus, in the School of Medicine Building (Schwitalla Hall) on the Health Sciences 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.

## 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 graduate and professional school students.

The Frost Campus offices are located in the Eckelkamp Center for Campus Ministry, immediately northwest of the Clock Tower. Offices on the Health Sciences Campus are located in Doisy 3049, School of Nursing Room 325, and Caroline Hall, Room 207. Priests and ministers of several denominations are available for spiritual direction and pastoral counseling including marriage counseling.

## Student Success Center

[Career Services](#) is available to help students and alumni find their career paths by discovering their passion and purpose. Graduate students are encouraged to consult with a career counselor early in their graduate program and to seek opportunities for career-related experiences throughout their academic programs.

Counselors in Career Services can help graduate students clarify their professional goals, enhance their resumes, create job-search plans, develop networking skills, and hone their interviewing skills.

### **Disability Services**

Saint Louis University is committed to providing equal educational access for all of its students by ensuring that students with documented clinical or medical disabilities receive reasonable accommodations that support effective participation in all aspects of the educational experience.

At Disability Services, students, faculty and staff are welcome to obtain information regarding services available, procedures, documentation, and best practices.

In general, 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 (part of Student Success Center) 20 North Grand Boulevard, St. Louis, MO 63103

### **Academic Support**

The Academic Support department strives to enhance the pursuit of lifelong learning, intellectual inquiry and communication by

fostering students' academic success and encouraging self-advocacy. Services promote a holistic developmental process that empowers students to become independent, competent and confident learners.

The department offers services to all students in writing and tutoring, provides Supplemental Instruction for select courses, supports students with disabilities in academic accommodations, and aids first-year students in their transition to Saint Louis University through the University 101 course and the MAP-Works transition assessment.

## 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 Health Sciences Campus.

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 SLU community.

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

All currently enrolled students are automatically members.

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.

## Dining Services

Saint Louis University contracts with Chartwells to provide University dining services to the staff, faculty, and students on the Frost and Health Sciences Campuses. Bannister House, located at 3824 Lindell, also provides breakfast, lunch, and catered meetings to faculty, staff, and alumni. The Frost Campus offers seven dining locations, and the Health Sciences Campus provides two locations. A variety of options from Chinese fare to Italian pizzas and pastas are offered. Fresh Gatherings, located in the Doisy College of Health Sciences building on the Health Sciences Campus, 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-traditional commuter student who wants the convenience of an on-campus meal-plan.

In Madrid, the Campus Cafeteria, located in San Ignacio Hall, offers buffet meals and snacks on a cash-only basis.

## Billiken Bucks

Billiken Bucks is a debit account program that allows students and employees 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, the SLU ID card is swiped, and the amount of the purchase is deducted from the account.

## Athletics

Saint Louis University is a member of the National Collegiate Athletic Association (NCAA Division 1) and of Mid Atlantic

10. Presentation of a valid SLU identification card at the gate or door of a "home" athletic event by a student entitles that student to attend that event free of charge on a first-come, first-served basis with one exception: men's basketball.

## Parking and Inter-Campus Travel

[Parking facilities](#) are provided at both campuses for a fee. The Billiken Bus Line provides transportation within and between the Frost and Health Sciences Campuses while classes are in session. Vans and buses are available for private charter to student and faculty organizations.

## GRADUATE EDUCATION

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### Contacts

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## General Policies

Graduate students must become familiar with the regulations of those of the chosen major department or program. Each student must accept responsibility for compliance with these regulations and for the consequences associated with noncompliance.

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

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

## Organization and Governance

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

## Admission Policies and Procedures

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### Categories of Graduate Students

**Classified** students have been admitted and matriculated through their particular School/College/Center to pursue advanced degrees and are advised by academic departments or their equivalents.

**Unclassified** students are not formally pursuing degrees or certificates. Such students may be completing prerequisites for subsequent degree pursuit or simply taking coursework for enrichment. The former group may be eligible for some categories of financial assistance available through the University, but the latter is not. Ordinarily, a student may not remain in Unclassified status and be eligible for financial aid for more than two academic terms.

**Probationary** students are applicants for Classified admission who are temporarily assigned to this status because of deficits in their academic backgrounds. Tenure in Probationary status may not exceed twelve credit hours or one calendar year. Once the student has advanced to Classified status, s/he may petition that coursework completed while in Probationary status, exclusive of eliminating any prerequisite deficiencies, may be accepted toward partial fulfillment of degree requirements.

**Conditional Classified** students are informally admitted, which permits them to initiate coursework prior to full approval of Classified status. A student is termed Conditional often because a required document which would complete the Classified application is missing, such as an updated transcript showing the conferral of a degree. Ordinarily, a student may remain in Conditional status for only one academic term, but the coursework completed during that term may subsequently apply toward a graduate degree.

**Certificate** students either have been admitted directly into a certificate program or are already seeking an advanced degree and are pursuing a certificate concurrently. The student and the major field 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 credit hours in an amount greater than that required to earn the degree alone.

**Auditors** are students admitted into Unclassified status in a Graduate Program and who enroll in coursework but not for academic credit

at the Frost or Health Sciences Campuses. They are formally registered with the Registrar's Office in order to be recognized on their transcripts. They are expected to attend classes regularly, but are not responsible for assignments or examinations. Tuition to audit a course is \$50 per credit hour. Email, library, and other privileges associated with classified student status are granted to auditors. It is the decision of the Schools/Colleges/Centers whether it is appropriate to permit their classified students to audit classes. In any case, students are permitted to audit a maximum of one course per semester, with a two-course audit limit within a degree program.

**Visitors** are students temporarily admitted for the Summer Sessions at the Frost or Health Sciences Campuses. They must secure department or program permission for entry into desired courses. Visitors are not required to formally apply, but they must be admitted by the Dean or Director of their particular School/College/Center, then register, and a permanent record is created for them. Visitors who audit classes are assessed tuition at \$50 per credit hour.

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

## Admission Policies

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

Decisions regarding acceptance into a graduate degree program will not be made on the basis of the length of the degree program the student has completed, but rather on the applicant's preparation to pursue graduate work in the discipline.

### ETS® Personal Potential Index (PPI)

The PPI is a third-party evaluative tool administered by the ETS (Educational Testing Service) organization ([www.ets.org/ppi/](http://www.ets.org/ppi/)). Some departments are requiring that new applicants also complete the PPI as part of their admission application. Other departments are recommending that new applicants considering using it. Please see the department's website for more information.

### International Applicants

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

International applicants must submit a [TOEFL](#) or [IELTS](#) score when applying. Exemptions are: English is the official language of the applicant's country; the student attended a US university for four semesters; other cases that warrant exemption determined by the admitting department.

Saint Louis University recommends a minimum paper-based TOEFL (PBT) score of 550, an 80 on the computer-based TOEFL (iBT), a 6.5 on the IELTS, and a 4+ on SLU's own SLUWE (Saint Louis University Writing Evaluation). The latter test is administered by ESL once the international student has arrived on campus. Individual graduate programs may decide to set higher minimums based on the level of English proficiency needed for their respective course of studies.

This policy emphasizes that the scores listed above indicate a level of English that does not necessarily guarantee that the international applicant will have a command of spoken and written English, an ability to read the language and to take notes in it such that s/he will be on equal terms with native speakers of English. It is thus very important that the international student follow the recommendations by ESL for improving her/his English based on the TOEFL/IELTS test score, the SLUWE score and the English proficiency needed by the particular graduate program. It is the student's responsibility to do so. These recommendations may range from exemption from any ESL courses, to concurrent enrollment in ESL and the graduate program, or full-time enrollment in ESL with no registration in graduate-level work until the desired level of English has been achieved.

## Re-application

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

## Immunization Policy

All Classified graduate students must comply with the University's immunization policy. All incoming students must complete and submit the SLU Student Immunization Record form, which is located on the [Graduate Admission Website](#).

# Admission Procedures

The application process is handled on-line. <http://www.slu.edu/x32020.xml>

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 goals 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 school/college/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.

# Matriculation Policies

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

Classified graduate students are expected to meet with their advisors at least once each semester. Students must have their advisor's permission to enroll in new academic work in anticipation of a new academic term.

A Classified graduate student may formalize an interruption in progress towards a degree by petitioning the major-field chairperson and the Associate Dean for Graduate Education or Center Director of their school/college/center for a leave of absence. A leave period

is generally for one calendar year. Students on approved leave of absence do not violate the mandatory continuous enrollment policy during the leave period. However, students without matriculation for 3 years or more must apply for admission.. Students on approved leave do not have access to University resources.

A Classified student 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. A student 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.

All petition forms are available on-line at [http://www.slu.edu/graduate/students\\_forms.html](http://www.slu.edu/graduate/students_forms.html).

## Parental Leave Policy

The Graduate Student Parental Leave Policy will provide relief of all full-time graduate duties including research, teaching responsibilities, and comprehensive or candidacy examinations for 6 weeks following childbirth or adoption. It is mandatory for graduate 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 a graduate student require additional relief of duties beyond the approved parental leave period, the graduate student must petition for a leave of absence, as described in the Graduate Education Catalog. 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, a graduate student must be enrolled as a full-time graduate student in either a master's or doctoral program; be in good standing with her or his academic department; and be the primary caregiver to a newborn or adopted child. If both parents are eligible graduate 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 graduate 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. Graduate 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 graduate education faculty administrator (e.g. Associate Dean for Graduate Education), and the Associate Vice President for Graduate Education.

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

All graduate 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 a graduate student on an approved parental leave will be continued during the leave period as necessary.

Graduate 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 the graduate student and his or her advisor.

Graduate 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 Vice President for Graduate Education, in consultation with the graduate student and his or her advisor.

## Transfer of Credit

The Classified student is expected to complete most degree requirements "in residence" (a term used here and throughout these pages of the catalog to describe "through Saint Louis University"), but some advanced work taken elsewhere may be transferred, subject to specific university, college, school, or center restrictions. The student must initiate a petition and have an official transcript of the work proposed for transfer forwarded to the college/school/center. The advisor and major field makes a recommendation on the petition form, and the final decision rests with the Associate Dean or Director for Graduate Education or Center Director of the

particular school/college/center. Such a petition will not receive consideration until the student has completed a minimum of six semester hours toward the degree in residence.

Ordinarily, work completed elsewhere more than five years prior to the beginning of the current SLU degree 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 major field of the student at the accredited institution where it was taken. The grade received must have been B (3.0 on a 4.0 scale) or higher. (Courses taken on a Credit/No Credit or Pass/Fail basis ordinarily will not be considered for transfer.) Final approvals of transfer of credit are documented by the University Registrar in the student's permanent records at the University.

The Master's degree student must complete a minimum of 80% of the advanced work in residence.. For example, within a 30 credit-hour Master's program, a maximum of six semester hours of work (20%) may be approved for transfer toward fulfillment of degree requirements. 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 graduate course taken in partial fulfillment of undergraduate degree requirements may not also be included in a graduate degree program unless specified otherwise by a school, college, center, or program.

The Ph.D. degree student must also complete a minimum of 80% or, if matriculating as a post-Master's student, at least 24 credit-hours of post-baccalaureate work in residence in preparation for and in anticipation of preliminary degree examinations. The Ed.D. degree student must complete at least 38 semester hours of credit in residence.. 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 the student Advanced Standing.

## TUITION AND FEES

[Tuition and fees](#) are subject to change.

### Admission Deposit

All incoming residents/graduate 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.

### Payment of Tuition and Fees

Payment of tuition, fees, and deposits (not covered by financial aid awards) must be made after pre-registration for classes. Initial billing statements are mailed to the student's permanent address by the [Office of Student Financial Services](#). Subsequent billing statements will be mailed to the student's local address, or, if specified, the permanent billing address.

For additional information about payment arrangements see Office of Student Financial Services.

For the schedule of Madrid Campus tuition, fees, payment and refund information, see [http://spain.slu.edu/admissions/tuition\\_and\\_fees.html](http://spain.slu.edu/admissions/tuition_and_fees.html).

### Student Financial Responsibility

No student is 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.

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# FINANCIAL RESOURCES

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To learn about financial aid, visit Student Financial Services at: <http://www.slu.edu/x21861.xml>

## 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.

### Graduate Assistantships

Saint Louis University in St. Louis offers three categories of graduate 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 graduate students and remain in good standing. Assistants are expected to maintain a cumulative grade-point average of 3.0 during the academic year of appointment. If the student's GPA falls below a 3.0 during any portion of the academic year, the student can be terminated by the department from the assistantship during that academic year.

Normally, the maximum number of years that a graduate student may hold an assistantship is two years while pursuing a Master's degree and five years in a Doctoral program. In the case of a student pursuing the Master's and Doctoral degree in the same major field, eligibility for funding is also normally limited to five years. A third year of funding for the Master's (thesis option only) or a sixth year for the Doctoral degree is possible provided funding through the department in question is available and the criteria established by the respective school/college are met. The appeal should be made 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 school/college. 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, the student is 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 graduate 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 the student's educational and career objectives.

Any new Graduate Assistants must attend the Graduate Assistantship Orientation, which is offered before the beginning of the fall semester.

### 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.

### Presidential Fellowships

These [fellowships](#) include a stipend for an eleven-month appointment as well as 21 credit hours of tuition scholarship and health insurance.

### Diversity Fellowships

[The Diversity Fellowship](#) is designed to assist in achieving a more diverse population of graduate students. This initiative is consistent with SLU's Mission Statement and with its commitment to making graduate 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 graduate program. These fellowships include a stipend for an eleven-month appointment as well as 21 credit hours of tuition scholarship and health insurance.

### **Dissertation Fellowships**

[Dissertation Fellowships](#) are awarded in annual competitions to selected doctoral Candidates for the Ph.D. Each nine-month, academic-year fellowship award includes a stipend, twelve semester hours of tuition remission, and health insurance.

### **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.

### **External Fellowships**

Individual departments or programs may receive funding from sources [external to the University](#) that includes support of graduate students. 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 school/college/center. Trainees will be required to participate in training experiences as demanded by the grantor.

### **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.

### **Private Sources**

Other fellowships are available from various agencies, professional organizations, foundations and corporations. Most of these awards may be taken by the student 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, and the Council of Graduate Schools in Washington, DC, the National Institutes of Health in Bethesda, MD, and Peterson's Guides in Princeton, NJ.

## **Graduate Student Loans**

### **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 the student's graduate 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.

### **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-served basis to Classified students who are U.S. citizens and in academic good standing. Ordinarily, these loans will be granted a maximum of three times provided the previous ones have been repaid.

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# REGISTRATION

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## Pre/Continuing/Late Registration

[Pre-registration](#) periods for courses and other academic work for the Summer Sessions and the Fall and Spring Semesters are scheduled by the Office of the Registrar. At the end of those periods, the Office of Student Financial Services mails billing statements to pre-registered students, and they must respond to the statements to confirm their registration.

A period of Continuing Registration follows the Pre-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. A “late-registration fee” may be charged to the student enrolling during the Late Registration period.

Course registration made during the pre-registration period will be canceled if there is a balance due and no response to the billing statement. Similarly, registrations initiated during the Continuing or Late Registration periods will be canceled if financial arrangements are not made.

## Changes in Registrations

No fee is assessed for a [change in registration](#). Generally, academic work may not be added to or substituted within the graduate student’s program for the term or session subsequent to the second full week of classes for the semester. More stringent time-lines exist during the Summer Sessions. Ordinarily, withdrawals from academic work may not occur after mid-term.

## Registration Holds

The University may block the registration of a matriculated student by placing an [academic hold](#) on the student’s record for one of several reasons (e.g. non-payment of tuition, library books not returned, violation of the mandatory continuous-enrollment requirement).

## Zero-Credit Registrations

A Classified graduate student may include in the program for the academic term one or more zero credit-hour registrations. Often a journal club or colloquia registration, and in some instances practicum or internship enrollments, may be for zero credit. The student 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. The student may be completing the requirements for coursework that was initiated during a previous academic term. Zero-credit registrations, coded by 5CR and 6CR or 595 and 695, are each permitted no more than twice during a degree program. Any registration, even if for zero credit hours, enables the student to have access to the academic resources of the University.

## Research-Phase Registrations

Toward completion of requirements for a research degree, a Master’s level student must enroll in six credit hours of Thesis Research. Accumulation of these credits may begin after the student has completed the equivalent of one full-time semester of coursework in residence. The student pursuing the Ph.D. degree must accumulate 12 credit hours of Dissertation Research, and an Ed.D. student three credit hours of Project Guidance. Students are encouraged to distribute research registrations over several academic terms, taking numbers of hours per term commensurate with the anticipated intensity of research involvement.

Ordinarily, the minimum research registration for an academic term is one semester hour. Zero credit-hour registrations in Thesis or Dissertation Research are allowed only after the required credits have been accumulated (within the ordinary or extended time-to-degree period).

If a student’s degree program becomes protracted such that extensions of the ordinary time-to-degree period are necessary, approvals of such extensions of research-degree programs are ordinarily accompanied by the requirements of enrollment in additional research credits (or additional Project Guidance credits for students pursuing Ed.D. degrees).

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

## Inter-University Registrations

Through mutual agreements with specific local academic institutions, including Washington University, University of Missouri-St. Louis, and several other institutions offering post-baccalaureate work, students may be permitted to enroll in courses offered at these locations for “in-residence” credit. The course must be 500- or 600-level or the equivalent at the “visited” institution and generally be in the student’s major field. The student must be Classified and full-time for the

academic term. Ordinarily, 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 semester hours per degree program. A special, [inter-university registration](#) form, available from the University Registrar, must be completed for each such enrollment.

Through special arrangements with the University, Aquinas Institute's (AI) graduate courses are directly accessible to graduate 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.

## Audits, Auditors, and Visitors

Auditing a course as a Classified student must be approved by the academic unit offering the course. The tuition charge for auditing is \$50 per credit hour. At the end of the academic term, the course instructor determines if the student has satisfactorily completed the audit. If so, the designation “AU” is placed by the Registrar in the grade field for the course on the student’s permanent record and, if not, a “W” is placed. No credit toward a degree is earned in an audited course. A change in status of a course from “credit” to “audit” may not be made after the mid-term. A change in course status from “audit” to “credit” will not be approved after the second week of the semester.

An *Auditor* is an individual who enrolls for the academic term only to audit coursework. There is a \$50 charge per credit hour for Auditors.

The *Visitor* is a student taking coursework only for enrichment or for potential transfer of SLU credits into a degree program at another academic institution. The Visitor is admitted to the University only for the academic term, and is evaluated for eligibility for registrations in individual courses by the academic units offering those courses. Categorically, Visitor status exists only for the Summer Sessions. The Visitor desiring to take graduate-level academic work should be admitted by Graduate Education Admissions.

## Registrations of Undergraduates in Graduate Coursework

SLU undergraduate, degree-seeking students may be permitted to enroll in 500 or 600-level coursework provided that specific conditions are met. First, the student must hold senior standing and have the majority of the major requirements already fulfilled. Second, prerequisites for each course in question must have been completed. Third, the student’s cumulative GPA must be minimally 2.7 on a 4-point scale. Fourth, the total enrollment for the semester (or summer sessions) may not exceed 15 (six) credit hours with not more than six (three) credits in 500 or 600-level work. To be granted permission to take graduate coursework, the undergraduate must complete a formal petitioning process during which approvals of the course instructor, the student’s major advisor, the undergraduate Dean, and the Associate Dean or Director for Graduate Education of the particular school/college/center are obtained.

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

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

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

### Refunds: Fall and Spring Semesters

<b>Time of withdrawal as approved by the Dean of the particular School/College/Center</b>	<b>Percentage of Tuition Refunded</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, <http://medschool.slu.edu/sfs/>

School For Professional Studies: (314)977-2330, <http://www.slu.edu/x11121.xml>

If a student and/or the student's parent is receiving federal financial aid for the term of enrollment, a pro-rata 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 or from the entire program of studies for an academic term must be undertaken formally by the student and through the completion of a Change-of-Registration form available from the University Registrar. Formalization of a withdrawal may entitle the student 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 University Registrar.

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

In addition to filing the Registrar's form, a student 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 school/college/center. A Classified student withdrawing entirely (or taking a formal leave of absence) from a graduate program is required to submit a letter of resignation (or a petition for a leave), routing the letter or petition through the major field and to the Associate Dean for Graduate Education or Center Director of the particular school/college/center.

# ACADEMIC STANDARDS

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## Academic Work at the 400, 500, 600 and 700 Levels

Academic work designated by 500, 600 or 700 level is, by definition, offered for “graduate credit.” To the extent applicable, students may obtain credit toward degrees for limited numbers of credit hours in 400-level (upper-division, undergraduate) courses. Limitations are given in the subsequent section on “Graduation Requirements.”

## Grading System

The Grading Scale exclusive of Thesis or Dissertation Research is as follows:

Undergraduates, Health Science Professional, and Masters in Social Work - Fall 2005 - Present, Graduate and Other Professional - Summer 2011 - Present

A	4	
A-	3.7	
B+	3.3	
B	3	
B-	2.7	
C+	2.3	
C	2	
C-	1.7	
D	1	
F	0	
AF	0	Failure due to excessive absence
P	0	
NP	0	

School of Law - Fall 1994 - Present

A+	4	
A	4	
A-	3.7	
B+	3.3	
B	3	
B-	2.7	
C+	2.3	
C	2	
C-	1.7	Fall 2007 - Present
D	1	
F	0	

For most graduate level offerings carrying zero or one semester hour of credit, one of these two final grades is assigned:

“S” Satisfactory



## The SLU Permanent Record

A transcript is a copy of the permanent record, certified as authentic and true by the Registrar. The permanent record at the University shows the courses taken and the grades received by the student. Any academic work taken elsewhere that has been approved for transfer into a SLU degree program. If and when the student earns a degree and/or a certificate, that item is posted to the student's SLU record. A final GPA is computed for the academic work taken in the University. If a graduate student takes a specific course twice, both entries will appear in the transcript, but only one will be included in the work presented toward a degree. The quality points from both entries will be included in the GPA.

## Good Academic Standing and Academic Probation

A Classified student is in good academic standing when s/he is making progress toward a degree within the time period established for that degree. A student is not in good standing when s/he is on academic probation. Students are also not in good standing if they have been formally dismissed from the University or placed under temporary suspension by action of the Dean or Center Director of the particular school/college/center for academic deficiencies or academic misconduct. A student is not in good standing if he has more than 2 incomplete grades. A student will not be advanced to candidacy or be eligible to graduate or continue an assistantship while not in good academic standing.

If the cumulative GPA of a Classified student falls below 3.0 (on the four-point scale, "B" = 3.0), that student is automatically placed on academic probation (not to be confused with Probationary admission). To continue degree pursuit, the student must progress toward a 3.0 cumulative average and is expected to emerge from academic probation within nine credit hours or two successive academic terms during which coursework registrations are recorded. A student will not be advanced to candidate status while on academic probation. In general, doctoral students are expected to complete academic work at the "B+" level.

A limited number of credit hours in which the grade of "C" or "D" is earned may or may not be accepted toward a graduate degree at the discretion of the individual department or program. The Classified student's cumulative GPA in academic work presented to fulfill degree requirements must be at least 3.0.

## Acceptable Academic Progress/ Ordinary Time Periods to Degree

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

For the student pursuing a Master's degree, the ordinary time period to the degree is five years, and seven for the doctorate directly from the baccalaureate. For the student 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 five years.

## Academic Integrity/ Ethical Behavior

The University is a community of learning, and its effectiveness requires an environment of mutual trust and integrity. As members of this community, students share with faculty and administrators the responsibility to maintain this environment. [Academic integrity](#) is violated by any dishonesty in submitting an assignment, test, research report, or any other documentation required to validate the student's learning. In a case of clear indication of such dishonesty, the faculty member or administrator has the responsibility to apply sanctions to protect the environment of integrity.

Although not all forms of academic dishonesty are given here, the instances listed below should be seen as actions that violate academic integrity:

- soliciting, receiving, or providing any unauthorized assistance in the completion of any work submitted;
- copying from another student;

- using electronic devices to share information during an exam;
- copying from a book or class notes during a closed-book exam;
- submitting materials authored by or editorially revised by another person but represented as the student's own work;
- copying a passage or text directly from a published source without appropriately citing/recognizing that source;
- taking a test or doing an assignment or other academic work for another student;
- securing or supplying in advance a copy of an examination without the knowledge or consent of the instructor.
- Falsifying or fabricating research data.

Any clear violation of academic integrity will be met with sanctions. In a case of dishonesty within a course, the instructor may assign an appropriate grade and/or recommend further sanctions to the Dean, Associate Dean, or Center Director of the particular school/college/center, who is then responsible for the final decision and notification of all associated parties. The final decision of the Dean, Associate Dean or Center Director may be appealed as described in "Procedures for Academic Appeals."

Ethical behavior is also expected of students and faculty in the academic setting and extending into professional life. Sexual harassment will not be tolerated and will be sanctioned. Most major fields require their graduate students to complete an ethics requirement within the curriculum. Coursework or other training in ethical research is required of academic personnel involved in traineeship and investigative programs funded by a number of federal and other agencies.

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

## Suspension/Dismissal

The student who is 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 school/college/center, who is responsible for decisions to suspend or dismiss.

## Procedures for Academic Appeals

As a general policy, if a student desires to appeal any academic decision that appeal 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 school/college/center, and the Dean, in that order. Should the student wish to pursue an additional level of appeal, the case is taken to the Associate Vice President for Graduate Education who reviews the file to determine if the process was followed. The Associate Vice President does not overturn a decision, but may send the case back to the school/college/center if process was not followed.

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# GRADUATION REQUIREMENTS

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## Master's Degrees

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 given and explained in the Curricula and Courses section of this catalog and in their program handbook.

### Courses

A minimum of 30 semester hours of academic work is required. For students pursuing the research option, six of the total credit hours 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 hours 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 400-level undergraduate courses to be included in the degree program. However, the maximum allowable total semester hours of credit of such coursework is ten. Also, at least half of the work in the major field (again, exclusive of Thesis Research) must be strictly graduate (500, 600, or 700) 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 400 level.

Ordinarily, no Master's degree program may include more than six credit hours in Research Topics (597) or Graduate Reading (598), or a combination thereof. Master's degree students may not enroll in tutorials carrying the course-numbers 497 or 498.

### 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 Modern and Classical Languages 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.

### Residency

Except for students in the School for Professional Studies, each full-time Master's degree student must devote at least one calendar year or the equivalent to their program of study. For part-time students, three years is generally the norm. Following admission to Classified status, the student in active pursuit of the Master's degree must maintain continuous enrollment during the nine-month academic year.

If the student is following a program leading to the non-research Master's degree to be completed through attendance during Summer Sessions exclusively, s/he adheres to the mandatory-continuous-enrollment policy by being in residence every summer (unless a formal petition for a temporary leave of absence is approved by the major field and the Associate Dean of Graduate Education or Center Director of the particular school/college/center) until degree requirements are fulfilled.

### Graduation Requirements

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

### Thesis

Graduate Education requires the formal appointments of three Graduate Faculty readers of the thesis, one of which is the student's

mentor. The acceptable thesis must be approved by all three readers. A student ordinarily may not circulate the thesis among the approved faculty readers during the summer months. Likewise, a student should not expect conferral of a research Master's degree during or at the end of the Summer Sessions. Exceptions may be granted on individual bases, but only with prior approval of the student's committee chairperson.

Research Master's degree students must formally enroll for six credit hours of Thesis Research within the ordinary time period to the degree.

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

### **Comprehensive Degree Examination**

Because there is variation among masters programs and policies regarding comprehensive exams and capstone requirements, students should refer to individual program requirements and handbooks. Final degree requirements are determined by individual programs based on disciplinary practices.

### **Ordinary Time to Degree**

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

Should the five years (or six summers) pass without the student completing all degree requirements, that student ceases to be in good academic standing unless s/he petitions a successful extension to be approved by the Associate Dean or Center Director of the particular school/college/center and the Associate Vice President for Graduate Education. Extensions are usually granted for no longer than one calendar year at a time. Ordinarily, for a student pursuing a research degree, each extension carries with it the requirement of registration for one additional credit hour (beyond the required six credits) of Thesis Research. The student taking a non-research Master's degree and exceeding the time-to-degree limit must also petition an extension and is required to take an additional credit-hour 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 Ed.S. degree](#) program, offered through the Department of Education, is designed for the educator/practitioner seeking administrative certification at the elementary, middle, junior high, senior high, or school-district level. The viable applicant must possess, prior to matriculation, an appropriate Master's degree.

Requirements for the Ed.S. degree include completion of a minimum of 30 semester hours of post-baccalaureate study, all of which must be taken at Saint Louis University. For additional descriptive information about this program, see the Courses and Curricula section of the catalog.

## **The Doctor of Education Degree**

[The Ed.D. degree program](#) is preparation for educational-leadership roles through broadly based coursework and an extensive project focusing on practical needs within the major field. The successful applicant possesses a Master's degree in education or a related field, or an Ed.S. degree, and must complete, at SLU, a body of post-Master's academic work, much of it in the Department of Educational. The degree includes research preparation, practica, and internship experiences. More extensive and detailed descriptions of the Ed.D. degree program are given in the Courses and Curricula section of the catalog under the Department of Educational and in the program handbook.

# The Doctor of Philosophy Degree

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

## Coursework

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

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

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

Ordinarily, no doctoral program may include more than 20% of the coursework in preparation for preliminary degree examinations in Research Topics (697) or Graduate Reading (698), or a combination thereof. Graduate degree students are not permitted to take 400-level tutorials (identified by the course number 497 or 498).

## 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 Modern and Classical Languages 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.

## Residency

Each doctoral degree student is expected to spend at least one academic year or its equivalent in full-time pursuit of the degree although more time may be necessary. The minimum tenure in this regard is one full semester and a contiguous summer session. The student in active pursuit of the doctorate must maintain continuous enrollment during the nine-month academic year.

## 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 student's doctoral studies. In other programs, the written examination is structured to assess comprehensive knowledge of the discipline after all or nearly all of the student's academic work has been completed. If the student's performance is satisfactory, the department chairperson recommends a committee of five members of the Graduate Faculty to administer the oral examination.

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

In order for a non-SLU faculty member to serve on a doctoral committee, the person must have a terminal degree in the field and/or have significant and unique expertise/experience of particular relevance to the student's dissertation. Appointment to the committee is made by the school, college, or center. The chair of a Doctoral Committee will be from the student's major program and a member of the current SLU faculty. A SLU emeritus professor, a non-SLU faculty member or someone outside of the major field may serve as a co-chair of a student's Doctoral Committee.

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

An oral examination/proposal defense is scheduled in advance of the formalized research phase of the student's 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 student's written preliminary degree-exam was comprehensive. 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 awards of distinction. The transmittal form will be sent to committee chairperson prior to the exam or defense. An outside committee member (a SLU faculty member from another program) will be present at the second exam/proposal defense. If a student fails the exam/proposal defense, upon authorization by the Associate Dean, the oral exam may repeat once. Ordinarily, the second attempt should not be scheduled within the same academic term as the first. Should the outcome of the second examination be unsatisfactory, a third exam is rarely approved.

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

Doctoral Candidate status will be given to the student after the passage of the comprehensive oral exam regardless of whether it includes the dissertation proposal.

### **Dissertation**

The Candidate for a PhD. must write a dissertation and present and defend their original and independent research. Twelve semester hours of Dissertation Research are required of each student pursuing the Ph.D. within the ordinary time period to the degree.

The written work must follow a composition format within guidelines established by the major field and the *Formatting Guide*. A 3-paper model is allowed as an alternative to the traditional dissertation. This model permit 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. Not all doctoral programs allow the 3-paper model of dissertation. The Doctoral Candidacy Advisor completes a format evaluation of the dissertation and abstract by appointment. The student 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 submitted to the Doctoral Candidacy Advisor well in advance of (minimally three weeks) the presentation date. Candidates anticipating May graduation must submit the Notification of Readiness no later than the date set in the Graduate Education Calendar of Deadlines supplement to the University Calendar. Following the presentation, the doctoral candidate should expect questions from the readers and the assembled audience. The dissertation-committee chairperson serves as the moderator for the defense.

Each program will determine the manner in which a vote for any type of exam or defense is taken. The only information transmitted to the Office of Graduate Education is the final decision, including any awards of distinction. The transmittal form will be sent to committee chairperson prior to the exam or defense. There will be separate votes for the Doctoral Oral Defense of the Dissertation and the Written Dissertation. A vote of pass is required from a majority of the committee members for a student 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 graduate 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 five or seven years and doctoral requirements remain, the student must formally petition for an extension of the ordinary time period, providing a justification and calendar for completion, routing the petition through the mentor to the major-field chairperson or the graduate program director, Associate Dean or Center Director, and finally the Associate Vice President for Graduate Education. Generally, when such petitions are approved, extensions are given for one calendar year at a time. In part because such petitions typically occur during the research phase of the degree program, each such approval is also accompanied by the requirement of enrollment in one additional Dissertation Research credit (beyond twelve, which should have already been taken). Furthermore, if the time period has been exceeded to the extent that more than five calendar years have elapsed since preliminary degree examinations were passed, to remain active in the doctoral program the student will be required to retake the preliminary examinations to demonstrate currency in the major field.

## The Multidisciplinary Doctoral Option

After having been formally and unconditionally admitted into an existing Ph.D. degree program and initiated doctoral studies, the Classified graduate student 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, the Associate Dean or Center Director reserves final approval of this option. The Multidisciplinary Option is not available at the Master's level or toward another advanced degree.

To begin the transfer process, the student prepares a draft of a proposal that describes the multidisciplinary program envisioned. The title of the student's 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. that already completed as well as the work yet to be taken, and the general area of dissertation research. With the proposal draft in hand, the student proceeds to select minimally five members of the Graduate Faculty to serve as a committee that, in effect, becomes the student's 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) Associate Vice President for Graduate Education. The petition with appropriate supporting documentation from the student's academic file is then transmitted to the proposed committee chairperson for evaluation of the student's preparedness for and potential for academic success in the envisioned program. By this time the proposal draft should have been critiqued by the committee and subsequently revised to reflect their evaluative comments.

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

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

## Submission of Thesis and Dissertation

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

After the Format Review appointment with the Candidacy Advisor, the graduate student submits his/her 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 the student 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), a student/author 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. The work will default to whichever publishing method selected at the expiration of that embargo.

At the end of the initial embargo, if there is a need to delay publication beyond two years, 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. This must be then approved by the committee chair and the department chair. If approved, the author then contacts ProQuest/UMI to notify them of the extension.

## Dual-Degree Programs

There are a number of formally established, advanced [dual-degree programs](#). Within such a program, the student pursues 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 the student 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.

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

[Master in Health Administration \(M.H.A. / Master's in Business Administration \(M.B.A.\)](#)

[Master in Public Administration \(M.P.A.\) / Law \(J.D.\)](#)

[Master in Urban Affairs \(M.U.A.\) / J.D.](#)

[M.H.A./J.D.](#)

[Master of Public Health \(M.P.H.\) / J.D](#)

[Ph.D. in Health Care Ethics / J.D.](#)

[M.P.H. / M.D.](#)

[Ph.D. in a Biomedical Science or Health Care Ethics / M.D.](#)

[M.P.H./Master in Social Work \(M.S.W.\)](#)

[M.P.A./M.S.W.](#)

[M.P.H/ Master of Science \(M.S.\) in Nutrition and Dietetics .](#)

[M.P.H. / Masters of Science in Nursing \(M.S.N.\)](#)

[M.S.P.H. / Ph.D. in Psychology](#)

[M.P.A / M.A. in Political Science](#)

[M.P.H. \(Health Policy\)/J.D.](#)

Master of Social Work (M.S.W.) and Master of Arts in Theology at Concordia Seminary

M.S.W. and Master of Divinity at Concordia Seminary

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

## Certificate Programs

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

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

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

Several such specific [certificate programs](#) have been developed.

# COURSES AND CURRICULA

# INTRODUCTION

This part of the Catalog is divided into the individual schools/colleges/centers. Within each collegiate unit, the major fields of graduate degree study are individually described. There are additional requirements for each available degree, and a listing in numerical order of the 500 through 800-level courses that graduate students may take for graduate 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. Graduate credit may be earned upon completion of specific individual courses numbered 400 through 899. The level of these courses is understood as follows:

400 level: upper-division/beginning graduate  
 500 level: introductory/intermediate graduate  
 600 level: advanced graduate  
 700, 800 levels: professional/certificate

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 400 and 500 levels or at both the 500 and 600 levels. For such a course, the requirements and expectations differ with the course level. Both undergraduate and graduate students could conceivably take a 400/500-level course, but the undergraduate may not register for it at the 500 level without permission from the Dean or Center Director and the Associate Dean for Graduate Education of the particular School/College. A graduate student may not enroll in it at the 400 level. A doctoral student might register for a 500/600-level course under the 600 number, whereas a student seeking a Master's degree would likely take it at the 500 level.

Numbers in the 90s at the 500 and 600 levels refer to generic forms of academic work at the Master's and doctoral levels. Specifically, the numbers, generic titles, and credit hours are as follows:

590: Introduction to Graduate Study (0-1)  
 591-691: Journal Club (0-1)  
 592-692: Colloquium (0-1)  
 593-693: Special Topics (1-3)  
 594-694: Internship (0-6)  
 595-695: Special Study for Examinations (0)  
 596-696: Essay/Project Guidance (0-3)  
 597-697: Research Topics (1-3)  
 598-698: Graduate Reading Course (1-3)  
 599: Thesis Research (0-6)  
 5CR: Master's Degree Study [Section 90] (0)  
 5CR: Specialist Degree Study [Section 95] (0)  
 690: Introduction to Doctoral Study (0-1)  
 699: Dissertation Research (0-6)  
 6CR: Doctor of Education Degree Study [Section 97] (0)

# COLLEGE OF ARTS & SCIENCES

**Michael Barber, S.J.,**  
*Collegiate Dean*

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 graduate study leading to master's and/or doctoral degrees. The goal of graduate 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

**Matthew J. Mancini, Ph.D.,**  
*Department Chairperson*

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

### Master of Arts Master of Arts (Non-Thesis)

#### **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 510 Perspectives in American Studies.  
At least one reading seminar offered by the Department.  
At least one research seminar offered by the Department.

*A formal minor is not permitted.*

### Doctor of Philosophy

#### **Prerequisites**

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

#### **Required Courses**

ASTD.510 Perspectives in American Studies;  
ASTD.550 The Practice of American Studies; and  
ASTD.612 Dissertation Colloquium.

At least two reading seminars offered by the Department.  
At least two research seminars offered by the Department.

## Additional Requirements

Reading proficiency in one foreign language.

*A formal minor is not permitted.*

## Graduate Courses

ASTD.510 Perspectives in American Studies (3)

ASTD.515 American Photography (3)

ASTD.523 Cultures of the American South (3)

ASTD.525 Tocqueville's America (3)

ASTD.535 American Autobiographies (3)

ASTD.537 America and the Transatlantic: Readings of the Middle Passage (3)

ASTD.540 Metropolitan America (3)

ASTD.542 Workshop in the American Metropolis (3)

ASTD.550 The Practice of American Studies (3)

ASTD.572 Cross-Cultural Encounters of the American Frontier (3)

ASTD.574 Women's Lives (3)

ASTD.577 African American Politics, Culture, and Identity (3)

ASTD.593 Special Topics in American Studies (3)

ASTD.594 Graduate Internship (1-3)

ASTD.595 Special Study for Examinations (0)

ASTD.598 Graduate Reading Course (1-3)

ASTD.599 Thesis Research (0-6)

ASTD.5CR.90 Master's Degree Study (0)

ASTD-605-01 Mythbusting and Mythmaking in Recent American Studies Scholarship (3)

ASTD.612 Dissertation Colloquium (1-3)

ASTD.615 Visual Culture Theory (3)

ASTD.620 Jazz and American Culture (3)

ASTD.627 Transnational America (3)

ASTD.642 Topics in American Urbanism (3)

ASTD.644 From Satchmo to Strangelove: Cold War Cultural Politics and the "American Century" (3)

ASTD.645 Edibles are Fun to Think With: Food and American Culture (3)

ASTD.655 Public Art and Memory (3)

ASTD.660-01 American Studies Interdisciplinary Seminar (3)

ASTD.670 American Political Thought (3)

ASTD.671 Leadership and Culture (3)

ASTD.693 Special Topics in American Studies (3)

ASTD.694 Graduate Internship (1-3)

ASTD.695 Special Study for Examinations (0)

ASTD.698 Graduate Reading Course (1-3)

ASTD.699 Dissertation Research (0-6)

ASTD 6CR.99 Doctor of Philosophy Degree Study (0)

# BIOLOGY

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

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

**Susan Spencer, Ph.D.,**  
*Graduate Coordinator*

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

## Master of Arts

### Prerequisites

Suggested courses include: Biology (a minimum of eighteen, upper-division credit-hours); Chemistry (a minimum of eight, upper-division credit-hours including two semesters of organic chemistry or one semester of organic chemistry and the other of biochemistry); Physics (two semesters); Mathematics (through a first course in Calculus).

The program for the Master of Arts degree requires a minimum of 30 semester hours 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 the student's advisor.

### Required Courses

BIOL.582 Graduate Seminar: Cellular and Molecular Regulation (at least one semester) OR  
BIOL.584 Graduate Seminar: Ecology, Evolution, and Systematics (at least one semester)  
BIOL.591 Departmental Seminar (every semester in residence)

*A formal minor is not permitted.*

## 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, introductory biological chemistry, cell biology, physiology, molecular biology, microbiology or immunology.

The program for the Master of Science degree requires a minimum of 30 semester hours, including 24 hours of structured course work and 6 hours 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 student's research interests in consultation with the student's advisory committee.

### Required Courses

BIOL582 Graduate Seminar: Cellular and Molecular Regulation (minimum of two credit hours) OR  
BIOL584 Graduate Seminar: Ecology, Evolution, and Systematics (minimum of two credit hours)  
BIOL593-02 Scientific Communication in Biology Practicum (one credit hour)  
BIOL593-01 Research Colloquium (one credit hour)

BIOL.591 Departmental Seminar (every semester in residence)

## 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, introductory biological chemistry, cell biology, physiology, molecular biology, microbiology or immunology.

The program for the Doctor of Philosophy degree requires a minimum of 36 semester hours, when pursued from the baccalaureate, including 24 hours of structured coursework and 12 hours 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 student's research interests in consultation with the student's advisory committee.

New Ph.D. degree students who enter the program with a BS or BA degree may take the written preliminary exam the second Spring semester they are in residence. 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 in residence.

*A formal minor is not permitted.*

### Required Courses

BIOL.582 Graduate Seminar: Cellular and Molecular Regulation (minimum of two credit hours) OR  
 BIOL.584 Graduate Seminar: Ecology, Evolution, and Systematics (minimum of two credit hours)  
 BIOL.593-02 Scientific Communication in Biology Practicum (one credit hour)  
 BIOL.593-01 Research Colloquium (one credit hour)  
 BIOL.691 Departmental Seminar (every semester in residence)

### Upper-Division Courses

BIOL.402 Vertebrate Reproductive Physiology (3)	BIOL.416 Microbial Ecology (4)
BIOL.404 Pollination Biology (3)	BIOL.420 Aquatic Ecology (4)
BIOL.409 Plant Ecology (3)	BIOL.421 Biology and Classification of Orchids (3)
BIOL.410 Natural History of the Vertebrates (4)	BIOL.426 Biology of Amphibians and Reptiles (4)
BIOL.411 Natural History (1)	BIOL.428 Biology of Fishes (4)
BIOL.412 Field Botany (5)	BIOL.431 Biology of Birds (4)
BIOL.413 Field Mammalogy (5)	BIOL.432 Cave Biology (4)
BIOL.4124 Field Ornithology (5)	BIOL.433 Spring Flora of the Ozarks (4)
BIOL.415 Nerve Cell Mechanisms in Behavior (3)	BIOL.434 Systematic Biology (3)
BIOL.435 Biology of Parasitic Organisms (4)	BIOL.451 Behavioral Endocrinology (3)
BIOL.436 Animal Behavior (3)	BIOL.454 Human Cellular Physiology (3)
BIOL.437 Animal Behavior Laboratory (1)	BIOL.461 Developmental Biology Laboratory (2)
BIOL.438 Biology of Mammals (4)	BIOL.464 General Microbiology (3)
BIOL.440 Applied Ecology (3)	BIOL.465 Microbiology Lab (2)
BIOL.441 Comparative Animal Physiology (3)	BIOL.472 Cancer Biology (3)
BIOL.444 Vertebrate Histology (4)	BIOL.480 Internship in Conservation (3)
BIOL.448 Conservation Biology (3)	BIOL.481 Integrative Bioinformatics Internship (0-3)
BIOL.450 Introductory Endocrinology (3)	

- BIOL.482 Internship in Plant Science (3)
- BIOL.500 Problems in Vertebrate Morphology (2-3)
- BIOL.501 Ecology of Vertebrate Reproduction (3)
- BIOL.502 Comparative Vertebrate Reproduction (3)
- BIOL.503 Genomics (3)
- BIOL.505 Molecular Techniques Laboratory (2)
- BIOL.507 Advanced Biological Chemistry (3)
- BIOL.508 Advanced Cell Biology (3)
- BIOL.509 Biometry (4)
- BIOL.510 Cellular and Molecular Genetics (3)
- BIOL.512 Signal Transduction (3)
- BIOL.517 Introduction to GIS
- BIOL.518 Intermediate GIS
- BIOL.519 GIS in Biology (3)
- BIOL.530 Problems in Vertebrate Physiology (2-4)
- BIOL.534 Problems in Cell Biology (1-2)
- BIOL.535 Current Topics in Cell Biology (2)
- BIOL.540 Problems in Genetics (1-4)
- BIOL.541 Ecological Genetics (3)
- BIOL.542 Problems in Evolutionary Biology (1-4)
- BIOL.545 Biogeography (3)
- BIOL.547 Systemic Biology Lab (1)
- BIOL.548 Conservation Biology (3)
- BIOL.550 Problems in Ecology (2-4)
- BIOL.555 Advanced Ecology (3)
- BIOL.556 Advanced Evolution (3)
- BIOL.558 Applied Population Genetics (3)
- BIOL.561 Principles of Developmental Biology (3)
- BIOL.564 Concepts of Immunology (3)
- BIOL.567 Advanced Population Biology (3)
- BIOL.570 Advanced Molecular Biology (3)
- BIOL.576 Problems in Botany (2-4)
- BIOL.578 Molecular Phylogenetic Analysis (3)
- BIOL.582 Graduate Seminar/Cellular and Molecular Regulation (1-2)
- BIOL.584 Graduate Seminar: Ecology, Evolution, and Systematics (2)
- BIOL.591 Department Seminar (0-1)
- BIOL.593-01 Research Colloquium (0-1)
- BIOL.593-02 Scientific Communication Practicum (1)
- BIOL.595 Special Study For Exams (0)
- BIOL.597 Research Topics (Master's only; 1-3)
- BIOL.598 Graduate Reading Course (Master's only; 1-3)
- BIOL.599 Thesis Research (0-6)
- BIOL.604 Current Topics in Developmental Biology (3)
- BIOL.615 Neural Basis of Behavior (3)
- BIOL.630 Special Studies in Comparative Physiology (1-4)
- BIOL.691 Departmental Seminar (0-1)
- BIOL.695 Special Study for Examinations (0)
- BIOL.697 Research Topics (Ph.D. only; 1-3)
- BIOL.698 Graduate Reading Course (Ph.D. only; 1-3)
- BIOL.699 Dissertation Research (0-6)

# CHEMISTRY

**Steven W. Buckner, Ph.D.,**  
*Department Chairperson*

**R. Scott Martin, Ph.D.,**  
*Graduate Program Director*

The Department of Chemistry offers both a MS and Ph.D degree. The thesis-based Master of Science degree program is typically for full-time research graduate students who want to a stand-alone MS degree. The non-thesis-based MS degree is for full-time research graduate students who want to transition into the Ph.D. program after year 2 in the department. Both degrees offer specialization in the fields of analytical, inorganic, organic, or physical chemistry. This program includes a core curriculum of 12 credit-hours consisting of a minimum of two courses from each of the two specified areas, with the remaining 12 hours 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 credit hours of lecture coursework and research classes (including 12 hours of dissertation research).

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

## Master of Science (non-thesis)

### Prerequisites

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

### Required Courses

Students must take 24 hours of coursework in the Department. CHEM.513 (Advanced Inorganic Chemistry) and CHEM.520 (Analytical Chemistry II) must be taken unless they or their equivalents have already been taken for undergraduate credit. Full-time research students usually take 3 hours of Introductory Research in a CHEM.5x8 course in addition to 3 hours of research topics course. *A formal minor is not permitted.*

## Master of Science (thesis-based)

### Prerequisites

In addition to 18 credit-hours 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 hours of Thesis Research, culminating in an oral presentation of their research work.

### Required Courses (Core)

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

*A formal minor not permitted.*

# Doctor of Philosophy

## Prerequisites

In addition to 18 credit-hours 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 hours of Introductory Research in a CHEM.5x8 courses in addition to 12 hours of Dissertation Research, CHEM.699; 3 hours of research topics; and 3 hours of Proposal Writing CHEM.690; culminating in an oral presentation of their research work.

## Required Courses (Core)

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

*A formal minor not permitted.*

## Graduate Courses

All graduate 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.

### 1. Synthesis & Materials Chemistry

CHEM.508 Advances in Synthetic Chemistry (3)

CHEM.513: Inorganic Chemistry (3)

CHEM.515 Organometallic Chemistry (3)

CHEM.517 Solid State Chemistry (3)

CHEM.519 Special Topics in Inorganic Chemistry (3)

CHEM.540 Advanced Organic Chemistry (3)

CHEM.541 Synthetic Organic Chemistry (3)

CHEM.544 Polymer Chemistry (3)

CHEM.545 Principles of Medicinal Chemistry (3)

CHEM.549 Special Topics in Organic Chemistry (3)

CHEM.551 Fundamentals and Design of Nanoarchitectures (3)

### 2. Analytical & Physical Methods

CHEM.509 Advances in Analysis and Modeling of Chemical Systems (3)

CHEM.512 Chemical Applications of Group Theory and Spectroscopy (3)

CHEM.520 Instrumental Analysis (3)

CHEM.521 Environmental Chemistry (3)

CHEM.524 Electroanalytical Chemistry (3)

CHEM.525 Bioanalytical Methods of Analysis (3)

CHEM.526 Analytical Separations (3)

CHEM.527 Analytical Spectroscopy (3)

CHEM.529 Special Topics in Analytical Chemistry (3)

CHEM.533 Advanced Physical Chemistry (3)

CHEM.534: Advanced Thermodynamics (3)

CHEM.535 Elements of Surface and Colloid Science (3)

CHEM.539 Special Topics in Physical Chemistry (3)

CHEM.540 Advanced Organic Chemistry (3)

### 3. Other Courses

CHEM.518 Introduction to Inorganic Research (1-3)

CHEM.523 Chemical Sensors (3)

CHEM.528 Introduction to Analytical Research (1-3)

CHEM.537 Computational Chemistry (3)

CHEM.538 Introduction to Physical Research (1-3)

CHEM.548 Introduction to Organic Research (1-3)

CHEM.591 Research Seminar (0-1)

CHEM.595 Special Study for Examinations (0)

CHEM.596 Essay Guidance (0-3)

CHEM.597 Research Topics (1-3)

CHEM.598 Graduate Reading Course (1-3)

CHEM.599 Thesis Research (0-6)

CHEM.5CR.90 Master's Degree Study (0)

CHEM.618 Methods in Inorganic Research (3)

CHEM.619 Advanced Inorganic Research (3)

CHEM.628 Methods in Analytical Research (3)

CHEM.629 Advanced Analytical Research (3)

CHEM.638 Methods in Physical Research (3)

CHEM.639 Advanced Physical Research (3)

CHEM.648 Methods in Organic Research (3)

CHEM.649 Advanced Organic Research (3)

CHEM.690 Introduction to Proposal Writing and Oral Presentations (3)

CHEM.691 Research Seminar (0-1)

CHEM.699 Dissertation Research (0-12)

# COMMUNICATION

**April Trees, Ph.D.,**  
*Department Chairperson*

**Dan Kozlowski, Ph.D.,**  
*Graduate Program Director*

The Department of Communication offers a Master of Arts degree for students interested in culture and public dialogue, media studies, and organizational communication. The degree provides a solid foundation of theory, research, and ethical sensitivity in helping students apply communication skills. 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 MA degree take 30 semester hours of coursework plus comprehensive written and oral examinations. The applied project degree completion option includes 27 semester hours of coursework plus an applied project (three credit hours of CMM.589, Applied Project Credits) and a final oral examination. The thesis degree completion option consists of 24 semester hours of coursework plus a master's thesis (six semester hours of CMM.599, Thesis Research) and a final oral examination. The department requires all students to take at least 21 hours of graduate-level courses in Communication, including 9 hours of required courses. For their additional coursework, students may choose up to a total of nine hours in the following areas: 400-level courses in Communication, graduate coursework outside of the department, or independent studies. Unless circumstances mandate, no more than six of these nine hours may be taken in 400-level courses in Communication or graduate coursework outside of the department. No more than three of these hours 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 Theory and Research.

### Required Courses

CMM.500 Graduate Study of Communication;  
CMM.502 Research Methods in Communication;  
CMM.504 Reading Foundations in Communication Theory

### Additional Requirements

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

## Certificate Programs

A Certificate in Rhetoric and Composition Studies is available for students interested in additional, interdisciplinary study of rhetorical theory and writing pedagogy. Requirements are outlined on the graduate catalog page for certificate programs.

### Upper-Division Courses

CMM.400 Family Communication (3)

CMM.409 Theories of Persuasion (3)

CMM.410 Multiplatform Journalism (3)

CMM.421 Organizational Culture (3)

CMM.422 Conflict, Mediation and Negotiation (3)

CMM.416 Editing (3)

CMM.420 Leadership and Teams (3)

CMM.424 Training and Development (3)

CMM.430 Gender and Communication (3)

CMM.432 Communicating Across Racial Divisions (3)  
 CMM.435 Stereotyping and Bias in the Mass Media (3)  
 CMM.441 Critical Perspectives on Journalism (3)  
 CMM.442 Theory of Free Expression (3)  
 CMM.443 Culture, Technology, and Communication (3)  
 CMM.444 History of Journalism (3)

### Graduate Courses

CMM.500 Graduate Study of Communication (3) (Offered every Fall semester)  
 CMM.502 Research Methods in Communication (3) (Offered every Spring semester)  
 CMM.504 Reading Foundations in Communication Theory (3) (Offered every Fall semester)  
 CMM.506 Contemporary Theories in Communication (3) (Offered occasionally)  
 CMM.510 Studies in Mass Media (3) (Offered occasionally)  
 CMM.512 Contemporary Issues in Media (3) (Offered every year)  
 CMM.514 Culture and Public Dialogue (3) (Offered occasionally)  
 CMM.516 Strategic Communication (3) (Offered every other year)  
 CMM.518 Organizational Communication (3) (Offered every year)  
 CMM.520 Communication Ethics (3) (Offered occasionally)  
 CMM.522 Rhetorical Theory and Criticism (3) (Offered occasionally)  
 CMM.524 Language and Cultural Diversity (3) (Offered occasionally)

CMM.447 Rhetoric of Political Campaigns (3)  
 CMM.460 Integrated Communication Campaigns (3)  
 CMM.464 Public Relations Case Studies (3)  
 CMM.465 International Public Relations (3)  
 CMM.470 Advertising Research and Strategic Planning (3)  
 CMM.472 American Advertising Federation Competition (3)  
 CMM.481 Digital Storytelling (3)

CMM.525 Foundations of Journalism (3) (Offered occasionally)  
 CMM.526 Interpersonal Communication (3) (Offered every other year)  
 CMM.528 Health Communication: Theory and Practice (3) (Offered every year)  
 CMM.532 Digital Storytelling (3) (Offered occasionally)  
 CMM.535 Advanced Research Methods (3) (Offered occasionally)  
 CMM.562 Philosophy of Communication (3) (Offered occasionally)  
 CMM.589 Applied Project Credits (3)  
 CMM.593 Special Topics (3)  
 CMM.595 Special Study for Examinations (0)  
 CMM.598 Graduate Reading Course (1-3)  
*Prior permission of sponsoring professor and department chairperson required.*  
 CMM.599 Thesis Research (0-6)  
 CMM.5CR.90 Master's Degree Study (0)

# COMMUNICATION SCIENCES & DISORDERS

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

**Pat D. Miller, M.S.,**  
*Director of the Graduate Program*

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

## Master of Arts

### Prerequisites

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

### Required Courses

CSDI.505 Experimental Design  
 CSDI.545 Phonological Development and Disorders  
 CSDI.551 Assessment/Management of Social Communication Disorders  
 CSDI.553 Augmentative and Alternative Communication  
 CSDI.555 Language I  
 CSDI.556 Language II  
 CSDI.560 Fluency Disorders  
 CSDI.563 Dysphagia  
 CSDI.570 Voice Disorders  
 CSDI.571 Cleft Palate and Craniofacial Anomalies  
 CSDI.572 Neurogenic Communicative Disorders in Adults  
 CSDI.576 Motor Speech Disorders  
 CSDI.577 Assessment and Management of Communication Disorders in Multicultural Populations  
 CSDI.580 Professional Issues in Speech-Language Pathology and Audiology  
 CSDI.582 Cognitive Communication Disorders.  
 CSDI.501 Clinical Practicum  
 CSDI.503 Student Teaching in Communication Disorders  
 CSDI.594 Clinical Internship

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

*A formal minor is not permitted.*

### Upper-Division Courses

CSDI.400 Survey of Speech Disorders (2)	CSDI.430 Clinical Methods (3)
CSDI.410 Survey of Language Disorders (2)	CSDI.435 Clinical Observation (0)
CSDI.420 Audiology: Basic Audiometry (3)	

CSDI.440 Aural Rehabilitation (3)

CSDI.450 Neurological Bases of Communication (3)

### **Graduate Courses**

CSDI.501 Clinical Practicum (0)

CSDI.572 Neurogenic Communicative Disorders in Adults (3)

CSDI.503 Student Teaching in Communication Disorders (3)

CSDI.573 Neuropathologies in Children (2) (offered occasionally)

CSDI.505 Experimental Design (2)

CSDI.576 Motor Speech Disorders (3)

CSDI.544 Linguistics (2)

CSDI.577 Assessment and Management of Communication Disorders in Multicultural Populations (2)

CSDI.545 Phonological Development and Disorders (2)

CSDI.580 Professional Issues in Speech-Language Pathology (1)

CSDI.551 Assessment/Management of Social Communication Disorders (2)

CSDI.582 Cognitive Communication Disorders (3)

CSDI.553 Augmentative and Alternative Communication (2)

CSDI.588 Advanced Audiology (2)

CSDI.555 Language I (3)

CSDI.589 Institute in Communication Disorders (2)

CSDI.556 Language II (3)

CSDI.593 Special Topics (1-3)

CSDI.558 Language Based Literacy Disorders (2)

CSDI.594 Clinical Internship (3)

CSDI.560 Fluency Disorders (3)

CSDI.595 Special Study for Examinations (0)

CSDI.563 Dysphagia (3)

CSDI.596 Essay/Project Guidance (0)

CSDI.565 Clinical Supervision: Practices, Issues and Choices (2)

CSDI.598 Graduate Readings (1-3)

CSDI.570 Voice Disorders (3)

CSDI.599 Thesis Research (0-6)

CSDI.571 Cleft Palate and Craniofacial Anomalies (2)

CSDI.5CR.90 Master's Degree Study (0)

# EARTH & ATMOSPHERIC SCIENCES

**William P. Dannevik, Ph.D.,**  
*Department Chairperson*

## GEOSCIENCE

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

The Geoscience section of the Department of Earth and Atmospheric Sciences offers graduate programs leading to the degrees of Master of Science and Master of Science (Research) in geoscience and, Doctor of Philosophy in geophysics. Students with undergraduate degrees in geology, geophysics, physics, mathematics, or engineering are encouraged to apply to these programs. Active research areas in geophysics include earthquake seismology, tectonics, gravimetry and physics of the deep interior. Active research areas in geology include tectonics, remote sensing, sedimentary geology and sedimentation, igneous and metamorphic petrology, geochemistry, geochronology, geomorphology and fluid-rock interaction. Research facilities include a network of seismograph stations surrounding the New Madrid fault zone, state-of-the-art seismic observatories which transmit data by satellite from sites distributed across a broad region of the central United States, high performance computing clusters, rock preparation and mineral separation facilities, a large format stream table, stable isotope geochemistry lab, and an environmental imaging lab.

### **Required Core Courses (Geoscience Section; All Degrees)**

EAS.450 Scientific Communications;  
EAS.437 Earth Dynamics, or  
EAS.506 Physics of the Solid Earth;  
EAS.519 Seminar in Geosciences, or  
EAS.539 Seminar in Geophysics.  
EAS.517 Divergent and Convergent Margins, **or**  
EAS.518 Transform margins and Plate Interiors.

EAS.591 Geoscience Journal Club (each semester in residence) Master's students must register for at least one semester for one credit hour. PhD students must register for at least two semesters for one credit hour each semester.

## Master of Science (Non-Thesis)

The Master of Science, coursework option, requires a minimum of 33 semester-hours of course work and independent study.

The Master of Science (Research) requires a minimum of 24 semester-hours of course work plus a written thesis with 6 hours of thesis credit.

The master's program has two options: Geology and Geophysics.

### **Prerequisites (Geology Option)**

Mineralogy, petrology, sedimentology, and structural geology. One year each of calculus, physics, and chemistry is highly desirable.

### **Required Courses (Geology Option)**

Core courses listed previously, plus  
EAS.517 Divergent and Convergent Margins, and  
EAS.518 Transform Margins and Plate Interiors.

### **Prerequisites (Geophysics Option)**

Structural geology, college physics, classical mechanics, and mathematics through differential equations.

### **Required Courses (Geophysics Option)**

Core courses listed previously, plus two courses from

EAS.504 Potential Theory, EAS.540 Continuum Mechanics and EAS.551-552 Seismic Exploration, Methods-Laboratory.

### **Additional Requirements (Both Options)**

EAS.588 Independent Study; and additional courses to satisfy the minimum credits required.  
*A formal minor is not permitted.*

## Doctor of Philosophy (GEOPHYSICS)

### **Prerequisites**

Structural geology, college physics, and mathematics through differential equations.

### **Required Courses**

Core courses listed previously, plus Students in Seismology must take

EAS.539 Seminar in Seismology  
EAS. 631 Advanced Seismology I  
EAS.632 Advanced Seismology II

When the doctorate is pursued directly from the baccalaureate, a minimum of 48 semester-hours of coursework is required in preparation for the research-phase.

*A formal minor is not permitted.*

## METEOROLOGY

**Zitao 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.

## Master (Research)

This degree requires 30 credit hours with 6 hours being thesis research.

### **Prerequisite**

An undergraduate degree in meteorology or a related field.

**Required Courses (9 hrs)**

EAS 508 Dynamics of the Atmosphere (3)  
 EAS 509 Physics of the Atmosphere (3)

EAS 530 Seminar in Atmospheric Science (0-1)  
 EAS 533 Communicating in Research (2)

**Elective Courses (15 hrs.) from following list**

EAS.511 Computing in Atmospheric Science (2)  
 EAS.520 Numerical Methods of Prediction (3)  
 EAS523 Boundary Layer Meteorology (3)  
 EAS. 524 Tropical Meteorology (3)  
 EAS.527 Meteorology of Severe Storms (3)  
 EAS.529 Mesometeorology (3)  
 EAS.534 Cloud Physics (3)  
 EAS.538 Statistical Methods in Meteorology (3)  
 EAS.536 Principles of Radiation Transfer I (3)  
 EAS.547 Turbulence and convection (3)  
 EAS.560 Atmospheric Chemistry (3)

EAS.561 Satellite Meteorology (3)  
 EAS.565 Radar Meteorology (3)  
 EAS.570 Convection in the Atmosphere (3)  
 EAS.588 Independent Study (1-3)  
 EAS.589 Research Seminar (3)  
 EAS.593 Special Topics in Meteorology (1-3)  
 EAS.597 Research Topics (1-3)  
 EAS.598 Graduate Reading Course (1-3)  
 EAS.648 General Circulation of the Atmosphere (3)  
 IAS.551 Remote Sensing of Environment & Resources (3)

In addition, up to 9 hours of some upper division (400-level) undergraduate courses in meteorology can be counted towards electives with permission.

**Additional Requirement**

Qualifying exam  
 EAS.595 Special Study for Examinations (0)  
 6 hours of thesis credits, EAS.599 Thesis Research (0-6)

## Master (Professional)

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

## Doctor of Philosophy

**Prerequisite**

An undergraduate area of concentration in meteorology.

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

**Required Courses (3 hrs)**

EAS 630 Seminar in Atmospheric Science (1)

EAS 631 Communicating in Research (2)

**Elective courses (15 hrs)**

Those listed in Masters.

EAS 688 Independent Study (1-3)  
EAS 698 Graduate Reading Course (1-3)

EAS 693 Special Topics in Meteorology (1-3)

**Additional Requirement**

Written and oral preliminary exam  
EAS.695 Special Study for Examination (0)  
12 hrs. dissertation research, EAS.699 Dissertation Research (0-12)

The doctorate may be pursued directly from the baccalaureate with the permission of the Program Director.

**Upper-Division Courses**

EAS.405 Petrology (3)	EAS.437 Earth Dynamics (3)
EAS.406 Petrology Laboratory (1)	EAS.440 Engineering Geology (3)
EAS.410 Sedimentology and Stratigraphy (3)	EAS.444 Principles of Dynamic Meteorology I(3)
EAS.418 Stratigraphy (3)	EAS.445 Principles of Dynamic Meteorology II (3)
EAS.419 Petroleum Geology (3)	EAS.450 Scientific Communications (2)
EAS.420 Synoptic Meteorology I (3)	EAS.451 Principles of Seismic Exploration (2)
EAS.422 Synoptic Meteorology II (3)	EAS.452 Seismic Exploration Laboratory (1)
EAS.423 Micrometeorology (3)	EAS.453 Principles of Electrical Exploration (3)
EAS.427 Environmental Geophysics (3)	EAS.455 Principles of Gravity and Magnetic Exploration (4)
EAS.428 Environmental Geochemistry (3)	EAS.460 Introduction to the Physics of the Solid Earth (3)
EAS.430 Structural Geology (4)	EAS.462 Introduction to Earthquake Seismology (3)
EAS.433 Physical Meteorology I (3)	EAS.472 Seismological Instrumentation (3)
EAS.434 Physical Meteorology II (3)	EAS.475 Introduction to Geomagnetism (3)
EAS.435 Groundwater Hydrology (3)	

**Graduate Courses**

EAS.504 Potential Theory (3)	EAS.524 Tropical Meteorology (3)
EAS.506 Physics of Solid Earth (3)	EAS.526 Synoptics and Dynamics of Jet Streams (3)
EAS.508 Dynamics of the Atmosphere (3)	EAS.527 Meteorology of Severe Storms (3)
EAS 509 Physics of the Atmosphere (3)	EAS.528 Diagnosis and Prediction of Severe Storms (3)
EAS 511 Computing in Atmospheric Science (2)	EAS.529 Mesometeorology (3)
EAS.512 Time Series Analysis in Geophysics (3)	EAS 530 Seminar in Atmospheric Science (0-1)
EAS.515 Properties of Earth Materials (3)	EAS 533 Communicating in Research (2)
EAS.517 Divergent and Convergent Margins (3)	EAS.534 Cloud Physics (3)
EAS.518 Transform Margins and Plate Interiors (3)	EAS.536 Principles of Radiative Transfer (3)
EAS.519 Seminar in Geoscience (2)	EAS.538 Statistical Methods in Meteorology (3)
EAS.520 Numerical Methods of Prediction (3)	EAS.539 Seminar in Seismology (2)
EAS.522 Geophysical Data Processing (3)	EAS.540 Continuum Mechanics in Wave Propagation (3)
EAS.523 Boundary Layer Meteorology (3)	

- EAS.542 Advanced Structural Geology (2)
- EAS.543 Isotope Geochemistry (2)
- EAS.544 Advanced Sedimentary Geology (2)
- EAS.545 Advanced Petrology (2)
- EAS.546 Geodynamics (3)
- EAS.547 Turbulence (3)
- EAS.551 Seismic Exploration Methods (2)
- EAS.552 Seismic Exploration Laboratory (1)
- EAS.554 Potential and Electrical Exploration Methods (3)
- EAS.561 Satellite Meteorology (3)
- EAS.565 Radar Meteorology (3)
- EAS.570 Convection in the Atmosphere (3)
- EAS.572 Seismological Instrumentation (3)
- EAS.575 Land-Atmosphere Interaction (3)
- EAS.580 Synoptic-Mesoscale Circulations (3)
- EAS.588 Independent Study (1-3)
- EAS.591 Geoscience Journal Club (0-1)
- EAS.593 Special Topics in Earth and Atmospheric Sciences (1-3)
- EAS.595 Special Study for Examinations (0)
- EAS.597 Research Topics (1-3)
- EAS.598 Graduate Reading Course (1-3)
- EAS.599 Thesis Research (0-6)
- EAS.5CR.90 Master's Degree Study (0)
- EAS.610 Advanced Topics in Solid Earth Geophysics (3)
- EAS.619 Advanced Seminar in Geophysics (2)
- EAS.620 Advanced Geomagnetism (3)
- EAS.630 Seminar in Atmospheric Science (1)
- EAS.631 Advanced Seismology I (3)
- EAS.633 Communicating in Research (2)
- EAS.632 Advanced Seismology II (3)
- EAS.648 General Circulation of the Atmosphere (3)
- EAS.659 Seminar in Numerical Methods of Atmospheric Sciences (3)
- EAS.688 Independent Study (1-3)
- EAS.691 Geoscience Journal Club (0-1)
- EAS.693 Special Topics in Earth and Atmospheric Sciences (1-3)
- EAS.695 Special Study for Examinations (0)
- EAS.697 Research Topics (1-3)
- EAS.698 Graduate Reading Course (1-3)
- EAS.699 Dissertation Research (0-6)
- EAS.6CR.99 Doctor of Philosophy Degree Study (0)

# ENGLISH

**Jonathan Sawday, Ph.D.**

*Department Chairperson*

**Joseph Weixlmann, Ph.D.**

*Graduate Program Director*

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

## Master of Arts and Master of Arts (Thesis)

### **Prerequisites:**

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

### **Required Courses:**

The Master of Arts requires 30 hours of course work beyond the B.A. Six credit hours may be taken at the 400 level. Students are required to take, preferably in their first year, ENGL.500 Methods of Literary Research, or ENGL.511 Literary Theory. ENGL.501, The Teaching of Writing, or its equivalent, is also required of those who teach writing classes offered by the Department.

### **Master of Arts (Thesis):**

The M.A. (Thesis) gives students the option of substituting a thesis for six hours of course work. Such students must register for 6 hours of ENGL.599 (Thesis Research) in their second year.

### **Madrid Campus:**

The M.A. and M.A. (Thesis) program are also offered at the Saint Louis University Madrid-Spain campus. Students from the Madrid program are required to enroll in three courses with Frost campus faculty, two of which should be taken during a one semester residence on the Frost campus in St. Louis.

### **Additional Requirements:**

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

### **Advancement to the Doctorate:**

Admission to the doctorate is made by separate application; in the spring of the master's candidate's second year. Students seeking admission to the doctorate from the master's program must complete a written project testifying to their sustained ability to work independently. This requirement can be satisfied in one of two ways. If they wish, students in their second year may write a Master's Thesis; at the completion of this two-semester process, these candidates graduate with M.A. (Thesis) degrees. Alternately, students contemplating advancement to doctoral study can complete a Master's Essay in one semester. Written under the direction of a faculty member chosen by the student, the Master's Essay is shorter than a thesis but nevertheless testifies to students' abilities to independently frame and complete article-length projects (roughly 25-30 pages) of their own design. Students writing a Master's Essay must register for 3 hours of ENGL.598 (a Graduate Reading Course) in the semester in which they undertake this project.

## Doctor of Philosophy

### **Prerequisites:**

An M.A. or 30 credit hours in course work in English beyond the B.A., though students from other fields with strong backgrounds in English studies will also receive consideration. Students with a B.A. seeking admission directly to the Ph.D. program still need to complete the M.A.

### **Required Courses:**

Students are required to take a minimum of 24 credit hours in English course work beyond the M.A. Six credit hours may be taken at the 400 level. ENGL.500 OR ENGL.511 is required of all students who have not taken the equivalent in another program at another university as part of their prior training. ENGL.501, The Teaching of Writing, or its equivalent, is also required of those who teach writing classes offered by the Department. After their first year, all Ph.D. students must, over several terms, distribute registrations for 12 hours of ENGL.699 (Dissertation Research).

### **Language Requirement:**

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

### **Additional Requirements:**

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

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

### **Upper-Division Undergraduate Courses**

*ENGL.400-404 Writing and Rhetoric*

ENGL.400 Business and Professional Writing

ENGL.401 New Media Writing

ENGL.402 History of Rhetoric I

ENGL.403 History of Rhetoric II

ENGL.404 Problems in Rhetoric

*ENGL.405-409: Creative Writing*

ENGL.405 Advanced Creative Writing: Poetry

ENGL.406 Advanced Creative Writing: Fiction

ENGL.407 Advanced Creative Writing: Drama

ENGL.408 Advanced Creative Writing: Non-Fiction

ENGL.409 Advanced Creative Writing: Special Topics

*ENGL.410-412 Language Studies*

ENGL.410 History of the English Language

ENGL.411 Introduction to Linguistics

ENGL.412 Language Studies: Special Topics

*ENGL.413-419 Literary Theory, Cultural Studies, and Film Studies*

ENGL.413 Literary Theory

ENGL.414 Cultural Studies

ENGL.415 Ethnic and Race Studies

ENGL.416 Gender Studies

ENGL.417 American Film History

ENGL.418 Film Theory

ENGL.419 Literary Theory, Cultural Studies, and Film Studies: Special Topics

*ENGL.420-429 Medieval Literature*

ENGL.420 Introduction to Old English

ENGL.421 Beowulf

ENGL.422 Introduction to Old Norse

ENGL.423 Literature of the Vikings

ENGL.424 Chaucer: The Canterbury Tales

ENGL.425 Chaucer: Troilus and Criseyde and Shorter Works

ENGL.426 Medieval Drama

ENGL.427 Arthurian Literature: Medieval to Modern

ENGL.428 The Alliterative Tradition

- ENGL.429 Medieval Literature: Special Topics  
*ENGL.430-439 16<sup>th</sup>- & 17<sup>th</sup>-Century Literature*
- ENGL.430 The Age of Elizabeth
- ENGL.431 Early Shakespeare
- ENGL.432 Later Shakespeare
- ENGL.433 Renaissance Drama
- ENGL.434 Renaissance Poetry and Prose
- ENGL.435 17<sup>th</sup>-Century Literature
- ENGL.436 Milton
- ENGL.437 Renaissance Literature and Rhetoric
- ENGL.438 Early Women Writers
- ENGL.439 16<sup>th</sup>- and 17<sup>th</sup>-Century Literature: Special Topics  
*ENGL.440-445 Restoration & 18<sup>th</sup>-Century Literature*
- ENGL.440 Restoration Literature
- ENGL.441 18<sup>th</sup>-Century Literature
- ENGL.442 Dryden, Pope, Swift
- ENGL.443 The Age of Johnson
- ENGL.444 Restoration and 18<sup>th</sup>-Century Drama
- ENGL.445 Restoration and 18<sup>th</sup>-Century Literature: Special Topics  
*ENGL.446-452 18<sup>th</sup>- & 19<sup>th</sup>-Century British Literature*
- ENGL.446 The Gothic Novel
- ENGL.447 Crime and Punishment
- ENGL.448 Jane Austen and her Predecessors
- ENGL.449 18<sup>th</sup>- and 19<sup>th</sup>-Century Women Writers
- ENGL.450 The Age of Romanticism
- ENGL.451 Romantic Poetry
- ENGL.452 18<sup>th</sup>- and 19<sup>th</sup>-Century Literature: Special Topics  
*ENGL.453-459 19<sup>th</sup>-Century British Literature and Culture*
- ENGL.453 The Victorian Age
- ENGL.454 Victorian Fiction
- ENGL.455 Victorian Poetry
- ENGL.456 The Victorian Essay/Prose
- ENGL.457 Victorian Satire
- ENGL.458 Major Victorian Authors/Movements
- ENGL.459 19<sup>th</sup>-Century Literature: Special Topics
- ENGL.460-469 20<sup>th</sup>- & 21<sup>st</sup>-Century British, Irish, and Postcolonial Literature
- ENGL.460 Topics in British Literature 1900-1945
- ENGL.461 Female/Expatriate Modernism
- ENGL.462 British Postmodernism
- ENGL.463 Nationalism and the Irish Cultural Revival
- ENGL.464 Irish Culture and Politics at Mid-20<sup>th</sup> Century
- ENGL.465 Contemporary Irish Literature, Culture, and Politics
- ENGL.466 Early 20<sup>th</sup>-Century Postcolonial Literature and Culture
- ENGL.467 Contemporary Postcolonial Literature and Culture
- ENGL.468 Major Postcolonial Writers
- ENGL.469 20<sup>th</sup>/21<sup>st</sup>-Century Literature: Special Topics  
*ENGL.470-489 American Literature*
- ENGL.470 American Literary Tradition to 1865
- ENGL.471 American Literary Tradition 1865-present
- ENGL.472 Contemporary American Literature
- ENGL.473 Ethnic American Literature
- ENGL.474 19<sup>th</sup>-Century American Literature
- ENGL.475 19<sup>th</sup>-Century American Poetry
- ENGL.476 20<sup>th</sup>-Century American Literature
- ENGL.477 20<sup>th</sup>-Century American Poetry
- ENGL.478 Recent American Poetry
- ENGL.479 American Drama
- ENGL.480 American Short Story
- ENGL.481 Major American Authors
- ENGL.482 Pre-1900 African American Literature
- ENGL.483 Post-1900 African American Literature
- ENGL.484 Native American Literature
- ENGL.485 Latino American Literature
- ENGL.486 Literature and Culture of the Americas
- ENGL.487 Introduction to Young Adult Literature
- ENGL.488 The Machine Age in American Literature
- ENGL.489 American Literary and Cultural Studies: Special Topics  
*ENGL.490-493 Special Studies*
- ENGL.490 Interdisciplinary Studies
- ENGL.491 Internship
- ENGL.492 World Literature: Special Topics
- ENGL.493 Special Topics in Literature
- ENGL.494 Senior Inquiry Seminar
- ENGL.495 Senior Residency
- ENGL.498 Advanced Independent Study
- ENGL.4WU Wash-U Inter University Course

## Graduate Courses

### *ENGL.500-504: Research Methodology and Pedagogy*

ENGL.500 Methods of Literary Research (3)

ENGL.501 The Teaching of Writing (3)

ENGL.502 Teaching Literature (3)

ENGL.504 Problems in Rhetoric (3)

### *ENGL.510-518: Theory and Criticism*

ENGL.510 History of Literary Criticism from Aristotle to the Present (3)

ENGL.511 Literary Theory (3)

ENGL.512 Theoretical Perspectives in Medieval Literature (3)

ENGL.513 Theoretical Perspectives in Renaissance Literature (3)

ENGL.514 Theoretical Perspectives in Restoration and 18th-Century British Literature (3)

ENGL.515 Theoretical Perspectives in 19<sup>th</sup>-Century British Literature (3)

ENGL.516 Theoretical Perspectives in 20<sup>th</sup>-Century British Literature (3)

ENGL.517 Theoretical Perspectives in American Literature (3)

ENGL.518 Theoretical Perspectives in Contemporary Literature (3)

### *ENGL.519-529: Medieval Literature and Language Studies*

ENGL.519 History of the English Language (3)

ENGL.520 Introduction to Old English (3)

ENGL.521 Beowulf (3)

ENGL.522 Introduction to Old Norse (3)

ENGL.523 Literature of the Vikings (3)

ENGL.524 Anglo-Saxon/Old English Literature (3)

ENGL.525 Old Norse Literature (3)

ENGL.527 Arthurian Literature (3)

ENGL.529 Special Topics in Medieval Literature (3)

ENGL.571 American Fiction, 1900-1950 (3)

ENGL.580 Film Studies (3)

ENGL.593 Special Topics (1-3)

ENGL.595 Special Study for Examinations (0)

ENGL.598 Graduate Reading Course (1-3)-

ENGL.599 Thesis Research (0-6)

ENGL.5CR.90 Master's Degree Study (0)

ENGL.5UMSL UMSL Inter-University Course (0-3)

ENGL.5WU Wash-U Inter University Course (1-5)

## Advanced Graduate Seminars

ENGL.604 Rhetorical Theory and Discourse Pedagogy (3)

ENGL.610 Studies in Literary Theory (3)

ENGL.615 Genre Studies (3)

ENGL.617 Literary Themes (3)

ENGL.619 Interdisciplinary Studies (3)

ENGL.625 Chaucer: The Canterbury Tales (3)

ENGL.626 Studies in Chaucer (3)

ENGL.627 Middle English Literature (3)

ENGL.630 16<sup>th</sup>-Century Non-Dramatic Literature (3)

ENGL.631 Renaissance Drama (3)

ENGL.632 Shakespeare (3)

ENGL.634 Renaissance Drama (3)

ENGL.635 17<sup>th</sup>-Century Literature (3)

ENGL.636 17<sup>th</sup>-Century Prose (3)

ENGL.639 Special Topics in Renaissance Literature (3)

ENGL.640 Restoration Literature (3)

ENGL.641 Restoration and 18<sup>th</sup>-Century Poetry (3)

ENGL.642 Restoration and 18<sup>th</sup>-Century Prose Fiction (3)

ENGL.643 Restoration and 18<sup>th</sup>-Century Drama (3)

ENGL.649 Special Topics in Restoration and 18<sup>th</sup>-Century British Literature (3)

ENGL.650 Romanticism (3)

ENGL.651 19<sup>th</sup>-Century Prose Non-Fiction (3)

ENGL.652 Victorian Poetry (3)

ENGL.653 19<sup>th</sup>-Century Novel (3)

ENGL.659 Special Topics in Nineteenth-Century British Literature (3)

ENGL.660 Studies in Modernism (3)

ENGL.661 20<sup>th</sup>-Century Fiction (3)

ENGL.662 20<sup>th</sup>-Century Poetry (3)

ENGL.663 20<sup>th</sup>-Century Drama (3)

ENGL.665 20<sup>th</sup>-Century Postcolonial Literature (3)

ENGL.669 Special Topics in Literature of the 20th Century (3)

ENGL.670 Early American Literature (3)

ENGL.671 19<sup>th</sup>-Century American Literature (3)

ENGL.672 19<sup>th</sup>-Century American Poetry (3)

ENGL.673 19<sup>th</sup>-Century American Modernism (3)

ENGL.674 Studies in American Modernism (3)

ENGL.676 20<sup>th</sup>-Century American Fiction (3)

ENGL.677 20<sup>th</sup>-Century American Poetry (3)

ENGL.678 20<sup>th</sup>-Century American Drama (3)

ENGL.679 Special Topics in 20th-Century American Literature (3)

ENGL.680 The American Short Story

ENGL.681 American Film Aesthetics (3)

ENGL.685 Studies in Comparative Literature (3)

ENGL.689 Poetry and Theory of Gender after the 1960s (3)

ENGL.693 Special Topics (1-3)

ENGL.695 Special Study for Examinations (0)

ENGL.697 Research Topics (1-3)

ENGL.698 Graduate Reading Course (1-3)

ENGL.699 Dissertation Research (0-12)

ENGL.6CR.99 Doctor of Philosophy Degree Study (0)

# HISTORY

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

**T. Michael Ruddy, 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 or Modern European History. Doctoral students must choose a primary and secondary specialty. The secondary area may be in any of the areas cited for Master's degree study or a specialized area constructed in consultation with the departmental advisor and 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 hours of coursework (twenty-seven hours for those enrolled in the combined MA/Ph.D. program), including HIST.500; a historical studies course and a seminar in the chosen specialty. A maximum of six (6) credit-hours may be taken in academic fields other than history. For those pursuing an MA research degree, six (6) hours of thesis research replaces six (6) hours of coursework.

### Additional Requirements

Competency in one foreign language to be verified by written examination. A two hour written comprehensive exam and one hour oral for the MA; a one-hour oral thesis presentation for MA research. (For students continuing on to the Ph.D., an oral presentation of a seminar research paper will replace the thesis requirement.)

*A formal minor is not permitted.*

## Doctor of Philosophy (Combined MA/Doctor of Philosophy)

### Prerequisites

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

### Required Courses

For students entering with an MA from another institution, twenty-seven hours of coursework; for those pursuing the combined MA/Ph.D., thirty-six hours total (twenty-seven from the MA plus nine (9) additional hours). Course work must include HIST.500 and historical studies courses and seminars in both the primary and secondary specialties. A maximum of six (6) credit hours may be taken in fields other than history.

### Additional Requirements

For Medieval and Early Modern Europe history, competency in two foreign languages, one of which must be Latin. For U.S. history, competency in one foreign language. In-residence, fulltime study for at least one year. Two four-hour written exams and a two-hour oral exam at the end of coursework. HIST.690/691, prospectus courses leading to the preparation of a prospectus, including a historical essay, before undertaking dissertation research.

## Graduate Courses

- HIST.500 Theory and Practice of History: An Introduction (3)
- HIST.520 Studies in Late Antiquity and Byzantine History (3)
- HIST.521 Advanced Studies in Late Antiquity and Byzantine History (3)
- HIST.525 Perspectives in Late Antiquity and Byzantine History (3)
- HIST.530 Studies in Medieval History (3)
- HIST.531 Advanced Studies in Medieval History (3)
- HIST.535 Perspectives in Medieval History (3)
- HIST.540 Studies in Early Modern European History (3)
- HIST.541 Advanced Studies in Early Modern European History (3)
- HIST.545 Perspectives in Early Modern European History (3)
- HIST.550 Studies in Modern European History (3)
- HIST.551 Advanced Studies in Modern European History (3)
- HIST.555 Perspectives in Modern European History (3)
- HIST.560 Studies in American History (3)
- HIST.561 Advanced Studies in American History (3)
- HIST.565 Perspectives in American History (3)
- HIST.590 History Teaching Practicum (0)
- HIST.593 Special Topics in History (1-3)
- HIST.595 Special Study for Examinations (0)
- HIST.597 Research Topics (1-3)
- HIST.598 Graduate Reading Course (1-3)
- HIST.599 Thesis Research (0-6)
- HIST.5CR.90 Master's Degree Study (0)
- HIST.680 Seminar in Late Ancient and Byzantine History (3)
- HIST.681 Seminar in Medieval History (3)
- HIST.682 Seminar in Early Modern European History (3)
- HIST.683 Seminar in Modern European History (3)
- HIST.684 Seminar in American History (3)
- HIST.690 Professional Writing for Historians 1 (3)
- HIST.691 Professional Writing for Historians 2 (3)
- HIST.693 Special Topics in History (1-3)
- HIST.695 Special Study for Examinations (0)
- HIST.697 Research Topics (1-3)
- HIST.698 Graduate Reading Course (1-3)
- HIST.699 Dissertation Research (0-6)
- HIST.6CR.99 Doctoral Degree Study (0)

# INTEGRATED & APPLIED SCIENCES

**Paul Jelliss, Ph.D.,**  
*Graduate Program Director*

## Doctor of Philosophy

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

The distribution of courses in the various IAS areas is determined by the student's dissertation committee with a minimum total of 48 credit hours between all three areas. A total of 60 credit hours are required with the remaining 12 credit hours coming from dissertation credits. An appropriate coursework track is developed by the student and their mentor with subsequent approval by the IAS Administrative Committee.

### Prerequisites

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

### Required Courses

Students choose a core department, completing 25-29 credit hours of lecture or laboratory-based 500 and 600 level courses. Students are also required to complete the following courses for at least four and up to six semesters:

IAS.601 Interdisciplinary Seminar; and  
 IAS.603 (Current Topics in) Interdisciplinary Research

### Additional Requirements

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

### Graduate Courses

GIS.501 Introduction to GIS (3)	
GIS.502 Intermediate GIS (3)	IAS.603 (Current Topics in) Interdisciplinary Research (2)
GIS.503 Geospatial Methods in Environmental Studies (3)	IAS.695 Special Study for Examinations (0)
GIS.504 Introduction to Remote Sensing (3)	IAS.697 Research Topics (1-3)
GIS.505 Microwave Remote Sensing: SAR principles, data processing and Applications (3)	IAS.698 Graduate Reading Course (1-3)
GIS.506 InSAR - Synthetic Aperture Radar Interferometry (3)	IAS.699 Dissertation Research (0-12)
GIS.585 - GIS Capstone	IAS.6CR.99 Doctor of Philosophy Study (0)
IAS.601 Interdisciplinary Seminar (1)	

# MATHEMATICS

**James Hebda, Ph.D.,**  
*Department Chairperson*

**Julianne Rainbolt, Ph.D.,**  
*Graduate Director*

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

## Master of Arts

### Prerequisite

An undergraduate area of concentration in Mathematics.

### Required Courses

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

MATH.511 Algebra I, MATH.512 Algebra II;

MATH.521 Analysis I, and one of MATH.522 Complex Analysis, MATH 523 Functional Analysis, and MATH 524 Harmonic Analysis; and MATH.531 Topology I, MATH.532 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 year long sequences:

MATH.511 Algebra I, and MATH.512 Algebra II;

MATH.521 Analysis I and one of MATH.522 Complex Analysis, MATH 523 Functional Analysis, and MATH 524 Harmonic Analysis;

MATH.531 Topology I and MATH.532 Topology II;

MATH.641 Differential Geometry I and MATH.642 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 the student has carried out, with the guidance of a faculty member.

*No formal minor is permitted.*

### Upper-Division Courses

MATH.401 Elementary Theory of Probability (3)

MATH.402 Introductory Mathematical Statistics. (3)

MATH.403 Probability and Statistics for Engineers, (3)

MATH.405 History of Mathematics (3)

MATH.411 Introduction to Abstract Algebra (3)

MATH.412 Linear Algebra (3)

MATH.415 Number Theory (3)

MATH.421 Introduction to Analysis (3)

MATH.422 Metric Space (3)

MATH.423 Multivariable Analysis (3)

MATH.441 Foundations of Geometry (3)

### Graduate Courses

MATH.501 Linear Algebra (3)

MATH.502 Metric Spaces (3)

MATH.503 Number Theory (3)

MATH.504 Multivariable Analysis (3)

MATH.511 Algebra (3)

MATH.512 Algebra II (3)

MATH.521 Real Analysis I (3)

MATH.522 Complex Analysis (3)

MATH.523 Functional Analysis (3)

MATH.524 Harmonic Analysis (3)

MATH.531 Topology I (3)

MATH.532 Topology II (3)

MATH.593 Special Topics in Mathematics (1-3)

MATH.595 Special Study for Examinations (0)

MATH.598 Graduate Reading Course (1-3)

*Prior permission of instructor and chairperson required.*

MATH.599 Thesis Research (0-6)

MATH.447 Non-Euclidean Geometry (3)

MATH.448 Differential Geometry (3)

MATH.451 Introduction to Complex Variables (3)

MATH.452 Complex Variables II (3)

MATH.453 Geometric Topology (3)

MATH.455 Nonlinear Dynamics and Chaos (3)

MATH.457 Partial Differential Equations (3)

MATH.463 Graph Theory (3)

MATH.465 Cryptography (3)

MATH.5CR.90 Master's Degree Study (0)

MATH.611 Algebra III (3)

MATH.618 Topics in Algebra (3)

MATH.621 Lie Groups and Lie Algebras (3)

MATH.622 Representation Theory of Lie Groups (3)

MATH.628 Topics in Analysis (3)

MATH.631 Algebraic Topology (3)

MATH.632 Topology of Manifolds (3)

MATH.638 Topics in Topology (3)

MATH.641 Differential Geometry I (3)

MATH.642 Differential Geometry II (3)

MATH.648 Topics in Geometry (3)

MATH.695 Special Study for Examinations (0)

MATH.698 Graduate Reading Course (1-3)

*Prior permission of instructor and chairperson required.*

MATH.699 Dissertation Research (0-6)

MATH.6CR.99 Doctor of Philosophy Degree Study

# MODERN AND CLASSICAL LANGUAGES

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

## Master of Arts in French

**Pascale Perraudin, Ph.D.,**  
*Graduate Program Director*

The Master of Arts 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.

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.510 Critical Writing, Oral Expression, and Research;

Nine semester-hours of coursework prior to 1900 and nine semester-hours 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.*

### Upper-Division Courses

With the permission of the course instructor and the Graduate Program Director, undergraduate students may petition to enroll in literature and culture courses under the graduate (500-level) number.

### Graduate Courses

FREN.500 Teaching College French (0)

FREN.507 Studies in Francophone Culture (3)

FREN.510 Critical Writing, Oral Expression, and Research (3)

FREN 522: French and Francophone Media (3)

FREN 529: Women and Global Issues (3)

FREN.533 French "Moralists" (3)

FREN.534 The Age of Enlightenment (3)

FREN.535 Studies in 19th-Century French Novel (3)

FREN.537 Literature of the Fantastic (3)

FREN.539 Studies in 20th-Century French Prose (3)

FREN.541 Early Modern French Poetry (3)

FREN.542 Studies in 19th-Century French Poetry (3)

FREN.551 Early Modern French Theater (3)

FREN.554 Studies in 20th-Century French Theater (3)

FREN.560 Contemporary Women Writers in France and Quebec (3)

FREN.561 French Cinema (3)

FREN.563 Studies in Francophone Literature (3)

FREN.566 Nation, Identity and Culture (3)

FREN.567 Post colonialism and Violence (3)

FREN.570 Love & Honor in Early Modern France (3)

FREN.571 Women and Writing in Early Modern France (3)

FREN.585 Seminar on Molière (3)

FREN.586 The World of Baudelaire (3)

FREN.587 Exoticism in French Literature (3)

FREN.593 Special Topics in French (1-3)

FREN.598 Graduate Reading Course (1-3)

FREN.595 Special Study for Examinations (0)

FREN.5CR.90 Master's Degree Study (0)

## Master of Arts in Spanish

**Karen A. Secrist, Ph.D.,**  
*Graduate Program Director*

Our M.A. program seeks to give the student 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. Our 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 there 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.*

### Graduate Courses

SPAN.500 Teaching College Spanish (0)

SPAN.531 Women Writing Women: Latin American Women Playwrights (3)

SPAN.502 Spanish in the World (3)

SPAN.532 The African Experience in Spanish America (3)

SPAN.503 Spanish Linguistics (3)

SPAN.533 Narratives on the End of Utopias (3)

SPAN.504 Methods and Technology for the Teaching of Spanish (3)

SPAN.535 Counter Hegemony Discourses (3)

SPAN.505 Spanish Phonology and its Place in the Classroom (3)

SPAN.536 Written by Herself: Latin American Women Writers (3)

SPAN.507 Spanish Stylistics (3)

SPAN.537 Latin American Film (3)

SPAN.508 Learning Texts: Tradition, Authenticity and Virtuality (3)

SPAN.538 Cultural Stereotypes: Latin America (3)

SPAN.518 Contemporary Spanish Culture and Civilization. (3)

SPAN.539 Contemporary Spanish Women Writers (3)

SPAN.519 Contemporary Spanish American Culture and Civilization (3)

SPAN.543 Three Spanish Literary Masterpieces (3)

SPAN.520 Introduction to Literary Criticism (3)

SPAN.552 Don Quixote by Cervantes (3)

SPAN.524 Short Stories: History, Histories (3)

SPAN.553 Golden Age Lyric Poetry (3)

SPAN.526 Latin American "Modernismo" (3)

SPAN.554 Golden Age Drama (3)

SPAN.527 Contemporary Latin American Poetry (3)

SPAN.555 Spanish Jewry in Medieval Spain: Life under Islam and Christianity. Expulsion and Diaspora, 1492-1700 (3)

SPAN.528 Early Latin American Novel (3)

SPAN.561 Nineteenth-Century Poetry and Drama (3)

SPAN.529 Boom, Mass Media and Utopia (3)

SPAN.562 Nineteenth-Century Novel (3)

SPAN.568 Contemporary Spanish Short Story (3)

SPAN.570 Twentieth-Century Poetry (3)

SPAN.571 Twentieth-Century Novel (3)

SPAN.572 Twentieth-Century Drama (3)

SPAN.573 Spanish Literature and Film (3)

SPAN.574 From the Poetry of Knowledge to the Poetry of the Turn of the Century (3)

SPAN.575 Spanish Novel after 1970 (3)

SPAN.577 Carpe Verbum: The Journey of Women Poets in Contemporary Spain (3)

SPAN.593 Special Topics (1-3)

SPAN.595 Special Study for Examinations (0)

SPAN.598 Graduate Reading Course (1-3)

SPAN.5CR.90 Master's Degree Study (0)

# PHILOSOPHY

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

The graduate program in 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)

### Prerequisites

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

### Required Courses

Thirty (30) credit hours, 21 of which must be graduate hours. Eighteen (18) hours must be in philosophy and 12 of which must be graduate hours. Completion of the systematic synthesis course (3 hours). One-hour defense of synthesis paper.

## Master of Arts (Thesis)

### Prerequisites

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

### Required Courses

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

### Additional Requirements

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

*A formal minor may be permitted.*

## Doctor of Philosophy

### Prerequisites

Eighteen (18) credit hours of undergraduate upper-division coursework.

### Required Courses

Sixty-six (66) credit hours, six of which are prospectus hours and 12 of which are dissertation research hours. The other 54 hours of coursework beyond the bachelor's degree must include: 21 credit-hours in the history of philosophy, namely six in ancient, six in medieval, six in modern and three in contemporary philosophy; 15 credit hours in topics courses to be distributed over three of the following areas: epistemology, metaphysics, ethics, and social and political philosophy, with nine credit hours falling within a chosen area of competence; three hours of advanced logic at 400-level or above (for which a departmental examination may be substituted [but without credit]); nine hours of electives; six credit hours of reading courses on the dissertation topic culminating in dissertation topic prospectus.

## Additional Requirements

One course permitted at 400-level. A maximum of nine credit hours may be taken in a related discipline. A two-hour oral examination on the dissertation prospectus covering: (i) the relationship between the dissertation topic and the broader discipline, whether contemporary or historical, and (ii) the philosophical import of the topic itself. Reading proficiency in both French and German, or in two other foreign languages at the discretion of the student's supervisory faculty committee.

*A formal minor is permitted.*

## Upper-Division Course

PHIL.493 Advanced Logic (3)

## Graduate Courses

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

PHIL.500 Introduction to the Graduate Study of Philosophy (0)

PHIL.595 Special Study for Examinations (0)

PHIL.510 Problems in Epistemology (3)

PHIL.598 Graduate Reading Course (1-3)

PHIL.520 Problems in Metaphysics (3)

PHIL.599 Thesis Research (0-6)

PHIL.530 Problems in Ethical Theory (3)

PHIL.5CR.90 Master's Degree Study (0)

PHIL.540 Problems in Social and Political Philosophy (3)

PHIL.600 Seminar on a Major Philosopher in Ethics (3)

PHIL.580 Systematic Synthesis (3)

PHIL.605 Seminar on a Major Philosopher in Political Philosophy (3)

PHIL.593 Special Topics in Philosophy (3)

PHIL.610 Seminar on a Major Philosopher in Metaphysics (3)

PHIL.615 Seminar on a Major Philosopher in Epistemology (3)

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

PHIL.620 Philosophy of Science (3)

PHIL.632 Advanced Metaphysics (3)

PHIL.622 Advanced Logic (3)

PHIL.634 Advanced Epistemology (3)

PHIL.626 Problems in the Philosophy of Religion (3)

PHIL.636 Seminar in Political Philosophy (3)

PHIL.630 Advanced Ethics (3)

PHIL.638 Seminar in Aesthetics (3)

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

PHIL.640 Ancient Philosophy (3)

PHIL.695 Special Study for Examinations (0)

PHIL.645 Medieval Philosophy (3)

PHIL.697 Special Topics in Philosophy (1-3)

PHIL.650 Modern Philosophy (3)

PHIL.698 Graduate Reading Course (1-3)

PHIL.655 Contemporary Philosophy (3)

PHIL.699 Dissertation Research (0-6)

PHIL.680 Prospectus (3-6)

PHIL.6CR.99 Doctor of Philosophy Degree Study (0)

# POLITICAL SCIENCE

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

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

**James Gilsinan, Ph.D.**  
*Coordinator 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 two dual-degree programs: a dual-degree M.P.A./M.A. in Political Science and a dual degree M.P.A. /J. D. The Political Science department collaborates with other departments on a graduate concentration in Global and Local Social Justice.

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 hour program of study (120 as an undergraduate, 30 as a graduate student, 6 of those hours 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 graduate degree.

The Master of Public Administration (M.P.A.) program is designed for mid-career professionals and pre-service students interested in preparing themselves for 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 National Association of Schools of Public Affairs and Administration (NASPAA).

## Accelerated Bachelor of Arts/Master of Arts

### **Prerequisites**

Political Science Major, junior standing, and a GPA of at least 3.4. Degree requirements are the same as for the Master of Arts.

## Master of Arts

### **Prerequisites**

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

### **Required Courses**

Students will choose a track and focus on American Politics, International Affairs, Gender and Politics or Political Theory. All students will complete a total of 30 credit hours for the M.A. degree. Students who select a capstone option involving less than 6 credit hours will take additional courses to bring the total to 30 hours.

No more than 12 hours of the MA may be taken outside Political Science, no more than 6 hours may be taken at the 400-level, and no more than 6 hours 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 graduate classes. Exceptions will be allowed only with the approval of the Director of Graduate Studies for the department

### **American Politics—General Track**

**Core Courses** (9 hrs.)

POLS.511 American Political Institutions  
 POLS.670 American Political Thought

POLS.500 Political Science Quantitative Research Methods **or**  
 SOC 560 Research Methodology

**Other Requirements**

SOC.601 Inferential Statistics **or** other quantitative methods course  
**Two** more American politics **or** Public Policy courses  
 6-12 hrs. Political Science electives, depending on capstone choice

**Capstone** (*Choose one option from*)

MA Thesis (6 hrs.)  
 Internship (6 hrs.)

Professional paper (0 hrs.)  
 Comprehensive exam (0 hrs.)

**American Politics—Polling, Campaigns and Elections Track****Core Courses** (9 hrs.)

POLS.511 American Political Institutions  
 POLS.670 American Political Thought

POLS.500 Political Science Quantitative Research Methods **or**  
 SOC.560 Research Methodology

**Other Requirements**

SOC.601 or other quantitative methods course  
 POLS.517 Seminar in Electoral Politics

POLS.593 Election Law  
 6 hrs. Political Science electives

**Capstone**

Internship required (6 hrs.)

**American Politics—Public Law Track****Core Courses** (9 hrs.)

POLS.511 American Political Institutions  
 POLS.670 American Political Thought

POLS.500 Political Science Quantitative Research Methods **or**  
 SOC.560 Research Methodology

**Other Requirements** (*Three of the following*)

POLS.530 Administrative Law  
 POLS.580 Theories of Constitutional Interpretation  
 POLS.593 Law and Social Change

POLS.593 Election Law  
 Plus 6 hrs. of Political Science Electives

**Capstone**

Internship required (6 hrs.)

**Gender and Politics Track****Core Courses** (9 hrs.)

POLS.576 Feminist Theory  
 POLS.577 Feminist Epistemology

POLS.593 Gender and American Politics

**Other Required Courses** (*Choose 6 hrs. from*)

POLS.593 Women and the Law  
 POLS.513 American Race Relations

POLS.671 Leadership and Culture

**Research Methods** (*Choose 3 hrs. from*)

POLS.500 Political Science Quantitative Research Methods  
 WSTD.501 Qualitative Research Methods  
 SOC.560 Research Methodology

PPS.506 Qualitative Research and Evaluation Methods  
 PPS.535 Introduction to Geographic Information System

**Political Science electives**

6-12 hours of electives, depending on the capstone option, chosen with advisor's approval  
 Courses from outside Political Science and Women's Studies require approval of the Director of Graduate Studies

**Capstone** (*Choose one option from*)

M.A. Thesis (6 hrs.)  
 Internship (6 hrs.)

Professional paper (0 hrs.)  
 Comprehensive exam (0 hrs.)

**International Affairs—General Track****Core courses** (*Choose two classes from*)

POLS.551 Democratization  
 POLS.555 State and Society

POLS.569 Theories of World Politics

**Other Requirements** (*Choose one class from*)

POLS.500 Political Science Quantitative Research Methods  
 SOC.560 Research methodology  
 SOC.580 Survey Design and Sampling  
 SOC.601 Quantitative I: Applied Inferential Statistics

PPS.506 Qualitative Research and Evaluation Methods  
 PPS.535 Intro to GIS  
 Plus 15-21 hrs. of electives, chosen with advisor's approval

**Capstone** (*Choose one option from*)

MA Thesis (6 hrs.)  
 Internship (6 hrs.)

Professional paper (0 hrs.)  
 Comprehensive exam (0 hrs.)

**International Affairs—Security and Cooperation Track****Core Courses (6 hrs.)** *Choose two classes from:*

POLS.551 Democratization  
 POLS.555 State and Society

POLS.569 Theories of World Politics

**Other Requirements**

POLS.511 American Political Institutions  
 POLS.562 Global Diplomacy  
 POLS.564 Problems of International Terrorism  
 POLS.566 Asymmetric War

PPS.535 Intro to GIS  
 PPS.537 Intermediate GIS  
 Plus 0-6 hrs. of Political Science electives, depending on capstone choice

**Capstone** *Choose from:*

MA Thesis (6 hrs.)  
 Internship (6 hrs.)

Professional paper (0 hrs.)  
 Comprehensive exam (0 hrs.)

**International Affairs—Foreign Service Track****Core Courses (6 hrs.)** *Choose two classes from:*

POLS.551 Democratization  
 POLS.555 State and Society

POLS.569 Theories of World Politics

## Other Requirements

POLS.511 American Political Institutions

POLS.562 Global Diplomacy

6 hrs. at the 400 or 500-level of the foreign language appropriate to the student's area of interest. (*Students who have already achieved this level of proficiency may take 6 hrs. of electives instead.*)

6-12 hrs. of Political Science electives, depending on capstone choice

**Capstone** *Choose from:*

Internationally-focused internship (6 hrs.)

International field research leading to an MA thesis (6 hrs.) or a professional paper (0 hrs.)

## Political Theory Track

### Required Courses

POLS.593 History of Political Thought

12 hrs. chosen from:

POLS.573 Contemporary Political Ideologies

POLS.576 Feminist Theory

POLS.670 American Political Thought

POLS.671 Leadership and Culture

POLS.593 Critical Theory and the Frankfurt School

POLS.593 Structures of Power/Structures of Thought

POLS.593 Reason, Virtue, and Politics

*Courses approved by the Director of Graduate Studies to satisfy this political theory requirement.*

### Political Science electives

9-15 hrs. chosen in consultation with the student's advisor

**Capstone** *Choose from:*

M.A. Thesis (6 hrs.)

Internship (with approval from the Director of Graduate Studies) (6 hrs.)

Professional paper (0 hrs.)

Comprehensive exam (0 hrs.)

## Master of Public Administration (M.P.A.)

The MPA program is comprised of course work totaling 36 hours: 18 hours of core courses and 18 hours of concentration courses and electives. In addition, the program requires an Internship (3 credit hours) for students with limited professional experience in the public sector.

In order to complete the program, students must choose between taking comprehensive exams or completing a capstone project.

### Prerequisites

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

### Required Courses

PPS.501 Research Methods

PPS.503 Issues in American Public Administration

PPS.512 Introduction to Public Sector Budgeting

PPS.515 Economics of the Public Sector

PPS.540 Organizational Theory and Behavior

PPS.541 Administrative Law

## Elective Courses

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 Public Policy Studies, including urban affairs, city planning and policy analysis. Typical focus areas for Public Administration students include:

Criminal Justice Policy  
Finance  
Fundraising

Health Care Policy  
Housing Policy  
Nonprofit Management

Organizational Psychology  
Public Sector Accounting  
The Policy Process

## Additional Requirements:

Pre-service students are required to take a three-credit-hour internship. A total of 36 or, with the internship, 39 credit hours is required. A formal minor is not allowed.

## M.P.A./M.A. Dual Degree Program

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 hours of course work required for the M.P.A./M.A. The required courses are:

PPS.540 Organizational Theory and Behavior (3)

PPS.515 Economics of the Public Sector (3)

PPS.512 Introduction to Public Sector Budgeting (3)

PPS.541/POLS.530 Administrative Law (3)

PPS.503 Issues in Public Administration (3)

PPS.501 Research Methods (3)

Three core classes, with two from either the American Politics General Track or the International Affairs General Track (9)

Internship (3)

Political Science electives (9)

Public Policy electives (9)

Capstone (3)

## Dual J.D./M.P.A.

The Department of Political Science and the School of Law offer students the opportunity to earn a joint degree in Law and Public Administration (J.D./M.P.A.). The student spends the first year of the joint program in the law school. Thereafter, the student undertakes both M.P.A. and J.D. coursework. Students in the joint program take a total of 103 hours of coursework (79 hours in the School of Law and 24 hours from the M.P.A. curriculum). Students complete the same core classes as in the M.P.A.

## Graduate Certificate in Global and Local Social Justice

The Graduate Global and Local Social Justice certificate consists of 15 hours of classes, including:

**One class in theories of justice. Choose from:**

POLS.573 Contemporary Political Ideologies

POLS.575 American Political Thought

POLS.593 Structures of Power/Structures of Thought

ASTD.670/POLS670 Seminar in American Political Thought

WSTD.501/POLS.576 Feminist Theory

**Two classes in local and domestic issues. Choose from:**

ASTD.527 Anti-Black Racism  
 ASTD.540 Metropolitan America  
 ASTD.639 Race, Rights & American Identity  
 POLS.671 Leadership and Culture  
 PPS.500 The Metropolis  
 PPS.576 Poverty Policy  
 PPS.605 Policy Ethics / Social Responsibility

SOC.540 Race, Gender, Class and Criminal Justice  
 SOC.550 Social Stratification  
 SOC.551 Constructing Social Problems  
 SWRK.702 Social Policy  
 SWRK.715 Social Work Practice with Low Income Families  
 and Neighborhoods  
 SWRK.716 Diversity and Anti-Oppression Practice

**One class in global issues. Choose from:**

POLS.550 Democratization  
 POLS.584 Politics of Health  
 POLS.562 Global Diplomacy

PPS.493 Structure of Poverty - Global and Local  
 SWRK.703 International Social Work: Mexico/Ghana  
 SWRK.793 Social Work in an International Context

**Electives. Consult with the director about other possible electives.**

SWRK.701 Social Justice: Human Liberation and Community  
 Building  
 SWRK.717 Foundations of Nonviolent Peacemaking

SWRK.768 Health and Mental Health Policy  
 SWRK.798 Non-Profit Management  
 PPS.540 Organizational Theory and Behavior

No more than nine of the fifteen required hours may be taken in a single department. Other courses may be substituted with the approval of the program director.

In addition to the fifteen hours of coursework, all students must successfully complete a 0-credit capstone requirement (graded pass/fail). Each student will give a public presentation typically based on a paper written in one of the classes taken as part of the concentration.

**Upper-Division Courses**

PPS.433 Comparative Urban and State Politics (3)

PPS.435 Geographic Information Systems (3)

PPS.450 Research Methods (3)

**Graduate courses**

POLS.500 Political Science Quantitative Research Methods (3)

POLS.511 American Political Institutions (3)

POLS.513 American Race Relations (3)

POLS.514 Political Parties and Interest Groups (3)

POLS.517 Seminar in Electoral Politics (3)

POLS.518 Graduate Internship (1-3)

POLS.530/PPS.541 Administrative Law (3)

POLS.532 Environmental Politics and Policy-making (3)

POLS.550 Russian Political Culture (3)

POLS.551 Democratization (3)

POLS.552 Political Change (3)

POLS.555 State and Society (3)

POLS.562 Global Diplomacy (3)

POLS.564 Problems of International Terrorism (3)

POLS.566 Asymmetric Warfare in Two Eras: Vietnam & The Cold War

POLS.569 Theories of World Politics (3)

POLS.573 Contemporary political ideologies (3)

POLS.576 Feminist Theory (3)

POLS.577 Feminist Epistemologies (3)

POLS.580 Theories of Constitutional Interpretation (3)

POLS.584 Politics of Health (3)

POLS.585 Politics of the Future (3)

POLS.586 Political Thought of Asia (3)

POLS.588 Graduate Capstone Internship (3-6)

POLS.595 Study for Special Exams (0)

POLS.598 Graduate Independent Study (1-3)

POLS.599 Thesis Research (0-6)

POLS.5CR Master's Degree Study (0)

POLS.670 American Political Thought (3)

POLS.671 Leadership and Culture (3)	PPS.594 Internship (3)
PPS.500 The Metropolis (3)	PPS.595 Special Study for Examinations (0)
PPS.501 Research Methods (3)	PPS.597 Research Topics (1-3)
PPS.503 Issues in American Public Administration (3)	PPS.598 Graduate Reading Course (1-3)
PPS.505 Special Topics: Urban and Administrative Theory (3)	PPS.5CR.90 Master's Degree Study (0)
PPS.506 Qualitative Research and Evaluation Methods (3)	PPS.600 Scope and Methods of Policy Analysis (3)
PPS.512 Introduction to Public Sector Budgeting (3)	PPS.608 Industrial Organizations and Anti-Trust Policy (3)
PPS.515 Economics of the Public Sector (3)	PPS.609 Industrial Organization and Regulatory Policy (3)
PPS.518 Human Resource Administration (3)	PPS.611 Economics of Government-Federal Sector (3)
PPS.520 Crime, Justice and Public Policy (3)	PPS.612 Financing the Public Sector (3)
PPS.535 Introduction to Geographic Information Systems (3)	PPS.630 Power, Coalition and Decision-Making (3)
PPS.540 Organizational Theory and Behavior (3)	PPS.635 Judicial Policy Making (3)
PPS.541 Administrative Law (3)	PPS.636 Economics of Government – State and Local Sector (3)
PPS.542 Quantitative/Qualitative Modeling (3)	PPS.639: Contemporary Issues in Social Psychology (3)
PPS.545 The Policy Process (3)	PPS.649 Topics: Organizational Psychology (3)
PPS.546 Organizational Psychology (3)	PPS.650 Introduction to the Nonprofit Sector (3)
PPS.547 Organization Analysis (3)	PPS.663 Consultation Skills (3)
PPS.548 Psychology of Small Groups (3)	PPS.670 Seminar: Law and Society (3)
PPS.550 History of Cities and Planning (3)	PPS.678 Corrections Policy (3)
PPS.560 Law, Courts, and Urban Social Change (3)	PPS.681 Policy Implementation Theory (3)
PPS.570 Health Policy (3)	PPS.689 Advanced Quantitative Analysis (3)
PPS.576 Poverty Policy (3)	PPS.693 Special Topics (1-3)
PPS.578 Program Evaluation (3)	PPS.695 Special Study for Examinations (0)
PPS.585 Capstone/Project (3)	PPS.697 Research Topics (1-3)
PPS.589 Field Service (1-6)	PPS.698 Graduate Reading Course (1-3)
PPS.593 Special Topics (1-3)	PPS.699 Dissertation Research (0)

## GRADUATE GLOBAL AND LOCAL SOCIAL JUSTICE CONCENTRATION

**Robert Strikwerda, Ph.D.,**  
*Director*

The concentration aims to provide graduate students with an understanding of the social and political institutions and processes that advance or inhibit social justice. Through interdisciplinary study of social systems, political institutions, public policies, cultural values, and processes of change, students will become familiar with structures that expand or impede material welfare, racial and gender equality, individual human rights, and other components of a just society. The Global and Local Social Justice concentration is a cooperative program that draws required or elective courses from several departments and programs, including American Studies, Political Science, Public Policy Studies, Sociology and Criminal Justice, Social Work, and Women's Studies.

To be admitted to the concentration program, students must have been accepted into a graduate degree program at Saint Louis University. Ordinarily, students in the concentration program must have a minimum 3.0 undergraduate GPA and will have taken at least fifteen hours of undergraduate course work in the social sciences. They will also need to meet any prerequisites for the courses they plan to take. A student's enrollment in the concentration program must be approved by the concentration program director and by

the director of the student's home program. The director will also advise students on the best order in which to take courses and on which courses may not be offered regularly.

### Requirements of the Graduate Concentration in Global and Local Social Justice, Saint Louis University

The concentration consists of 15 hours of classes, including:

**One class in theories of justice.** *Choose from:*

POLS.573 Contemporary Political Ideologies  
 POLS.575 American Political Thought  
 POLS.593 Structures of Power/Structures of Thought

ASTD.670/POLS.670 Seminar in American Political Thought  
 WSTD.501/POLS.576 Feminist Theory

**Two classes in local and domestic issues:** *Choose from:*

ASTD.527 Anti-Black Racism  
 ASTD.540 Metropolitan America  
 ASTD.639 Race, Rights & American Identity  
 POLS.550 Democratization  
 POLS.671 Leadership and Choice  
 PPS.500 The Metropolis  
 PPS.576 Poverty Policy

PPS.605 Policy Ethics / Social Responsibility  
 SOC.540 Race, Gender, Class and Criminal Justice  
 SOC.550 Social Stratification  
 SOC.551 Constructing Social Problems  
 SWRK.702 Social Policy  
 SWRK.715 Social Work Practice with Low Income Families and Neighborhoods  
 SWRK.716 Diversity and Anti-Oppression Practice

**One class in global issues.** *Choose from:*

POLS.584 Politics of Health  
 POLS.562 International Organization and the Management of World Problems

PPS.493 Structure of Poverty - Global and Local  
 SWRK.703 International Social Work: Mexico/Ghana  
 SWRK.793 Social Work in an International Context

**Electives: consult with Director about other possible electives:**

SWRK.701 Social Justice: Human Liberation and Community Building  
 SWRK.717 Foundations of Nonviolent Peacemaking  
 SWRK.768 Health and Mental Health Policy

SWRK.798 Non-Profit Management  
 POLS.593 Minority Rights and Affirmative Action in India (var. title)  
 PPS.540 Organizational Theory and Behavior

Students also may select an elective from the classes listed in the three required issue areas. No more than nine of the fifteen required hours may be taken in a single department. Other courses may be substituted with the approval of the program director.

In addition, all students must successfully complete a 0-credit capstone requirement (graded pass/fail). Each student will give a public presentation typically based on a paper written in one of the classes taken as part of the concentration.

# PSYCHOLOGY

**Jeffrey D. Gfeller, Ph.D.,**  
*Department Chairperson*

**Kimberly Powlishta, Ph.D.,**  
*Graduate Director, Experimental Program*

**Michael J. Ross, Ph.D.**  
*Graduate Director, Clinical Program*

**Edward J. Sabin, Ph.D.,**  
*Graduate Director, Industrial-Organizational Program*

## EXPERIMENTAL PROGRAM Master of Science

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

### Prerequisites

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

### Required Courses

Six credit hours of Research Methodology and Statistics; this requirement must be fulfilled by taking PSY.508 Advanced Quantitative Research Methods, and PSY.579 Applied Univariate Statistics in Behavioral Science. Six credit hours of program core; choose two courses from the following list:

PSY.512 Memory and Cognition

PSY.513 Neuroscience

PSY.530 Advanced Social Psychology

PSY.525 Cognitive Development

PSY.526 Social Development

Twelve credit hours of electives

Six credit hours of thesis research (PSY.599)

PSY.595 (Special Study for Exams; 0 credit hours) during semester in which thesis is defended

### Additional Requirements

Continuous enrollment in PSY.584 (Experimental Psychology Research Vertical Team)

## Doctor of Philosophy

### Prerequisite

Masters of Science in Psychology or equivalent

### Required Courses

Statistics and research methods: 12 credit hours minimum at the graduate level (which must include PSY.508, PSY.579, and PSY.650)

Program Core: 12 credit hours of coursework from the following core areas:

Cognitive Psychology: PSY.512 (Memory and Cognition)

Developmental Psychology: PSY.525 (Cognitive Development) or PSY.526 (Social Development)

Neuroscience: PSY.513

Social Psychology: PSY.530

**Concentration core:**

Nine credit hours within a student's concentration area (Cognitive Neuroscience, Developmental Psychology, or Social Psychology). For Cognitive Neuroscience and Social Psychology students, this requirement is met by completing three 600-level seminars (in cognition/neuroscience or social psychology, respectively); for Developmental Psychology students, this requirement is met by completing PSY.525 or PSY.526 (whichever was not taken to complete the Program Core requirement) and two 600-level developmental psychology seminars.

**Concentration electives:**

Six credit hours of additional graduate level coursework in any of the Experimental concentrations and/or the teaching of psychology.

One credit hour in Human Diversity (PSY.603)

One credit hour in Research Ethics (PSY.680)

Twelve credit hours of dissertation research (PSY.699)

Successful completion of the written preliminary and the oral qualifying exams (enrolling in PSY.695, Special Study for Exams, while completing each exam).

Continuous enrollment in PSY.584 (Experimental Psychology Research Vertical Team).

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

## INDUSTRIAL-ORGANIZATIONAL PROGRAM

### Master of Science

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.

**Prerequisites**

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

**Required Courses**

A total of 30 credit hours of graduate level, program approved courses including:

Quantitative Research

PSY.508 Advanced Quantitative Research Methods (3)

PSY.579 Applied Univariate Statistics in Behavioral Science (3)

PSY.650 Applied Multivariable and Multivariate Statistics in Behavioral Science (3)

PSY.546 Advanced Organizational Psychology (3)

PSY.599 Master's Thesis Research (6)

Program Electives (12)

**Additional Requirements**

Participation in research/professional group each semester.

# Doctor of Philosophy

## Prerequisite

Master of Science in Psychology

## Required Courses

PSY.603 Human Diversity (1)

PSY.680 Ethics and Professional Issues (1)

PSY.699 Dissertation Research (12)

Graduate level statistics and research methods (15)

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

## Additional Requirements

Involvement in research/professional practice activities each semester.

Written and oral preliminary examinations.

Additional curricular information is available from the director.

# CLINICAL PROGRAM

The graduate training program in Clinical Psychology is accredited by the American Psychological Association (APA, 750 First Street, NE, Washington, D.C. 20002-4242; phone 202-336-5979; <http://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 credit-hours of advanced undergraduate courses in psychology, including statistics and research methods.

## Required Courses

Statistics: six credit hours. Research methods: six credit hours. Thesis research: six credit hours.

## Additional Requirements

PSY.503 Clinical Assessment I (3)

PSY.504 Clinical Assessment II (3)

PSY.552 Psychopathology (3)

PSY.561 Clinical Interventions (3)

PSY.680 Ethics and Professional Issues (3)

PSY.561 Clinical Practicum I (3)

PSY.562 Clinical Practicum II (3)

PSY.586 Clinical Research I (0)

PSY.587 Clinical Research II (0)

PSY.580 Clinical Assessment Practicum I (0)

PSY.583 Clinical Assessment Practicum II (0)

PSY.588 Psychopathology Practicum (0)

PSY.688 Clinical Interventions Practicum (0)

# Doctor of Philosophy

## Prerequisite

Master of Science in Psychology or equivalent.

## Required Courses

Dissertation research: twelve credit hours.

**Additional Requirements**

PSY.510 History and Systems (3)  
 PSY.512 Cognitive-Affective Bases of Behavior (3)  
 PSY.513 or 593 Biological Aspects of Behavior (3)  
 PSY.522 Lifespan Developmental Psychology (3)  
 PSY.530 Social Aspects of Behavior (3)  
 PSY.639 Human Diversity (3)

PSY.681 Clinical Practicum III (3)  
 PSY.682 Clinical Practicum IV (3)  
 PSY.686 Advanced Clinical Research I (0)  
 PSY.687 Advanced Clinical Research II (0)  
 PSY.689 Internship in Clinical Psychology (0)  
 Electives (15)

**Graduate Courses**

PSY.503 Clinical Assessment I (3)  
 PSY.504 Clinical Assessment II (3)  
 PSY.508 Advanced Quantitative Research Methods (3)  
 PSY.509 Psychometric Theory (3)  
 PSY.510 History of Psychology (3)  
 PSY.512 Memory and Cognition (3)  
 PSY.513 Neuroscience (3)  
 PSY.522 Lifespan Developmental Psychology (3)  
 PSY.525 Cognitive Development (3)  
 PSY.526 Social Development (3)  
 PSY.527 Personality Assessment (3)  
 PSY.530 Advanced Social Psychology (3)  
 PSY.531 Advanced Personality Theory (3)  
 PSY.541 Industrial Psychology (3)  
 PSY.546 Advanced Organizational Psychology (3)  
 PSY.547 Psychology of Small Groups (3)  
 PSY.552 Psychopathology (3)  
 PSY.561 Clinical Interventions (3)  
 PSY.567 Behavior Therapy (3)  
 PSY.578 Program Evaluation (3)  
 PSY.579 Applied Univariate Statistics in Behavioral Science (3)  
 PSY.580 Clinical Assessment Practicum I (0)  
 PSY.581 Clinical Practicum I (0-3)  
 PSY.582 Clinical Practicum II (0-3)  
 PSY.583 Clinical Assessment Practicum II (0)  
 PSY.584 Experimental Psychology Research Vertical Team (0)  
 PSY.585 Practicum: Applied Psychology (0-6)  
 PSY.586 Clinical Research I (0-3)  
 PSY.587 Clinical Research II (0-3)  
 PSY.588 Practicum: Psychopathology (0-3)  
 PSY.589 Clerkship: Clinical Psychology (0)  
 PSY.595 Special Study for Examinations (0)  
 PSY.597 Research Topics (1-3)  
 PSY.598 Graduate Reading Course (1-3)  
 PSY.599 Thesis Research (0-6)  
 PSY.5CR.90 Master's Degree Study (0)  
 PSY.600 Teaching of Psychology (3)  
 PSY.603 Human Diversity (1-3)  
 PSY.604 Topics: Assessment (3)  
 PSY.606 Topics: Quantitative Psychology (3)  
 PSY.619 Topics: Cognitive Neuroscience (3)  
 PSY.629 Topics: Developmental Psychology (3)  
 PSY.639 Topics: Social Psychology (3)  
 PSY.649 Topics: Organizational Psychology (3)  
 PSY.650 Applied Multivariable and Multivariate Statistics in Behavioral Science (3)  
 PSY.652 Clinical Child Psychology (3)  
 PSY.659 Topics: Psychopathology (3)  
 PSY.660 Structural Equation Modeling (3)  
 PSY.663 Consultation Skills: Theory and Practice (3)  
 PSY.665 Theories of Child Psychotherapy (3)  
 PSY.A666 Psychodynamic Psychotherapy (3)  
 PSY.668 Neuropsychological Assessment (3)  
 PSY.669 Topics: Intervention Strategies (3)  
 PSY.678 Community Psychology and Primary Prevention (3)  
 PSY.679 Topics: Applied Psychology (3)  
 PSY.680 Ethics and Professional Issues (1-3)  
 PSY.681 Clinical Practicum III (0-3)

PSY.682 Clinical Practicum IV (0-3)

PSY.685 Internship In Applied Psychology (0)

PSY.686 Advanced Clinical Research I (0-3)

PSY.687 Advanced Clinical Research II (0-3)

PSY.688 Practicum: Clinical Interventions (0-3)

PSY.689 Internship: Clinical Psychology (0)

PSY.695 Special Study for Examinations (0)

PSY.697 Research Topics (1-3)

PSY.698 Graduate Reading (1-3)

PSY.699 Dissertation Research (0-6)

PSY.6CR.99 Doctor of Philosophy Degree Study (0)

# SOCIOLOGY & ANTHROPOLOGY

**Richard A. Colignon Ph.D.,**  
*Department Chairperson*

**Terry Tomazic Ph.D.,**  
*Graduate Program Director*

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 class room to enrich and enliven the education of the students. The 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 credit-hours of graduate study with a minimum of 27 hours of course work. The MA is completed either through the thesis or non-thesis tracks. The thesis track includes up to 6 thesis credit hours while the non-thesis track includes 6 additional hours of course work.

## Master of Arts in Sociology

### **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:**

SOC.501 Organizational Theory and Behavior

SOC.510 Pro-seminar

SOC.520 Urban Ecology

SOC.525 Elementary Forms of Urban Life

SOC.550 Social Inequality

SOC.551 Constructing Social Problems

SOC.552 Sociological Social Psychology

SOC.553 Urban Ethnography

SOC.554 Environmental Impact of the City

SOC.555 Comparative Theories of Race and Ethnic Relations

SOC.559 Law and Society

SOC.560 Research Methodology

SOC.561 Death Investigation

SOC.564 Social Demography

SOC.565 Introduction to GIS

SOC.566 Intermediate GIS

SOC.567 Spatial Demography

SOC.568 Spatial Analytics of Crime

SOC.570 Applied Spatial Analysis

SOC.575 Qualitative Research

SOC.580 Survey Design and Sampling

SOC.585 Program Evaluation and Assessment

SOC.589 Reading Statistics in Research

SOC.601 Quantitative I: Applied Inferential Statistics

SOC.610 Regression Analysis and Non-linear Models

SOC.620 Nonparametric Statistical Analysis

SOC.650 Confirmatory Factor Analysis

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

# THEOLOGICAL STUDIES

**James R. Ginther, Ph.D.**

*Department Chairperson*

**Rubén Rosario-Rodríguez, Ph.D.**

*Director of M.A. Program*

**Grant Kaplan, Ph.D.**

*Director of Ph.D. Program*

The department offers two degrees, the master of arts in theology and the doctor of philosophy in historical theology. The MA 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 PhD in Historical Theology has three areas of specialization: Early Christianity, Medieval Christianity, and Modern Christianity.

## Master of Arts in Theology

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

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

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

### Prerequisites

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

### Required Courses:

The MA consists of two tracks, Religious Education and Research, which students may choose upon enrollment. Each track requires 36 hours of study and comprehensive exams.

#### *Track # 1: Religious Education*

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

#### **The Religious Education track consists of a 36-hour program of study:**

Theological Resources and Methods (3 hours)

Constructive Theology (6 hours)

Theological Ethics (6 hours)

Historical Theology (3 hours)  
 Scripture (6 hours)  
 Elective (3 hours)  
 Religious Education (9 hours)

The Curriculum and Administration of Religious Education Programs (3 hours)  
 Theology of Catechetical Ministry (3 hours)  
 Models and Methods for Religious Education (3 hours)

### ***Track # 2: Research***

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

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

The Research track consists of a 36-hour, two-year program of study, comprehensive exams, and a 50-70 page thesis. Research track students are eligible for Research Assistantships and Tuition Scholarships.

### ***Specialization #1: Constructive Theology***

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

Theological Resources and Methods (3 hours)  
 Constructive Theology (9 hours)  
 Theological Ethics (3 hours)  
 Historical Theology (3 hours)  
 Scripture (3 hours)  
 Electives (9 hours)  
 MA Thesis (6 hours)

*MA Thesis:* The MA thesis in Constructive Theology (50-70 pages) for a total of 6 credit hours. This option is especially recommended to students who intend to apply to PhD programs.

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

### ***Specialization # 2: Historical Theology***

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

Theological Resources and Methods (3 hours)  
 Historical Theology (9 hours)  
 Theological Ethics (3 hours)  
 Constructive Theology (3 hours)  
 Scripture (3 hours)  
 Electives (9 hours)  
 MA Thesis (6 hours)

*MA Thesis:* Students will compose an MA thesis in Historical Theology (50-70 pages) for a total of 6 credit hours.

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

### ***Specialization #3: Theological Ethics***

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

Theological Resources and Methods (3 hours)  
 Theological Ethics (9 hours)  
 Constructive Theology (3 hours)  
 Historical Theology (3 hours)  
 Scripture (3 hours)  
 Electives (9 hours)  
 MA Thesis (6 hours)

*MA Thesis:* The MA thesis in Theological Ethics (50-70 pages) for a total of 6 credit hours.

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

## Doctor of Philosophy in Historical Theology

### **Prerequisites**

M.A. degree in Historical Theology or the equivalent  
 Nine credit hours of undergraduate and/or MA philosophy courses  
 Nine credit hours of undergraduate and/or MA history courses  
 Competency in at least one research language besides English (usually Greek, Latin, French, German or Italian).

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

### **Required Courses: 54 hours**

The program requires two years of coursework (36 hours), and a third year dedicated to dissertation related research (18 hours). The remaining two years focus on dissertation writing, which does not require credit hours. Moreover, students are expected to have a major area (12 credit-hours of doctoral seminars) and a minor area (6 credit hours of doctoral seminars; *a formal minor is not permitted*) chosen from the three possible areas of specialization: Early Christianity, Medieval Christianity, and Modern Christianity. By the end of the first year, students are required to declare their major/minor.

### **The thirty-six hours of coursework derive from the following options:**

THEO.601: Methods in Historical Theology (3 hours) required of all students  
 Historical Theology Surveys (9 hours) required of all students  
     THEO.602: Early Christianity  
     THEO.603: Medieval Christianity  
     THEO.604: Modern Christianity

Major Seminars (12 hours) chosen according to student's declared major field  
     THEO.611: Early Christianity  
     THEO.612: Medieval Christianity  
     THEO.613: Modern Christianity

Minor Seminars (6 hours) chosen according to a student's declared minor field  
     THEO.611: Early Christianity  
     THEO.612: Medieval Christianity  
     THEO.613: Modern Christianity

Electives (6 hours) chosen from any graduate course offered (500/600 level)

**The eighteen hours of related dissertation research include the following:**

Dissertation Prospectus (6 hours)

Dissertation Research (12 hours)

**Additional Requirements**

All PhD students are required to demonstrate competency in *three* languages before advancement to their dissertation field exam in the second year. One language must be ancient and one modern. The language choices are determined by the student's research specialty as approved by the Director of the PhD program in consultation with the chair of the student's comprehensive examination board. The language possibilities include, but are not limited to: Greek, Latin, Syriac, German, French, Spanish or Italian.

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

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

**Masters Courses**

**Biblical Theology**

THEO.500: Biblical Interpretation (3)

THEO.502: Pentateuch (3)

THEO.503: Historical Books (3)

THEO.504: Prophets (3)

THEO.505: Wisdom Literature (3)

THEO.506: The Psalms (3)

THEO.509: Special Topics: Old Testament (3)

THEO.510: New Testament (3)

THEO.511: The Synoptics (3)

THEO.512: Luke-Acts (3)

THEO .513: Paul (3)

THEO.514: Johannine Literature (3)

THEO.519: Special Topics: New Testament (3)

**Historical Theology**

THEO.520: Methods in Historical Theology (3)

THEO.521: Survey of Early Christian History, 200-600 (3)

THEO.522: Survey of Medieval Christian History, 600-1500 (3)

THEO.523: Christianity, 1500-2000 (3)

THEO.525: Survey of the History of Religions (3)

THEO.526: Comparative Theology (3)

THEO.539.Special Topics: Historical Theology (3)

**Systematic Theology**

THEO.540 Theological Resources and Methods (3)

THEO.542: God (3)

THEO.544: Christology (3)

THEO.545: Theology of the Human Person (3)

THEO.547: Ecclesiology (3)

THEO.550: Sacraments (3)

THEO.559 Special Topics: Systematic Theology (3)

**Moral Theology**

THEO.560: Contemporary Moral Theology (3)

THEO.562 Fundamental Moral Theology (3)

THEO.563: Social Ethics (3)

THEO.564: Family Ethics (3)

THEO.565: Bioethical Controversies (3)

THEO.568 History of Moral Theology (3)

THEO.569: Special Topics: Moral or Pastoral Theology (3)

### **Spirituality**

THEO.573: Spirituality and Psychology (3)

THEO.579 Special Topics: Spirituality (3)

### **Religious Education**

THEO.580: Theology of Catechetical Ministry (3)

THEO.596: Essay Guidance (0-3)

THEO.581: Models and Methods for Religious Education (3)

THEO.597: Research Topics (1-3)

THEO.582: The Curriculum and Administration of Religious Education Programs (3)

THEO.598: Graduate Reading Course (1-3)

THEO.595: Special Study for Examinations (0)

THEO.5CR.90: Master's Degree Study (0)

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

THEO.601: Methods in Historical Theology (3)

THEO.621: Prospectus (3)

THEO.602: Survey of Early Christian History, 200-600 (3)

THEO.693: Special Topics in Historical Theology (3)

THEO.603: Survey of Medieval Christian History, 600-1500 (3)

THEO.695: Special Study for Examinations (0)

THEO.604: Survey of Early Modern: 1500-2000 (3)

THEO.697: Research Topics (1-3)

THEO.611: Early Church Seminar (0 or 3)

THEO.698: Graduate Reading Course (1-3)

THEO.612: Medieval Seminar (0 or 3)

THEO.699: Dissertation Research (0-9)

THEO.614: Modern Seminar (0 or 3)

THEO.6CR.99: Doctor of Philosophy Degree Study (0)

# COLLEGE OF EDUCATION AND PUBLIC SERVICE

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

Established in 1998, the College is the academic home for all graduate programs in education in the University. As a College within a Catholic, Jesuit institution, the College of Education and Public Service offers its students an excellent professional education and a sound background within the broad and liberal curriculum of the Graduate School. Thus, the students are educated within a liberal tradition. The main objective of the college is to prepare dedicated, reflective practitioners who exhibit the knowledge, skills and dispositions embedded in the conceptual framework of the college. The shared values (or the 5Cs) that guide the graduate 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 College offers graduate degree programs in Educational Leadership, Higher Education Administration, Curriculum and Instruction, and Educational Foundations,, the curricula for which are detailed below. The College offers the M.A., MA/MBA, M.A.T., Ed.S., Ed.D., and Ph.D. In addition, certification for the principalship, director of special education and superintendency are also offered. All programs for director of special education, principal and superintendent are accredited by the Missouri Department of Elementary and Secondary Education and the National Council for the Accreditation of Colleges of Teacher Education.

## COLLEGE OF EDUCATION & PUBLIC SERVICE

### **Graduate Program Coordinators**

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

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

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

**Ronald Rebore, Ph.D.**  
*International Programs*

Graduate work in the College of Education and Public Service is designed for those individuals interested in pursuing advanced degrees in the specialties of Curriculum and Instruction, Educational Foundations, Educational Leadership, Higher Education, Special Education, or Teacher Education. 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 a graduate advisor.

### **Doctor of Philosophy**

The Doctor of Philosophy (Ph.D.) program in the College of Education and Public Service emphasizes the interplay of theory and practice in education as well as a strong emphasis on research. Graduate students may choose an area of concentration in Curriculum and Instruction, Educational Foundations, Educational Leadership, or Higher Education.

#### **Prerequisites**

A master's degree in Education or a related field; and Research requirements for the M.A. degree in the College of Education and Public Service.

### **Required Courses**

A minimum of 72 hours beyond the baccalaureate with a minimum of 42 hours beyond the Masters Degree including 12 hours of dissertation research and 30 hours of coursework. Three advanced research courses approved by the College are also required demonstrated competency in a foreign language (not the native tongue of the student) may substitute for one of the required advanced research courses. Students must also pass written exams, oral defense of the dissertation proposal, and public oral defense of the dissertation.

### **Additional Requirements**

Two successive semesters of Doctoral Residency (registration in a total of three credit-hours) arranged with an advisor on a contract basis to extend personal and professional development.

## **Doctor of Education**

The Doctor of Education degree program is designed to prepare professionals for leadership positions in school districts, colleges, and/or universities. The program emphasizes a practical problem-oriented curriculum which does not require a strong research emphasis. Students may choose an area of concentration in Curriculum and Instruction, Educational Foundations, Educational Leadership, or Higher Education.

### **Prerequisites**

A Master's degree in Education or a related field and six credit hours of research preparation (the same courses as those required for the Master of Arts degree or their equivalents).

### **Required Courses**

A minimum of 70 hours of academic work beyond the baccalaureate, including 40 credit hours in education and an internship or practicum for the Ed.D. in Educational Leadership or Higher Education. A minimum of 72 hours of academic work beyond the baccalaureate including 38 hour in education and 4 hours of doctoral project for Curriculum & Instruction and Educational Foundations. Research requirements include those required for the Master of Arts degree (six credit hours) and one advanced research course selected from those approved by the College. A minimum of 38 credit-hours, excluding assigned prerequisites (if any), must be taken at Saint Louis University. The Ed.D. degree program encourages students to begin their projects early in their program-tenure. Three to four Project Guidance credits will be included in the total hour requirement. Students should consult their advisors for course requirements, which differ in each of the programs (Educational Administration, Higher Education, Curriculum and Instruction and Educational Foundations).

### **Additional Requirements**

Two successive semesters of Doctoral Residency (registration for a total of three credit-hours) arranged with an advisor on a contract basis to extend personal and professional development. Three to four semester-hours of Project Guidance. Students must also take and pass written and oral exams.

## **Master of Arts**

The Master of Arts degree is designed for those individuals seeking a degree in leadership leading to certification as an elementary, middle, or high school principal, or graduate work with an area of concentration in curriculum and instruction, educational foundations, higher education, educational leadership or special education.

### **Prerequisites**

Eighteen semester-hours of advanced undergraduate coursework in education or related areas approved by the College.

### **Required Courses**

Coursework in educational leadership, higher education, curriculum and instruction, special education, and/or educational foundations; six semester hours in research-preparation coursework selected from those approved by the College.

### **Additional Requirements**

A theme paper or written examination (program dependent)

A one-hour Oral Examination

Total required credit hours: 32.

## MA/MBA

The College of Education and Public Service and the John Cook School Business jointly administer a dual degree program leading to the degrees of Master of Arts in Educational Administration and Master of Business Administration. These programs provide an awareness of the functional relationships between the educational system and business administrative organizations. Prospective students must apply separately to each program.

### Prerequisites

Eighteen semester-hours of advanced undergraduate coursework in education or related areas approved by the College and the prerequisites for the MBA in the John Cook School of Business.

### Required Courses

See a sample curriculum on the John Cook School of Business website (<http://business.slu.edu/uploads/2012/10/26/graduate-business-ma-mba-curriculum-2012-2013.pdf>)

## Master of Arts in Teacher Education

The Master of Arts in teacher education is designed to offer classroom teachers three broad areas of development: knowledge in subject-matter areas; current educational developments; and the processes of teaching and learning. The course of study is for classroom teachers interested in professional growth.

### Prerequisites

Eighteen semester-hours of advanced undergraduate coursework in education or related areas approved by the College of Education and Public Service.

### Required Courses

A carefully constructed program, including not more than six credit hours from outside the College of Education and Public Service, planned with an advisor.

### Additional Requirements

A theme paper.

An oral examination.

Total semester hours: 32.

## Specialist in Education

The Specialist in Education degree program is offered for persons interested in developing competencies necessary for certification as superintendents of schools or advanced certification as elementary, middle, or high school principals

### Required Courses

A minimum of 30 semester hours of in-residence credit beyond the Master's Degree and six semester hours of research-preparation (the same courses as those required for the Master of Arts degree or their equivalents.).

# PROGRAM OF CONCENTRATIONS

## CURRICULUM AND INSTRUCTION

M.A., MAT, Ed.D., Ph.D.

Students accepted into this specialty focus, on curriculum and related instructional processes and tools (including technology). Students who choose this area typically plan to pursue jobs as professional curriculum specialists or training specialists. The typical program in curriculum and instruction includes curriculum theory, curriculum design, instructional design, and curriculum and/or program evaluation. Students in the Curriculum and Instruction program may select an area of emphasis outside the College of Education and Public Service.

## EDUCATIONAL FOUNDATIONS

M.A., Ed.D., Ph.D.

Foundations of Education is a graduate program designed to support critical inquiry into the nature of education. Graduate students typically study the disciplines of psychology, theory, history, philosophy, and sociology to analyze issues in education.

## EDUCATIONAL LEADERSHIP

M.A., Ed.S., Ed.D., Ph.D.

The professional and certification programs in Educational Leadership prepare individuals for administrative positions at the building and school district level. Certification programs are offered for the following positions: Director of Special Education; Building Level Principal; Superintendent of Schools. Those in non-certification programs focus on trends and issues in educational leadership. Programs in Catholic School Leadership are also available.

## HIGHER EDUCATION

Student Personnel Administration (M.A.)

Higher Education Administration (M.A., Ph.D.)

The goal of the higher education program is to prepare students for leadership positions at the university and/or colleges. Areas of concentration include academic administration, financial administration and student personnel administration. The higher education programs integrate theoretical and experiential learning.

## SPECIAL EDUCATION

M.A.

The professional programs in Special Education require an emphasis in one of the following areas: Early Childhood Special Education; Behavior Disorders; Learning Disabilities; or Intellectual Disabilities.

### Required Courses

EDSP.460: Medical Implications in Special Education or  
EDSP.553: Fundamentals of Neurology;

EDSP.560: Seminar in Special Education; and  
EDSP.561, 562, 563, or 564.

### Additional Requirements

Dependent upon the area of emphasis.

## CURRICULUM AND INSTRUCTION

### Upper-Division Courses

EDI.421 Instructional Technology (2)

EDI.425 Elementary School Curriculum and Instruction (3)

EDI.426 Middle School Curriculum and Instruction (3)

EDI.430 Methods in Remedial Reading (3)

EDI.427 Secondary School Curriculum and Instruction (3)

EDI.429 Methods in Remedial Mathematics (3)

EDI.433 Methods in Advanced Reading (3)

EDI.442 Assessing Classroom Performance (3)

EDI.444 Assessment in Early Childhood (3-4)  
 EDI.445 Perceptual Motor Development (2)  
 EDI.448 Integrated Early Childhood Curriculum I (3)  
 EDI.449 Integrated Early Childhood Curriculum II (3)  
 EDI.451 Counseling in Early Childhood (3)  
 EDI.452 Principles of Early Childhood Education (3)  
 EDI.454 Practicum: Early Childhood Education (5)  
 EDI.455 Practicum: Elementary Education (4)

### **Graduate Courses**

EDI.524 Seminar: Innovations in Elementary Mathematics Methods (3)  
 EDI.539 Psychology of Reading (3)  
 EDI.543 Basic Human Anatomy for Teachers (3)  
 EDI.544 Human Physiology for Teachers (2)  
 EDI.560 Models of Teaching (3)  
 EDI.562 The Changing Roles of the Classroom Teacher (3)  
 EDI.570 Math for the Exceptional Child (3)  
 EDI.583 Techniques of Teaching Reading in the Content Area (3)  
 EDI.595 Special Study for Exams (0)  
 EDI.598 Graduate Reading Course (1-3)  
 EDI.604 Seminar: Children's Literature (3)  
 EDI.623 Seminar in Instruction (3)  
 EDI.625 Practicum: Curriculum and Instruction (3)  
 EDI.631 The Supervisory Process in the Elementary School (3)  
 EDI.632 The Supervisory Process in the Secondary School (3)

### **Educational Administration**

EDL.510 Foundations of Educational Administration (2-3)  
 EDL.515 Special Dimensions of Educational Administration (3)  
 EDL.520 School-Community Relations (2-3)  
 EDL.530 School Law (2-3)  
 EDL.545 Managing the Building Level Curriculum (3)  
 EDL.550 Seminar: Legal Issues in Higher Education (2-3)  
 EDL.560 Program Evaluation (3)  
 EDL.563 The Principalship I (3)  
 EDL.566 The Principalship II (3)  
 EDL.573 Professional Staff Development and Evaluation (2-3)  
 EDL.583 Internship: Building Principal (1-6)

EDI.456 Practicum: Middle School (4)  
 EDI.457 Practicum: Secondary Education (4)  
 EDI.461 Health for Education Majors (2)  
 EDI.462 Cultural Diversity in the Classroom (3)  
 EDI.472 Home, School, Community Resources in Early Childhood Education (3)  
 EDI.476 Middle School Philosophy, Organization, and Management (2)  
 EDI.479 Seminar: Early Childhood (3)  
 EDI.480 Educational Institute (2)

EDI.641 The Elementary School Curriculum (3)  
 EDI.642 The Secondary School Curriculum (3)  
 EDI.643 Middle School Curriculum and Instruction (3)  
 EDI.644 Curriculum Development in Parochial Schools (3)  
 EDI.645 Curriculum Development (3)  
 EDI.646 Curriculum Theory (3)  
 EDI.648 Seminar in Curriculum (3)  
 EDI.650 Seminar: Religious Education (Advanced) (3)  
 EDI.655 Principles of Assessment for Education Settings (3)  
 EDI.695 Special Study for Exams (0)  
 EDI.696 Project Guidance (0-4)  
 EDI.697 Research Topics (1-3)  
 EDI.698 Graduate Reading Course (1-3)  
 EDI.699 Dissertation Research (0-6)

EDL.584 Internship: Educational Administration-Superintendency, General Administration (3-6)  
 EDL.593 Special Topics (2-3)  
 EDL.595 Special Studies for Exams (0)  
 EDL.598 Graduate Reading Course (1-3)  
 EDL.5CR Master's Degree Study (0)  
 EDL.600 Professional Writing in Educational Leadership (3)  
 EDL.601 Doctoral Residency (0)  
 EDL.602 Case Studies: Organization and Administration of Higher Education (3)  
 EDL.606 Research Design and Analysis (3)  
 EDL.608 Program Evaluation (3)  
 EDL.609 Qualitative Research for Educational Leaders (3)

EDL.610 Theory of Administration (3)  
 EDL.611 School District Administration (3)  
 EDL.614 The Politics of Educational Leadership (2-3)  
 EDL.615 Organization and Administration of Higher Education (3)  
 EDL.620 Ethics of Educational Leadership (3)  
 EDL.625 Seminar: School Administration-Public and Non-Public School Relationships (2)  
 EDL.630 Advanced School Law (2-3)  
 EDL.639 Seminar: Gateway Leadership Institute (2-3)  
 EDL.640 Seminar: Human Resources Administration (2-3)  
 EDL.641 Professional Negotiations (2-3)  
 EDL.645 Managing the District Curriculum (3)  
 EDL.647 Planning and Maintaining School Facilities (2-3)

EDL.648 Advanced School Finance and Facilities (3)  
 EDL.650 School Finance (2-3)  
 EDL.659 Administration of Media (2-3)  
 EDL.665 Technology in Educational Administration (2-3)  
 EDL.669 School Business Administration (2-3)  
 EDL.693 Special Topics (1-3)  
 EDL.695 Special Study for Exams (0)  
 EDL.696 Project Guidance (0)  
 EDL.697 Research Topics in Educational Leadership (3)  
 EDL.698 Graduate Reading Course (1-3)  
 EDL.699 Dissertation Research (0-9)  
 EDL.6CR Doctor of Education Degree Study (0)

### **Higher Education**

EDH.525 History of Higher Education (2-3)  
 EDH.535 Student Development Theory (3)  
 EDH.540 Law and Higher Education (3)  
 EDH.547 Legal and Ethical Issues In Student Personnel Administration (3)  
 EDH.560 Student Personnel Administration (3)  
 EDH.564 The Student in Higher Education (3)  
 EDH.565 Intervention Skills for Student Personnel Administration (3)  
 EDH.570 Internship: Higher Education Administration (1-3)  
 EDH.571 Internship: Student Personnel Administration in Higher Education (1-3)  
 EDH.572 Internship: College Teaching (1-3)  
 EDH.575 Current Issues in Higher Education (3)  
 EDH.593 Special Topics (2-3)  
 EDH.595 Special Studies for Exams (0)  
 EDH.598 Graduate Reading Course (1-3)

EDH.5CR Master's Degree Study (0)  
 EDH.600 Org & Admin of Higher Ed (3)  
 EDH.601 Doctoral Residency (0)  
 EDH.605 Disability in Higher Education and Society (3)  
 EDH.607 Evidence Based Decision Making in Education (3)  
 EDH.658 Financial Administration in Higher Education (3)  
 EDH.660 Higher Education Curriculum (3)  
 EDH.670 College Teaching (3)  
 EDH.677 Seminar: Academic Administration (1-3)  
 EDH.693 Special Topics (1-3)  
 EDH.695 Special Study for Exams (0)  
 EDH.696 Project Guidance (0)  
 EDH.698 Graduate Reading Course (1-3)  
 EDH.699 Dissertation Research (0-9)  
 EDH.6CR Doctor of Education Degree Study (0)

### **Special Education**

#### **Upper-Division Courses**

EDSP.401 Law and the Handicapped (1)  
 EDSP.424 Behavior Management: EC, EL, or SpEd. (2)  
 EDSP.425 Behavior Management: Mid, Sec, or SpEd. (2)  
 EDSP.431 Education and Psychology of the Exceptional Individual (3)  
 EDSP.438 Supervised Practicum in Early Childhood Special Education: Practice Teaching (6-10)  
 EDSP.439 Institute in Special Education (1-3)

EDSP.440 Speech and Language Development of the Exceptional Child (2-4)  
 EDSP.447 Teaching Methods for Inclusive Classrooms: EC and E1 (3)  
 EDSP.448 Teaching Methods for Inclusive Classrooms: Mid and Sec (3)  
 EDSP.451 Counseling in Special Education (2)  
 EDSP.453 Curriculum, Methods, and Materials in Early Childhood Special Education – Advanced (3)

EDSP.456 Special Education Process (2)

EDSP.460 Medical Implications in Special Education (3)

### **Graduate Courses**

EDSP.526 Practicum in Special Education (1-3)

EDSP.530 Teaching the Gifted (3)

EDSP.531 Advanced Studies in Psychology and Education of the Exceptional Individual (3)

EDSP.545 Advanced Counseling in Special Education (3)

EDSP.553 Fundamentals of Neurology (3)

EDSP.554 Individual Intelligence Testing (3)

EDSP.555 Advanced Assessment Procedures in Special Education (3)

EDSP.560 Seminar: Special Education (3)

EDSP.561 Seminar: Mental Retardation (3)

EDSP.464 Seminar in Early Childhood Special Education (3)

EDSP.465 Education of the Gifted (3)

EDSP.562 Seminar: Learning Disabilities (3)

EDSP.563 Seminar: Behavioral Disorders (3)

EDSP.564 Seminar in Early Childhood Special Education (3)

EDSP.594 Special Education Internship (3)

EDSP.595 Special Study for Exams (0)

EDSP.598 Graduate Reading Courses (1-3)

EDSP.611 Special Education Administration (3)

EDS.P615 Advanced Professional Development (3)

EDSP.650 Advanced Seminar: Special Education (3)

### **Educational Foundations**

#### **Upper-Division Courses**

EDF.423 Psychology of Teaching and Learning (3)

EDF.470 Human Growth and Development (3)

EDF.471 Early Childhood Growth and Development (3)

#### **Graduate Courses**

EDF.500 Theory of Education (2)

EDF.520 The Learning Process (2)

EDF.521 Individual Differences in Ability (2)

EDF.523 Motivation in Learning (2)

EDF.527 Personality Development and Adjustment (3)

EDF.530 Advanced Educational Psychology (3)

EDF.560 Foundations of Urban Education (3)

EDF.561 Foundations of Catholic Education (2-3)

EDF.570/CFT.570 Advanced Growth and Development (3)

EDF.595 Special Study for Exams (0)

EDF.598 Graduate Reading Course (1-3)

EDF.605 Multicultural Issues for Public Service Settings: Theory and Practice (3)

EDF.610 Studies in Educational Philosophy (3)

EDF.611 Seminar: Philosophy of Education (3)

EDF.620 Reading in Educational Classics (3)

EDF.630 Studies: Catholic Education (3)

EDF.631 Seminar: Catholic Education (3)

EDF.640 History of European Education Through the Sixteenth Century (3)

EDF.641 History of European Education Since the Sixteenth Century (3)

EDF.642 Seminar: History of European Education (3)

EDF.645 History of American Education to 1865 (3)

EDF.646 History of American Education Since 1865 (3)

EDF.650 Seminar: Education Psychology (3)

EDF.655 Principles of Assessment in Educational Settings (3)

EDF.660 Education in American Culture (3)

EDF.665 Seminar: History of American Education (3)

EDF.685 Seminar: Comparative Education (3)

EDF.687 Seminar: Current Educational Problems (3)

EDF.695 Special Study for Exams (0)

EDF.696 Project Guidance (0-4)

EDF.697 Research Topics (1-3)

EDF.698 Graduate Reading Course (1-3)

EDF.699 Dissertation Research (0-6)

## **Special Studies, Readings, and Research**

### **Graduate Courses**

EDR.510 Intro to Inferential Statistics for Educators (3)

EDR.520 Test Construction Techniques (3)

EDR.540 Qualitative Research in Education (3)

EDR.550 Evaluation of Educational Programs (3)

EDR.560, General Research Methods for Educators (3)

EDR.595 Special Study for Examinations (0)

EDR.598 Graduate Reading Course (1-3)

EDR.599 Thesis Research (0-6)

EDR.5CR.90 Master's Degree Study (0)

EDR.5CR.95 Specialist Degree Study (0)

EDR.601 Doctoral Residency (0-3)

EDR.610, Intermediate Applied Statistics for Educators (3)

EDR.623, Action Research (3)

EDR.625, Curriculum Evaluation

EDR.640, Intermediate Qualitative Research for Educators (3)

EDR.665 Seminar: Reading Research (3)

EDR.671 Seminar: Current Research in Educational Psychology (3)

EDR.695 Special Study for Examinations (0)

EDR.696 Project Guidance (0)

EDR.697 Research Topics (1-3)

EDR.698 Graduate Reading Course (1-3)

EDR.699 Dissertation Research (0-6)

EDR.6CR.97 Doctor of Education Degree Study (0)

EDR.6CR.99 Doctor of Philosophy Degree Study (0)

# CENTER FOR SUSTAINABILITY

**John Wooschlager, Ph.D.**

*Director*

Sustainability is focused on meeting the social, economic, and environmental needs of present-day society as well as future generations without damaging the planet's regenerative capacity. Implied in this definition is a focus on service to others, which aligns sustainability 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 the critical environmental, social, and economic challenges facing society today. 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.

In 2012, the Center for Sustainability expanded its academic and research capacity with the addition of Urban Planning and Real Estate Development (UPRED) and the Center for Environmental Sciences (CES). The UPRED program provides education, community dialogue and research to support urban growth and revitalization, both in the St. Louis region and around the globe. The CES offers a research and educational environment that examines the interaction of the solid earth, hydrosphere, atmosphere and biosphere and how humans are interacting with these systems.

## Sustainability

### Master of Arts & Master of Science

The Master of Arts (M.A.) and Master of Science (M.S.) degrees in Sustainability train leaders to understand the cascading issues surrounding society's increasing use of our decreasing resources. The M.A. and M.S. share a foundational core of courses designed to provide students with an integrated view of sustainability that incorporates cross-disciplinary knowledge in science, technology, business, policy, sociology, and social work.

Given the unique interdisciplinary nature of sustainability, the program offers a wide variety of electives available through the Center for Sustainability and its partner schools. In general, Master of Arts students take sustainability electives focused on business, policy, sociology, and social work. Master of Science students choose from sustainability electives focused on science, engineering, and technology.

Because sustainability is such a broad field of study, we have built a flexible program that can be catered to the student's interests and career goals. Students are encouraged to set up advising appointments with Center for Sustainability faculty and staff to help them navigate the choices and craft a program of study. Both the M.A. and the M.S. are 30 credit hour programs, which can be pursued on a part-time or full-time basis.

#### **Required Courses**

MOS.502 Sustainability Foundations (4)

MOS.505 Sustainable Business Practices (3)

MOS.506 Environmental Aspects of Sustainability (3)

MOS.511 Sustainability in Society and Cultures (3)

#### **Additional Requirements**

MOS.581 Capstone I (2)

MOS.582 Capstone II (3)

Electives: twelve credit hours selected in consultation with an advisor (12)

## Accelerated Master of Arts or Master of Science

Undergraduate students can complete up to one full year of graduate coursework (15 credit hours) prior to entering the graduate degree program by taking courses in the center during their junior and senior years. A list of requirements is available on the Center for Sustainability website.

# Urban Planning and Real Estate Development

## Master of Arts

In 2009, US News and World Report chose urban planning as a top career with high job satisfaction and staying power. Planning is a rewarding field where you can play a pivotal role in improving communities. Urban planners often work in coordination with residents, local businesses, and other professionals in their efforts to plan for the future and implement policies and programs that help make cities successful. They are trained as problem solvers and frequently draw on knowledge of economics, architecture, real estate, sociology, finance, politics, history, and law to find solutions to the problem at hand. Urban planners understand the complexities of cities and recognize the short and long-term impact of decisions. Our students also gain an understanding of real estate and land transactions that is unique to the program.

The Master of Arts in Urban Planning and Real Estate Development, offered by Saint Louis University's Center for Sustainability, is the only degree of its kind in Missouri or at a Jesuit university. The program is interdisciplinary in cooperation with SLU's John Cook School of Business and School of Law and, as part of the Center for Sustainability, it has access to many resources and faculty experts whose knowledge enriches the Planning program. Our intimate classes emphasize skill building, discussion, and debate. Because of the learning experience at Saint Louis University, UPRED graduates are leading the way in public and private sector careers and making a positive impact in planning and development.

The M.A. is a 45 credit hour degree that can be completed in two years (full-time, including the summer session). A part-time option is available, requiring a minimum participation of six credit hours per semester. Part-time students complete the degree in 3.5 years.

### Required Courses

UPD.500 Urban and Regional Development Theory (3)  
 UPD.501 Planning Methods (3)  
 UPD.510 Local Economic Development Policy and Practice (3)  
 UPD.525 Infrastructure Planning and Processes (3)

UPD.530 Theory and Foundations of Planning (3)  
 UPD.531 Land Use Planning and Analysis (3)  
 LAW.768 Land Use Control (3)  
 UPD.533 Real Estate Finance (3)  
 UPD.544 Planning and Development Studio (3)

### Additional Requirements

UPD.585 Capstone/Project (3)  
 UPD.594 Internship for pre-service students (3)  
 Electives: twelve credit hours selected in consultation with advisor (12)

### Specializations

Students are encouraged to use electives to pursue one of the specializations offered through the program. Specializations include:

Community Development  
 Economic Development  
 Geographic Information Systems (GIS)  
 Real Estate Development  
 Environmental and Sustainability Planning

# Dual Degree – Business and Sustainability

## Master of Business Administration and Master of Arts or Master of Science in Sustainability

This dual degree program is one of the first-of-its-kind dual degrees offered by an AACSB-accredited institution; it provides broad coverage of business and sustainability concepts. The MBA degree will prepare students to be effective leaders in a global economy and the M.A. or M.S. in Sustainability will provide insights into how businesses can simultaneously enhance economic, social, and environmental performance. This is a full-time program in which students complete both degrees in only 18 months. Students take a total of 74 credit hours comprised of 44 credit hours towards the MBA and 30 credit hours towards the Master of Arts or Master of Science in Sustainability

### Required Courses - MBA

MBA.621 Information Technology in Organizations (1)	MBA.636 Financial Management (3)
MBA.622 Operations Management of Sustainability (2)	MBA.637 Ethical Environment of Business (1)
MBA.623 Supply Chain Management (1)	MBA.638 Managerial Accounting (1)
MBA.625 Essentials of Marketing Strategy (2)	MBA.641 Global Business Integration (2)
MBA.627 Foundations in Strategy and Management (2)	MBA.642 Data and Decisions (3)
MBA.628 Integrated Decision Making (2)	MBA.643 The Organization: Governance, Compliance, and Strategy (3)
MBA.630 Applied Statistics (2)	MBA.644 Nexus II (1)
MBA.631 Legal Aspects of Business (1)	MBA.651 Study Abroad (3)
MBA.632 Financial Accounting (1)	MBA.653 Integrated Consulting Module (3)
MBA.633 Managerial Economics (2)	MBA.654 Nexus III (1)
MBA.634 Nexus I (1)	

Electives: six credit hours selected in consultation with advisor (6)

### Required Courses – Master of Arts or Master of Science in Sustainability

MOS.502 Sustainability Foundations (4)	MOS.511 Sustainability in Society and Cultures (3)
MOS.505 Sustainable Business Practices (3)	MOS.581 Capstone I (2)
MOS.506 Environmental Aspects of Sustainability (3)	MOS.582 Capstone II (3)

Electives: twelve credit hours selected in consultation with an advisor (12)

# Geographic Information Systems

## Graduate Certificate

Professionals in remote sensing and geographic information systems (GIS) are in ever increasing demand in a variety of disciplines. The graduate certificate program in Advanced Remote Sensing and GIS in the Center for Environmental Sciences is developed to fill a growing demand for GIS skills in today's job market. This graduate level program is intended to offer a mix of GIS theory and practical training for individuals who have completed an undergraduate education in a wide range of disciplines, gained a certain level of GIS experience, and wish to upgrade their GIS skills.

The objective of the program is not only to cultivate GIS expert users, but also to ensure that students become well-grounded professionals in theoretical knowledge and practical skills for developing new applications in various disciplines of geospatial analysis and remote sensing.

The emphasis in the program is on advanced methods, technologies, and applications of remote sensing and GIS to spatial problem solving. Students are required to complete **15-credit hours** of courses.

## Courses

GIS.501 Introduction to GIS (3)

GIS.502 Intermediate GIS (3)

GIS.503 Geospatial Methods in Environmental Studies (3)

GIS.504 Introduction to Remote Sensing (3)

GIS.505 Microwave Remote Sensing: SAR Principles, Data Processing, Applications (3)

GIS.506 Interferometric Synthetic Aperture Radar (3)

GIS.535 Introduction to GIS for the Social Sciences and Humanities

GIS.537 Intermediate GIS for Social Sciences

GIS 538 Advanced GIS for Social Sciences

GIS.585 GIS Capstone (3)

GIS.586 GIS Capstone for UPRED (3)

GIS.593 Programming for Remote Sensing/GIS

# PARKS COLLEGE OF ENGINEERING, AVIATION, AND TECHNOLOGY

**Theodosios Alexander, Sc.D.**

*Collegiate Dean*

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

*Graduate Programs Director*

Consistent with the mission of Saint Louis University, the mission of 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 at the undergraduate and graduate levels.

## Program Objectives

The graduate program emphasizes quantitative extension of knowledge in the core area of engineering and aviation with additional specialization tailored to the interests of the graduate student.

The program emphasizes familiarization with the methods and techniques of scientific investigation through research, evaluation of knowledge in an independent and critical fashion, and communication of knowledge, through written and oral means. The program is designed to advance the careers of working engineers, as well as provide graduate education to students at the Master of Science and Ph.D. degree levels.

## Master of Science

### Required Courses

The College offers a Master of Science degree in engineering and a Master of Science degree in aviation with three options: a. courses only option, b. project option, and c. thesis option. The minimum requirement for all Master of Science degrees in engineering is 30 credit hours, including up to nine credit hours for thesis research or a project. Faculty advisors may tailor individual curriculum to satisfy the research goals of the students. Industry professionals may complete a course only degree, with 30 credit hours of course work. Up to 9 credit hours may be comprised of coursework at the 400 level. The remaining course work credits must be at the 500 or 600 level.

The variable credit hour requirements for thesis or project allows flexibility in meeting the needs of students with a variety of backgrounds. The traditional model for a research Master of Science degree includes 6-9 credit hours of thesis research.

Within these minimum requirements, individual faculty advisors may impose additional requirements or specific course requirements.

### Degree Plan

Each new graduate student writes a Program of Study that must be approved by the faculty advisor and the Graduate Programs Director. That document will be prepared and reviewed in the context of the student's background and the student's career goals. In that flexible approach, each student will determine, with faculty advice and approval, a unique set of courses and a specific plan for the thesis or project. This approach can accommodate students who want to continue for a Ph.D. degree, students who want to go into industry with a M.S. degree, and students who want to integrate other areas into their degrees - areas like business, the basic sciences, or other areas that fit into the student's individual career plans. The number of allowed transfer credit hours to the Master of Science graduate program is limited to 12 credit hours. The transfer credit hours must be approved by the department chair and the Graduate Programs Director to determine the quality and relevance of graduate courses taken elsewhere. Significant changes in the degree plan, as indicated on the Program of Study form, requires approval of the student's faculty advisor and the Graduate Programs Director.

## Research

Students who are research oriented, and may continue for a Ph.D. degree, will undertake thesis research for 6-9 credit hours. This is the traditional option for Ph.D. students who want academic or other careers where a doctorate level degree is required. Other students who expect to enter or re-enter industry, and they will likely choose the project option, or the course only option. The project represents successfully planning, conducting, and completing an individual or team task. The nature of the project may be quite varied. It could

produce a research result, a product prototype in hardware or software, or a solution to a problem in industry or academia. The project may also initiate a new line of inquiry or progress toward a new product or process. In any case, it should go beyond simply providing a learning experience; it should represent a new contribution to knowledge by the student who is working towards obtaining a Master of Science degree.

## Career Paths

The various departments within Parks College provide a stimulating environment for graduate study. Several courses are taught by working professionals, such as from the Boeing Company. Some courses are typically offered in the early evenings to facilitate working engineers to enroll in the program. Class room lectures are sometimes supplemented by guest lectures, laboratory demonstrations and field trips, as appropriate. Students are encouraged to publish the results of their thesis or project work in appropriate professional conferences and archival journals.

# Doctor of Philosophy

## Required Courses

The College offers a Ph.D. degree in engineering and a Ph.D. degree in aviation.

The doctoral degree program builds upon the Master of Science degree curriculum with additional course work focused on the research area of interest.

The engineering Ph.D. degree requires a total of 60 credit hours of course work and research activity beyond the Bachelor of Science degree, including 15-18 credit hours of dissertation research. Of the 60 credit hours, a maximum of nine credit hours may be comprised of course work at the 400 level; all other course work must be at the 500 or 600 level.

The aviation Ph.D. degree requires a total of 63 credit hours beyond the Bachelor of Science degree, including 12 credit hours of dissertation research, 15 credit hours in research methods, 9 credit hours in a secondary discipline, and 3 credit hours in graduate reading.

Those students who earn a Master of Science degree may include the Master of Science degree course credits, but not the thesis or project credits in the 60 or 63 credit hours which are required for the Ph.D. degree.

## Additional Requirements

Doctoral students are evaluated in three formal examinations. At the end of the first year of full-time doctoral study at SLU, the Qualifying Examination will assess the background of the student. After the second year, a dissertation proposal will be the basis of the Proposal Examination, which focuses on dissertation research, but also allows faculty to assess the student's abilities in research and the student's academic strengths and weaknesses. The third examination is a

Dissertation Defense. Some students will enter doctoral studies with research experience and with a Master of Science degree, and the estimated timing of these three exams will be part of the initial Program of Study. The timing may be modified with approval of the faculty advisor, and the Director of Graduate Programs.

The Qualifying Examination will focus on topics related to the required courses and the student's general preparation for graduate study and research. All qualifying examinations will be arranged and administered by the associated department chair. The Qualifying Exam will normally be a written examination. The intent of this exam is to determine if the student is prepared to continue doctoral studies. The result of the exam may be a pass, no-pass, or conditional-pass. The associated department chair will report the results of the Qualifying Examination to the Graduate Programs Director. The conditional-pass will normally require that the student correct specific weaknesses, and modify the Program of Study accordingly.

A doctoral student will ordinarily develop a dissertation proposal under the supervision of the faculty advisor, and present at the Proposal Exam prior to the third year of studies. The guidance committee administers the dissertation proposal exam. The results are reported to the Graduate Program Director. On successfully completing the Proposal Exam, the student becomes a doctoral candidate.

Upon completion of the final dissertation document, a final public defense is held as a Dissertation Defense. Following the open forum seminar-style presentation, the student continues the defense in a private session with the guidance committee.

Normally, graduate students are expected to publish the results of their research with their faculty advisor. Although not a rigid requirement, Ph.D. degree candidates are expected to produce a minimum of one manuscript submitted for journal publication prior to completing their degree.

Every student entering the graduate program is assigned a faculty advisor. The student must file a proposed Program of Study normally prior to the end of the second semester of full-time doctoral study at SLU. The student's Program of Study is a schedule of academic and research work that has been carefully designed by the student in close consultation with the faculty advisor.

In regard to transfer credit hours for the Ph.D. degree, up to 30 credit hours may be transferred at the Master of Science degree level to contribute to the credit hour requirements for a Ph.D. level degree. At the post-Master of Science degree level, up to 9 credit hours may be transferred to contribute to the credit hour requirements for a Ph.D. level degree. In all three cases, the transferred credit hours and associated course work are reported on the Program of Study form, and are subject to approval by the faculty advisor, department chair, and Director of Graduate Programs.

## Graduate Courses

### AEROSPACE ENGINEERING

#### **Interim Department Chair: Sridhar Condoor, Ph.D.**

AENG.500: Seminar (0)

AENG.513: Introduction to Computational Fluid Dynamics (3)

AENG.514: Hypersonics (3)

AENG.515 Parachute Systems & Design (3)

AENG.516 Unsteady Aerodynamics of Bluff Bodies (3)

AENG.518: Applied Aerodynamics (3)

AENG.522: Flight Simulation (3)

AENG.532: Aeroelasticity (3)

ESCI.533: Composite Materials for Structure and Design (3)

AENG.541: Space Dynamics and Control (3)

AENG.551: Space Mission Failures (3)

AENG.553: Space Mission Analysis and Design (3)

AENG.554: Orbital Mechanics (3)

AENG.555: Guidance, Navigation and Estimation for Dynamic Vehicles (3)

AENG.556: Modern Control Systems (3)

AENG.557: Advanced Control Systems (3)

AENG.558 Autonomous Systems Design (3)

AENG.559: Advanced Space Mission Design (3)

AENG.593: Special Topics (1-3)

AENG.598: Independent Study (1-3)

AENG.599: Master's Thesis Research (0-6)

AENG.698: Independent Study (1-3)

AENG.699: Doctoral Dissertation Research (0-6)

### AVIATION SCIENCE

#### **Department Chair: Stephen Belt, Ph.D.**

#### ***Aviation Science Core***

ASCI.521 Aviation Org. Theory and Management (3)

ASCI.522 Aviation Safety Programs (3)

ASCI.523 Professional Ethics and Standards (3)

ASCI.546 Qualitative Analysis (3)

ASCI.547 Quantitative Analysis (3)

ASCI.599: Master's Thesis Research (0-6)

ASCI.699: Doctoral Dissertation Research (0-6)

***Flight Operations Administration Track***

FSCI.523 Economics of Air Transportation (3)

ASCI.601 Federal and International Regulatory Environment (3)

ASCI.602 Flight Operations Business and Administration (3)

ASCI.603 Aviation and Public Policy (3)

***Collegiate Flight Education Track***

EDL.564 The Student in Higher Education (3)

ASC.605 Legal and Ethical Issues in Collegiate Flight Education (3)

ASC.606 Aviation Curriculum Development and Management (3)

ASCI.607 Aviation Training Methods and Practice (3)

**BIOMEDICAL ENGINEERING****Interim Department Chair: Gary Bledsoe, Ph.D.**

BME.500 Seminars (0)

BME.501 Current Topics I (1)

BME.502 Current Topics II (1)

BME.503 Current Topics III (2)

BME.504 Current Topics IV (2)

BME.510 Biomedical Signals (3)

BME.515 Sensory Neuroscience (3)

BME.520 Biomechanics (3)

BME.540 Tissue-Material Interfaces (3)

BME.541 Tissue Engineering (3)

BME.545 AFM Techniques and Training (3)

BME.550 Experimental Techniques and Design (0-2)

BME.560 Quantitative Physiology (3)

BME.580 Research Rotation (1-3)

BME.593 Special Topics (1-3)

BME.596 Masters Project (1-3)

BME.597 Research Topics (1-3)

BME.598 Independent Study (1-3)

BME.599 Masters Thesis Research (0-6)

BME.697 Research Topics (1-3)

BME.698 Independent Study (1-3)

BME.699 Doctoral Dissertation Research (0-6)

**CIVIL ENGINEERING****Interim Department Chair: Riyadh Hindi, Ph.D., P.Eng.*****Structures Track***

CVNG.405/505 – Advanced Structural Analysis (3)

CVNG.407/507 – Structural Dynamics (3)

CVNG.409/509 – Advanced Reinforced Concrete (3)

CVNG.411/511 – Advanced Steel Design (3)

CVNG 413/513 – Bridge Engineering (3)

CVNG.515 – Prestressed Concrete (3)

CVNG.517 – Seismic Design (3)

***Environmental and Sustainable Engineering Track***

CVNG.419/519 – Sustainable Land Development Engineering (3)

CVNG.421/521 – Sustainable Water Management (3)

CVNG.423/523 – Biological Treatment Systems (3)

CVNG.425/525 – Physical/Chemical Treatment Systems (3)

CVNG.427/527 – Design of Wastewater Treatment Facilities (3)

CVNG.429/529 – Design of Drinking Water Treatment Facilities (3)

CVNG.431/531 – Air Pollution (3)

CVNG.433/533 – Solid and Hazardous Waste Regulation and Treatment (3)

CVNG.535 – Groundwater Analysis and Site Remediation (3)

***Geotechnical Engineering Track***

CVNG.437/537 – Slopes and Retaining Structures (3)

CVNG.439/539 – Advanced Geotechnical Engineering (3)

***Transportation Analysis and Planning Track***

CVNG.445/545 – Traffic Engineering (3)

CVNG.447/547 – Urban Transportation Planning (3)

***General Courses***

CVNG 500: Seminar (0)

CVNG.593 – Special Topics (1-3)

CVNG.596 – Master’s Project (1-3)

CVNG.541 – Soil Dynamics (3)

CVNG.543 – Foundation Engineering II (3)

CVNG.449/549 – Data Management and Analysis (3)

CVNG.599 – Master’s Thesis Research (0-6)

CVNG.699 – Doctoral Dissertation Research (0-6)

**ELECTRICAL AND COMPUTER ENGINEERING****Department Chair: Hulyar Mallikarjuna, Ph.D.**

ECE.510 Power Systems I

ECE.511 Power Systems II

ECE.520 Modern Control Theory

ECE.525 Hardware Software Co-design

ECE.526 Robotics

ECE.530 Advanced Semiconductor Devices

ECE.531 Low Noise Electronics Design

ECE.532 Analog Integrated Circuit Design

ECE.535 Digital IC Design

ECE.541 Radar System Design and Analysis

ECE.542 Microwave Theory and Techniques

ECE.543 Antenna Theory and Design

ECE.550 Advanced Filter Design

ECE.551 Image Processing

ECE.555 Stochastic Processing

ECE.560 Communication Systems

ECE.561 Spacecraft Communications

ECE.562 Cellular Communications

ECE.570 Energy Technologies I

ECE.593 Special Topics (1-3)

ECE.596 Master’s Project (3)

ECE.597 Research Topics (1-3)

ECE.598 Independent Study (1-3)

ECE.599 Master’s Thesis Research (0-6)

ECE 697 Research Topics (1-3)

12.697 Research Topics (1-3)

ECE.698 Independent Study (1-3)

ECE.699 Doctoral Dissertation Research (0-6)

**MECHANICAL ENGINEERING****Interim Department Chair: Sridhar Condoor, Ph.D.**

MENG.500: Seminar (0)

MENG.501: Advanced Fluid Dynamics (3)

MENG.502: Technology Entrepreneurship (3)

MENG.503: Numerical Methods Using Matlab and Labview (3)

MENG.512: Experimental Methods in Fluid Dynamics (3)

MENG.517: Viscous Flows (3)

MENG.519: An Introduction to Turbulence (3)

ESCI .533: Composite Materials for Structure and Design (3)

MENG.534: Finite Element Analysis I (3)

MENG.535: Finite Element Analysis II (3)

MENG.536: Multidisciplinary Optimization (3)

MENG.537: Structural Reliability (3)

MENG.538: Advanced Mechanics of Solids (3)

MENG.539: Fracture Mechanics and Plasticity (3)

MENG.593: Special Topics (1-3)

MENG.598: Independent Study (1-3)

MENG.599: Master’s Thesis Research (0-6)

# CENTER FOR ADVANCED DENTAL EDUCATION (CADE)

**John F. Hatton, D.M.D.**

*Executive Director*

The Center for Advanced Dental Education (CADE) at Saint Louis University is the academic division through which advanced training in dentistry is administered. The Center is committed to advancing the science and the art of all dental specialties through outstanding education, patient care, and research while promoting a multidisciplinary focus. At the present time, CADE is comprised of three graduate 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 graduate 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 graduate 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, in-residence participation. 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 graduate dental education.

## Graduate Courses

CAD.501 Pain: Anatomy, Physiology, Psychology, Diagnosis & Treatment (1)

CAD.503 Advanced Oral Microbiology (2)

CAD.504 Molecular Biology of the Cell (2)

CAD.505 Introduction to Statistical Inference (3)

CAD.506 Ethics in Dental Research and Practice (0)

CAD.508 Multidisciplinary Diagnosis and Treatment Planning I (1)

CAD.509 Research in Graduate Dentistry (1)

CAD.510 Dental Therapeutics (1)

CAD.511 Principles of Practice Management (1)

CAD.514 TMJ Disorders (0-1)

CAD.516 Advanced Oral Medicine (1)

CAD.517 Advanced Oral Pathology (1)

CAD.519 Advanced Head and Neck Anatomy (2)

CAD.522 Clinical Immunology (1)

CAD.523 Business Law (2)

CAD.524 Implants & Temporary Anchorage Devices (1)

CAD.G595 Special Study for Examinations (0)

## ENDODONTICS (CADE)

**John F. Hatton, D.M.D.**

*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.514, CAD.523, and CAD.524 are required. In addition, required 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 credit-hours: 50

*No formal minor is permitted.*

### Graduate Courses

ENDG.500 Preclinical Endodontic Technique (1)

ENDG.520 Literature Review (1)

ENDG.521 Literature Review II (1)

ENDG.522 Literature Review III (1)

ENDG.523 Literature Review IV (1)

ENDG.524 Literature Review V (1)

ENDG.530 Preclinical Teaching Practicum (0)

ENDG.531 Clinical Teaching Practicum (0)

ENDG.541 Pulp Biology (1)

ENDG.547 Concepts in Biomedical Science (1)

ENDG.551 Principles of Endodontic Surgery (1)

ENDG.552 American Board of Endodontics Review (1)

ENDG.560 Clinical Endodontics (1)

ENDG.561 Clinical Endodontics II (2)

ENDG.562 Clinical Endodontics III (2)

ENDG.563 Clinical Endodontics IV (1)

ENDG.564 Clinical Endodontics V (2)

ENDG.565 Clinical Endodontics VI (2)

ENDG.566 Clinical Endodontics VII (1)

ENDG.591 Endodontic Journal Club (0-1)

ENDG.595 Special Study for Examinations (0)

ENDG.599 Thesis Research (0-6)

ENDG.5CR.90 Master's Degree Study (0)

## ORTHODONTICS (CADE)

**Rolf G. Behrents, D.D.S., M.S., Ph.D.**

*Program Director*

The Center for Advanced Dental Education at Saint Louis University offers a graduate 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.503, CAD.510, and CAD.522. 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 credit hours: 83.

*No formal minor is permitted.*

### Graduate Courses

ORTH.501 Fundamentals of Orthodontics (2)	ORTH.563 Principles of Orthodontic Techniques II (2)
ORTH.503 Facial Development (2)	ORTH.570 Clinical Procedures (1)
ORTH.510 Biomechanics (2)	ORTH.571 Clinical Orthodontics I (2)
ORTH.525 Clinical Cephalometrics (2)	ORTH.572 Clinical Orthodontics II (3)
ORTH.535 Surgical Orthodontics (1)	ORTH.573 Clinical Orthodontics III (1)
ORTH.537 Orthodontic Problems Related to Cleft Palate Patient (1)	ORTH.574 Clinical Orthodontics IV (3)
ORTH.539 Speech Problems Related to the Oral Mechanism (1)	ORTH.575 Clinical Orthodontics V (2)
ORTH.540 History of Orthodontics (1)	ORTH.576 Clinical Orthodontics VI (1)
ORTH.549 Diagnostic Procedures in Orthodontics (1)	ORTH.577 Clinical Orthodontics VII (3)
ORTH.550 Diagnosis and Treatment Planning I (1)	ORTH.578 Clinical Orthodontics VIII (0-3)
ORTH.553 Clinical Diagnosis I (1)	ORTH.580 Seminar: Child and Adolescent Psychology (1)
ORTH.554 Clinical Diagnosis II (1)	ORTH.584 Diagnostic Seminars on Early & Mixed Dentition Treatment (1)
ORTH.555 Orthodontic Analysis and Treatment Modalities (1)	ORTH.585 Diagnostic Seminars on Adult & Interdisciplinary Treatment (2)
ORTH.556 Clinical Case Conference (0-1)	ORTH.589 Review for the ABO Examination (0)
ORTH.558 Clinical Specialty Seminars (1)	ORTH.591 Literature Review (1)
ORTH.560 Introduction to Clinical Orthodontics (1)	ORTH.595 Special Study for Examinations (0)
ORTH.561 Introduction to Clinical Orthodontics II (1)	ORTH.597 Research Topics (1-2)
ORTH.562 Principles of Orthodontic Techniques (2)	ORTH.599 Thesis Research (0-6)

## PERIODONTICS (CADE)

**D. Douglas Miley, D.M.D., M.S.D.**

*Program Director*

The 36-month graduate 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 graduate 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.511, CAD.523, and CAD.524. 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 credit-hours: 61

*No formal minor is permitted.*

## Graduate Courses

PERL.500 Principles of Periodontics (1)	PERL.560 Clinical Periodontics I (1)
PERL.501 Periodontal Literature Reviews I (1)	PERL.561 Clinical Periodontics II (2)
PERL.502 Periodontal Literature Reviews II (1)	PERL.562 Clinical Periodontics III (2)
PERL.503 Periodontal Literature Reviews III (1)	PERL.563 Clinical Periodontics IV (1)
PERL.504 Periodontal Literature Reviews IV (1)	PERL.564 Clinical Periodontics V (2)
PERL.505 Periodontal Literature Reviews V (1)	PERL.565 Clinical Periodontics VI (2)
PERL.506 Periodontal Literature Reviews VI (1)	PERL.566 Clinical Periodontics VII (1)
PERL.510 Conscious Sedation I (1)	PERL.567 Clinical Periodontics VIII (2)
PERL.511 Conscious Sedation II (1)	PERL.568 Clinical Periodontics IX (2)
PERL.520 Introduction to Graduate Implant Dentistry I (1)	PERL.570 Periodontal Systemic Interrelationships (0)
PERL.521 Introduction to Graduate Implant Dentistry II (1)	PERL.580 Orthodontic-Periodontic Interrelationships (0)
PERL.522 Advanced Implant Surgery I (1)	PERL.591 Current Literature in Periodontics (1)
PERL.523 Advanced Implant Surgery II (1)	PERL.595 Special Study for Examinations (0)
PERL.530 Clinical Teaching Practicum (0)	PERL.599 Thesis Research (0-6)
PERL.540 Periodontal Case Presentation Seminar (1)	PERL.5CR.90 Master's Degree Study (0)

# ALBERT GNAEGI CENTER FOR HEALTH CARE ETHICS

**Jeffrey P. Bishop, MD, PhD.**

*Center Director and Department Chair*

## PhD Program in Health Care Ethics

The PhD 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 JD/PhD, MD/PhD, or the MA/PhD follow a modified curriculum. Students entering the PhD program from baccalaureate studies pursue additional coursework as described below.

### **COURSEWORK**

Students who have completed a Master's degree or another advanced degree (e.g., a JD or MD) complete 48 hours of coursework as described in this section. Students entering the PhD program directly from baccalaureate studies complete an additional 12 credit hours of coursework, as described in the following section. Students pursuing the JD/PhD or the MD/PhD complete a modified version of the Masters-level PhD program curriculum described here.

Students register for courses in five areas: Foundations, Context of Health Care, Topics and Scholars, Practica, and Dissertation Research.

#### **Foundations of Health Care Ethics (12 hours)**

The Foundations courses establish the research competencies required for the scholarly analysis of health care ethics. These required courses examine philosophical (HCE.601), religious (HCE.602), and interdisciplinary (HCE.604) methods in health care ethics. Additionally, student are required to complete 1 of the following 3 foundations courses: HCE.605 Philosophical Foundations in Ethics, HCE.606 Psychosocial Foundations in Ethics, HCE.607 Foundations of Catholic Morality.

#### **Context of Health Care (12 hours)**

Five Context courses are required: Medicine for Ethicists (HCE.611, 1 credit) and Bioethics and the Law (HCE.660, 2 credits), HCE.618 Clinical Ethics, HCE-639 Research Ethics, and HCE.641 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 hours)**

Students will complete 12 credit hours of Topics and Scholars courses. Preferably some electives will be in areas related to a student's anticipated dissertation research.

#### **Dissertation Research (12 hours)**

After passing the comprehensive examinations, students prepare a dissertation proposal and write a dissertation while registered for 12 credit hours of dissertation research (HCE.699).

### **ADDITIONAL REQUIREMENTS IN THE CURRICULUM INCLUDE THE FOLLOWING:**

#### **Research Tools**

These competencies are essential for success in health care ethics. Students may develop these competencies through different mechanisms.

1. Competency in medical terminology
2. Competency in library database skills
3. Competency in reading statistics and study design

## **Comprehensive Examinations**

The comprehensive examinations occur after completing all course work and practica. For more information about comprehensive examinations, go to <http://www.slu.edu/bioethics/phd-program/curriculum/comp-exams>. 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, PhD candidates must present substantial evidence of their ability to extend the knowledge base in the major field and demonstrate how the research competencies in the program are to be integrated with the proposed research of the dissertation.

## **Oral Defense of the Dissertation**

Upon completion of the dissertation, students publicly present and defend their dissertation before their dissertation committee, CHCE faculty and doctoral students.

## **ADDITIONAL COURSEWORK REQUIREMENT FOR STUDENTS ENTERING DIRECTLY FROM BACCALAUREATE STUDIES**

Students entering the PhD Program directly from baccalaureate studies additionally complete 12 hours of coursework.

HCE.605: Philosophical Foundations of Ethics (3 credits)- or an equivalent 3-credit hour graduate-level foundations of ethics course

HCE.606: Psychosocial Foundations in Ethics-or a suitable 3-credit hour graduate-level applied ethics course available in another department

HCE.607 Catholic Foundations of Morality-or a suitable 3-credit hour graduate-level applied ethics course available in another department

CMHC.502: Ethical Issues in Public Health-or a suitable 3-credit hour graduate-level applied ethics course as 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 PhD students and does not count toward the additional 12 hrs. required.*

## **JD/PHD CURRICULUM**

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 hours of courses at the Center for Health Care Ethics. In addition to the six hours at the CHCE, students enroll in a three-hour 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 JD 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 PhD program. The PhD program recognizes 9 hours of law school courses towards the PhD. (See details below.) Additionally, students will have completed 9 hours of Health Care Ethics classes during the JD program. Thus it is expected that students will complete their PhD coursework in two semesters following their JD 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 PhD seminars and other extracurricular programs offered by the doctoral program. Once they have completed their JD 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.

## **CURRICULAR DETAIL**

Students complete the usual curriculum in both the Juris Doctor (JD) and PhD programs. However, as indicated below, 18 credit hours of coursework satisfies requirements in both of the dual degree programs.

#### **Law Courses Counted Toward PhD Degree (7 credits)**

LAW.757: Health Care Law [3 credits; replaces Topics and Scholars Elective]

LAW.758: Bioethics and the Law [2 credits; Context Requirement.]

LAW.86H22: Research Ethics [2 credits; replaces HCE 639 Research Ethics]

#### **PhD Courses Counted Toward JD Degree (9 credits)**

HCE.653: Directed Research in Health Law and Ethics [Cross listed with LAW-885: Directed Research (3)] [Required]

Plus two of the following five additional PhD courses:

HCE.604: Interdisciplinary Research in Health Care Ethics (3)

HCE.605: Philosophical Foundations of Ethics (3)

HCE.606: Psychosocial Foundations in Ethics (3)

HCE.607: Catholic Foundations of Morality (3)

HCE.634: Health Care Reform (3)

*\* Note: Dual degree students complete the Masters-level PhD program track, not the more extensive BA-level track.*

#### **MD/PHD CURRICULUM**

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 PhD 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 hours of coursework is required for the PhD. This ordinarily includes 33 hours of course work, three hours of practicum, and 12 hours of dissertation research. CHCE accepts 7 credit hours from Phase 1 and Phase 2 of the MD curriculum. The required courses HCE.611 Introduction to Medicine for Ethicists, one 3-credit Topics and Scholars elective and the HCE.641 Practica are waived based on medical school coursework in Patient, Physician, and Society I and II, and in Fundamentals of Biomedical Science. MD/PhD 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 credit hours of PhD coursework, comprehensive exams, the dissertation, and the public defense of the dissertation must be completed during the three years of PhD study.

*\* Note: Dual degree students complete the Masters-level PhD program track, not the more extensive BA-level track.*

#### **MA/PHD CURRICULUM**

Ordinarily, students begin their MA studies at Aquinas Institute of Theology (AIT) during their first year of the program. In year 1, students will complete 30\* hours of 36 hours required for the MA from AIT:

6 credits Biblical Studies

3 credits Historical Studies

12 credits Systematic Theology

9 credits Moral Theology

During the second year, students enter the PhD program at SLU and follow the PhD curriculum for students who already hold Masters degrees. In Year 2, dual degree students become eligible for assistantship funding. AIT will count 6 credits from the PhD coursework completed in Year 2 toward completion of the MA. The following PhD courses may be used to fulfill the final 6 credits toward the MA:

- HCE.602 (Religious Methods in Health Care Ethics) or HCE.631 (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 MA at AIT will count towards fulfillment of the Topics and Scholars elective requirements in the Ph.D. program. Two of the following MA courses may be treated as Topics and Scholars electives for the PhD:

Justice and Catholic Social Teaching

Ethics of Human Sexuality

Christian Anthropology

(Any substitutions to these courses must be approved by the MA advisor and the Center Director.)

After the end of Year 2 and completion of the major paper and comprehensive exams required for the MA degree, students are awarded the MA in Theology from AIT. The timing for completion of the major paper and the comprehensive exams is to be determined in consultation with the MA advisor at AIT.

In Year 3, students complete the coursework required for the PhD.

## CERTIFICATE OF EMPIRICAL RESEARCH METHODS IN BIOETHICS

Students, with the approval of the program's faculty, may opt to complete this certificate program. The certificate program, which has two distinct tracks (qualitative and quantitative), requires 15 hours of coursework, some of which can be integrated into the traditional PhD program. The aim of the certificate program is to prepare students to do independent research based either on survey (quantitative) or on interview (qualitative) methods. Data gathered during the final courses of the certificate program should be integrated into the doctoral dissertation in health care ethics. For further detail, see section 1.B.

### PHD CONCENTRATION IN RESEARCH ETHICS

Students enrolled in the PhD program in health care ethics may take 15 hours of coursework with an emphasis on 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.603 (3 credits): Applied Methods in Health Care Ethics or HCE.604 (3 credits): Interdisciplinary Research in Health Care Ethics

Concentration students will focus their paper in the area of human subjects research. [Note: Both courses are required for the PhD program. Students in the Human Research concentration would be required to focus on research ethics in at least one of the two classes.]

HCE.639 (3 credits): Research Ethics

HCE.698 (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 PhD 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.

### PHD CONCENTRATION IN CATHOLIC TRADITION

Students enrolled in the PhD program in health care ethics may take 15 hours of coursework 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 PhD degree should additionally hold an MA in theology. We strongly recommend that students who do not already hold an MA in theology complete our dual degree program, offered in collaboration with the Aquinas Institute of Theology. Alternately, students should plan on completing an MA prior to commencing work in Catholic health care. The concentration requirements are outlined below.

As a prerequisite, students must complete HCE.607 Foundations of Catholic Morality or demonstrate that they have completed an equivalent course at the 500 or 600 level.

HCE.602 (3 credits): Religious Methods in Health Care Ethics

Concentration students will focus their paper and receive special mentoring in the Catholic tradition.

HCE.631 (3 credits): Health Care Ethics in the Catholic Tradition

HCE.698 (3 credits): Graduate Reading Course

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 PhD 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.

Please refer to the CHCE website for course descriptions: [http://bioethics.slu.edu/PhD\\_Course\\_Descriptions.html](http://bioethics.slu.edu/PhD_Course_Descriptions.html)

## CERTIFICATE OF EMPIRICAL RESEARCH METHODS IN BIOETHICS

### Program Overview

Students enrolled in the PhD Program in Health Care Ethics may opt to complete a Certificate of Empirical Research Methods in Bioethics. The PhD Program was designed to produce graduates who are competent in *normative* health care ethics. Completion of a Certificate is meant to indicate special research competencies over and above those gained in the PhD program. These specific competencies pertain to empirical research in the field of bioethics.

The Certificate Program has two tracks: Quantitative and Qualitative. Both tracks require the completion of 15 hours of coursework.

**Integration of Certificate and PhD Coursework.** Some Certificate courses will satisfy PhD Program course requirements. These substitutions were carefully considered so as not to compromise competency in normative ethics or in knowledge of the context of health care. Because there may be up to 6 credit hours of overlap, students who enter the PhD Program with the pre-requisite in inferential statistics will be required to complete only 9 additional credit hours of coursework. Students may receive up to 6 hours of advanced standing within the Certificate program for methods courses completed elsewhere.

**Integration with the PhD Program's Educational Mission.** The most significant aspect of any PhD program is dissertation research. All dissertations in the PhD Program are expected to make original contributions to normative ethics in health care. However, normative ethics must be informed by many facts, frequently by empirical facts about the values people hold, the causal factors influencing a moral situation, or the outcomes of quality improvement or educational interventions. This presents the opportunity to incorporate original empirical research into dissertations in normative ethics.

The capstone course for the Certificate, HCE.652 Directed Empirical Research in Bioethics, requires students to gather original data that will be incorporated into the doctoral dissertation. The course will provide students with the mentoring necessary to integrate this data into the doctoral dissertation proposal in a way that is sensitive to the interdisciplinary nature of this endeavor.

### **Course of Studies for the Qualitative Track**

*Note: In square brackets substituted CHCE PhD courses are indicated.*

SOC.560 Research Methodology (or equivalent, such as SW-S775, Social Work Research).

SOC.580 Survey Research Methods [Topics and Scholars Elective]

NR-N610 Qualitative Methods in Nursing Research (or an equivalent graduate level, introduction to qualitative methods course, such as SW-S776)

A suitable course on Intermediate Qualitative Research

HCE.652 Directed Empirical Research in Bioethics [Topics requirement]

### **Course of Study for the Qualitative Certificate**

*Note: In square brackets substituted CHCE PhD courses are indicated.*

SOC.560 Research Methodology (or equivalent, such as SW-S775, Social Work Research).

SOC.580 Survey Research Methods [Topics and Scholars Elective]

PSY.625 Analysis of Variance and Experimental Design

PSY.650 Multivariate Statistical Analysis

HCE.652 Directed Empirical Research in Bioethics [Topics requirement]

As most courses build upon each other, course work is ordinarily to be completed in the order indicated above.

### **Advanced Standing and Residency Requirements**

Courses in research methods may not be transferred. However, students who have completed graduate level courses in research methods may apply for advanced standing in the certificate program (effectively having some requirements waived in lieu of previous coursework). The student will be required to provide the CHCE Certificate Program Director with a copy of his or her transcripts and a copy of the syllabus of all courses for which recognition is sought. If the Certificate Program Director considers the student to have met some of the certificate course requirements, the student will then petition the Center Director for advanced standing.

At a minimum, students must complete at Saint Louis University HCE.652 plus two other 3-credit hour graduate level courses in research methods. Substitutions may be made in order to avoid duplication of coursework.

### **Upon Successful Completion of Certificate Coursework**

Certificates will be awarded upon successful completion of all coursework. Students' transcripts will indicate the Certificate courses completed. The Center for Health Care Ethics will issue the physical Certificate, which will indicate which of the two Tracks were completed. The Certificate will be signed by the Certificate Director and the Center Director.

### **Dissertations Incorporating Original Empirical Research**

(See policy under section on dissertations.)

# CERTIFICATE OF EMPIRICAL RESEARCH METHODS IN BIOETHICS PETITION TO PURSUE A CERTIFICATE WITHIN A DEGREE PROGRAM

Graduate Education form is available online at:

<http://www.slu.edu/Documents/graduate/PursueCertWithinGradProgramIA.pdf>

Admissions: Prerequisites

## **Prerequisites for Admission to PHD Program through the Postgraduate Track**

Students must have completed a Master's degree in a field relevant to health care ethics or a professional degree in a field of health care or law. Ordinarily, students whose Master's level curriculum did not include the following items will need to complete additional prerequisite course work to satisfy the following items:

1. Foundations in Philosophical Ethics (graduate-level, 3 credit hours).
2. Applied Ethics (graduate-level, 3 credit hours).
3. Logic or Critical Thinking (undergrad/graduate, 3 credit hours).
4. MA thesis in ethics or six credit hours of humanities studies which included essays.

## **Prerequisites for Admission to PHD Program through the Post-Baccalaureate Track**

Post-baccalaureate: Applicants are required to possess a bachelor's degree with a major or a minor in a field related to ethics in the humanities (e.g., philosophy or religious studies) and their writing sample and statement of aims must evidence the maturity needed to complete a PhD in health care ethics. Basic competencies in philosophical and applied ethics are developed within the doctoral curriculum.

## **Prerequisites for Admission to PHD Program through the JD/PHD Program**

Ordinarily, JD/PhD students are required to satisfy the same prerequisites as students admitted to the PhD program on the postgraduate admission track.

## **Prerequisites for Admission to PHD Program through the MD/PHD Program**

MD/PhD students must have completed a graduate level foundations of ethics course and applied ethics course. Students may satisfy these requirements as directed reading courses during the summer between the first and second years of medical school. Applicants to the health care ethics program must provide a sample of writing in health care ethics that demonstrates the ability to do doctoral level coursework.

# DOISY COLLEGE OF HEALTH SCIENCES

**IRMA RUEBLING, MA, PT**  
*INTERIM DEAN*

The Doisy College of Health Sciences incorporates Saint Louis University's long-standing tradition of excellence in health care education with modern innovations in interprofessional 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, professional and certificate programs in these departments. Many of the departments are nationally ranked and all of them have a reputation for excellence in professional education.

## CLINICAL LABORATORY SCIENCE

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

### Department Faculty

Donna Duberg, MA, MS, MT(ASCP)SM  
Uthayashanker Ezekiel, PhD, MB(ASCP)<sup>CM</sup>  
Elizabeth Gockel-Blessing, PhD, MLS(ASCP)<sup>CM</sup>, *CCLS Program Director*  
Mona Hebert, BS, MLS(ASCP)<sup>CM</sup>  
Rita M. Heuertz, PhD, MT(ASCP)  
Larry List, MS, PA(ASCP)CT<sup>CM</sup>, *CCT Program Director*  
Tim R. Randolph, Ph.D., MT(ASCP)  
Amanda Reed, EdM, MLS(ASCP)<sup>CM</sup>

The Department of Clinical Laboratory Science offers three separate degree programs: clinical laboratory science (CLS), cytotechnology (CT), and investigative and medical sciences (IMS). The department also offers four certificate programs in the areas of chemistry, hematology, microbiology and cytotechnology. Pre-medicine, pre-physician assistant and other pre-professional curricular tracks are options in all three programs. Consult the respective program's website for more information.

Clinical Laboratory Science program website: <http://www.slu.edu/x24731.xml>

Cytotechnology program website: <https://www.slu.edu/x16887.xml>

Investigative and Medical Sciences program website: <http://www.slu.edu/x24730.xml>

## Certificate in Clinical Laboratory Science (CCLS)

### Certificate in Clinical Laboratory Science (CCLS) Program Description

The Clinical Laboratory Science (CLS) department offers *undergraduate* certificate (categorical) programs in three laboratory-specific disciplines: chemistry, hematology, and microbiology. Each of the certificate curricula provides students with a strong science background, medically applied courses, and corresponding practicum experiences in the clinical laboratory. Each program consists of two full semesters of didactic coursework and a subsequent clinical practicum that varies in length between 5-7 weeks. Clinical

experiences are scheduled at the convenience of CLS Department affiliate sites. Thus, the typical program takes between 12-18 months to complete.

CCLS graduates are prepared to manage and conduct a wide spectrum of laboratory testing relative to the laboratory testing studied. Results of these tests are used to evaluate the health status of individuals, diagnose disease, and monitor treatment efficacy. Progression through the program is based on meeting academic, psychomotor, and professional behavior requirements. Upon successful completion of the program, the graduate is eligible for national certification as a categorical medical laboratory professional. In addition to working in diagnostic, research and other laboratories, many graduates continue their education in medical school, graduate school, and other professional programs.

### **General Prerequisites**

Concurrent enrollment at Saint Louis University or completion of a conferred degree from a regionally accredited college/university with a major in biological science or chemistry is required. Students must complete a combination of 30 semester hours (45 quarter hours) of biology, chemistry and/or medical sciences for program admission consideration.

Science-based required coursework consists of a minimum of 30 credit hours and must contain concepts in inorganic and organic chemistry, human physiology, genetics, cellular and molecular biology, and biochemistry. Other required coursework includes a minimum of 3 credit hours of mathematics at a level of pre-calculus or above and 3 credit hours 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 2.75 minimum cumulative GPA on a 4.0 scale for admission consideration. An earned a "C" or better in all biological science, chemistry, math at a level of pre-calculus or above and statistics is required for admissions consideration.

### **Certificate in Clinical Laboratory Science (CCLS)- Chemistry**

CLS.350 Medical Immunology

CLS.432 Special Studies: Topics in Body Fluids

CLS.305 Urinalysis

CLS.432 Special Studies: Clinical Laboratory Management and Education

XXX PHIL/THEO Elective

CLS.330 Clinical Biochemistry

CLS.331 Molecular and Clinical Biochemistry Laboratory

CLS.432 Special Studies: Clinical Chemistry Exam Prep

CLS.TBA Chemistry Practicum

IPE.110 Introduction to Interprofessional Education

HCE.201 Healthcare Ethics

### **Certificate in Clinical Laboratory Science (CCLS)- Hematology**

CLS.350 Medical Immunology

CLS.301 Hematology & Body Fluids

CLS.302 Hematology & Body Fluids Lab

CLS.305 Urinalysis

CLS.432 Special Studies: Clinical Laboratory Management and Education

XXX PHIL/THEO Elective

CLS.306 Hemostasis and Thrombosis

CLS.303 Immunoematology Lecture **or** CLS.330 Clinical Biochemistry Lecture

CLS.TBA Hematology Practicum

CLS.432 Special Studies: Clinical Hematology Exam Prep

IPE.110 Introduction to Interprofessional Education (IPE)

HCE.201 Healthcare Ethics

### **Certificate in Clinical Laboratory Science (CCLS) Microbiology**

CLS.350 Medical Immunology

CLS.352 Medical Microbiology

CLS.432 Special Studies: Topics in Body Fluids

CLS.432 Special Studies: Clinical Laboratory Management and Education

IPE.110 Introduction to Interprofessional Education

XXX PHIL/THEO Elective

CLS.353 Medical Microbiology Laboratory

CLS.432 Special Studies: Clinical Microbiology Exam Prep

CLS.TBA Microbiology Practicum

CLS.420 Medical Parasitology

CLS.421 Medical Mycology

HCE.201 Healthcare Ethics

## **Program Accreditation**

The programs are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) | 8410 West Bryn Mawr Avenue, Suite 670 | Chicago, IL 60631 | (773) 714-8880.

# Certificate in Cytotechnology (CCT)

## **Certificate in Cytotechnology (CCT) Program Description**

The Clinical Laboratory Science (CLS) department offers a one year *post-baccalaureate* certificate program in cytotechnology. The certificate curriculum provides students with a strong science background, medically applied courses, and corresponding practicum experiences in the cytotechnology laboratory. The cytotechnologist is a health care professional whose primary responsibility is the microscopic examination of cell samples for morphologic changes that indicate infectious disease or malignancy. The expert eyes of the cytotechnologist 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. The didactic curriculum culminates in an 8 week practicum in cytotechnology laboratories. Results of cytotechnology analyses assist in the diagnosis of infectious, pre-cancerous and malignant disease. Progression through the certificate program is based on meeting academic, psychomotor, and professional behavior requirements. Upon successful completion of the certificate program, the graduate is eligible for national certification as a cytotechnologist. In addition to working in clinical cytotechnology labs many graduates continue their education in medical school, graduate school, and other professional programs.

## **General Prerequisites**

A conferred degree from a regionally accredited college/university is required for program admission consideration. Students must have completed at least 28 semester hours in the biological sciences and chemistry of which at least 20 semester hours must be in biology and at least 8 semester hours in chemistry. In addition, students must have at least 3 semester hours of mathematics at a level of pre-calculus or above and at least 3 semester hours in statistics.

Applicants wishing to apply for the certificate program must have a 2.75 minimum cumulative GPA on a 4.0 scale for admission consideration.

## **Required Clinical Laboratory Science Courses**

CLS.440 Research Design, Critique, Presentation

## **Required Cytotechnology Courses**

CT.400 Introduction to Cytology

CT.410 Female Genital Tract I

CT.411 Female Genital Tract II

CT.420 Female Genital Tract III

CT.430 The Processing Laboratory

CT.440 Respiratory and Oral Cytology

CT.460 Body Fluid Cytology

CT.470 Gastrointestinal & Genitourinary Cytology

CT.480 Fine Needle Aspiration Cytology

CT.490 Advanced Practices in Cytology

## **Program Accreditation**

The program is accredited by Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the American Society of Cytopathology (ASC), Cytotechnology Programs Review Committee (CPRC) | 400 West 9<sup>th</sup> Street Suite 201 | Wilmington, DE 19801-1555 | (312) 553-9355

# HEALTH INFORMATICS AND INFORMATION MANAGEMENT

**Jody Smith, Ph.D.**

*Department Chairperson*

*Graduate Program Director*

The Department of Health Informatics and Information Management offers a graduate program leading to the master of science in health informatics (MSH) degree. The MSHI is a 30 credit hour, non-thesis, multidisciplinary degree program. Graduates are prepared to assume a critical role in the development and implementation of clinical, administrative and documentation systems designed to enhance the quality of care and support decision-making in the healthcare sector. The program is designed for individuals with a strong background or interest in healthcare, computer science, information science, biomedical sciences, privacy and security of health data.

## Master of Science in Health Informatics (MSHI)

### Prerequisite

Bachelor of science degree in related field.

### Required Courses

MHI.520 Introduction to Health Informatics

MHI.525 Strategic Leadership in Health Informatics

MHI.530 Information Security

MHI.540 Clinical Decision Making

MHI.550 Regulations and Standards

MHI.560 Resource Management

MHI.590 Applied Project I

MHI.591 Applied Project II

HMP.593 Healthcare Project Management

ITM.630 Database Management Systems

### Elective Courses

Elective courses may be substituted if a required course was previously taken at the graduate level or if the student has documented work experience in the subject area. Approval to substitute a course must be given by the MSHI program coordinator.

MHI.510 Medical Vocabularies and Classification Systems

HMP.500 US Health Care Delivery System

ITM.610 Systems Analysis and Design

IF.505 Programming and Problem Solving

IF.510 Knowledge Management

### Additional Requirements

Medical Terminology

### Program Accreditation

The program is in candidacy status pending accreditation review by the Commission on Accreditation for Health Informatics and Information Education (CAHIIM).

# MEDICAL IMAGING AND RADIATION THERAPEUTICS

**William Hubble, MA, CNMT, RT(R)(N)(CT), FSNMMITS**  
*Department Chair*

## Molecular Imaging and Therapeutics Program

### Program Faculty

Medhat Osman, MD, PhD, *Program Director*  
Debra Hewing, MBA, CNMT, RT (N), NCT, CCRP, *Program Coordinator*  
William Hubble, MA, CNMT, RT (R)(N)(CT), FSNMMITS  
Kathleen Kienstra, MAT, RT (R)(T)  
Marcey Kennedy, MA, ARTMRIT RT (MR)  
Sherry Bicklein, MHI, RT (R)(T)  
Crystal Botkin, MPH, CNMT, PET  
J. Austin Turner, BS, CNMT, PET, RT (MR)  
Patrick Kelly, PhD

Saint Louis University's Master of Science (M.S.) in Molecular Imaging and Therapeutics (MIT) program is for students with a background in imaging or radiologic science who want to pursue a new area of study for educational and research purposes.

This degree is a 12 month, three semester program with a rigorous curriculum and three separate tracks. This degree option combines a collaborative research component with individual areas of imaging and therapeutic sciences.

Students choose to study one of the following: magnetic resonance imaging, nuclear medicine technology or radiation therapy. The program includes a required Masters Seminar course each semester which will contain an advanced scholarly component designed to enhance the content of other courses in their chosen area of study. The masters seminar courses are completed under the direction of a scholarly mentor and will result in a scholarly project suitable for publication in a peer reviewed journal, professional presentation or scholarly equivalent by program completion.

*Students with a baccalaureate degree in a radiologic science discipline can apply to the one year program online at [mit.slu.edu](http://mit.slu.edu). The admissions process is competitive. Progression through the program is based on meeting academic and professional behavior requirements.*

MIT Program Website: <http://www.slu.edu/x57680.xml>

## Master of Science in Molecular Imaging and Therapeutics (MIT)

### Prerequisites

Bachelor of science degree in a radiologic science discipline (MRI, NMT, RT, etc), preferably one that followed a pre-physician assistant or pre-medicine track and maintained a GPA 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. Refer to the MIT Program website for further information.

**Required Courses (M.S. in Molecular Imaging and Therapeutics Degree)****Magnetic Resonance Imaging Track**

MIT.511 MRI Physical Principles  
 MIT.512 MRI Cross Sectional Anatomy  
 MIT.513 MRI Instrumentation / QA  
 MIT.514 MRI Clinical / Image Production  
 MIT.515 MRI Patient Care / Safety  
 MIT.600 Masters Seminar I

HSR.510 Research Methods in Healthcare  
 MIT.521 Clinical MRI Practicum I  
 MIT.522 Advanced / Emerging Technologies  
 MIT.610 Masters Seminar II  
 MIT.599 Clinical MRI Practicum II  
 MIT.620 Masters Seminar III

**Nuclear Medicine Technology Track**

MIT.551 NMT Radiation Physics and Radiation Protection  
 MIT.552 NMT Radiochemistry / Radiopharmacy  
 MIT.553 NMT Nuclear Medicine Instrumentation  
 MIT.554 NMT Clinical Nuclear Medicine  
 MIT.555 NMT Advanced Instrumentation  
 MIT.600 Masters Seminar I  
 HSR.510 Research Methods in Healthcare

MIT.561 NMT Imaging Practicum  
 MIT.562 NMT Radiopharmacy Clinical Practicum  
 MIT.563 NMT Emerging Technologies  
 MIT.610 Masters Seminar II  
 MIT.598 NMT Clinical Practicum  
 MIT.620 Masters Seminar III

**Radiation Therapy Track**

MIT.531 XRT Radiation Physics  
 MIT.532 XRT Radiation Therapy Practice I  
 MIT.533 XRT Treatment Technique  
 MIT.534 XRT Treatment Planning  
 MIT.536 XRT Emerging Technologies  
 MIT.540 XRT Radiation Oncology Patient Care and QM  
 MIT.541 XRT Radiobiology and Radiation Protection  
 MIT.600 Masters Seminar I

HSR.510 Research Methods in Healthcare  
 MIT.535 XRT Clinical Practicum I  
 MIT.542 XRT Radiation Therapy Practice II  
 MIT.544 XRT Clinical Dosimetry  
 MIT.610 Masters Seminar II  
 MIT.545 XRT Clinical Practicum II  
 MIT.620 Masters Seminar III

# **MASTER OF SCIENCE IN HEALTH SCIENCES**

## **(MSHS)**

**Elizabeth A. Gockel-Blessing, PhD, MLS(ASCP)<sup>CM</sup>**  
*Program Director*

**Program Faculty**

Lisa L. Dorsey, PhD, MBA, PT  
 Elizabeth A. Gockel-Blessing, PhD, MLS(ASCP)<sup>CM</sup>  
 Patrick Kelly, PhD, MAPA  
 Jeanne Melton, DHA, MHA  
 Elaina Osterbur, PhD, MA

**Program Description**

Saint Louis University's Master of Science in Health Sciences (MSHS) program is designed for individuals with an undergraduate degree, preferably in a health sciences discipline. The MSHS is a two-year, 36 credit hour degree program that will equip graduates with the tools and skills necessary to assume a variety of roles in health care that may involve teaching, administrative responsibilities and critical inquiry. The program may also serve as a preparatory for entrance into medical school, dental school, or other graduate

and professional programs. Students will complete a significant research project suitable for publication in a peer-reviewed journal, professional presentation or scholarly equivalent by program completion. The ultimate goal of the program is to advance students' knowledge of health science fields and critical inquiry.

The master of science in health sciences (MSHS) is a two year, 36 credit hour program consisting of 18 credits of core health sciences coursework, 9 credits of research intensive study, and 9 credits of electives.

### **Required Courses**

HSCI.525 Qualitative Methods for Health Sciences Research  
 HSR.530 Foundations of Health Outcomes Research I  
 HSCI.530 Research I  
 HSCI.510 Seminar I  
 HSCI.505 Foundations of the U.S. Health Care System  
 ORES.501 Introduction to Biostatistics for Health Outcomes Research  
 XXX Elective I

HSCI.515 Seminar II  
 HSCI.500 Science and Philosophy  
 XXX Elective II  
 HSCI.535 Research II  
 HSCI.520 Seminar III  
 XXX Elective III  
 HSCI.540 Research III

## **NUTRITION AND DIETETICS**

**Mildred Mattfeldt-Beman, Ph.D.**, *Department Chairperson, Coordinator of Medical Dietetics Emphasis, Interim Dietetic Internship Director*

**Steven Jenkins, M.A., Chef**,  
*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*

The Department of Nutrition and Dietetics offers a dietetic internship program and graduate programs leading to the master of science in nutrition and dietetics degree. All interns register as graduate students, and twenty credit hours of graduate courses are incorporated into the internship. Upon completion of the internship, students are eligible to sit for the national registration exam.

Medical dietetics, culinary entrepreneurship, and nutrition and physical performance are available as areas of emphasis in the master's program. Students in the culinary 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 hour requirement is 54. Each student will complete a one semester, 20 hour per week practicum in an area combining dietetics and public health designed to strengthen the student's 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**

#### **Prerequisite**

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.

**Required Courses**

DIET.510 Human Nutrition in Physiology and Metabolism I  
 DIET.513 Human Nutrition in Physiology and Metabolism II

DIET.535 Clinical Systems Management  
 DIET.XXX Emphasis Specific Elective

**Additional Requirements**

DIET.578 Applied Education in Dietetics I  
 DIET.579 Applied Education in Dietetics II

DIET.594 Dietetic Internship (two semesters).

## Master of Science in Nutrition and Dietetics

**Prerequisites**

Bachelor of science degree in dietetics or related area of study, biochemistry, basic nutrition, advanced nutrition, medical nutrition therapy, Nutrition in the Life Cycle, and Inferential Statistics or equivalent.

**Additional Prerequisites for Culinary Entrepreneurship Emphasis**

Minimum of an Associate Degree in Culinary; human physiology; and community nutrition.

**Additional Prerequisites for Nutrition and Physical Performance Emphasis**

Human anatomy; human physiology; and community nutrition.

## MEDICAL DIETETICS EMPHASIS

**Required Courses**

HMP.500 Health Care Organization  
 DIET.510 Human Nutrition in Physiology and Metabolism I  
 DIET.513 Human Nutrition in Physiology and Metabolism II  
 DIET.535 Clinical Systems Management  
 DIET.555 Nutrition Counseling

ORES.512 or SOC.610 Advanced Statistics  
 ORES 510 or SOC.560 Research Methodology  
 DIET.588 Seminar in Dietetics Research  
 DIET.589 Special Problems in Dietetics

**Twelve credit-hours selected from**

DIET.503 Sustainable Food Systems  
 DIET.507 Culinary and Medicinal Herbs  
 DIET.521 Pediatric Nutrition  
 DIET.522 Gerontological Nutrition  
 DIET.530 Community Nutrition

DIET.540 Nutrition Education  
 DIET.550 Nutrition and Physical Performance  
 DIET.560 Current Research in Vitamins  
 DIET.565 Current Research in Minerals

*A formal minor is permitted.*

## CULINARY ENTREPRENEURSHIP EMPHASIS

**Required Courses**

DIET.503 Sustainable Food Systems  
 DIET.510 Human Nutrition in Physiology and Metabolism I  
 DIET.513 Human Nutrition in Physiology and Metabolism II  
 DIET.535 Clinical Systems Management

DIET.588 Seminar in Dietetics Research  
 DIET.589 Special Problems in Dietetics  
 DIET.590 Culinary Practicum

ORES.512 **or** SOC.610 Advanced Statistics  
 ORES.510 **or** SOC.560 Research Methodology  
 MGT.620 New Venture Initiation **or** MGT.623 Corporate  
 Entrepreneurship

MGT.621 Advanced Business Planning for New Ventures  
 ACT.501  
 MKT.600 **or** Approved course

**Three credit-hours selected from**

DIET.575 Gastronomy  
 DIET.5XX Sustainable Cooking in Tuscany

DIET.5XX Creating Sustainable American Cuisine  
 DIET.5XX Food Innovation Processing

*A formal minor is permitted.*

## NUTRITION AND PHYSICAL PERFORMANCE EMPHASIS

**Required Courses**

DIET.510 Human Nutrition in Physiology and Metabolism I  
 DIET.513 Human Nutrition in Physiology and Metabolism II  
 DIET.540 Nutrition Education  
 DIET.550 Nutrition and Physical Performance  
 DIET.570 Exercise Testing and Prescription  
 DIET.580 Cardiovascular and Metabolic Aspects of Exercise  
 Physiology

DIET.581 Practical Aspects of Exercise Testing and  
 Prescription  
 DPT.414 **or** BIOL.546 Exercise Physiology  
 SOC.560 **or** ORES.510 Research Methodology  
 DIET.588 Seminar in Dietetics Research  
 DIET.589-02 Special Problems in Dietetics

**Six credit-hours selected from**

HMP.500 Health Care Organization  
 DIET.503 Sustainable Food Systems  
 DIET.507 Culinary and Medicinal Herbs  
 DIET.521 Pediatric Nutrition  
 DIET.522 Gerontological Nutrition

DIET.535 Clinical Systems Management  
 DIET.555 Nutrition Counseling  
 DIET.560 Current Research in Vitamins  
 DIET.565 Current Research in Minerals

*A formal minor is permitted*

## Master of Science in Nutrition/M.P.H. Dual Degree Program

**Required Courses**

DIET.510 Human Nutrition in Physiology and Metabolism I  
 DIET.513 Human Nutrition in Physiology and Metabolism II  
 DIET.530 Community Nutrition

DIET.540 Nutrition Education  
 DIET.545 Patient/Client Nutrition Management Practicum  
 DIET.588 Seminar in Dietetics Research

**Six credit-hours selected from**

DIET.503 Sustainable Food Systems  
 DIET.507 Culinary and Medicinal Herbs  
 DIET.521 Pediatric Nutrition  
 DIET.522 Gerontological Nutrition  
 DIET.535 Clinical Systems Management

DIET.550 Nutrition and Physical Performance  
 DIET.555 Nutrition Counseling  
 DIET.560 Current Research in Vitamins  
 DIET.565 Current Research in Minerals

**Additional Requirements**

Core courses for M.P.H. program; course list is available at:

<https://www.slu.edu/college-for-public-health-and-social-justice/dual-degree-mphms>

### **Program Accreditation**

The 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, (312) 899-0040 ext. 5400.

# **OCCUPATIONAL SCIENCE AND OCCUPATIONAL THERAPY**

**Debra A. Rybski, MS, MSHCA, OTR/L**

*Chair*

### **Program Faculty**

S. Omar Ahmad, Ph.D., OTD/L

Rebecca M. Aldrich, Ph.D., OTR/L

Karen F. Barney, Ph.D., OTR/L, FAOTA, Emerita

Jeanne R. Eichler, MOT, OTR/L, MT

Julia Henderson-Kalb, MS, OTR/L

S. Margaret Maloney, Ph.D., OTR/L

Cynthia S. Matlock, MBA, OTR/L

Sherry L. Muir, MOT, OTR/L, ABD

Charlotte Royeen, Ph.D., OTR/L, FAOTA

Kathleen L. Serfas, OTD, OTR/L

Sarah Walsh, MOT, OTR/L

This program offers two degrees: a bachelor of science in occupational science (BSOS) and a master of occupational therapy (MOT) degree. Occupational science is the study of the forms and meaning of human activity, and how everyday activities influence individuals' sense of identity and roles within families and communities. Occupational therapy is a health profession that employs everyday activities in the service of helping people to live healthy and satisfying lives. Services are provided to individuals who are at risk, or who have disabling conditions or life circumstances that prevent full participation in the roles and activities that they value. Students have guaranteed entry into the graduate level master's program if they have successfully completed all the requirements of the undergraduate program. The combined BSOS and MOT program is five years of study.

Qualified post baccalaureate students with degrees in other fields may apply to the MOT program for an additional two years of study (including one summer semester). For more information, please visit: <http://www.slu.edu/x2400.xml> .

### **Non-Academic Requirements**

Fieldwork experiences in community and clinical practice settings are required in occupational therapy education. Regulations require all students to complete a criminal background check and a drug test at least once during the Program, either or both of these may be repeated as agency requirements demand. Positive results from the criminal background check or drug tests may result in ineligibility to graduate from the program. A felony conviction will affect a graduate's eligibility for professional certification and licensure.

## **Master of Occupational Therapy (MOT)**

For the first two semesters, MOT courses are cross-listed with the OCS 4XX level BSOS courses. These courses are required for both the occupational science seniors and the first year post baccalaureate occupational therapy students.

**Required Courses**

ANAT.400 Gross Anatomy	MOT.540 OT in Rehabilitation I
OCS.462 Clin Conditions & Phenomenology	MOT.541 OT in Behavioral Health II
MOT.500 Fundamentals of OS for Post Bac	MOT.545 OP & Assmnt of Infant & Child
MOT.502 Professional Development I	MOT.546 OT with Aging Adults
MOT.503 Professional Development II	MOT.549 Applied Research I
MOT.504 Professional Development III	MOT.550 Applied Research II
MOT.515 Kinesiology	MOT.555 OT in Rehab II
MOT.517 Neuroscience for OT	MOT.556 OT in Behavioral Health II
MOT.520 Clin Conditions & Phenomenology	MOT.560 OT with Infants & Children
MOT.525 OT Policy & Administration	MOT.565 Applied Research III
MOT.526 Problem Based Learning	MOT.566 Applied Research IV
MOT.530 Fundamentals of OT Practice	MOT.570 Level II Fieldwork (12 weeks)
MOT.535 Theoretical Foundations of OT	MOT.575 Level II Fieldwork (12 weeks)

**Graduation**

Upon completion of all requirements, students receive the master's in occupational therapy (MOT) 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, most 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 program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA) located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220; ACOTE's telephone number is (301) 652-AOTA

**PHYSICIAN ASSISTANT EDUCATION**

**L. Richard Coulson, PhD**  
*Chair*

**A. Caroline Chang, MMS, PA-C**

**Michael J. Cox, MD, FACP, FCCP,**  
*Medical Director*

**Carol R. Danter, MPAS, PA-C**

**Genevieve A. DelRosario, MHS, PA-C,**  
*Director of Clinical Education*

**Anne C. Hart Garanzini, MEd, PA-C**

**Chezna W. Warner, MSW, MHS, PA-C**

**Christine M. Werner, PhD, RD, PA-C**

**Mary White, ascj, MS, PA-C**

The Department of Physician Assistant Education (PA) offers a 27 month, year round, competency based program with a rigorous didactic and clinical curriculum leading to a master of medical science (MMS) degree. During the didactic phase (4 semesters), the student studies the basic medical sciences of anatomy and physiology, as well as applied behavioral sciences and the foundations of clinical medicine. Educational material is presented through organ system based courses/modules which support the integration of complex disease processes with diagnosis and treatment. The clinical phase (3 semesters) consists of rotations in internal medicine, general surgery, pediatrics, emergency medicine, women's health, family medicine, psychiatry/behavioral medicine and two rotations in clinical specialties of the student's choice (clinical elective and EBM Clerkship). While working clinically with the supervision of a physician or mid-level preceptor, the student actively participates in the care of patients of all ages and

backgrounds. Graduates of the Saint Louis University PA Program are eligible to sit for the Physician Assistant National Certifying Exam (PANCE). Certified physician assistants diagnose and treat patients and are employed in primary care and in essentially every medical and surgical specialty and subspecialty in which physicians are employed, including hospitals, health clinics, and physician offices and other healthcare settings. An optional post-graduate mini-residency in an area of the student's choice allows graduates to increase their clinical expertise in a specific medical or surgical discipline.

## Master of Medical Science (MMS)

### Prerequisites

Baccalaureate degree earned by May prior to matriculation. Minimum science GPA of 3.0 and minimum overall GPA of 3.0. Minimum 500 hours of direct patient care experience at time of application with preference given to applicants with credentialed work experience providing direct patient care. Successful completion of the following prerequisite courses or equivalents: medical terminology; statistics; college chemistry I & II; organic chemistry I & II; microbiology; vertebrate or human anatomy; vertebrate or human physiology; molecular biology, genetics or upper-level biochemistry. Admissions considerations also include the number of science prerequisites completed by December of the year prior to matriculation, the number of science prerequisites completed at a 4-year university rather than online or at a community college and the date of the applicant's undergraduate degree conferral.

### Required Courses

CLS.360 Clinical Laboratory Medicine  
 ANAT.400 Human Gross Anatomy  
 PAED.500 Psychosocial Dynamics in Health Care  
 PAED.501 Professional and Psychosocial Issues of PA Practice  
 PAED.504 Physiology  
 PAED.507 Principles of the Medical Interview  
 PAED.511 Introduction to the Systems Approach & Integument  
 PAED.512 Principles and Practice of Hematology  
 PAED.513 Principles and Practice of Otorhinolaryngology & Ophthalmology  
 PAED.515 Pharmacology I  
 PAED.520 Pharmacology II  
 PAED.521 Principles and Practice of Pulmonology  
 PAED.522 Principles and Practice of Cardiovascular Medicine  
 PAED.523 Principles and Practice of Gastroenterology & Nutrition  
 PAED.524 Principles and Practice of Nephrology & Genitourinary Medicine

PAED.525 Principles and Practice of Endocrinology  
 PAED.530 Evidence-Based Medicine  
 PAED.531 Principles and Practice of Orthopedics & Rheumatology  
 PAED.532 Principles and Practice of Neurology  
 PAED.533 Essentials of Surgery  
 PAED.534 Essentials of Emergency Medicine  
 PAED.536 Essentials of Pediatrics  
 PAED.537 Essentials of Behavioral Medicine  
 PAED.538 Essentials of Obstetrics & Gynecology  
 PAED.540 Internal Medicine  
 PAED.542 Family Medicine  
 PAED.551 General Surgery  
 PAED.560 Pediatrics  
 PAED.570 Psychiatry and Behavioral Medicine  
 PAED.575 Women's Health  
 PAED.580 Emergency Medicine  
 PAED.586 EMB Clerkship  
 PAED.593 Clinical Elective  
 PAED.600 Senior Seminar  
 PAED.TBA (Optional) Post-Graduate Mini-Residency

### Additional Requirements

In addition to meeting all the prerequisite requirements outlined above, graduates of an international college/university are also required to successfully complete at least 9 hours of social-behavioral science courses (e.g., psychology, sociology) and 12 hours 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 a minimum 500 hours of healthcare experience outside of the U.S. and must also acquire at least 250 hours of patient care experience 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 December 1. A combined minimum score of **100** is required, with minimum component scores of 22-Reading, 22-Listening, 26-Speaking and 24-Writing.

### Program Accreditation

The program has maintained full accreditation since its inception, is currently accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) and is scheduled for its next accreditation review in 2013. For information on PA program accreditation, contact the ARC-PA at 12000 Findley Road, Suite 240, Duluth, GA, 30097. 770.476.1224. Web: [www.arc-pa.org](http://www.arc-pa.org)

# PHYSICAL THERAPY AND ATHLETIC TRAINING

**Mark Reinking, PT, PhD, SCS, ATC,**  
*Chair*

The Department of Physical Therapy & Athletic Training includes two separate professional programs, the program in physical therapy and the athletic training program.

## Program in Physical Therapy

### Program Faculty

**Tricia Austin, PT, PhD, ATC,**  
*Assistant Program Director*

**Carol Beckel, PT, PhD,**  
*Director of Clinical Education*

**Jason Bennett, PT, PhD, SCS, ATC**

**Jill FitzGerald, PT, DPT**

**Ethel Frese, PT, DPT, CCS**

**Kelly Hawthorne, PT, DPT, GCS**

**Ann Marcolina Hayes, PT, DPT, OCS**

**Ginge Kettenbach, PT, PhD**

**Kim Levenhagen, PT, DPT, WCC**

**Rosemary Archambault Norris, PT, DPT**

**Mark Reinking, PT, PhD, SCS, ATC,**  
*Program Director*

**Randy Richter, PT, PhD**

**Gretchen Salsich, PT, PhD**

**Darina Sargeant, PT, PhD**

**Sara Scholtes, PT, DPT, PhD**

**Chris Sebelski, PT, DPT, OCS**

**Joanne Wagner, PT, PhD**

**Elaine Wilder, PT, PhD, C/NDT**

**Barbara Yemm, PT, DPT, OCS**

The program in physical therapy program is a freshman entry six-year curriculum leading to a bachelor of science in exercise science (BSES) degree after the fourth year and a doctor of physical therapy (DPT) degree after the sixth year. *Students with a baccalaureate degree can apply to the three-year DPT program but transfer admission is on a space available basis and is historically very limited.* The admissions process in physical therapy is competitive and post-baccalaureate students must apply through the Physical Therapy Centralized Application Service ([www.ptcas.org](http://www.ptcas.org)). Progression through the program is based on meeting academic and professional behavior requirements. PT Program Website: <http://pt.slu.edu>

## Doctor of Physical Therapy (DPT)

### 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 PT Program website for further information.

**Required Courses (DPT Degree)**

ANAT.400 Gross Anatomy	DPT.525 Clinical Gait
ANAT.430 Neuroscience	DPT.526 Neuropathology
DIET.502 Aspects of Nutrition for Physical Therapy	DPT.527 Neurological Conditions I
DPT.403 Documentation	DPT.528 Neurological Conditions II
DPT.405 Human Growth & Development	DPT.529 Cardiopulmonary Conditions
DPT.411 Kinesiology I	DPT.534 Multisystem Management
DPT.412 Kinesiology II	DPT.540 Lab Studies & Imaging
DPT.413 Survey of Disease	DPT.542 Pharmacology
DPT.415 Therapeutic Exercise	DPT.560 Departmental Administration
DPT.420 Developmental Biology	DPT.561 Applied Administration & Management
DPT.430 Therapeutic Modalities	DPT.563 Evidence Based Practice
DPT.455 Basic Exam	DPT.565 Components of Effective Communication & Teaching
DPT.460 Clinical Research & Design	DPT.566 Concepts of Wellness
DPT.470 Basic Procedures	DPT.570 Patient Management I
DPT.484 Skills Practicum	DPT.571 Patient Management II
DPT.507 Applied Neuroscience	DPT.572 Patient Management III
DPT.508 Professional Development I	DPT.580 Clinical Rotation IA (5 wks)
DPT.510 Professional Development II	DPT.581 Clinical Rotation IB (5 wks)
DPT.512 Professional Development III	DPT.582 Clinical Rotation IIA (5 wks)
DPT.519 Biomechanical Interventions	DPT.583 Clinical Rotation IIB (5 wks)
DPT.520 Musculoskeletal Conditions I	DPT.584 Clinical Internship A (10 weeks)
DPT.521 Musculoskeletal Conditions II	DPT.585 Clinical Internship B (10 weeks)
DPT.522 Musculoskeletal Conditions III	DPT.590 Applied Evidence Based Practice
DPT.523 Musculoskeletal Conditions IV	

**Program Accreditation**

The program 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)

# **Athletic Training**

**Program Faculty**

**Anthony Breitbach, PhD, ATC,**  
*Program Director*

**Timothy Howell, EdD, ATC, CSCS,**  
*Clinical Education Coordinator*

**Mike Markee, ATC, PT, OCS, COMT**

**Katherine Newsham, PhD, ATC**

**L. Tyler Wadsworth, MD,**  
*Medical Director*

The Athletic Training (AT) Program is a freshman entry five-year curriculum leading to a BSES degree after the fourth year and a master of athletic training (MAT) degree after the fifth year. *Students with a baccalaureate degree can apply to the two year professional program but transfer admission is on a space available basis and is limited.* Application information is available on the athletic training program website. Progression through the program is based on meeting academic and professional behavior requirements. AT Program Website: <http://at.slu.edu>

## Master of Athletic Training (MAT)

### 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 (MAT Degree)

ANAT.400 Gross Anatomy	MAT.562 Psychology of Sport and Injury
MAT.430 Therapeutic Modalities	MAT.565 Research in Athletic Training
MAT.501 Principles of Athletic Training	MAT.570 AT Clinical Practicum I
MAT.510 Athletic Training Kinesiology	MAT.575 AT Clinical Practicum II
MAT.516 Bioenergetics of Athletic Performance	MAT.580 Medical Conditions in Athletic Training
MAT.524 Musculoskeletal Assessment & Mgmt I	MAT.590 AT Field Experience
MAT.525 Musculoskeletal Assessment & Mgmt II	MAT.595 AT Clinical Practicum III
MAT.540 Lab Studies and Imaging	MAT.616 Enhancing Athletic Performance
MAT.550 Rehabilitation in Athletic Training I	MAT.670 AT Capstone Project
MAT.555 Rehabilitation in Athletic Training II	MAT.671 AT Clinical Practicum IV
MAT.560 Athletic Training Administration	MAT.680 Seminar in Athletic Training

### Program Accreditation

The program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE) as an Entry-Level Master's Program. The five year accreditation (2010-15) is the maximum for newly accredited programs. The SLU program is one of more than 350 CAATE accredited programs nationally and one of approximately 25 accredited Entry-Level Master's programs in the country. More information is available from the CAATE at (512) 733-9700, <http://www.caate.net> or 2201 Double Creek Drive, Suite 5006, Round Rock, TX 78664.

# SCHOOL OF MEDICINE

**Philip O. Alderson, M.D.**

*Collegiate Dean*

In addition to contributing strongly to the first two years of the Doctor of Medicine degree curriculum, the pre-clinical, medical-science departments offer post baccalaureate work leading to the Ph.D. degree. Five offerings, each affiliated with an individual department or center, are available; however, most students admitted for direct Ph.D.-degree study take a common, first-year core in the basic biomedical sciences. Furthermore, studies toward the Ph.D. degree in a medical-science field may be combined with the M.D.-degree curriculum, and the two degrees pursued concurrently by selected students. M.S. (Research or non-Research) and Ph.D. degrees also are offered by the Center for Anatomical Science and Education.

## BASIC BIOMEDICAL SCIENCE

**Willis K. Samson, Ph.D.,**

*Graduate Program Director*

Admission to all Ph.D. degree programs in the biomedical sciences is by application to the core graduate 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 graduate 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 graduate programs in the School of Medicine [Biochemistry and Molecular Biology; Molecular Microbiology and Immunology; Pathology; Pharmacological and Physiological Science]. The subsequent requirements for completion of the Ph.D. degree vary with the individual program and include specialized advanced courses and the performance of original research leading to completion of the dissertation.

### Required Courses

BBS.501 Basic Biomedical Science I;

BBS.502 Special Topics in Basic Biomedical Science I;

BBS.503 Basic Biomedical Science II;

BBS.504 Special Topics in Basic Biomedical Science II; and

BBS.510 Responsible Conduct in Research.

### Additional Requirements

BBS.592 Basic Biomedical Science Colloquium (both semesters) and

BBS.597 Introduction to Basic Biomedical Research (both semesters)

BBS.501 Basic Biomedical Science I (5)

BBS.502 Special Topics in Basic Biomedical Science I (4)

BBS.503 Basic Biomedical Science II (5)

BBS.504 Special Topics in Basic Biomedical Science II (4)

BBS.510 Responsible Conduct in Research (0)

BBS.592 Basic Biomedical Science Colloquium (1)

BBS.597 Introduction to Basic Biomedical Research (2)

# BIOCHEMISTRY AND MOLECULAR BIOLOGY

**Enrico Di Cera, M.D.**

*Department Chairperson*

**Dale Dorsett, Ph.D.,**

*Graduate Program Director*

Students with bachelor's degrees enter the Biochemistry and Molecular Biology graduate 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, the student selects a faculty mentor and a specific graduate program. Students with master's degrees in biochemistry or related fields can apply for direct entry into the Biochemistry and Molecular Biology graduate 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.501 Basic Biomedical Science I;	Interactions
BBS.502 Special Topics in Basic Biomedical Science I;	BCHM.624 Molecular Basis of Human Disease
BBS.503 Basic Biomedical Science II;	BCHM.625 Preparation and Evaluation of Scientific Research Proposal.
BBS.504 Special Topics in Basic Biomedical Science II;	BCHM.628 Introduction to Genomics & Bioinformatics
BBS.510 Ethics for Research Scientists	ORES 520 Introduction to Statistics in Biomedical Sciences
BCHM.623 Macromolecules: Structure, Function, and	

### Additional Requirements

- BBS.592 Basic Biomedical Science Colloquium (two semesters);
- BBS.597 Introduction to Basic Biomedical Research (two semesters)
- BCHM.691 Biochemistry and Molecular Biology Journal Club (two semesters).
- BCHM.692 Biochemistry and Molecular Biology Colloquium (one semester).

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 credit-hours toward preliminary examinations for the doctorate: at least 48. 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.

## Graduate Courses

BCHM.595 Special Study for Examinations (0)

*Prerequisite: Permission of Instructor.*

BCHM.5CR.90 Master's Degree Study (0)

BCHM.692 Biochemistry and Molecular Biology Colloquium (1)

*Prerequisite: Permission of Instructor.*

BCHM.599 Thesis Research (0-6)

BCHM.695 Special Study for Examinations (0)

BCHM.623 Macromolecules: Structure, Function, and Interactions (3)

*Prerequisite: Permission of Instructor.*

BCHM.697 Research Topics (1-3)

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

BCHM.624 Molecular Basis of Human Disease (3)

*Prerequisite: Permission of Instructor.*

BCHM.625 Preparation of Scientific Research Proposals (3)

*Prerequisite: Permission of Instructor.*

BCHM.698 Graduate Reading Course (1-3)

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

BCHM.628 Introduction to Genomics and Bioinformatics (2)

*Prerequisites: BBS.501 and BBS.502 or consent of the Instructor.*

BCHM.699 Dissertation Research (0-6)

BCHM.691 Biochemistry and Molecular Biology Journal Club (1)

BCHM.6CR.99 Doctor of Philosophy Degree Study (0)

# MOLECULAR MICROBIOLOGY AND IMMUNOLOGY

**William S. M. Wold, Ph.D.,**

*Department Chairperson*

**H. Peter Zassenhaus, Ph.D.,**

*Graduate Program Director*

The Department of Molecular Microbiology and Immunology offers a graduate program in molecular microbiology leading to the Ph.D. degree. Our goal is to graduate exceptionally well-trained researchers who possess the necessary background and experience for a career in academic science or biotechnology. Research in the department is diversified. Areas of research emphasis include cell and molecular biology, virology, and immunology. Admission to the Ph.D. program in Microbiology will be by application to the graduate program in Basic Biomedical Sciences. This interdisciplinary graduate program is intended for all students who are interested in basic 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 graduate 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, cell, molecular, developmental genetic, and physiological sciences.

## Doctor of Philosophy

### Prerequisites

Coursework in college physics, calculus, organic chemistry, and the biological sciences.

### Required Courses

RMET.597 Biostatistics for Medical Sciences

BBS.504 Special Topics in Basic Biomedical Science II;

BBS.501 Basic Biomedical Science I;

BBS.510 Ethics for Research Scientists;

BBS.502 Special Topics in Basic Biomedical Science I;

MB.635 Virology

BBS.503 Basic Biomedical Science II;

MB.665 Basic Immunobiology.

### **Additional Requirements**

BBS.592 Basic Biomedical Science Colloquium (two semesters);

BBS.597 Introduction to Basic Biomedical Research (two semesters);

MB.691 Microbiology Journal Club; and MB.692 Microbiology Colloquium.

Minimum postbaccalaureate credit-hours in preparation for preliminary degree examination: 48. Students are required to submit a grant proposal to an outside agency for extra-mural research and/or stipend support within six months of successfully passing the Candidacy Examination. Funds obtained from such grants supplement support provided by the Department and/or a mentor.

*A formal minor is not permitted.*

### **Graduate Courses**

MB.531 Introduction to Research Techniques and Topics (1-3)

MB.624 Advanced Topics in Immunology (2-3)

MB.635 Virology (3)

MB.665 Basic Immunobiology (3)

MB.675 Immunology Journal Club (2)

MB.682 Advanced Topics in Virology and Cell Biology (1-3)

MB.691 Microbiology Journal Club (0-1)

MB.692 Microbiology Colloquium (0-1)

EMB.695 Special Study for Examinations (0)

MB.697 Research Topics (0-3)

MB.698 Graduate Reading Course (1-3)

MB.699 Dissertation Research (0-6)

MB.6CR.99 Doctor of Philosophy Degree Study (0)

# PATHOLOGY

**Carole Vogler, M.D.,**

*Department Chairperson*

**Jacki Kornbluth, Ph.D.,**

*Graduate Program Director*

The graduate program in the Department of Pathology offers training in biomedical research with a strong emphasis in medically important areas including tumor biology and cardiovascular and liver pathobiology. Students will acquire knowledge of basic disease processes, learn research methodologies, and utilize state-of-the-art cell and molecular biology techniques in preparation for research careers. In addition to the standard array of equipment necessary for performing basic biochemical and cellular biology, the Pathology Department also contains well-equipped facilities for flow cytometry, single-cell microinjection, video and confocal microscopy, laser capture microdissection, and scanning and transmission electron microscopy.

## Doctor of Philosophy

### **Prerequisites**

An undergraduate degree in biology or chemistry. Advanced biology coursework is recommended.

### **Required Courses**

BBS.501 Basic Biomedical Science I;

BBS.502 Special Topics in Biomedical Science I;

BBS.503 Basic Biomedical Science II;

BBS.504 Special Topics In Biomedical Science II;

BBS.510 Ethics for the Research Scientist; and

PATH.501 Pathobiology.

**Additional Requirements**

BBS.592 Basic Biomedical Science Colloquium (two semesters);

BBS.597 Introduction to Basic Biomedical Research (two semesters);

PATH.691 Molecular Pathobiology Journal Club; and

PATH.692 Pathology Research Colloquium.

Postbaccalaureate credit hours in preparation for preliminary degree examinations: minimally 48.

*A formal minor is not permitted.*

**Graduate Courses**

PATH.501 Pathobiology (5)

PATH.502 Molecular Pathobiology (4)

PATH.535 Introduction to Microscopy Techniques (3)

PATH.538 Immunopathology (3)

PATH.691 Molecular Pathobiology Journal Club (1)

PATH.692 Pathology Research Colloquium (1)

PATH.693 Special Topics in Pathology (1-3)

PATH.695 Special Study for Examinations (0)

PATH.697 Research Topics (1-3)

PATH.698 Graduate Reading Course (1-3)

PATH.699 Dissertation Research (0-6)

PATH.6CR.99 Doctor

# PHARMACOLOGICAL AND PHYSIOLOGICAL SCIENCE

**Thomas P. Burris, Ph.D.**

*Department Chairperson*

**Mark M. Voigt, Ph.D.**

*Vice-Chairperson*

**Terrance M. Egan, Ph.D.**

*Graduate Program Director*

The graduate 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 graduate study if an applicant is otherwise acceptable for admission into the program.

## Required Courses

BBS.501 Basic Biomedical Science I;

BBS.502 Special Topics in Basic Biomedical Science I;

BBS.503 Basic Biomedical Science II;

BBS.504 Special Topics in Basic Biomedical Science II;

PPY.511 Advanced Topics in Pharmacological and Physiological Science I;

PPY.512 Selected Topics in Pharmacological and Physiological Science I;

PPY.513 Advanced Topics in Pharmacological and Physiological Science II; and

PPY.514 Selected Topics in Pharmacological and Physiological Science II.

## Additional Requirements

BBS.592 Basic Biomedical Science Colloquium (two semesters);

BBS.597 Introduction to Basic Biomedical Research (two semesters);

PPY.680 Pharmacological and Physiological Science Seminar; and

PPY.691 Pharmacological and Physiological Science Journal Club.

Participation and attendance required in the Seminar and Journal Club during entire tenure of residency, whether or not student is 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.

Credit hours in preparation for preliminary examinations total 48 minimum if degree pursued directly from the baccalaureate.

*A formal minor is not permitted*

## Graduate Courses

PPY.511 Advanced Topics in Pharmacological and Physiological Science I (4)

PPY.512 Selected Topics in Pharmacological and Physiological Science I (2)

PPY.513 Advanced Topics in Pharmacological and Physiological Science II (4)

PPY.514 Selected Topics in Pharmacological and Physiological Science II (2)

PPY.595 Special Study for Examinations (0)

PPY.599 Thesis Research (0-6)

PPY.5CR.90 Master's Degree Study (0)

PPY.600 Pharmacological Principles of Human Therapeutics (2)

PPY.601 Pharmacology and Physiology of the Cardiovascular System (4)

PPY.655 Signal Transduction Mechanisms (4)

PPY.666 Pharmacology and Physiology of the Nervous System and Selected Topics in Neuropharmacology (4)

PPY.680 Pharmacological and Physiological Science Seminar (0-1)

PPY.691 Pharmacological and Physiological Science Journal Club (0-1)

PPY.695 Special Study for Examinations (0)

PPY.697 Research Topics (1-3)

PPY.698 Graduate Reading Course (1-3)

PPY.699 Dissertation Research (0-6)

PPY.6CR.99 Doctor of Philosophy Degree Study (0-1)

# CENTER FOR ANATOMICAL SCIENCE AND EDUCATION

**Daniel L. Tolbert, Ph.D.,**

*Graduate Program Director*

*Director, Center for Anatomical Science and Education*

**John Martin, Ph.D.,**

*Graduate Program Associate Director*

**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 (non-thesis) and Doctor of Philosophy degrees. The Master's degree programs prepare students for teaching in the anatomical disciplines and provide experience with fundamental anatomical research and/or teaching methodologies. The Doctoral program emphasizes training in clinical human anatomy and independent research for individuals seeking careers in medical school or university teaching. Research in biological structure and function focuses on clinically relevant anatomical topics. Additionally, CASE also offers the Medical Anatomy and Physiology Preparatory Program (MAPP) to post-baccalaureate scholars considering careers in medicine, dentistry or biomedical science education. The MAPP program is a two semester (fall and spring) academic experience that provides graduate-level courses in anatomy and physiology.

## Medical Anatomy and Physiology Program (MAPP) (24 credit hours)

### Prerequisite

Background in biology and/or chemistry.

### Required Courses

ANAT.500 Human Gross Anatomy;

ANAT.510 Human Histology and Ultrastructure;

ANAT.520 Human Embryology;

ANAT.530 Human Systems Neurobiology;

ANAT.540 Human Systems Physiology.

## Master of Science in Anatomy (Non-thesis) (30 credit hours)

### Prerequisite

Background in biology and/or chemistry.

### Required Courses

ANAT.500 Human Gross Anatomy;

ANAT.510 Human Histology and Ultrastructure;

ANAT.520 Human Embryology;

ANAT.530 Human Systems Neurobiology;

ANAT.540 Human Systems Physiology;

ANAT.550 Advanced Dissections in Human Anatomy;

ANAT.588 Human Anatomy Independent Study;

ANAT.595 Special Studies for Exams;

ANAT.691 Journal Club.

## Master of Science (Thesis) in Anatomy (30 credit hours with 4-6 hours for Thesis Research)

### Prerequisite

Background in biology and/or chemistry.

### Required Courses

ANAT.500 Human Gross Anatomy;	ANAT.544 Basic Research Techniques in Anatomy;
ANAT.510 Human Histology and Ultrastructure;	ANAT.595 Special Studies for Exams;
ANAT.520 Human Embryology;	ANAT.599 Thesis Research;
ANAT.530 Human Systems Neurobiology;	ANAT.691 Journal Club;
ANAT.540 Human Systems Physiology;	BBSG.510 Ethics for Research Scientists.

## Doctor of Philosophy in Anatomy (60 credit hours)

(48 hours and 12 hours of Dissertation Research)

### Prerequisite

Background in biology, chemistry, or psychology.

### Required Courses

ANAT.500 Human Gross Anatomy;	BBSG.510 Ethics for Research Scientists;
ANAT.510 Human Histology and Ultrastructure;	BST.500 Principles of Biostatistics;
ANAT.520 Human Embryology;	ANAT.689 Anatomy Seminar;
ANAT.530 Human Systems Neurobiology;	ANAT.691 Journal Club;
ANAT.540 Human Systems Physiology;	ANAT.695 Special Studies for Exams;
ANAT.544 Basic Research Techniques in Anatomy;	ANAT.699 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.*

### Graduate Courses

ANAT.500 Human Gross Anatomy (8)	ANAT.597 Research Topics (1-3)
ANAT.510 Human Histology and Ultrastructure (5)	ANAT.598 Graduate Reading (1-3)
ANAT.520 Human Embryology (2)	ANAT.599 Thesis Research (0-6)
ANAT.530 Human Systems Neurobiology (5)	ANAT.5CR.90 Master's Degree Study (0)
ANAT.540 Human Systems Physiology (4)	ANAT.630 Advanced Systems Neurobiology (1)
ANAT.544 Basic Research Techniques in Anatomy (2)	ANAT.632 Developmental Neurobiology (2)
ANAT.550 Advanced Dissections in Human Anatomy (2-4)	ANAT.667 Visual Neuroscience (2)
ANAT.588 Human Anatomy Independent Study (2-4)	ANAT.689 Anatomy Seminar (0-1)
ANAT.595 Special Study for Examinations (0)	

ANAT.691 Anatomy Journal Club (0-1)

ANAT.698 Graduate Reading Course (1-3)

ANAT.695 Special Study for Examinations (0)

ANAT.699 Dissertation Research (12)

ANAT.697 Research Topics (1-3)

# COUNSELING AND FAMILY THERAPY

**Craig W. Smith, Ph.D.,**  
*Department Chairperson*

The mission of the Department of Counseling and Family Therapy is to train skilled clinicians in the professions of professional counseling and marriage and family therapy 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. The Marriage and Family Therapy Doctoral Program at Saint Louis University is 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. As part of the Educational Unit of the Saint Louis University College of Education and Public Service, the School Counseling program is accredited by the Missouri Department of Elementary and Secondary Education (DESE) and the National Council for Accreditation of Teacher Education (NCATE).

The Department of Counseling and Family Therapy 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. Doctoral and Master's degree students see clients at the Center for Counseling and Family Therapy, located near the Department offices. The Center provides mental health services to the university and St. Louis communities on a sliding-scale fee basis. The Department of Counseling and Family Therapy offers both Master's and Doctoral degree programs, as well as a Marriage and Family Therapy Certificate program.

## Master of Arts in Counseling

Program options include concentrations in School Counseling, toward fulfillment of requirements for Professional School Counselor Certification in Missouri, and Human Development Counseling, fulfilling course and practicum requirements toward Licensed Professional Counselor (LPC) status in Missouri. Both concentrations require a total of 600 hours of clinical experience with at least 280 hours of direct clinical contact.

### Prerequisites

The M.A. in Counseling program involves a minimum of 51 credit hours beyond the bachelor's degree. Prerequisites include 18 credit hours in the behavioral sciences.

### Course of Study

CFT.520 Counseling and Career Development (3);

EDF.530 Advanced Educational Psychology (3);

CFT.522 Introduction to Counseling (3);

CFT.577 Foundations of Multicultural Counseling (3);

CFT.530 Counseling Theory (3);

CFT.653 Ethical and Legal Issues in Counseling and Family Therapy (3);

CFT.532 Group Counseling Theory and Practice (3);

CFT.655 Diagnosis and Appraisal in Counseling and Family Therapy (3);

CFT.533 Assessment Methods in Counseling (3);

CFT.666 Introduction to Couple and Family Studies (3);

CFT.540 Practicum in Counseling (Beg) (3)

A graduate level statistics course (3); and

CFT.550 Practicum in Counseling (Adv) (3)

A graduate level research methods course (3).

CFT.544 Internship in Counseling (6)

CFT.570 Advanced Growth and Development (3) or

Three credit hours of electives.

Three credit hours of electives must be CFT.500 (or CFT.501)

Foundations of Guidance if concentration is Elementary (or Secondary) School Counseling.

Candidates for Missouri Department of Elementary and Secondary Education (DESE) Professional School Counseling Certification must have a valid teaching certificate or take additional coursework beyond the M.A. in Counseling. Total credit hours required for degree: 51.

*A formal minor is not permitted.*

## Master of Arts in Family Therapy

The M.A. in Family Therapy program fulfills the course and clinical training requirements toward licensure in the State of Missouri as a Licensed Marital and Family Therapist (LMFT). Five-hundred hours of direct clinical contact, 250 of those being with couples and families, is required.

### Prerequisites

The M.A. in Family Therapy program involves a minimum of 51 credit hours beyond the bachelor's degree. Prerequisites include 18 credit hours in the behavioral sciences.

### Course of Study

CFT.521 Introduction to Family Therapy (3);

CFT.532 Group Counseling Theory and Practice (3);

CFT.541 Practicum in Family Therapy (Beg) (3)

CFT.551 Practicum in Family Therapy (Adv) (3)

CFT.545 Internship in Family Therapy (9)

CFT.570 Advanced Growth and Development (3);

CFT.577 Foundations of Multicultural Counseling (3);

CFT.650 Issues in Counseling and Family Therapy (3);

CFT.653 Ethical and Legal Issues in Counseling and Family Therapy (3);

CFT.655 Diagnosis and Appraisal in Counseling and Family Therapy (3);

CFT.656 Couple and Family Systems Theory I (3);

CFT.666 Introduction to Couple and Family Studies (3);

CFT.670 Couple Interaction and Therapy (3);

A graduate level statistics course (3); and

A graduate level research methods course (3).

Total credit hours required for degree: 51.

*A formal minor is not permitted.*

## Master of Arts (Non-Thesis)

A student may petition to transfer into the research Master's degree program with the advisor's recommendation after successful completion of 12 credit hours in the M.A. degree program. The research preparation sequence must include a graduate level general research methods course and 6 credit hours of CFT.599 Thesis Research.

Total credit hours required: 54.

## Certificate in Marriage and Family Therapy

The Certificate in Marriage and Family Therapy is an interdisciplinary clinical program for qualified clinical mental health practitioners to increase their knowledge of marriage and family therapy as well as their clinical skills conducting therapy with couples and families. Coursework is designed to meet the educational requirements for Marriage and Family Therapy licensure in Missouri. Coursework ranges from 15 to 33 hours, depending on the coursework taken at the master's level. All certificate students take two practicum courses in marriage and family therapy.

### Prerequisites

Completion of a 48-hour Master's degree in a clinical mental health field, or a post-baccalaureate in a human service field.

### **Course of Study**

Fifteen to 33 credit hours, dependent on coursework previously completed, including:

Three credit hours in theoretical foundations of MFT;

Twelve credit hours in the practice of MFT;

Six credit hours in human development/family studies;

Three credit hours in research;

Six credit hours in MFT practica; and

Three credit hours in MFT ethics.

### **Additional Requirement**

Capstone requirement: position paper and defense.

## **Doctor of Philosophy**

The Ph.D. in Family Therapy is based on a systemic/relational view of individuals, couples and families. Coursework focuses on theory, practice, and research in the field of marriage and family therapy. The doctoral program involves a minimum of 51 credit hours of coursework beyond the master's degree, plus written and oral preliminary examinations and original research culminating in the dissertation (12+ credit hours). The Ph.D. has a clinical component, during which students serve as therapists at the department's Center for Counseling and Family Therapy and other community sites, and complete a nine to 12 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-hundreds of those hours must be relationally focused working with couples and families.

### **Prerequisites**

A master's degree with at least 48 hours in marriage and family therapy (MFT) or a related mental health area with coursework equivalent to a master's degree in MFT.

### **Course of Study**

CFT.665 Advanced Couple and Family Therapy (3);

CFT.669 Supervision in Family Therapy (3);

CFT.670 Couple Interaction and Therapy (3);

CFT.671 Couple and Family Systems Theory II (3);

CFT.676 Family Issues in Therapy (3);

CFT.677 Cultural, Social, and Family Systems (3)

CFT.682 The Self in Theory and Therapy (3);

CFT.697 Research Topics-Counseling & Family Therapy (3).

### **Additional Requirements**

CFT.601 Doctoral Residency

Six credit hours of research courses (in addition to CFT.697)

Nine credit hours of Couple/Family Therapy practica

Three credit hours of Supervision of Counselors and Family

Therapists practica

Three credit hours of Clinical Supervision

Six hours of electives

## Graduate Courses

- CFT.500 Foundations of Guidance: Elementary (3)
- CFT.501 Foundations of Guidance: Secondary (3)
- CFT.520 Counseling and Career Development (3)
- CFT.521 Intro to Family Therapy (3)
- CFT.522 Intro to Counseling (3)
- CFT.530 Counseling Theory (3)
- CFT.532 Group Counseling Theory and Practice (3)
- CFT.533 Assessment Methods in Counseling (3)
- CFT.534 Assessing Person/Context Interactions (3)
- CFT.535 Family/School Consultation (3)
- CFT.538 Nonverbal Behavior (3)
- CFT.540 Practicum in Counseling: Beg (2)
- CFT.541 Practicum in Family Therapy: Beg (2)
- CFT.544 Internship in Counseling
- CFT.545 Internship in Family Therapy
- CFT.550 Practicum in Counseling: Adv (1)
- CFT.551 Practicum in Family Therapy: Adv (1)
- CFT.570/EDF.570 Advanced Growth and Development (3)
- CFT.574 Enrichment and Prevention Programs in Family and Human Systems (3)
- CFT.577 Foundations of Multicultural Counseling (3)
- CFT.595 Special Study for Examinations (0)
- CFT.598 Graduate Reading Course (1-3)
- CFT.599 Thesis Research (0-6)
- CFT.650 Issues in Counseling and Family Therapy (3)
- CFT.651 Individual Development and Therapy (3)
- CFT.652 Process Consultation Practices (3)
- CFT.653 Ethical & Legal Issues in Counseling and Family Therapy (3)
- CFT.655 Diagnosis and Appraisal in Counseling and Family Therapy (3)
- CFT.656 Couple and Family Systems Theory I
- CFT.660 Counseling and Vocational Behavior
- CFT.665 Advanced Couple and Family Therapy (3)
- CFT.666 Introduction to Couple and Family Studies
- CFT.667 Group Counseling (Advanced) (3)
- CFT.669 Supervision in Family Therapy (3)
- CFT.670 Couple Interaction & Therapy (3)
- CFT.671 Couple and Family Systems Theory II (3)
- CFT.672 Practicum: Beginning Couple and Family Therapy (3)
- CFT.673 Practicum: Intermediate Couple and Family Therapy (3)
- CFT.674 Practicum: Advanced Couple and Family Therapy (3)
- CFT.675 Practicum: Supv. of Counselors and Family Therapists (3)
- CFT.676 Family Issues in Therapy (3)
- CFT.677 Cultural, Social and Family Systems (3)
- CFT.682 The Self in Theory and Therapy (3)
- CFT.684 Practicum: Teaching in Counseling (3)
- CFT.687 Clinical Supervision (1)
- CFT.694 Doctoral Internship (0)
- CFT.695 Special Study for Examinations (0)
- CFT.697 Research Topics in Counseling and Family Therapy (3)
- CFT.698 Graduate Reading Course (1-3)
- CFT.699 Dissertation Research (0-6)

# SCHOOL OF NURSING

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

*Dean*

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

*Graduate and Professional Education, Associate Dean*

**Mary Lee Barron, Ph.D.**

*Advanced Nursing Practice Programs, Director*

**Andrew C. Mills, Ph.D.**

*Ph.D. Nursing Program, Director*

**Kristine M. L'Ecuyer, M.S.N.**

*Accelerated Generalist Masters of Science in Nursing Program, Coordinator*

The School of Nursing is fully accredited by the Commission on Collegiate Nursing Education and approved by the Missouri State Board of Nursing. To achieve its educational objectives, the School uses the hospitals within the Health Sciences Center and many health care organizations of greater St. Louis. In addition to its undergraduate offerings, programs leading to the Master of Science in Nursing (Generalist), Master of Science in Nursing (Advanced Nursing Practice), Doctor of Nursing Practice (D.N.P.), Doctor of Philosophy (Ph.D.) in Nursing degrees, and a Post-Master's certificate are available through Graduate Education.

The Master of Science in Nursing (Generalist) degree is an accelerated 21 month on-site prelicensure program 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. In addition, on completion of the program, graduates will be eligible to sit for the clinical nurse leader exam offered by American Association of Colleges of Nursing Commission on Nurse Certification.

The Master of Science in Nursing (Advanced Nursing Practice) degree program enables nurses to attain specialized knowledge and skills needed to implement 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 prepares nurses with skills to teach in associate, diploma, or baccalaureate nursing programs.

The Doctor of Nursing Practice (D.N.P.) prepares nurses as advanced practice nurses with the specialized knowledge and skills needed to diagnose and manage health and illness and improve the quality of health care in all practice settings using evidence and outcome-based methodologies. DNP graduates promote the value of the human person, clinical expertise, and patient-centered care with an emphasis on interdisciplinary collaboration within the health care delivery system.

The Ph.D. degree program prepares nurses as scholars and beginning nurse scientists who will contribute to the continued knowledge development of the discipline and profession of nursing. The program is offered in both a traditional classroom format and distance learning with 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.

## Master of Science in Nursing (Generalist)

### Prerequisites

- A baccalaureate degree from an accredited university.
- Completion of coursework in microbiology, human anatomy and physiology, and inferential statistics.

## Required Courses

NURS.460 Pharmacology in Nursing Practice (3)	NURS.521 Evidence-Based Practice for the Advanced Generalist Nurse (3)
NURS.501 Nursing Strategies for Health (6)	NURS.530 Health Care Systems and Policy (3)
NURS.502 Advanced Health Assessment for the Generalist Nurse (3)	NURS.537 Clinical Studies I (4)
NURS.503 Ethics in Nursing and Health Care (2)	NURS.538 Clinical Studies II (4)
NURS.508 Advanced Pharmacology (3)	NURS.539 Clinical Studies III (4)
NURS.510 Nursing Strategies in Physiological Health Alterations (6)	NURS.549 Advanced Clinical Studies (4)
NURS.515 Nursing Strategies in Psychosocial Health Alterations (4)	NURS.550 Informatics and Quality Improvement (3)
NURS.517 Advanced Pathophysiology (3)	NURS.560 Clinical Nursing Leadership for Advanced Generalists (3)
	NURS.561 Practicum in Clinical Leadership. (6)

## Master of Science in Nursing (Advanced Nursing Practice)

Specialties are available in Adult-Gerontological, Family, and Psychiatric-Mental Health Nursing, and Nursing of Children. Role preparation as a nurse practitioner is offered in Adult-Gerontological combination, Family, Family Psychiatric-Mental Health Nursing, and Nursing of Children. Nurse-practitioner tracks in the Adult-Gerontological Nursing specialty include both acute-care and primary nurse-practitioner tracks. Educator tracks are available in all specialties.

### Prerequisites

- A baccalaureate degree in nursing from a program accredited by a nationally recognized accrediting agency is preferred. Nurses with non-BSN baccalaureate degrees may be considered for admission.
- 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.

## Master of Science in Nursing (Advanced Nursing Practice) Curriculum

All students complete 20 credits of CORE courses that include:

NURS.503, Ethics in Nursing and Health Care (2)	NURS.516, Principles of Practice Management (3)
NURS.508, Advanced Pharmacology (3)	NURS.517, Advanced Pathophysiology (3)
NURS.511, Advanced Health Assessment & Clinical Decision Making (3)	NURS.520, General Research Methods (3), <i>and</i>
NURS.514, Health Promotion (3)	NURS.590, Residency (0)

### Adult-Gerontological Acute Care Nurse Practitioner (Core courses +)

Cognate: NURS 531, Critical Appraisal of Technology: Acute Care (3)	NURS 527, Advanced Clinical Studies in the Acute Care Setting II (4)
Elective (2)	NURS 581, Nursing Practicum (5)
NURS 526, Advanced Clinical Studies in the Acute Care Setting I (4)	NURS 595, Special Study for Exams (0)

**Total MSN (Advanced Nursing Practice) Degree 38 credit hours**

### Adult-Gerontological Primary Care Nurse Practitioner (Core courses +)

Cognate: NURS.575, Care of the Elderly: An Interdisciplinary Approach to Health (3)	NURS.525, Advanced Clinical Studies II: Adults and Older Adults (5)
NURS.524, Advanced Clinical Studies I: Adult and Older Adults (4)	NURS.581, Nursing Practicum (5)
	NURS.595, Special Study for Exams (0)

**Total MSN (Advanced Nursing Practice) Degree 37 credit hours**

**Family Nurse Practitioner (Core courses +)**

Cognate: NURS.563 Dynamics of Family Nursing Practice (3)  
 NURS.528, Advanced Clinical Studies I: Adults, and Older Adults (5)  
 NURS.529, Advanced Clinical Studies II: Women and Children (5)

NURS.551, Mental Health Care of the Family in Primary Care (2)  
 Elective (2)  
 NURS.581, Nursing Practicum (4)  
 NURS.595, Special Study for Exams (0)

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

**Pediatric Nurse Practitioner (Core courses +)**

Cognate: NURS.555, Family and Child Development (3)  
 NURS.532 Advanced Clinical Studies I in Nursing of Children (4)  
 NURS.533 Advanced Clinical Studies II in Nursing of Children (4)

Elective (2)  
 NURS.581 Nursing Practicum (5)  
 NURS.595 Special Study for Exams (0)

**Total MSN (Advanced Nursing Practice) Degree 38 credit hours**

**Family Psychiatric/Mental Health Nurse Practitioner Role (Core courses +)**

Cognate: NURS.540 Ecological Approach to Human Behavior (3)  
 Cognate: NURS.555 Family and Child Development (3)  
 NURS.534 Advanced Clinical Studies I : P/MH Nursing (4)

NURS.535 Advanced Clinical Studies II : P/MH Nursing (5)  
 NURS.543 Psychopharmacology (2)  
 NURS.581 Nursing Practicum (5)  
 NURS.595 Special Study for Exams (0)

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

**Educator Option**

The Nurse Educator courses provide an opportunity for course work and practicum experience in nursing education.

NURS.557 Curriculum Development in Nursing Education (2-3)  
 NURS.558 Instructional Strategies and Evaluation for Nurse Educators (2)  
 NURS.559 Practicum in Nursing Education (2)

An additional 3 credit Education course may be added so that the student may apply for the NLN Nurse Educator certificate.

## Post-Master's Certificate, Advanced Nursing Practice

Preparation in a second specialty or for a second role is offered to individuals who have earned Master's degrees in Nursing. Specialties in which preparation is available are the same as those in which Master's degrees are offered. Preparation is currently available for a second role as acute care, adult-gerontological, family, pediatric, or psychiatric/mental health nurse practitioner. A certificate may be earned by completing a focused program of study that includes a minimum of 15 semester hours.

**Prerequisites**

- Master of Science degree in nursing from a program accredited by a nationally recognized accrediting agency is preferred.
- Registered professional nurse licensure in the State of Missouri or in other states in which the student will complete a practicum.
- Additional prerequisites are specific for the role option chosen by the student. Please contact the Director of the Advanced Nursing Practice Programs for additional prerequisites.

**Required Courses**

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

## Master of Science in Nursing (Advanced Nursing Practice) Degree and Post-Master's Certificate Online Programs

Complete advanced nursing practice master's degree programs and post-master's certificate programs are available online through the World Wide Web for the adult-gerontological primary and acute care, family, pediatric, and family psychiatric/mental health nurse practitioner options.

### Nurse Educator Certificate

The Nurse Educator Certificate (NEC) will prepare graduates with the skills to teach in baccalaureate, associate or diploma nursing programs. All four educator courses are offered on-line with attention to building a learning community with a culture of sharing and support. Attention to development of the educator role is threaded through each course and culminates in the development of an educator portfolio including a personal philosophy of teaching, a research plan and examples of teaching products. Students in the NEC must meet the current residency requirements within the SON.

#### Prerequisites

- Master of Science degree in nursing from a program accredited by a nationally recognized accrediting agency is preferred.
- Registered professional nurse licensure in the State of Missouri or in other states in which the student will complete his/her practica.

#### Required Courses

A certificate may be earned by completing a focused program of study that includes a minimum of 9 semester hours.

NURS.556 Evidence-Based Nursing Education (2)  
NURS.557 Curriculum Development in Nursing Education (3)

NURS.558 Instructional Strategies and Evaluation for Nurse Educators (2)  
NURS.559 Practicum in Nursing Education (2)

## Doctor of Nursing Practice

Complete advanced nursing practice doctoral degree programs are available online through the World Wide Web for the adult-gerontological primary and acute care, family, pediatric, and psychiatric/mental health nurse practitioner options

### Post-BSN to DNP

#### Prerequisites

- A baccalaureate degree in nursing from a program accredited by a nationally recognized accrediting agency is preferred. Nurses with non-BSN baccalaureate degrees may be considered for admission
- Cumulative credit point average (GPA) of 3.5 on a 4.0 system for admission as a Classified student.
- GRE may be 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 his/her practica. (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

All students complete 23 credits of 500 level core courses that include:

NURS.500 Epidemiology (3)	NURS.514 Health Promotion (3)
NURS.503 Ethics in Nursing and Health Care (2)	NURS.516 Principles of Practice Management (3)
NURS.508 Advanced Pharmacology (3)	NURS.517 Advanced Pathophysiology (3)
NURS.511 Advanced Health Assessment & Clinical Decision Making (3)	NURS.520 General Research Methods (3)
	NURS.xxx Biostatistics (3)

All students complete 26 credits of 700 level core courses that include:

NURS.710 Health Care Policy and Advanced Practice Nursing (3)	NURS.715 Clinical Informatics (2)
NURS.711 Health Care Delivery Systems (3)	NURS.716 Evidence Based Practice I (3)
NURS.713 Interprofessional Collaboration (3)	NURS.717 Evidence Based Practice II (3)
NURS.714 Leadership in Health Care (3)	NURS.718 Project Management (3)
	NURS.789 Capstone (3)

**Adult-Gerontological Acute Care Nurse Practitioner (Core courses +)**

Cognate: NURS 531 Critical Appraisal of Technology: Acute Care (3)	NURS.527 Advanced Clinical Studies in the Acute Care Setting II (4)
Elective (2)	NURS.581 Nursing Practicum (5)
NURS.526 Advanced Clinical Studies in the Acute Care Setting I (4)	NURS.795 Special Study for Exams (0)

**Total DNP Degree 67 credit hours**

**Adult-Gerontological Primary Care Nurse Practitioner (Core courses +)**

Cognate: NURS.575 Care of the Elderly: An Interdisciplinary Approach to Health (3)	NURS.525 Advanced Clinical Studies II: Adults and Older Adults (5)
NURS.524 Advanced Clinical Studies I: Adult and Older Adults (4)	NURS.581 Nursing Practicum (5)
	NURS.595 Special Study for Exams (0)
	NURS.795 Special Study for Exams (0)

**Total DNP Degree 66 credit hours**

**Family Nurse Practitioner (Core courses +)**

Cognate: NURS.563 Dynamics of Family Nursing Practice (3)	NURS.551 Mental Health Care of the Family in Primary Care (2)
NURS.528 Advanced Clinical Studies I: Adults, and Older Adults (5)	NURS.581 Nursing Practicum (4)
NURS.529 Advanced Clinical Studies II: Women and Children (5)	NURS.795 Special Study for Exams (0)

**Total DNP Degree 68 credit hours**

**Pediatric Nurse Practitioner (Core courses +)**

Cognate: NURS.555 Family and Child Development (3)	NURS.533 Advanced Clinical Studies II in Nursing of Children (4)
NURS.532 Advanced Clinical Studies I in Nursing of Children (4)	Elective (2)
	NURS.581 Nursing Practicum (5)
	NURS.795 Special Study for Exams (0)

**Total DNP Degree 67 credit hours**

### Family Psychiatric/Mental Health Nurse Practitioner Role (Core courses +)

Cognate: NURS.540 Ecological Approach to Human Behavior (3)  
 Cognate: NURS.555 Family and Child Development (3)  
 NURS.534 Advanced Clinical Studies I : P/MH Nursing (4)  
 NURS.535 Advanced Clinical Studies II : P/MH Nursing (5)  
 NURS.543 Psychopharmacology (2)  
 NURS.581 Nursing Practicum (5)  
 NURS.795 Special Study for Exams (0)

**Total DNP Degree 70 credit hours**

## Post MSN to DNP

### 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 as an MSN degree (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.700 DNP Forum (0)	NURS.715 Clinical Informatics (2)
NURS.500 Principles of Epidemiology (3)	NURS.716 Evidence Based Practice I (3)
NURS.710 Health Care Policy and Advanced Practice Nursing (3)	NURS.717 Evidence Based Practice II: Methods and Techniques (3)
NURS.711 Health Care Delivery Systems (3)	NURS.718 Capstone Project Management (2)
NURS.713 Interprofessional Collaboration (3)	NURS.789 DNP Clinical and Capstone Project (3)
NURS.714 Leadership in Health Care (3)	

## Doctor of Philosophy in Nursing

### Prerequisites

A master's degree in nursing from a nationally accredited program Current registered professional nurse licensure in Missouri (or eligibility for licensure in the State) evidence of high potential for scholarship and leadership in nursing research interests that are congruent with the research expertise of the faculty and NURS625 Applied Univariate Statistics for Nursing Research (or its equivalent).

### Required Courses

NURS.600 Theory Development in Nursing (3)  
 NURS.601 Research Issues in Health Promotion, Disease Prevention, and Reduction of Health Disparities (3)  
 NURS.602 Measurement of Nursing Variables (3)  
 NURS.603 Nursing Issues and Leadership Strategies (2)  
 NURS.604 Research Issues in the Care of Acutely and Chronically Ill Populations (3)  
 NURS.609 Quantitative Methods in Nursing Research (3)  
 NURS.610 Qualitative Methods in Nursing Research (3)  
 NURS.612 Issues of Scientific Integrity in Nursing and Health Research (1)  
 NURS.613 Nursing Knowledge Development: Philosophical Perspectives (3)  
 NURS.650 Applied Multivariable and Multivariate Statistics in Nursing Research (3)  
 A research-methods elective, (3) *and*  
 An area of concentration enhancing the dissertation research or the nurse faculty role option (9).

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

# COLLEGE FOR PUBLIC HEALTH AND SOCIAL JUSTICE

**Edwin Trevathan, M.D., M.P.H.**

*Collegiate Dean*

The College for Public Health and Social Justice (CPHSJ), founded as the School of Public Health in 1991, is accredited by the Council on Education for Public Health (CEPH). The College provides undergraduate, masters and doctoral education in public health, health management and administration, emergency management, social work, applied behavioral analysis, and criminology and criminal justice. The degree programs prepare students for private, voluntary, and public-sector careers in practice and research.

The CPHSJ 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 CPHSJ is committed to eliminating health disparities and increasing health equity.

The CPHSJ is composed of five departments and one school that administer our academic programs and conduct state-of-the-art research:

**Elizabeth Baker, Ph.D., M.P.H.**

*Chair of Behavioral Science and Health Education*

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

*Chair of Biostatistics*

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

*Chair of Epidemiology*

**Roger Lewis, Ph.D.**

*Chair of Environmental and Occupational Health*

**Keith Elder, Ph.D., M.P.H.**

*Chair of Health Management and Policy*

**Donald Linhorst, Ph.D., M.S.W.**

*Director of School of Social Work*

As required by CEPH, all of the academic programs at the CPHSJ are constructed based on competency sets. The College offers master degrees in public health (MPH), health administration (MHA), science (MS, MSPH, MSABA), and social work (MSW), as well as a doctoral program in public health studies (Ph.D.). The MPH program is more than 35 years old, while the MHA is more than 65 years old and ranked number 12 in the country. The MSW has been offered at Saint Louis University since the 1930s and is ranked in the top 25% of programs nationally. CPHSJ offers the only ABA program (established in 2011) within a School of Social Work.

A number of joint degree programs in the MPH (e.g., biostatistics and epidemiology), as well as three MSW concentrations (family, health/mental health, and community/organizations) and several specializations (clinical practice with families, community mental health practice with adults, nonprofit administration, school social work, and gerontology) are offered by the CPHSJ. In addition, dual degree programs are available with the School of Social Work (MPH/MSW), the School of Law (MPH/JD, MHA/JD, MSW/JD), the School of Medicine (MPH/MD), the Doisy College of Health Sciences Department of Nutrition and Dietetics (MPH/MS), the John Cook School of Business (MHA/MBA), and the College of Arts and Sciences Department of Political Science (MSW/MPA) and the Clinical Psychology Doctoral Program (MSPH/PhD). The College also collaborates with the Aquinas Institute of Theology to offer a dual social work and master of arts in pastoral studies (MSW/MAPS) and with Concordia Seminary to offer a dual social work and master of arts in deaconess studies (MSW/MDeac), dual social work and master of divinity (MSW/MDiv), and dual social work and master of arts in theology (MSW/MA). The College also offers three graduate certificate programs: Certificate in Biosecurity and Disaster Preparedness, Certificate in Applied Behavioral Analysis, and Certificate in Violence and Injury Prevention (in collaboration with Washington University). All MPH and MHA degree programs require a practice experience, while the MSW and MSABA require practicum. Two non-traditional programs provide educational opportunities for working professionals: 1) Master of Science (MS) degree in Biosecurity and Disaster Preparedness offered in a distance learning format; and 2) Executive Master of Health Administration (EMHA) offered in a hybrid format.

The Ph.D. in public health studies allows students to choose from several different public health majors: behavioral science and health education; biosecurity and disaster preparedness; biostatistics; environmental and occupational health; epidemiology; health management and policy; and health services research (Elizabeth Baker, Ph.D., MPH and Thomas E. Burroughs, Ph.D., Co-Directors).

The CPHSJ offers Bachelor of Science (BS) degrees in public health, health management, emergency management (Lauren Arnold, Ph.D., M.P.H., Director); social work (Sabrina Tyuse, Ph.D., Director); and a Bachelor of Arts (BA) degree in criminology and criminal justice (Norman White, Ph.D., Director). Accelerated BS/MPH, BS/MHA (Lauren Arnold, Ph.D., M.P.H., Director), and BS/MSW (Sabrina Tyuse, Ph.D., Director) degree programs are also offered.

The CPHSJ collaborates with Augustana College to offer a BA/MPH (contact Bernie Backer for more information: [backerb@slu.edu](mailto:backerb@slu.edu)), Fontbonne University to offer a BSW/MSW, and Maryville University to offer a BA/MSW (contact Kristi Richter for more information: [ksrichter@slu.edu](mailto:ksrichter@slu.edu)).

## Master of Public Health (MPH)

The MPH degree has as its foundation the five areas of knowledge basic to the field of public health. All MPH degrees require the completion of the following MPH core curriculum and the concentration or track-specific curriculum indicated.

### MPH Core Curriculum (21 credit-hours)

BSH.500 Behavioral Science and Public Health;

BST.500 Principles of Biostatistics;

EOH.500 Environmental and Occupational Health;

EPI.500 Principles of Epidemiology;

PUBH.501 Mission and Practice of Global Public Health;

PUBH.502 Ethical Issues in Public Health;

PUBH.511 Managerial Aspects of Public Health Practice;

PUBH.592 Public Health Rounds: Integrating Public Health Practice;

PUBH.594 Practice Experience in Public Health; and

PUBH.595 Special Study for Examinations.

## MPH, Behavioral Science and Health Education (MPH-BSHE)

**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:** The MPH-BSHE requires the completion of the MPH core curriculum and the concentration curriculum as follows:

### Concentration Curriculum (27 credit-hours)

BSH.510 Health Promotion Program Planning;

BSH.520 Historical, Philosophical and Political Bases of Public Health and Health Education;

BSH.531 Health Communication;

BSH.540 Community Diagnosis;

BSH.600 Health Promotion Program Evaluation;

BSH.625 Capstone in Behavioral Science and Health Education; and

Nine credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 48.

## MPH, Behavioral Science and Health Education and Epidemiology (MPH, Joint - BSHE/EPI)

**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:** The MPH, Joint - BSHE/EPI requires the completion of the MPH core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (33 credit-hours)**

BSH.510 Health Promotion Program Planning;  
 BSH.531 Health Communication;  
 BSH.540 Community Diagnosis;  
 BSH.600 Health Promotion Program Evaluation;

BSH.625 Capstone in Behavioral Science and Health Education;  
 BST.510 Introduction to General Linear Modeling;  
 EPI.502 Epidemiology Methods II; and  
 Twelve credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 54.

## MPH, Biosecurity and Disaster Preparedness (MPH-BSDP)

**Prerequisites:** A bachelor's degree or the equivalent in the physical, chemical or biological sciences, or six credit-hours of college-level courses individually in chemistry, biology and the physical sciences, with an overall GPA of 3.0 or better in the science courses; however, applicants will be considered on an individual basis.

**Requirements:** The MPH-BSDP requires the completion of the MPH core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (27 credit-hours)**

BSDP.566 Fundamentals of Disaster Planning;  
 BSDP.570 Public Health and Disasters;  
 BSDP.572 Communicable Diseases and Infection Control;  
 BSDP.573 Disaster Planning for Infectious Disease Disasters;  
 BSDP.576 Disaster Communications and Media Relations;

BSDP.578 Behavioral and Cultural Aspects of Disaster Response;  
 BSDP.582 Disaster Management and Risk Analysis;  
 BSDP.625 Capstone in Biosecurity and Disaster Preparedness;  
 and  
 Three credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 48.

## MPH, Biosecurity and Disaster Preparedness and Epidemiology (MPH, Joint - BSDP/EPI)

**Prerequisites:** A bachelor's degree or the equivalent in the physical, chemical or biological sciences, or six credit-hours of college-level courses individually in chemistry, biology and the physical sciences, with an overall GPA of 3.0 or better in the science courses; however, applicants will be considered on an individual basis.

**Requirements:** The MPH, Joint - BSDP/EPI, which begins in the summer semester with BSDP-566 Fundamentals of Disaster Planning, requires the completion of the MPH core curriculum as revised and the concentration curriculum as follows:

**Exceptions to the MPH Core Curriculum**

BSDP.583 Legal and Ethical Implications of Disasters may substitute for PUBH.502 Ethical Issues in Public Health.

**Concentration Curriculum (33 credit-hours)**

BSDP.566 Fundamentals of Disaster Planning;  
 BSDP.570 Public Health and Disasters;  
 BSDP.572 Communicable Diseases and Infection Control;  
 BSDP.573 Disaster Planning for Infectious Disease Disasters;  
 BSDP.578 Behavioral and Cultural Implications of Disasters;

BSDP.582 Disaster Management and Risk Analysis;  
 BSDP.625 Capstone in Biosecurity and Disaster Preparedness;  
 BST.510 Introduction to General Linear Modeling;  
 EPI.502 Epidemiology Methods II; and  
 Six credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 54.

## MPH, Biostatistics (MPH-BST)

**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:** The MPH-BST requires the completion of the MPH core curriculum as revised and the concentration curriculum as follows:

**Exceptions to the MPH Core Curriculum**

The prerequisite upper-level or equivalent course in statistics satisfies the BST.500 Principles of Biostatistics course requirement (3 credit-hours) and decreases the MPH core curriculum credit-hours to 18.

**Concentration Curriculum (30 credit-hours)**

BST.502 Theory of Biostatistics;  
 BST.503 Statistical Programming and Study Planning: SAS;  
 BST.510 Introduction to General Linear Modeling;  
 BST.520 Survival Data Analysis;  
 BST.521 Categorical Data Analysis;

BST.540 Applied Data Management;  
 BST.625 Capstone in Biostatistics;  
 EPI.502 Epidemiology Methods II; and  
 Six credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 48.

## MPH, Biostatistics and Epidemiology (MPH, Joint - BST/EPI)

**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:** The MPH, Joint - BST/EPI requires the completion of the MPH core curriculum as revised and the concentration curriculum as follows:

**Exceptions to the MPH Core Curriculum**

The prerequisite upper-level or equivalent course in statistics satisfies the BST.500 Principles of Biostatistics course requirement (3 credit-hours) and decreases the MPH core curriculum credit-hours to 18.

**Concentration Curriculum (36 credit-hours)**

BST.502 Theory of Biostatistics;

BST.503 Statistical Programming and Study Planning: SAS;

BST.510 Introduction to General Linear Modeling;

BST.520 Survival Data Analysis;

BST.521 Categorical Data Analysis;

BST.540 Applied Data Management;

BST.625 Capstone in Biostatistics;

EPI.502 Epidemiology Methods II; and

Twelve credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 54

## MPH, Emergency Management and Crisis Leadership (MPH-EMCL)

No longer accepting applications. Refer to past catalogs for degree requirements.

## MPH, Environmental and Occupational Health (MPH-EOH)

**Prerequisites:** A bachelor's degree or the equivalent in the physical, chemical or biological sciences, or six credit-hours of college-level courses individually in chemistry, biology and the physical sciences, with an overall GPA of 3.0 or better in the science courses; however, applicants will be considered on an individual basis.

**Requirements:** The MPH-EOH requires the completion of the MPH core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (27 credit-hours)**

EOH.510 Human Toxicology and Environmental Health;

EOH.520 Evaluation of Environmental Hazards;

EOH.530 Assessment and Control of Infectious and Biological Hazards;

EOH.540 Human Health Risk Analysis;

EOH.550 Environmental and Occupational Epidemiology;

EOH.560 Policy, Science and Decisions in Environmental Health; and

EOH.625 Capstone in Environmental and Occupational Health; and

Six credit-hours of advisor-approved electives

The minimum total credit-hours requirement: 48.

## MPH, Environmental and Occupational Health and Biosecurity and Disaster Preparedness (MPH, Joint - EOH/BSDP)

**Prerequisites:** A bachelor's degree or the equivalent in the physical, chemical or biological sciences, or six credit-hours of college-level courses individually in chemistry, biology and the physical sciences, with an overall GPA of 3.0 or better in the science courses; however, applicants will be considered on an individual basis.

**Requirements:** The MPH, Joint - EOH/BSDP, which begins in the summer semester with BSDP-566 Fundamentals of Disaster Planning, requires the completion of the MPH core curriculum as revised and the concentration curriculum as follows:

**Exceptions to the MPH Core Curriculum**

BSDP.583 Legal and Ethical Implications of Disasters may substitute for PUBH-502 Ethical Issues in Public Health.

**Concentration Curriculum (33 credit-hours)**

BSDP.566 Fundamentals of Disaster Planning;  
 BSDP.570 Public Health and Disasters;  
 BSDP.572 Communicable Diseases and Infection Control;  
 BSDP.573 Disaster Planning for Infectious Disease Disasters;  
 BSDP.582 Disaster Management and Risk Analysis;  
 EOH.510 Human Toxicology and Environmental Health;  
 EOH.520 Evaluation of Environmental Hazards;  
 EOH.540 Human Health Risk Analysis;  
 EOH.550 Environmental and Occupational Epidemiology  
 EOH.625 Capstone in Environmental and Occupational Health  
*or* BSDP.625 Capstone in Biosecurity and Disaster Preparedness; and  
 Three credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 54.

## MPH, Environmental and Occupational Health and Epidemiology (MPH, Joint - EOH/EPI)

**Prerequisites:** A bachelor's degree or the equivalent in the physical, chemical or biological sciences, or six credit-hours of college-level courses individually in chemistry, biology and the physical sciences is recommended; however, applicants will be considered on an individual basis.

**Requirements:** The MPH, Joint - EOH/EPI requires the completion of the MPH core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (33 credit-hours)**

BST.510 Introduction to General Linear Modeling;  
 EOH.510 Human Toxicology and Environmental Health;  
 EOH.520 Evaluation of Environmental Hazards;  
 EOH.540 Human Health Risk Analysis;  
 EOH.550 Environmental and Occupational Epidemiology;  
 EOH.560 Policy, Science and Decisions in Environmental Health;  
 EOH.625 Capstone in Environmental and Occupational Health;  
 EPI.502 Epidemiology Methods II; and  
 Nine credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 54.

## MPH, Epidemiology (MPH-EPI)

**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:** The MPH-EPI requires the completion of the MPH core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (27 credit-hours)**

BST.503 Statistical Programming and Study Planning: SAS;  
 BST.510 Introduction to General Linear Modeling;  
 BST.520 Survival Data Analysis;  
 BST.521 Categorical Data Analysis;  
 EPI.502 Epidemiology Methods II;  
 EPI.625 Capstone in Epidemiology; and  
 Nine credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 48.

## MPH, Health Management and Policy (MPH-HMP)

**Prerequisites:** A bachelor's or professional degree from an accredited college or university.

**Requirements:** The MPH-HMP requires the completion of the MPH core curriculum as revised and the concentration curriculum as follows:

### Exceptions to the MPH Core Curriculum

HMP.500 Healthcare Organization substitutes for PUBH.501 Mission and Practice of Global Public Health;

HMP.530 Management of Health Care Organizations substitutes for PUBH.511 Managerial Aspects of Public Health Practice;

HMP.591 Health Management and Policy Rounds substitutes for PUBH.591 Public Health Rounds: Integrating Public Health Practice;

HMP.594 Internship substitutes for PUBH.594 Practice Experience in Public Health; and

HMP.595 Special Study for Examinations substitutes for PUBH.595 Special Study for Examinations.

### Concentration Curriculum (30 credit-hours)

HMP.504 Fundamentals of Economics and Finance;

HMP.520 Health Economics;

HMP.521 Economic Evaluation;

HMP.550 Health Policy;

HMP.551 Health Policy and Law;

HMP.553 Capstone Seminar in Health Policy;

HMP.572 Government Financing of Health and Health Care;  
and

Nine credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 51.

## MPH, Health Management and Policy and Epidemiology (MPH, Joint - HMP/EPI)

**Prerequisites:** A bachelor's degree from an accredited college or university in a biomedical science, one of the social sciences or a closely-related discipline is recommended. Professional experience in a health-related field is highly valued.

**Requirements:** The MPH, Joint HMP/EPI requires the completion of the MPH core curriculum as revised and the concentration curriculum as follows:

### Exceptions to the MPH Core Curriculum

HMP.500 Health Care Organization substitutes for PUBH.501 Mission and Practice of Global Public Health;

HMP.530 Management of Health Care Organizations substitutes for PUBH.511 Managerial Aspects of Public Health Practice;

HMP.591 Health Management and Policy Rounds substitutes for PUBH.591 Public Health Rounds: Integrating Public Health Practice;

HMP.594 Internship substitutes for PUBH.594 Practice Experience in Public Health;

HMP.595 Special Study for Examinations substitutes for PUBH.595 Special Study for Examinations.

### Concentration Curriculum (33 credit-hours)

BST.510 Introduction to General Linear Modeling;

EPI.502 Epidemiology Methods II;

HMP.520 Health Economics;

HMP.521 Economic Evaluation;  
 HMP.550 Health Policy;  
 HMP.551 Health Policy and Law;

HMP.553 Capstone Seminar in Health Policy;  
 HMP.572 Government Financing of Health Care; and  
 Nine credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 54.

## MPH, Maternal and Child Health (MPH-MCH)

**Prerequisites:** A bachelor's or first professional degree in most fields from an accredited college or university.

**Requirements:** The MPH-MCH requires the completion of the MPH core curriculum and the concentration curriculum as follows:

### Concentration Curriculum (27 credit-hours)

BSH.510 Health Promotion Program Planning;  
 BSH.540 Community Diagnosis;  
 BSH.600 Health Promotion Program Evaluation;  
 BSH.625 Capstone in Behavioral Science and Health Education;  
 EPI.522 Maternal and Child Health Epidemiology;

PUBH.562 Politics and Public Health Advocacy;  
 XXX-### Maternal and Child Health I;  
 XXX-### Maternal and Child Health II; and  
 XXX-### Public Health Aspects of Maternal and Child Nutrition.

The minimum total credit-hours requirement: 48.

## MPH, Maternal and Child Health and Epidemiology (MPH, Joint - BSHE/EPI)

**Prerequisites:** A bachelor's or first professional degree in most fields from an accredited college or university.

**Requirements:** The MPH-MCH requires the completion of the MPH core curriculum and the concentration curriculum as follows:

### Concentration Curriculum (33 credit-hours)

BST.503 Statistical Programming and Study Planning: SAS;  
 BST.510 Introduction to General Linear Modeling;  
 EPI.502 Epidemiology Methods II;  
 EPI.522 Maternal and Child Health Epidemiology;  
 EPI.625 Capstone in Epidemiology;  
 PUBH.562 Politics and Public Health Advocacy;

XXX-### Maternal and Child Health I;  
 XXX-### Maternal and Child Health II;  
 XXX-### Public Health Aspects of Maternal and Child Nutrition; and

Six credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 54.

## MPH, Professional Option – Practice (MPH-PRFP)

**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:** The MPH-PRFP requires the completion of the MPH core curriculum and the concentration curriculum as follows:

**Concentration Curriculum (21 credit-hours)**

BSDP.570 Public Health and Disasters;

HMP.500 Health Care Organization;

HMP.550 Health Policy;

PUBH.562 Politics and Public Health Advocacy;

PUBH.625 Capstone in Public Health Practice; and

Six credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 42.

## Dual Master of Public Health & Doctor of Medicine (MPH/MD)

The MPH/MD 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 MPH is offered in an accelerated program that can be completed in three consecutive semesters (summer, fall, spring) devoted entirely to MPH coursework. Students in this option earn an MPH without a specialization. Alternatively, the MPH degree (with a focus on analytic epidemiology) can be earned in a combined program with the School of Medicine curriculum during years 4 and 5 of the standard School of Medicine curriculum. Both programs require completion of professional medical-school requirements as well as the fulfillment of a complete MPH degree (42 credit-hours), which may include up to nine credit-hours of coursework from the School of Medicine MD 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 MPH 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 MPH and the MD degree programs.

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

**MPH, Accelerated One-Year Track**

**Requirements:** The MPH requires the completion of the MPH core curriculum and the track-specific curriculum as follows:

**MPH, Accelerated One-Year Track Curriculum (21 credit-hours)**

BSDP.570 Public Health and Disasters;

HMP.500 Health Care Organization;

HMP.550 Health Policy;

PUBH.562 Politics and Public Health Advocacy;

PUBH.625 Capstone in Public Health Practice; and

Six credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 42.

**MPH, Analytic Epidemiology Track**

**Requirements:** The MPH requires the completion of the MPH core curriculum and the track-specific curriculum as follows:

**MPH, Analytic Epidemiology Track Curriculum (21 credit-hours)**

BST.510 Introduction to General Linear Modeling

EPI.502 Epidemiology Methods II;

BST.520 Survival Data Analysis;

BST.521 Categorical Data Analysis;

EPI.625 Capstone in Epidemiology; and

Six credit-hours of advisor-approved electives.

The minimum total credit-hours requirement for the MPH: 42.

## Dual Master of Public Health & Juris Doctor (MPH /JD)

The MPH/JD 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 MPH degree (42 credit-hours), which includes nine credit-hours of coursework from the School of Law JD 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 MPH 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 MPH and the JD degree programs.

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

**MPH Requirements:** The MPH requires the completion of the MPH core curriculum and the concentration curriculum as follows:

### Concentration Curriculum (21 credit-hours)

PUBH.625 Capstone in Public Health Practice;

Nine credit-hours of advisor-approved coursework from the School of Law JD degree requirements; and

Nine credit-hours of advisor-approved electives.

The minimum total credit-hours requirement for the MPH: 42.

## Dual Master of Public Health, Health Management and Policy & Juris Doctor (MPH-HMP/JD)

The MPH-HMP/JD 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 MPH-HMP degree (51 credit-hours), which includes nine credit-hours of coursework from the School of Law JD 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 MPH-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 MPH-HMP and the JD degree programs.

**MHP-HMP Prerequisites:** A bachelor's degree or equivalent of a professional degree from an accredited college or university.

**MHP-HMP Requirements:** The MPH-HMP requires the completion of the MPH core curriculum as revised and the concentration curriculum as follows:

### Exceptions to the MPH Core Curriculum

HMP.500 Health Care Organization substitutes for PUBH.501 Mission and Practice of Global Public Health;

HMP.530 substitutes for PUBH.511 Managerial Aspects of Public Health Practice;

HMP.591 Health Management and Policy Rounds substitutes for PUBH.591 Public Health Rounds: Integrating Public Health Practice;

HMP.594 Internship substitutes for PUBH.594 Practice Experience in Public Health; and

HMP.595 Special Study for Examinations substitutes for PUBH.595 Special Study for Examinations.

### **Concentration Curriculum (30 credit-hours)**

HMP.504 Fundamentals of Economics and Finance;

HMP.520 Health Economics;

HMP.521 Economic Evaluation;

HMP.550 Health Policy;

HMP.553 Capstone Seminar in Health Policy;

HMP.572 Government Financing of Health and Health Care;

LAW.757 Health Care Law substitutes for HMP.551 Health Policy and Law; and

Nine credit-hours of advisor-approved coursework from the School of Law JD degree requirements.

The minimum total credit-hours requirement for the MPH-HMP: 51.

## Dual Master of Public Health & Master of Science, Nutrition and Dietetics (MPH/MS)

The MPH/MS 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 MS degree requirements as well as the fulfillment of a complete MPH degree (42 credit-hours), which includes nine credit-hours of coursework from the Doisy College of Health Sciences MS 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 MPH 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 MPH and the MS degree programs.

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

### **MPH Requirements:**

The MPH requires the completion of the MPH core curriculum as revised and the concentration curriculum as follows:

### **Exceptions to the MPH Core Curriculum**

DIET.545 Patient/Client Nutrition Management Practicum (3 credit-hours) substitutes for PUBH.594 Practice Experience in Public Health (zero credit-hours) and increases the MPH core curriculum credit-hours to 24.

### **Concentration Curriculum (18 credit-hours)**

DIET.530 Community Nutrition;

HMP.538 Management of Human Resources in Health Care;

PUBH.562 Politics and Public Health Advocacy;

PUBH.625 Capstone in Public Health Practice; and

Six credit-hours of advisor-approved electives.

The minimum total credit-hours requirement for the MPH: 42.

## Dual Master of Public Health & Master of Social Work (MPH/MSW)

The MPH/MSW dual degree is offered in collaboration with the School of Social Work, which is accredited by the Council on Social Work Education. This integrated program requires completion of MSW degree requirements as well as the fulfillment of a complete

MPH degree (42 credit-hours), which includes six credit-hours of coursework from the School of Social Work MSW 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 MPH 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 MPH and the MSW degree programs.

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

#### **MPH Requirements:**

The MPH requires the completion of the MPH core curriculum as revised and the concentration curriculum as follows:

#### **Exceptions to the MPH Core Curriculum**

SWRK-820 Concentration Integrative Practice Seminar, SWRK-832 Practicum II and SWRK-833 Practicum III (6 total credit-hours) substitute for PUBH.594 Practice Experience in Public Health (zero credit-hours), which increases the MPH core curriculum credit-hours to 27.

#### **Concentration Curriculum (15 credit-hours)**

HMP.500 Health Care Organization;

PUBH.625 Capstone in Public Health Practice; and

HMP.550 Health Policy;

Three credit-hours of advisor-approved electives.

PUBH.562 Politics and Public Health Advocacy;

The minimum total credit-hours requirement for the MPH: 42.

## **Master of Health Administration (MHA)**

The MHA degree, which is accredited by the Commission on Accreditation Healthcare Management Education (CAHME), has as its foundation the areas of knowledge basic to health management and policy. The MHA degree is offered in a traditional classroom-based format or in a hybrid format (EMHA) that blends distance learning with monthly face-to-face classes to meet the needs of working professionals.

**Traditional Classroom-Based Format 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.

**Traditional Classroom-Based Format Requirements:** The traditional classroom-based format degree requires the completion of the following curriculum:

#### **Traditional Classroom-Based Format Curriculum (60 credit-hours)**

HMP.500 Health Care Organization;

HMP.539 Ethical Leadership in Health Management and Policy;

HMP.503 Introduction to Health Care Accounting;

HMP.540 Legal Aspects of Health Services Management;

HMP.511 Health Operations Management;

HMP.550 Health Policy;

HMP.513 Health Information Systems;

HMP.570 Health Care Financial Management;

HMP.519 Analytical Methods for Health Management;

HMP.571 Financial Aspects of Health Care;

HMP.520 Health Economics;

HMP.580 Strategic Management in Health Care Organizations;

HMP.530 Management of Health Care Organizations;

HMP.591 Health Management and Policy Rounds;

HMP.534 Health Care Marketing;

HMP.538 Management of Human Resources in Health Care;

HMP.594 Internship;

HMP.595 Special Study for Examinations;

Twelve credit-hours of advisor-approved electives.

PUBH.501 Mission and Practice of Global Public Health; and

The minimum total credit-hours requirement: 60.

**Hybrid Format (EMHA) Prerequisites:** A bachelor's degree or the equivalent from an accredited college or university. The EMHA is limited to established professionals looking to advance their careers.

**Hybrid Format (EMHA) Requirements:** The hybrid format degree (EMHA) requires the completion of the following curriculum:

**Hybrid Format (EMHA) Curriculum (60 credit-hours)**

HMP.500 Health Care Organization;

HMP.539 Ethical Leadership in Health Management and Policy;

HMP.503 Introduction to Health Care Accounting;

HMP.540 Legal Aspects of Health Services Management;

HMP.504 Fundamentals of Economics and Finance;

HMP.550 Health Policy;

HMP.511 Health Operations Management;

HMP.570 Health Care Financial Management;

HMP.513 Health Information Systems;

HMP.571 Financial Aspects of Health Care;

HMP.519 Analytical Methods for Health Management;

HMP.580 Strategic Management in Health Care Organizations;

HMP.520 Health Economics;

HMP.583 Applied Management Projects I: Definition and Planning;

HMP.530 Management of Health Care Organizations;

HMP.584 Applied Management Projects II; Execution and Closure; and

HMP.534 Health Care Marketing;

HMP.538 Management of Human Resources in Health Care;

Six credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 60.

## Dual Master of Health Administration & Juris Doctor (MHA/JD)

The MHA/JD 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 MHA degree in the traditional classroom-based format (60 credit-hours), which includes fifteen credit-hours of coursework from the School of Law JD 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 MHA 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 MHA and the JD degree programs.

**MHA Prerequisites:** A bachelor's degree or the equivalent from an accredited college or university that includes completion of at least one college-level course in Microeconomics with a grade of B or higher.

**MHA Requirements:** The MHA degree must be completed in the traditional classroom-based format and requires the completion of the traditional classroom-based format curriculum as revised here:

**Exceptions to Traditional Classroom-Based Format Curriculum**

Fifteen credit-hours of advisor-approved coursework from the School of Law JD degree requirements substitute for HMP.540 Legal Aspects of Health Services Management and twelve credit-hours of advisor-approved electives.

The minimum total credit-hours requirement for the MHA: 60.

## Dual Master of Health Administration & Master of Business Administration (MHA/MBA)

The MHA/MBA 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 MHA degree in the traditional classroom-based format (60 credit-hours), which includes fifteen credit-hours of coursework from the John Cook School of Business MBA 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. Application to the individual programs should be made simultaneously; however, admission to the dual degree program is contingent upon admission to both the MHA and the MBA degree programs.

**MHA Prerequisites:** A bachelor's degree or the equivalent from an accredited college or university.

**MHA Requirements:** The MHA degree must be completed in the traditional classroom-based format and requires the completion of the traditional classroom-based format curriculum as revised here:

### Exceptions to Traditional Classroom-Based Format Curriculum

MBA.631 Legal Aspects of Business, MBA.632 Financial Accounting and MBA.638 Managerial Accounting substitute for HMP.503 Introduction to Health Care Accounting;

MBA.642 Data and Decisions substitutes for HMP.519 Analytical Methods for Health Management; and

MBA.643 The Organization: Governance, Compliance and Strategy, MBA.653 Integrated Consulting Module and a three credit-hour MBA elective substitute for nine credit-hours of advisor-approved electives; and

The minimum total credit-hours requirement for the MHA: 60.

## Master of Science, Biosecurity and Disaster Preparedness (MS-BSDP)

The MS-BSDP program is offered in a distance-learning format.

**Prerequisites:** A bachelor's degree or the equivalent that includes at least 12 college-level credit-hours in the biological, chemical or physical sciences in total, and three or more credit-hours in mathematics such as college algebra, statistics or first-semester calculus; however, applicants will be considered on an individual basis in the absence of these prerequisites. Professional experience in a health-related field, law enforcement or emergency preparedness is recommended but not required. Strong writing and critical thinking skills are essential for success, especially given the distance-learning format of the program.

The MS-BSDP requires the completion of the MS-BSDP core curriculum and the track-specific curriculum as follows:

### MS-BSDP Core Curriculum (24 credit-hours)

BSDP.567 Introduction to Biostatistics and Decision Analysis;

BSDP.582 Disaster Management and Risk Analysis;

BSDP.570 Public Health and Disasters;

BSDP.583 Legal and Ethical Implications of Disasters;

BSDP.575 Epidemiological Methods and Infectious Disease Surveillance;

BSDP.587 Facing the Challenge of International Bioterrorism; and

BSDP.578 Behavioral and Cultural Implications of Disasters;

BSDP.625 Capstone in Biosecurity and Disaster Preparedness

**General Track Curriculum (18 credit-hours)**

BSDP.566 Fundamentals of Disaster Planning;  
 BSDP.571 Terrorist Organizations and Their Motivations;  
 BSDP.572 Communicable Diseases and Infection Control;  
 BSDP.573 Disaster Planning for Infectious Disease Disasters;

BSDP.576 Disaster Communications and Media Relations;  
 and

Three credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 42.

**Infection Control Track Curriculum (21 credit-hours)**

BSDP.566 Fundamentals of Disaster Planning;  
 BSDP.572 Communicable Diseases and Infection Control;  
 BSDP.573 Disaster Planning for Infectious Disease Disasters;  
 BSDP.585 Public Health Ecology;

BSDP.586 Preparing for Disasters: Resiliency and Stress  
 Inoculation;

BSDP.588 Emerging Infections: Epidemiology and Public  
 Health Importance; and

BSDP.589 Business Continuity and Pandemic Planning.

The minimum total credit-hours requirement: 45.

**Medical and Public Health Intelligence Track Curriculum (21 credit-hours)**

BSDP.515 Writing for Intelligence I;  
 BSDP.516 Writing for Intelligence II;  
 BSDP.517 Writing for Intelligence III;  
 BSDP.564 Medical and Public Health Intelligence;  
 BSDP.571 Terrorist Organizations and Their Motivations;  
 BSDP.585 Public Health Ecology;

BSDP.588 Emerging Infections: Epidemiology and Public Health Importance; and

Six transfer credit-hours from coursework at the Mercyhurst University, Erie, PA, Master of Science in Applied Intelligence program: Intelligence Theory Application (INTL510) and Advanced Analytical Techniques (INTL520).

The minimum total credit-hours requirement: 45.

## Master of Science in Public Health (MSPH)

### MSPH, Behavioral Science and Health Education (MSPH-BSHE)

**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.

The MSPH-BSHE requires the completion of the curriculum as follows:

**Curriculum (36 credit-hours)**

BSH.500 Behavioral Science and Public Health;  
 BSH.600 Health Promotion Program Evaluation;

BSH.625 Capstone in Behavioral Science and Health  
 Education;

BST.500 Principles of Biostatistics;

BST.510 Introduction to General Linear Modeling;  
 BST.540 Applied Data Management;  
 EPI.500 Principles of Epidemiology;

PUBH.501 Mission and Practice of Global Public Health;  
 PUBH.502 Ethical Issues in Public Health;  
 PUBH.596 Research Project; and  
 Nine credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 36.

## Dual MSPH, Behavioral Science and Health Education & Ph.D. in Clinical Psychology (MSPH-BSHE/Ph.D.)

The MSPH/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 MSPH-BSHE degree (36 credit-hours), which includes 12 credit-hours 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 graduate degree program in clinical psychology. The student must then apply for and fulfill all admission requirements for the MSPH-BSHE degree program in order to gain admission to the dual degree program.

**MSPH-BSHE Prerequisites when taken as part of the dual degree:** A bachelor's degree or equivalent from an accredited college or university.

**MSPH-BSHE Requirements:** The MSPH-BSHE requires the completion of the MSPH-BSHE curriculum as revised here:

### Exceptions to the MSPH-BSHE Curriculum

PSY.508 Advanced Quantitative Research Methods substitutes for 3 credit-hours of advisor-approved electives;

PSY.579 Applied Univariate Statistics in Behavioral Science substitutes for BST.500 Principles of Biostatistics;

PSY.650 Applied Multivariable and Multivariate Statistics in Behavioral Science substitutes for BST.510 Introduction to General Linear Modeling;

PSY.680 Ethics and Professional Issues substitutes for PUBH.502 Ethical Issues in Public Health; and

PSY.699 Dissertation Research substitutes for PUBH.596 Research Project but no credit-hours from PSY.699 are used towards the minimum total credit-hours required for the MSPH-BSHE degree.

The minimum total credit-hours requirement for the MSPH-BSHE: 36.

## MSPH, Epidemiology (MSPH-EPI)

**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.

The MSPH-EPI requires the completion of the curriculum as follows:

### Curriculum (36 credit-hours)

BST.500 Principles of Biostatistics;

BST.503 Statistical Program and Study Planning: SAS;

BST.510 Introduction to General Linear Modeling;

BST.520 Survival Data Analysis;

EPI.625 Capstone in Epidemiology;

BST.521 Categorical Data Analysis;

PUBH.501 Mission and Practice of Global Public Health;

EPI.500 Principles of Epidemiology;

PUBH.596 Research Project; and

EPI.502 Epidemiology Methods II;

Nine credit-hours of advisor-approved electives.

The minimum total credit-hours requirement: 36.

## Graduate 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 MPH degree other than the MPH-BSDP.

### Curriculum (15 credit-hours)

BSDP.566 Fundamentals of Disaster Planning;

BSDP.573 Disaster Planning for Infectious Disease Disasters;  
and

BSDP.570 Public Health and Disasters;

BSDP.572 Communicable Diseases and Infection Control;

BSDP.582 Disaster Management and Risk Analysis.

The minimum total credit-hours requirement: 15.

## Doctor of Philosophy in Public Health Studies (Ph.D.)

**Elizabeth Baker, Ph.D., MPH**

**Thomas E. Burroughs, Ph.D.**

*Doctoral Program Co-Directors*

The doctoral program in public health studies at Saint Louis University College for Public Health and Social Justice 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 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 12 credit-hours. These are divided between four shared courses:

PHS.601 Design and Analysis in Public Health;

PHS.605 Science, Theory and Public Health;

PHS.606 Applied Research Skills; and

BST.510 Introduction to General Linear Modeling.

In addition, there is a required professional development course that provides students with the opportunity to build their unique professional skills outside of formal coursework or research with their mentor, e.g., obtaining a teaching certificate or learning a new methodology.

The second is the concentration curriculum comprised of courses totaling 48 credit-hours. Within the concentration, some of these credits may be for specific required courses and some may be for courses that are tailored for each student to provide them with the knowledge and skills needed to achieve their research and professional goals. The Doctoral Program Committee will be consulted on curricula decisions for student careers, and will provide guidance and direction to the Director(s).

The third component consists of the dissertation, including 12 dissertation credit-hours.

# SCHOOL OF SOCIAL WORK

**Donald M. Linhorst, PhD., MSW, ACSW**  
*Director, School of Social Work*

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 two graduate degrees: the Master of Social Work degree and the Master of Science in Applied Behavior Analysis degree.

## Master of Social Work (MSW) Degree

**Stephen McMillin, PhD, MA-SW**  
*Director of the MSW Program*

The MSW 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. MSW 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 MSW Program has been accredited continuously by the Council on Social Work Education (CSWE).

The MSW 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 four concentrations: Applied Behavior Analysis, Community and Organization, and Family, and Health and Mental Health. During the coursework, students will also be mentored by a MSW field instructor while working as a student in a social work capacity in the community. The MSW degree is 57 credit-hours, 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 credit-hours of advanced standing toward the MSW degree.

**Prerequisites:** A bachelor's degree from an accredited college or university with at least 24 credit-hours in liberal arts and the social sciences. The Graduate Record Exam (GRE) is not required.

### Required Courses

SWRK.750 Social Work Practice with Individuals, Families, and Groups

SWRK.751 Social Work Practice with Communities and Organizations

SWRK.702 Social Policy

SWRK.707 Policy Practice for Social Justice

SWRK.787 Research Methods for Social Work Practice I

SWRK.788 Research Methods for Social Work Practice II (all concentrations except ABA)

SWRK.700 Values and Ethics in Social Work Practice (all concentrations except ABA)

SWRK.831 Foundation Practicum I (2 credit-hours)

SWRK.819 Foundation Integrative Seminar (1 credit-hour)

SWRK.832 Practicum II (2 credit-hours)

SWRK.820 Concentration Integrative Seminar (1 credit-hour)

SWRK.833 Practicum III

PUBH.501 Mission and Practice of Global Public Health

### Concentrations and Required Courses

#### *Applied Behavior Analysis*

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.

SWRK.746 Principles and Concepts in Behavior Analysis

SWRK.792 Special Topics in ABA

SWRK.747 Assessment and Selecting Interventions

SWRK.774 Measurement and Experimental Design

SWRK.748 Behavior Change and Processes

SWRK.749 Behavior Change and Ethics

### ***Community and Organization***

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.

SWRK.785 Organizational Planning and Programming

SWRK.721 Community Theory and Practice

### ***Family***

The concentration courses focus on understanding transitions and challenges faced by families. Courses provide preparation for work as a therapist or family practice social worker in a wide range of agencies serving families with challenges of poverty, abuse, foster care, addiction, violence, and other challenges. In addition, coursework prepares for work with children and adolescents in schools and other settings.

SWRK.741 Family Interaction Under Stress

SWRK.757 Foundations of Family Practice

### ***Health and Mental Health***

The concentration courses focus on working with persons and families experiencing health and mental health challenges. The coursework has a recovery and consumer based approach in working with persons with co-occurring disorders of addiction and mental health. In addition, the coursework prepares students for community mental health practice as well as interdisciplinary team practice in a variety of health and mental health settings. Students are also able to take courses related to gerontology.

SWRK.734 Health and Human Behavior

SWRK.755 Social Work Practice in the Health Field

SWRK.742 Evidence-Based Clinical Practices in Mental Health

### **Specializations**

MSW students have the option to direct elective courses to a specialization or certificate. While not required, they provide students with additional, focused expertise. Options exist in the following areas: Specializations in Clinical Practice with Families, Community Mental Health Practice, Gerontology, School Social Work or Nonprofit Administration. Nonetheless, students will take two to four elective courses depending on the concentration in addition to requirements to complete the 57 credit program.

## **Master of Science in Applied Behavior Analysis (ABA)**

**Jolene R. Sy, PhD, 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 (MSABA) 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 the student and the student's advisor, with full-time and part-time options available. The MSABA is a 39 credit hour 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

ABA.746 Principles and Concepts in Behavior Analysis

ABA.774 Measurement and Experimental Design

ABA.747 Assessment and Selecting Interventions

ABA.748 Behavior Change and Processes

ABA.749 Behavior Change and Ethics

ABA.792 Special Topics in ABA

ABA.826 Practicum I

ABA.820.48 Integrative Seminar

ABA.827 Practicum II

ABA.820.49 Integrative Seminar

ABA.828 Practicum III

ABA.820.50 Integrative Seminar

ABA.599 Thesis (6 credit-hours)

ABA.595 Special Study for Exams

One elective course: PUBH 501 Mission and Practice of Global Public Health

## Post-Master's Certificate in Applied Behavior Analysis

Students take seven regular classroom courses (21 credit-hours), and may elect to engage in three practicum courses (9 credit-hours). 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 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 during a student's time at SLU. The practicum credit, if taken, may be scheduled in collaboration between the student and the student's advisor, with full-time and part-time options available.

**Prerequisites:** A master's degree from an accredited college or university with some coursework in social sciences. The Graduate Record Exam (GRE) is not required

### Required Courses

ABA.746 Principles and Concepts in Behavior Analysis

ABA.774 Measurement and Experimental Design

ABA.747 Assessment and Selecting Interventions

ABA.748 Behavior Change and Processes

ABA.749 Behavior Change and Ethics

ABA.792 Special Topics

## Dual Degree Programs

The School of Social Work has partnerships with other Saint Louis University departments and two other educational institutions to offer dual degrees. Students must apply separately for admission to both academic units. These dual degrees are designed to blend social work with another discipline to enable graduates to have additional preparation and expertise for certain career fields. These dual degrees have the advantage of fewer credit-hours and less expense as both degrees accept courses from the other to count for their degree as well. The School of Social Work has seven dual degrees, all with the MSW degree:

MSW/Juris Doctor (JD)

MSW/Master of Public Health (MPH)

MSW/Master of Public Administration (MPA)

MSW/Master of Pastoral Studies with Aquinas Institute (MAPS)

MSW/Master of Arts in Deaconess Studies with Concordia Seminary (MDeac)

MSW/Master of Arts in Theology with Concordia Seminary

MSW/Master of Divinity with Concordia Seminary (MDIV)

# SAINT LOUIS UNIVERSITY CENTER FOR OUTCOMES RESEARCH (SLUCOR)

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

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.

The Center for Outcomes Research (SLUCOR) is one of three Centers at Saint Louis University with degree granting status. SLUCOR embraces the university's educational mission through courses at undergraduate and graduate levels, 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). SLUCOR offers a Master of Science in Health Outcomes Research and Evaluation Sciences and a dual degree program with the School of Law (MS/JD). The center also offers a graduate certificate in Health Outcomes Research.

## HEALTH OUTCOMES RESEARCH AND EVALUATION SCIENCES

**Leslie Hinyard, Ph.D., MSW,**  
*Associate Director of Academic Affairs*

The Masters of Science 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 MS 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.

The mission of the Saint Louis University Center for Outcomes Research (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 Outcomes Research and Evaluation Sciences degree, a dual degree (MS/JD) with the School of Law, and a graduate certificate in Health Outcomes Research and Evaluation.

All SLUCOR programs are offered in a distance learning (web-based) format to provide scheduling flexibility and to meet the needs of working professionals. The MS and the graduate certificate may be completed on a part-time or full-time basis. The MS/JD dual degree program must be completed as a full-time student. The MS and the MS/JD require the completion of a capstone research project.

## Master of Science in Health Outcomes Research and Evaluation Sciences (MS)

The MS 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 (27 credit hours), the concentration-specific curriculum (9 credit hours), 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:** ORES-530 and ORES-531 must be taken consecutively in the student's first year of study.

**Prerequisite Coursework:** Graduate level inferential statistics (may be taken concurrently with first semester in the program)

### Required Core Coursework (27 credit hours):

ORES.503 Foundations of Outcomes Research I (3)	ORES.516 Data Management (3)
ORES.531 Foundations of Outcomes Research II (3)	ORES.521 Foundations of Medical Diagnosis and Treatment (3)
ORES.532 Scientific Writing and Communication (2)	ORES.526 Pharmacoepidemiology (3)
ORES.533 Research Ethics (1)	ORES.540 Pharmacoeconomics (3)
ORES.515 Multivariate Analysis for Health Outcomes Research (3)	ORES.590 Health Outcomes Research Capstone (3)

## MS in Health Outcomes Research and Evaluation Sciences—General Concentration

**Requirements:** Students must complete the core curriculum and the concentration curriculum as follows:

### Concentration Curriculum (9 credit hours)

*Students choose 3 of the following electives:*

ORES.541 Evaluation Sciences (3)	ORES.544 Comparative Effectiveness Research (3)
ORES.542 Clinical Trials Design and Analysis (3)	ORES.545 Biomedical Informatics (3)
ORES.543 Health Outcomes Measurement (3)	ORES.546 Drug and Device Development (3)

## MS in Health Outcomes Research and Evaluation Sciences—Clinical Investigation Concentration

**Requirements:** Students must complete the core curriculum and the concentration curriculum as follows:

### Concentration Curriculum (9 credit hours)

*Students must complete:*

ORES.542 Clinical Trials Design and Analysis (3)

*And 2 of the following courses:*

ORES.543 Health Outcomes Measurement (3)	ORES.545 Biomedical Informatics (3)
ORES.544 Comparative Effectiveness Research (3)	ORES.546 Drug and Device Development (3)

## MS in Health Outcomes Research and Evaluation Sciences/Juris Doctor (MS/JD) Dual Degree

The MS/JD 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 MS degree (36 credit hours), which includes 9 credit hours from the School of Law JD 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 MS 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 MS and JD programs.

**Requirements:** Students must complete the MS core curriculum as revised here:

### Required Core Coursework (18 credit hours):

ORES 530 Foundations of Outcomes Research I (3)	ORES 516 Data Management (3)
ORES 531 Foundations of Outcomes Research II (3)	ORES 540 Pharmacoeconomics (3)
ORES 515 Multivariate Analysis for Health Outcomes Research (3)	ORES 590 Health Outcomes Research Capstone (3)

### Concentration Curriculum (9 credit hours)

*Students must complete at least 6 credit hours from the following:*

ORES.541 Evaluation Sciences (3)	ORES.544 Comparative Effectiveness Research (3)
ORES.542 Clinical Trials Design and Analysis (3)	

*Three credit hours from the following electives:*

ORES.521 Foundations of Medical Diagnosis and Treatment (3)	ORES.543 Health Outcomes Measurement (3)
ORES.526 Pharmacoepidemiology (3)	ORES.545 Biomedical Informatics (3)

*Students complete:*

Nine credit hours of advisor-approved coursework from the School of Law JD degree requirements

## Graduate Certificate in Health Outcomes Research

**Requirements:** A bachelor's degree from an accredited college or university.

**Prerequisite Coursework:** Graduate level inferential statistics (may be taken concurrently with first semester in the program)

### Curriculum (15 credit hours)

*Students must complete the following core courses (9 credit hours):*

ORES.530 Foundations of Outcomes Research I (3)	ORES.515 Multivariate Analysis for Health Outcomes Research (3)
ORES.531 Foundations of Outcomes Research II (3)	

*Choose 6 credit hours from the following electives:*

ORES.526 Pharmacoepidemiology (3)	ORES.543 Health Outcomes Measurement (3)
ORES.540 Pharmacoeconomics (3)	ORES.544 Comparative Effectiveness Research (3)
ORES.541 Evaluation Sciences (3)	ORES.545 Biomedical Informatics (3)
ORES.542 Clinical Trials Design and Analysis (3)	ORES.546 Drug and Device Development (3)

## **Additional Graduate Coursework offered by SLUCOR**

In addition to the courses and electives offered for the *SLUCOR* graduate programs, *SLUCOR* also offers graduate-level courses in research methods and statistics for *SLU* students across the university. Courses offered by *SLUCOR* that are not part of a *SLUCOR* degree program are as follows:

ORES.501 Introduction to Biostatistics for Health Outcomes Research (3)

ORES.510 Research Methods in Health and Medicine (3)

ORES.512 Practical Applications of Statistical Methods (open only to MS in Nutrition and Dietetics students) (3)

ORES.520 Introduction to Statistics in the Biomedical Sciences (3)

# SCHOOL FOR PROFESSIONAL STUDIES

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

*Interim Dean*

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

*Associate Dean of Academic Development*

**Srikanth Mudigonda, Ph.D.**

*Director, Organizational Informatics Program*

**Steven Winton, Ph.D.**

*Director, Leadership and Organizational Development Program*

As a Jesuit institution, Saint Louis University has a longstanding, nearly 200-year-old tradition of serving students of all ages. SLU enhanced its focus on adult students in 1963, when it launched one of the first schools in the country dedicated to adult learners. Since then, the School for Professional Studies has evolved into one of the most innovative, adult-focused programs in the country.

## SPS Mission

The School for Professional Studies offers globally-accessible, academic and professional programs for working students in Saint Louis University's Jesuit tradition of excellence. We promote a student-centered, entrepreneurial environment built on a foundation of integrity and accountability.

## M.A. in Leadership & Organizational Development

### Available Online

The Leadership and Organizational Development (LOD) master's degree is a 36-credit hour program designed for working professionals wishing to pursue a professional master's degree while maintaining part- or full-time employment. With courses offered in online and blended formats in an accelerated 8-week term, this program makes advanced education more accessible for working professionals.

The program develops **12 competencies through project-based learning** in the areas of leadership and organizational development, with specific emphases at the personal, interpersonal/group and organizational levels.

At the **Personal level**, students within this management training program at Saint Louis University will be able to:

- Make sound, ethical decisions
- Effectively leverage their current leadership competencies and manage their future leadership development
- Apply innovation and creativity to leadership situations
- Engage in evidence-based decision making

At the **Interpersonal/Group level**, students will be able to:

- Provide coaching and mentoring to assist in employee development
- Effectively facilitate group and interpersonal interactions
- Create and sustain a culture that promotes collaborative learning and performance across a diverse work environment

At the **Organizational level**, students will be able to:

- Effectively engage in strategic visioning, with an emphasis on future-focused leadership
- Apply a systems thinking framework in work settings
- Implement projects in a way that integrates project management logistical needs with interpersonal leadership needs
- Lead change initiative efforts in an organization
- Apply the consultation skills necessary to develop high-impact, results-focused initiatives

## Project-Based Indicators of Success

At the end of the LOD program, students will produce a variety of artifacts that document both their success and their commitment to future development and lifelong learning.

- *Assessment of Leadership Competencies.* During the program, students gain knowledge, skills and abilities that make them effective leaders. To evaluate their educational experience, students reflect on their own personal and professional development in the 12 competency areas.
- *Leadership Development Plan.* Students develop their own personal leadership development plan that includes a formal leadership philosophy, specific strengths and developmental opportunities identified by the student, and clear action plans for future development.
- *Action Research Project.* A capstone experience requires that students plan and execute an action research project within their organization. This allows students to demonstrate program competencies while completing a project that adds value to their organization.

With the Leadership & Organizational Development Master's Degree, you will develop a portable set of knowledge and skills that are not about how to perform your job, but how to be a leader as it applies to your professional and personal life.

## Admissions Criteria

Minimal qualifications for obtained acceptance into the program are the following:

- Work Experience: Applicant must be employed on at least a part-time basis (20 hours or more per week) and have at least 3 years of work experience
- Undergraduate GPA: 3.0 or higher on a 4.0 scale - Students with a GPA less than 3.00 will be considered for probationary admission. They must obtain a minimum grade of "B" in each of the first two classes to become a fullyclassified student. The GPA requirement also applies to students bridging from the School for Professional Studies Organizational Studies Program.
- 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).
- At least 2 letters of recommendation from reputable sources (e.g., faculty, employer, co-workers).
- The Personal Potential Index (PPI) is highly recommended as part of your application. The PPI is free for those who have taken the GRE; however, for those applicants who have not taken the GRE there is a fee associated. The PPI requires that you provide e-mail contact information for up to five references (you can use the same ones who do your letters but you can also use employers and other individuals who can judge your personal attributes). The PPI can be found at <http://www.ets.org/ppi>. Please let us know if you have any questions.
- Transcripts from all undergraduate and post-baccalaureate work.
- A 3-5 page goal statement describing: (a) why a Master's degree in Leadership and Organizational Development is needed within the applicant's job or career area, (b) why the applicant feels the M.A. program at SLU will help meet that need, and (c) evidence to support the students assertions, along with appropriate citations.
- All applicants will be required to submit a current resume or curriculum vitae with application materials.

## Careers in Leadership & Organizational Development

Leadership is a competency that can make an impactful, positive contribution at all levels of any organization. The benefits to you, your organization, and your career increase significantly with a Master's degree from our Leadership & Organizational Development program when your work role involves any of the following requirements.

### 1. Does your role involve managing the talent of an organization?

Most supervisory and management roles in an organization involve finding ways to identify talented workers and create an

engaging work environment. In the Leadership & Organizational Development Program, you will learn how to better motivate and inspire others as a way to increase engagement and optimize results.

**2. Does your role involve human resource functions?**

Human resource roles involve working with employees across the organization, from sales and marketing to production and finance. These roles focus on improving the way employees interface with the organization. In many cases, human resource professionals also design and deliver training throughout the organization. In the Leadership & Organizational Development Program, you will take leadership and management courses at Saint Louis University, as well as learn how to create a work environment that supports employee development - one that optimizes both organizational effectiveness and employee well-being.

**3. Does your role involve developing a strategy and seeking commitment to that strategy?**

Key decision makers in organizations are required to think and act strategically. Strategic thinking and action requires attention to the long-term, or the big picture, so to speak. Unfortunately, most people are not naturally inclined to think and act strategically, and many key decision makers have never had the opportunity to develop their strategic competencies. In the Leadership & Organizational Development Program, you will be provided developmental opportunities to sharpen your strategic leadership skills, emphasizing such areas as visioning, empowerment, scenario planning and strategic planning.

**4. Does your role involve designing, overseeing or leading change initiatives in the organization?**

Many roles within an organization require involvement in change initiatives. Organizational development functions often have the primary responsibility for change management; however human resource professionals, managers, and executives often are required to develop, oversee, lead and obtain buy-in for new change initiatives. In the Leadership & Organizational Development Program you will learn the skills and competencies necessary to effectively lead change initiatives through leadership and management courses. Whether those changes are small (such as a departmental training program) or large (such as organizational re-structuring), the program will provide you with opportunities to improve the way you think about, plan and execute change in your organization.

## Graduate Courses in Leadership and Organizational Development

ORLD 500 Organizational Dynamics (3) -- ONLINE

ORLD 535 Team Leadership (3) -- ONLINE

ORLD 501 Contemporary Organizational Leadership (3) -- ONLINE

ORLD 545 Leading Organizational Change (3) -- ONLINE

ORLD 502 Organizational Informatics (3) -- ONLINE

ORLD 565 Future-Focused Leadership (3) -- ONLINE

ORLD 510 Professional Leadership Development (3) -- ONLINE

ORLD 575 Contemporary Issues in Leadership (3) -- ONLINE

ORLD 515 Talent Management and Development (3) -- ONLINE

ORLD 590 Action Research I (3) -- ONLINE

ORLD 525 Leading a Healthy Organization (3) -- ONLINE

ORLD 595 Action Research II (3) -- ONLINE

## M.S. in Organizational Informatics

### Available Online

The Organizational Informatics master's degree is a 36-credit hour program designed for working professionals wishing to pursue a professional master's degree while maintaining part- or full-time employment. With courses offered in online and blended formats in an accelerated 8-week term, this program makes advanced education more accessible for working professionals.

The online information technology management degree program at Saint Louis University develops **12 competencies through project-based learning** in the area of Organizational Informatics, with a specific emphasis on personal, interpersonal/group, organizational management and technological competencies.

At the **Personal level**, you will be able to:

- Make sound, ethical decisions
- Practice evidence-based decision-making

At the **Interpersonal/Group level**, you will be able to:

- Create and sustain a culture that promotes collaborative learning and performance across a diverse work environment

At the **Organizational and Management level**, you will be able to:

- Apply a systems-thinking framework in work settings
- Lead change-initiative efforts in an organization

At the **Technological level**, you will be able to:

- Demonstrate knowledge and understanding of essential facts, concepts, principles and theories relating to informatics and informatics applications
- Analyze, design, develop and code modern software applications that address informatics-based science and industry issues

- Examine and apply the principles of effective information organization and management to support knowledge discovery and dissemination;
- Demonstrate the ability to effectively integrate the skills of inquiry, critical thinking, problem solving and logical assessment
- Understand and explain the quantitative and qualitative dimensions of a situation through applied research
- Analyze and evaluate the ethical considerations associated with the modern field of informatics
- Develop the awareness to keep abreast of current trends and advances within their respective discipline

### **Admissions Criteria**

Student applications will be evaluated by the admission committee. Minimal qualifications for obtained acceptance into the program are the following:

- An undergraduate degree from an accredited institution.
- Work Experience: Applicant must be employed on at least a part-time basis (20 hours or more per week) and have at least 3 years of work experience
- Undergraduate GPA: 3.0 or higher on a 4.0 scale - Students with a GPA less than 3.00 will be considered for probationary admission. They must obtain a minimum grade of "B" in each of the first two classes to become a fully classified student. The GPA requirement also applies to students bridging from the School for Professional Studies Computer Information Systems undergraduate degree program.
- Course work in the following areas:
  - At least 1 course in information systems, information technology or a programming language.
  - At least 1 basic statistics or research methods course.
- It is expected that incoming students have a basic, working knowledge of a standard word processing program (e.g., Microsoft Word), standard spreadsheet and database programs (e.g., Microsoft Excel, Microsoft Access), and a standard presentation program (e.g., Microsoft PowerPoint).
- At least 3 letters of recommendation from reputable sources (e.g., faculty, employer, co-workers). This requirement will be waived for students bridging from the SPS undergraduate Computer Information Systems Program.
- A 300-500 word personal statement describing the applicant's interest in the program and how the applicant plans to use the degree, by specifically addressing the following points:(1) why a Master's degree in Organizational Informatics is needed within the applicant's job or career area; (2) why the applicant feels that the M.S. program at SLU will help meet that need; (3) evidence to support the students assertions, along with appropriate citations
- All applicants will be required to submit a current resume or curriculum vitae with application materials.

### **Career Paths**

A Master's Degree in Organizational Informatics prepares you to pursue careers in today's dynamic multi-disciplinary work place. Through our organizational development program, you will combine the use of technology with organizational leadership to support knowledge discovery and dissemination, assisting the decision maker across a variety of academic disciplines and professional fields and preparing you for jobs in:

- Business & Industry
- Private for Profit and Not-for-Profit
- Government
- Information Technology
- Health Care
- Life Sciences
- Education
- Security & Intelligence
- Military
- Many more...

Organizational Informatics encompasses a wide variety of specialties, as well as new areas of job opportunities. Career opportunities for graduates include:

- Information Officers
- Project Managers
- Solution Architect
- System Support Specialist
- Clinical Informatics Analyst/Manager
- Business Solution Manager
- System Integration Manager
- Data Analysis Manager
- Research Analyst/ Manager

- Compliance Manager
- Business Systems Analyst
- Information Security Analyst/Manager
- Assessment System Administrator

### **Graduate Courses in Organizational Informatics**

IF 500 Informatics Foundations (3) -- ONLINE

IF 505 Programming & Problem Solving (3) -- ONLINE

IF 510 Knowledge Management (3) -- ONLINE

IF 515 Evidence-Based Decision Making (3) -- ONLINE

IF 520 Information Visualization & Presentation (3) -- ONLINE

IF 525 Project Management (3) -- ONLINE

IF 575 Contemporary Issues in Informatics (3) -- ONLINE

IF 590 Applied Informatics Project I (3) -- ONLINE

IF 591 Applied Informatics Project II (3) -- ONLINE

ORLD 500 Organizational Dynamics (3) -- ONLINE

ORLD 501 Contemporary Organizational Leadership (3) -- ONLINE

ORLD 502 Organizational Informatics (3) -- ONLINE

# JOHN COOK SCHOOL OF BUSINESS

**Scott R. Safranski, Ph.D.**

*Interim Dean*

**James H. Bast, M.B.A.**

*Assistant Dean and Director, Master's Programs*

**Susan J. Hartmann, M.S., M.B.A.**

*Associate Director, Master's Programs*

**Hongxin Zhao, Ph.D.**

*Director, Ph.D. Program*

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 (MBA), the Master of Accounting (MACC), the Master of Science in Applied Financial Economics (MS-AFE), the Master of Supply Chain Management (MS-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 (JD/MBA) the Master of Arts in Educational Leadership/Master of Business Administration (MA/MBA), the Master of Arts in Sustainability/Master of Business Administration (MA/MBA), the Master of Health Administration/Master of Business Administration (MHA/MBA), and the Doctor of Medicine/Master of Business Administration (MD/MBA) degrees.

## Masters of Business Administration (MBA)

**The Master of Business Administration (MBA)** 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 graduate business students a broad perspective for managerial decision-making and strategy formulation. The one-year full-time program requires 50 credit hours over three semesters (Summer, Fall, and Spring), including a ten day study abroad. The part-time program-requirements range from 36-48 credit-hours, depending on prior academic background. The part-time program consists of twelve credit-hours of foundation coursework in economics, accounting, quantitative methods and operations management, part or all of which may be waived for students demonstrating competency through previously completed coursework, twenty-one credits of advanced managerial core requirements, and nine credit-hours of advanced course-electives. The advanced managerial core includes coursework in Finance, Information Technology, Global Business, Business Analytics, Management and Marketing, plus the 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(MACC)

The objective of the **Master of Accounting (MACC)** degree program is to provide strong technical and professional accounting skills to students planning careers as professional accountants. The program consists of 30 credit-hours of advanced coursework with up to 21 hours in accounting and the remaining credit-hours in graduate 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 Science in Applied Financial Economics (MS-AFE)

**The Master of Science in Applied Financial Economics (MS-AFE)** is a quantitatively-based, applied graduate 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 MS-AFE program consists of 30-39 credit-hours that can be completed full-time in one calendar year. The program consists of nine credit-hours of foundation coursework in economics, accounting, and quantitative methods, part or all of which may be waived for students demonstrating competency through previously completed coursework. No work experience is required, which means that students can transition into the program upon achieving their undergraduate degree. In addition, the program can be pursued on a part-time basis for up to five years, which makes it suitable for working professionals.

## MS-SCM: Master of Supply Chain Management

**The Supply Chain Management (SCM)** profession addresses the critical link between demand creation and the fulfillment of demand. Supply chain management professionals participate in fundamental decisions associated with current and future business success, such as the "go/no-go" decision regarding which goods or services to provide, which suppliers to work with, and how to access and excite prospective customers.

## Executive Master of International Business degree program (EMIB)

The two-year **Executive Master of International Business degree program (EMIB)** combines a basic business curriculum with international business issues and culture. It is intended to provide experienced business professionals the skills and tools for the complex global environment. Students are expected to have significant management experience, move through the program as a cohort group, and spend two weeks studying abroad.

## 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 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. Pre-requisite: a Master's degree in business or a related field and basic coursework in calculus and statistics. New students with limited backgrounds in business may be required to take specific coursework to ensure sufficient preparation prior to progressing into required courses toward the doctorate. The program consists of 54 credit-hours 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 the student through the advancement of research skills as well as the acquisition and application of knowledge.

## Graduate Business Certificates

**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 MBA program. The certificate requirements consist of 12 credit hours of graduate foundation courses and 6 credit hours of breadth courses (chosen by the student in association with their advisor) for a total of 18 credit hours. Upon completion, students will be awarded a certificate from Saint Louis University and the John Cook School of Business.

## Post-MBA Certificate

**The Post-MBA 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 credit hours of advanced graduate 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 graduate programs in the John Cook School of Business.

Graduate Business Programs, John Cook School of Business, Saint Louis University, 3674 Lindell Boulevard, St. Louis, MO63108 USA or phone: 800. SLU.FOR.U or 314.977.6221, Fax: 314.977.1416 or e-mail: [gradbiz@slu.edu](mailto:gradbiz@slu.edu)

### Accounting Graduate Courses

- ACCT 501 Accounting for Managers (3)  
*Pre-requisite: ACCT 501*
- ACCT 593 Special Topics (3)
- ACCT 598 Graduate Reading Course (0-3)  
*Pre-requisite: Permission of Department Chair*
- ACCT 600 Managerial Accounting Concepts (3)  
*Pre-requisite: ACCT 501*
- ACCT 603 Contemporary Financial Reporting (3)  
*Pre-requisite: ACCT 501 and ACCT 411*
- ACCT 611 Financial Reporting III (3)  
*Pre-requisite: ACCT 411*
- ACCT 614 Seminar in Accounting and Social Responsibilities (3)  
*Pre-requisite: ACCT 600*
- ACCT 616 International Accounting (3)  
*Pre-requisite: ACCT 600*
- ACCT 619 Financial Statement Analysis (3)  
*Banner Pre-requisite: ACCT 411 and FIN 600*
- ACCT 621 Issues in Strategic Cost Management (3)  
*Pre-requisite: ACCT 600*
- ACCT 631 Tax Planning for Individual and Entrepreneurial Business (3)
- ACCT 632 Federal Income Taxation: Flow-Through Entities (3)  
*Banner Pre-requisite: ACCT 430*
- ACCT 634 Federal Income Tax: Corporate (3)  
*Pre-requisite: ACCT 430*
- ACCT 635 State and Local Taxation (3)  
*Pre-requisite: ACCT 430*
- ACCT 636 Seminar in Tax Research (3)  
*Pre-requisite: ACCT 430*
- ACCT 638 Wealth Preservation (3)  
*Pre-requisite: ACCT 430 or ACCT 631*
- ACCT 639 International Taxation (3)  
*Pre-requisite: ACCT 634*
- ACCT 640 International Taxation Audit (3)  
*Pre-requisite: ACCT 440 / Co-requisites: ITM 410 or ITM 610*
- ACCT 645 Forensic and Investigative Accounting (3)  
*Pre-requisite: ACCT 440*
- ACCT 650 E-Business: Strategic Applications and Controls (3)
- ACCT 660 Research in Contemporary Accounting Issues (3)

### Economics Graduate Courses

- ECON 501 Economics for Managers (3)  
*Pre-requisite: ECON 501*
- ECON 574 Quantitative Methods in Business and Economics (3)  
*Pre-requisite: ECON 501*
- ECON 593 Special Topics (3)
- ECON 598 Graduate Reading Course (0-3)  
*Pre-requisite: Permission of Department Chair*
- ECON 600 Microeconomic Theory (3)  
*Pre-requisite: ECON-501*
- ECON 605 Econometrics I (3)  
*Pre-requisite: ECON 501 and OPM 502. Can be taken concurrently with ECON-600*
- ECON 606 Econometrics II (3)  
*Pre-requisite: ECON 605*
- ECON 608 Industrial Organization and Antitrust Policy (3)  
*Pre-requisite: ECON 600*
- ECON 616 Economic Development (3)  
*Pre-requisite: ECON 600*
- ECON 617 History of Economic Thought (3)
- ECON 620 Monetary Theory (3)  
*Pre-requisite: ECON 600*
- ECON 630 International Trade (3)  
*Pre-requisite: ECON 600*
- ECON 631 International Economics: Exchange Rates and International Adjustment (3)  
*Pre-requisite: ECON 600*
- ECON 635 Public Finance (3)  
*Pre-requisite: ECON 501*
- ECON 650 Sports Economics (3)  
*Pre-requisite: ECON 501 and OPM 502*
- ECON 652 Advanced Macroeconomic Theory I (3)  
*Pre-requisite: ECON 600*
- ECON 670 Health Economics (3)  
*Pre-requisite: ECON 501*
- ECON 698 Graduate Reading Course (0-3)  
*Pre-requisite: Permission of Department Chair*

### Finance Graduate Courses

- FIN 593 Special Topics (3)  
*Pre-requisite: FIN 600 or FIN 615*
- FIN 598 Graduate Reading Course (0-3)  
*Pre-requisite: Permission of Department Chair*
- FIN 600 Finance for Managers (3)  
*Pre-requisite: ACCT 501 and ECON 501*
- FIN 609 Real Estate Finance (3)
- FIN-610, Investment Concepts (3)  
*Pre-requisite: FIN 600 or FIN 615*
- FIN 615 Finance Theory and Applications (3)  
*Pre-requisite: ACCT 501 and ECON 501*
- FIN 616 Equity Securities and Markets (3)

*Pre-requisite: FIN 615*

FIN 620 Securities Analysis (3)

*Pre-requisite: FIN 615*

FIN 621 Fixed Income Securities and Markets (3)

*Pre-requisite: FIN 615*

FIN 622 Financial Institutions Management (3)

*Pre-requisite: FIN 615*

FIN 625 International Finance (3)

*Pre-requisite: FIN 615*

FIN 634 Financial Planning and Analysis (3)

*Pre-requisite: FIN 615*

FIN 635 Advanced Corporate Finance (3)

*Pre-requisite: FIN 615*

FIN 636 Private Equity and Venture Capital (3)

*Pre-requisite: FIN 615 and MGT 600*

FIN 638 Derivative Securities and Markets (3)

*Pre-requisite: FIN 615*

### **International Business Graduate Courses**

IB 501 Managerial Economics and Data Analysis (2)

*Pre-requisite: EMIB program*

IB 505 Financial and Managerial Accounting Methods (2)

*Pre-requisite: EMIB program*

IB 511 Financial Management Skills (2)

*Pre-requisite: EMIB program*

IB 514 International Business Environment (2)

*Pre-requisite: EMIB program*

IB 515 Management Skills (2)

*Pre-requisite: EMIB program*

IB 521 Marketing Skills (2)

*Pre-requisite: EMIB program*

IB 525 International Economics (2)

*Pre-requisite: EMIB program*

IB 531 International Business Strategies (2)

*Pre-requisite: EMIB program*

IB 533 Asian Business in Global Markets (3)

*Pre-requisite: EMIB program*

IB 535 International Marketing Strategies (2)

*Pre-requisite: EMIB program*

IB 541 International Financial Strategies (2)

*Pre-requisite: EMIB program*

IB 543 International Negotiations (2)

*Pre-requisite: EMIB program*

IB 545 International Accounting (2)

*Pre-requisite: EMIB program*

IB 551 Asia Pacific Business Strategy (2)

*Pre-requisite: EMIB program*

IB 555 European Business Strategy (2)

*Pre-requisite: EMIB program*

IB 561 Latin America Business Strategy (2)

*Pre-requisite: EMIB program*

IB 562 International Marketing Research and Analysis (2)

*Pre-requisite: EMIB program*

IB 565 Political and Cultural Environment of Europe (2)

*Pre-requisite: EMIB program.*

IB 566 Political and Cultural Environment of Latin America (2)

*Pre-requisite: EMIB program*

IB 567 Political and Cultural Environment of Asia-Pacific (2)

*Pre-requisite: EMIB program*

IB 568 Managing Cultural Differences (2)

*Pre-requisite: EMIB program*

IB 569 International Organizations (2)

*Pre-requisite: EMIB program*

IB 581 Internship (0-3)

IB 591 International Study Abroad (2)

*Pre-requisite: EMIB program*

IB 593 Special Topics (2)

*Pre-requisite: EMIB program*

IB 596 Study Abroad (3)

IB 598 Graduate Reading (0-4)

IB 600 Global Business Environment (3)

IB 622 International E-Business (3)

IB 641 Global Business Negotiation (3)

IB 642 Global Environment Strategy (3)

IB 644 Global Business Negotiations (3)

IB 680 Theory in International Business (Doctoral Seminar) (3)

*Pre-requisite: Ph.D. program*

IB 682 Seminar in Global and Regional Business (Doctoral Seminar) (3)

*Pre-requisite: Ph.D. program*

IB 682 Seminar in Global Strategy (Doctoral Seminar) (3)

*Pre-requisite: Ph.D. program*

IB 693 Special Topics (3)

IB 695 Special Study for Examinations (0)

*Pre-requisite: Ph.D. program*

IB 697 Research Topics (1-3)

*Pre-requisite: Ph.D. program*

IB 698 Graduate Reading Course (0-3)

*Pre-requisite: Permission of Department Chair*

IB 699 Dissertation Research (0-6)

*Pre-requisite: Ph.D. program*

### **Information Technology Management Graduate Courses**

ITM 593 Special Topics (3)

ITM 598 Graduate Reading Course (0-3)  
*Pre-requisite: Permission of Department Chair*

ITM- 600 Managing Information Technology (3)

ITM-605 Project Management (3)

ITM 610 Systems Analysis and Design (3)  
*Pre-requisite: ITM 600*

ITM 625 Electronic Commerce Systems (3)  
*Pre-requisite: ITM 600*

ITM 630 Database Management Systems (3)  
*Pre-requisite: ITM 600*

ITM 635 Telecommunications (3)  
*Pre-requisite: ITM 600*

ITM 640 Applied Business Analytics (3)  
*Pre-requisite: Six hours of 600-level graduate business courses*

### **Management Graduate Courses**

MGT 593 Special Topics (3)

MGT 598 Graduate Reading Course (0-3)

MGT 603 Legal, Ethical, Professional Environment of Business (3)

MGT 605 Strategic Management (3)  
*Pre-requisite: MGT 600*

MGT 606 Strategy and Practice (3)  
*Pre-requisite: MGT-600*

MGT 608 Failing Forward: Leadership / Art of Failure (3)

MGT 610 Management of Human Resources (3)

MGT 613 Value Based Organizational Design (3)  
*Pre-requisite: MGT 600*

MGT 614 Executive Decision-Making (3)  
*Pre-requisite: MGT 600*

MGT 615 Current Issues in Management (3)  
*Pre-requisite: MGT 600*

MGT 620 New Venture Initiation (3)  
*Pre-requisite: MGT 600*

MGT 621 Advanced Business Planning for New Ventures  
*Pre-requisite: MGT 620 or MGT 623*

MGT 622 Family Business (3)  
*Pre-requisite: MGT 620 or MGT 623*

MGT 623 Corporate Entrepreneurship (3)  
*Pre-requisite: MGT 600.*

MGT 624 Special Topics in Entrepreneurship  
*Pre-requisite: MGT 600*

MGT 628 Legal and Ethical Environment (3)

MGT 635 Management of Change (3)  
*Pre-requisite: MGT 600*

MGT 641 - Employee Performance and Turnover Management (3)  
*Pre-requisite: MGT 600*

MGT 698 – Graduate Reading Course (0-3)  
*Pre-requisite: Permission of Department Chair*

### **Marketing Graduate Courses**

MKT 593 Special Topics (3)

MKT 598 Graduate Reading Course (0-3)  
*Pre-requisite: Permission of Department Chair*

MKT 600 Marketing Management (3)

MKT 605 Seminar in Current Marketing Issues (3)  
*Pre-requisite: MKT 600*

MKT 610 Sales Management (3)  
*Pre-requisite: MKT 600*

MKT 612 Marketing and Electronic Commerce (3)  
*Pre-requisite: MKT 600*

MKT 615 New Product Management (3)  
*Pre-requisite: MKT 600 and OPM 502*

MKT 620 Consumer Analysis and Buyer Behavior (3)  
*Pre-requisite: MKT 600*

MKT 625 International Marketing (3)  
*Pre-requisite: MKT 600*

MKT 626 Green Marketing (3)  
*Pre-requisite: MKT 600*

MKT 630 Advertising Management (3)  
*Pre-requisite: MKT 600*

MKT 635 Business Marketing Management (3)  
*Pre-requisite: MKT 600*

MKT 640 Social Media and Digital Marketing (3)

MKT 646 Strategic Marketing (3)  
*Pre-requisite: MKT 600 and/or permission of instructor*

MKT 650 Sports Marketing (3)  
*Pre-requisite: MKT 600*

MKT 682 Seminar in Marketing Theory (Doctoral Seminar) (3)  
*Pre-requisite: Ph.D. program*

MKT 683 Seminar in International/Global Marketing (Doctoral Seminar) (3)  
*Pre-requisite: Ph.D. program*

MGT 593 Special Topics (3)

MKT 695 Special Study for Examinations (0)  
*Pre-requisite: Ph.D. Program*

MKT 697 Research Topics (1-3)  
*Pre-requisite: Ph.D. Program*

MKT 698 Graduate Reading Course (1-3)  
*Pre-requisite: Permission of Department Chair*

MKT 699 Dissertation Research (0-6)  
*Pre-requisite: Ph.D. Program*

## **Master of Business Administration Graduate Courses**

- MBA 501 Accounting for Managers (3)
- MBA 575 - Professional Effectiveness Seminar (1)
- MBA 593 Special Topics (3)
- MBA 598 Graduate Reading Course (0-3)  
*Pre-requisite: Permission of Department Chair*
- MBA 600 Meaning-Centered Approach to Organizational Communication (3)  
*Pre-Requisite: One-Year MBA Program*
- MBA 601 Emerging Business Issues I (1)  
*Pre-Requisite: One-Year MBA Program*
- MBA 602 Emerging Business Issues II (1)  
*Pre-Requisite: One-Year MBA Program*
- MBA 603 Emerging Business Issues III (1)  
*Pre-Requisite: One-Year MBA Program*
- MBA 604 Ethics and Values-Based Decision Making (1)  
*Pre-Requisite: One-Year MBA Program*
- MBA 607 Career Management (1)  
*Pre-Requisite: One-Year MBA Program*
- MBA 615 Global Business Ethics (3)  
*Pre-Requisite: One-Year MBA Program*
- MBA 620 Professional Effectiveness Series I (1)  
*Pre-Requisite: One-Year MBA Program*
- MBA 621 Information Technology (1)  
*Pre-Requisite: One-Year MBA Program*
- MBA 622 Operations Management (2)  
*Pre-Requisite: One-Year MBA Program*
- MBA 623 Supply Chain Management (1)  
*Pre-Requisite: One-Year MBA Program*
- MBA 624 Managerial Economics and Applied Statistics (2)  
*Pre-Requisite: One-year MBA Program*
- MBA 625 Essentials of Marketing Strategy (2)  
*Pre-Requisite: One-year MBA Program*
- MBA 626 Legal and Ethical Environment (2)  
*Pre-Requisite: One-year MBA Program*
- MBA 627 Leadership and Strategic Management (2)  
*Pre-Requisite: One-year MBA Program*
- MBA 628 Integrated Decision Making (2)  
*Pre-Requisite: One-year MBA Program*
- MBA 629 Accounting and Financial Management (4)  
*Pre-Requisite: One-year MBA Program*
- MBA 630 Applied Statistics (2)  
*Pre-Requisite: One-year MBA Program*
- MBA 631 Legal Aspects of Business (1)  
*Pre-Requisite: One-year MBA Program*
- MBA 632 Financial Accounting (1)  
*Pre-Requisite: One-year MBA Program*
- MBA 633 Managerial Economics (2)  
*Pre-Requisite: One-year MBA Program*
- MBA 634 Nexus I (1)  
*Pre-Requisite: One-year MBA Program*
- MBA 636 Financial Management (3)  
*Pre-Requisite: One-year MBA Program*
- MBA 637 Ethical Environment of Business (1)  
*Pre-Requisite: One-year MBA Program*
- MBA 638 Managerial Accounting (1)  
*Pre-Requisite: One-year MBA Program*
- MBA 640 Professional Effectiveness Series II (2)  
*Pre-Requisite: One-year MBA Program*
- MBA 641 Global Business Integration I (2)  
*Pre-Requisite: One-year MBA Program*
- MBA 642 Data and Decisions (3)  
*Pre-Requisite: One-year MBA Program*
- MBA 643 The Organization: Governance and Compliance (3)  
*Pre-Requisite: One-year MBA Program*
- MBA 644 Nexus II (1)  
*Pre-Requisite: One-year MBA Program*
- MBA 650 - Professional Effectiveness Series III (1-2)  
*Pre-Requisite: One-year MBA Program*
- MBA 651 Study Abroad (3)  
*Pre-Requisite: One-year MBA Program*
- MBA 652 Global Business Integration II (1)  
*Pre-Requisite: One-year MBA Program*
- MBA 653 Integrated Consulting Module (3)  
*Pre-Requisite: One-year MBA Program*
- MBA 654 Nexus III (1)  
*Pre-Requisite: One-year MBA Program*

## **Operations Management Graduate Courses**

- OPM 502 Applied Business Statistics (3)
- OPM 505 Operations Management (3)  
*Pre-requisite: OPM 502*
- OPM 593 Special Topics (3)
- OPM 598 Graduate Reading Course (0-3)  
*Pre-requisite: Permission of Department Chair*
- OPM 600 Forecasting and Demand Mgmt (3)  
*Pre-requisite: OPM 502*
- OPM 605 Business Process and Operations Management (3)  
*Pre-requisite: OPM 502*
- OPM 643 Quality Improvement Through a Lean Six Sigma Approach (3)  
*Pre-requisite: OPM 505*
- OPM 644 Global Supply Chain Management Concepts, Design, and Strategies (3)  
*Pre-requisite: OPM 505*
- OPM 646 Global Logistics and Operations Management (3)

*Pre-requisite: OPM 505*

OPM 648 Strategic Sourcing and Procurement in Supply Chain Management

(3)

*Pre-requisite: OPM 644*

OPM 650 Mathematical Statistics for Business (3)

*Pre-requisite: OPM 502*

# SCHOOL OF LAW

**Michael 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, the School offers an ideal environment for those committed to succeeding. Through its Center for Health Law Studies, the School also offers the premier health law program in the nation, along with specialized Centers in Employment Law, International and Comparative Law, and Interdisciplinary Law. Whatever the interest - corporate, criminal, employment, finance, health, international, intellectual property, public service, tax, real estate, or litigation - the School can help students achieve their desired career goals. [Click here](#) for comprehensive information about our different concentrations. In Fall 2013 we are welcoming our students to the new Scott Law Center in downtown St. Louis, a beautiful space designed with enhanced opportunities for our students in mind, located in the heart of the legal community.

SLU LAW offers both full-time day and both part-time day and evening programs. Students are presented with a variety of opportunities for experiential education. [Professional skills programs](#) are available to all students after the first year of studies. Students have a range of options from simulated arguments before the Supreme Court to contract drafting to participating in a legal clinic. The [Legal Clinics](#) allow students, under supervision from trained faculty, to represent clients in need at court, and by clerking for and participating in externships at corporations and government agencies. Through our clinic program, our students provide 40,000 hours of free legal services to the local community.

In the spirit of the Jesuit tradition of “men and women for others,” the School focuses on the obligation 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 through [email](#) or phone at 314.977.2800. If you would like to meet with an admissions counselor or take a tour of our new building, you may schedule an appointment by calling (314) 977-2800.

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

Bachelor's degree from an accredited college or university or the completion of the equivalent of six semesters with expected date of graduation to take place during the current academic year.

Registration 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 undergraduate and graduate transcripts must be forwarded directly to the CAS. SLU LAW will request the LSAC CAS Report upon receipt of the application.

**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.

## **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.

The dual degree student must meet the admissions criteria for both the School of 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 student's first year of enrollment in the School of Law. Dual Degree Students are required to complete a minimum of 82 hours in the School of Law.

The School of Law has established dual degree programs with the graduate programs outlined below. In addition, the School of Law will consider fashioning a dual degree program to meet individual student interest.

Juris Doctor and Master of Accounting

Juris Doctor and Master of Arts in Law and Sociology & Anthropology

Juris Doctor and Master of Arts in Public Administration

Juris Doctor and Master of Business Administration

Juris Doctor and Master of Health Administration

Juris Doctor and Masters of Public Health

Juris Doctor and Masters of Public Health - Health Policy

Juris Doctor and Doctorate in Health Care Ethics

Juris Doctor and Master of Science in Health Outcomes Research & Evaluation Sciences

Juris Doctor and Master of Social Work

### **LLM Programs**

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

### **Course Listing**

Click here for SLU Law's complete academic curriculum and program requirements.