

PUBLIC HEALTH STUDIES, PH.D.

Saint Louis University's Ph.D. in Public Health Studies provides expertise in research design, methods and dissemination in an interdisciplinary setting. Students gain a solid understanding of public health science, including the distribution and determinants of health and disease across populations.

SLU's Ph.D. program prepares students to become researchers both independently and within a team. We use an apprenticeship model that links a student with a mentor as they enter the program in order to leverage their training opportunities immediately.

Doctoral students work with their mentors (<https://www.slu.edu/public-health-social-justice/faculty/>) to forge their research pathways, while also working collaboratively with other students and faculty.

Our students learn how to work collaboratively with clinic, community, government and industry partners by developing, implementing and disseminating research in domestic and international settings. Students become productive researchers presenting at local, national and international conferences; publishing their research findings in esteemed journals; and competing for research grants.

Curriculum Overview

SLU's public health Ph.D. program requires 72 credits. Students take 21 credits of core doctoral courses, 39 credits of coursework to train in their research concentration area, and 12 credits of dissertation research. Students may apply up to 24 credits of their master's degree coursework toward advanced standing. The faculty mentor and doctoral director review prior coursework to ensure competencies in both doctoral and concentration core areas.

Behavioral Science and Health Equity

The behavioral science and health equity concentration focuses on behavioral science and how it interacts at individual, organizational, community or societal levels. The type of research occurs in community and clinic-based environments, as well as domestically and internationally. Current areas of research for faculty include:

- Health disparities
- Health promotion, communication and disease prevention interventions for chronic diseases
- Injury prevention
- Maternal and child health
- Nutrition and physical activity
- Sexual and reproductive health
- Global health

Biostatistics

The biostatistics concentration focuses on research for developing and testing statistical methods and responds to public health challenges using innovative computational and statistical programming. Current areas of research for faculty include:

- Methodology and application of causal inference
- Geospatial analyses to study associations between the built environment and chronic diseases

- Optimal experimental design
- Statistical modeling of genetic and environmental effects on co-morbidity

Epidemiology

The epidemiology concentration focuses on research about the distribution and determinants of health and disease in human populations. Current areas of research for faculty include:

- Cancer and chronic diseases
- Exposure assessment
- Global health
- Implementation research in public health settings
- Maternal child health

Health Management and Policy

The health management and policy concentration focuses on research about policy, health economics, health care access, delivery and quality of health services and their impact on population and public health. Current areas of research for faculty include:

- Health insurance policy and its impact on health outcomes
- Quality of and access to care
- Policy change implications

Fieldwork and Research Opportunities

Examples of current student fieldwork and research interests include:

- Opioid treatment centers
- Transgender health policy
- Comparative effectiveness of diabetes treatments
- Geospatial technology to respond to vast health challenges
- Reproductive health
- Cancer prevention
- Adolescent mental health
- Minority mental health

Careers

In a recent alumni survey, 96% of graduates in public health studies stated they found a job in their field before graduation, or within six months of graduation. Graduates go on to work as academics in universities and researchers at medical centers, government, non-governmental health agencies or community-based organizations.

Admission Requirements

This program is designed for individuals who already hold a master's degree in public health or a related field. The following criteria guide admission decisions.

- Evidence of exceptional intellectual ability, analytical and writing skills necessary to complete the doctoral program requirements
- Evidence of interest in an area of research and commitment to pursue it through the completion of a dissertation research project
- Presence of a willing and suitable faculty mentor in one of the concentration research areas
- A minimum 3.50 GPA in graduate work

Application Requirements

- Application form and fee
- Transcript(s)
- Three letters of recommendation
- Résumé or CV
- Professional goal statement

Requirements for International Students

All admission policies and requirements for domestic students apply to international students. International students must also meet the following additional requirements:

- Demonstrate English Language Proficiency (<https://catalog.slu.edu/academic-policies/office-admission/undergraduate/english-language-proficiency/>)
- Financial documents are required to complete an application for admission and be reviewed for admission and merit scholarships.
- Proof of financial support that must include:
 - A letter of financial support from the person(s) or sponsoring agency funding the student's time at Saint Louis University
 - A letter from the sponsor's bank verifying that the funds are available and will be so for the duration of the student's study at the University
- Academic records, in English translation, of students who have undertaken postsecondary studies outside the United States must include:
 - Courses taken and/or lectures attended
 - Practical laboratory work
 - The maximum and minimum grades attainable
 - The grades earned or the results of all end-of-term examinations
 - Any honors or degrees received.

WES and ECE transcripts are accepted.

Application and Assistantship Deadlines

All students are required to submit an application, even students currently enrolled in other programs at Saint Louis University. The Ph.D. program only accepts applications for the fall semester.

The application deadline is Jan. 15. Assistantships will be considered for top candidates.

Review Process

All admission decisions will be finalized by the end of March.

Assistantships

The doctoral program in public health has a limited number of graduate research assistantships, which are designed to allow students to work closely with a mentor on a research project. Assistantships are typically awarded for two years and provide a stipend, student health insurance and tuition waiver (up to 21 credits annually). Students will be informed about the terms and length of awards at the time of acceptance to the program. Additional funding is either provided through undergraduate teaching assistantships or faculty-research-funded projects.

Tuition

Tuition	Cost Per Credit
Graduate Tuition	\$1,310

Additional charges may apply. Other resources are listed below:

Net Price Calculator (<https://www.slu.edu/financial-aid/tuition-and-costs/calculator.php>)

Information on Tuition and Fees (<https://catalog.slu.edu/academic-policies/student-financial-services/tuition/>)

Miscellaneous Fees (<https://catalog.slu.edu/academic-policies/student-financial-services/fees/>)

Information on Summer Tuition (<https://catalog.slu.edu/academic-policies/student-financial-services/tuition-summer/>)

Scholarships and Financial Aid

The College for Public Health and Social Justice offers several ways to help finance graduate education. Opportunities include a limited number of merit-based scholarships and graduate research assistantships.

Awards are made to applicants with the highest combinations of GPAs and test scores who complete their applications by the priority deadlines.

For more information, visit the student financial services office online at <http://finaid.slu.edu> (<http://finaid.slu.edu/>).

Accreditation

Saint Louis University's College for Public Health and Social Justice is fully accredited by the Council on Education for Public Health (CEPH). To see our most recent accreditation documentation, please visit the College for Public Health and Social Justice website (<https://www.slu.edu/public-health-social-justice/>). (<https://www.slu.edu/public-health-social-justice/about/accreditation.php>)

Learning Outcomes

Saint Louis University's Ph.D. program in Public Health Studies continues to improve its curriculum to match the skills and competencies graduates should have. The overall Ph.D. competencies are listed below and additional competencies are described within the concentration areas.

Domain 1: Critical Thinking

Critically evaluate, integrate and challenge existing scientific knowledge. Assess gaps in research to develop research questions.

Domain 2: Analytical Skills

Plan, design and conduct research studies. Interpret the results using inferential statistical methods and methods of qualitative data analysis.

Domain 3: Communication

Communicate clearly and effectively about scientific information for diverse audiences through scientific publications, grant applications, teaching/ training, etc. Develop partnerships in community, clinic, academic and/or governmental settings to conduct research projects collaboratively.

Domain 4: Collaboration

Work collaboratively to conduct research and provide peer review to colleagues.

Domain 5: Ethics and Professionalism

Adopt and apply ethical principles for public health research and decisions on social justice and equity in the global environment. Conduct research that requires Institutional Review Board approval.

Domain 6: Community/Cultural Orientation

Evaluate the impact of cultural, structural, legal, political, and public health and social justice on health outcomes.

Domain 7: Translation and Dissemination

Use innovative methods to communicate scientific findings and implications to diverse audiences, ensuring appropriate strategies.

Concentration Competencies

Behavioral Science and Health Equity

- Analyze and articulate complex behavioral and social science research findings that advance understanding of multilevel determinants and health equity.
- Identify, measure, and influence the key mechanisms for successful behavior change.
- Demonstrate practice of community engaged research that includes strength-based approaches focused on understanding the community context, stakeholders, cultural humility, and co-learning.
- Conduct theory based research using appropriate strategies and methods to address research questions at multiple levels of the ecological framework.

Biostatistics

- Design research studies to achieve valid biostatistical results based on properties such as precision, sample representativeness, or between-group comparability.
- Apply advanced biostatistical and computational methodologies to complex data structures.
- Choose, critique, and apply new and advanced biostatistical methods to solve novel problems in public health and biomedical sciences.

Epidemiology

- Design and conduct an appropriate study to test epidemiologic hypotheses and minimize bias.
- Use statistical software to perform appropriate higher-level analyses that includes examining data for the presence of confounding and/or interaction.
- Communicate advanced epidemiologic results succinctly and persuasively in both oral and written communication to both scientists and nonscientists.
- Analyze the scientific literature to address gaps in knowledge that can be used to inform original hypotheses and research questions leading to scientific discovery, presentations, and papers.

Health Management and Policy

- Critical Thinking: Formulate evidence based policy alternatives for the improvement of healthcare delivery and outcomes.
- Science and Analysis: Effectively use data and appropriate analytical methods to analyze, interpret, and evaluate evidence to address health problems within the context of health management and policy
- Leadership: Generate appropriate study questions and aims to address problems in health management and policy

Requirements

Code	Title	Credits
Required Core Courses		
BST 5100	Introduction to General Linear Modeling	3
PHS 6010	Design and Analysis in Public Health	3
PHS 6050	Science, Theory and Public Health	3
PHS 6040	Applied Research Skills I: Primary Data Collection	3
PHS 6060	Applied Research Skills II: Grant Writing	3
PHS 6900	Professional Development	3
PUBH 5010	Mission and Practice of Global Public Health §	3
Concentration Courses		12-27
Behavioral Science and Health Equity Concentration (p. 3)		
Biostatistics Concentration (p. 4)		
Epidemiology Concentration (p. 4)		
Health Management and Policy Concentration (p.)		
Electives *		12-27
All electives must be taken at a graduate level and be pre-approved by the mentor.		
Dissertation Credits		12
PHS 6990	Dissertation Research †	
A prerequisite for entry into the program is a successfully completed graduate level introductory statistics course that has been taken in the past 5 years.		
Total Credits		72

† No more than 24 hours of advanced standing from previous master's work (except from SLU) can be substituted for requirements. Students will work with their mentor, program coordinator and doctoral director to review and petition for advanced standing. Students may not petition for advanced standing until second year.

‡ May be taken after passing the written comprehensive exam.

* Electives for students in behavioral science and health equity concentration should contain at least three quantitative methods courses taken in consultation with mentor.

§ PUBH 5010 Mission and Practice of Global Public Health (2,3 cr) is offered in asynchronous online format every semester and students may take it at any time. Students with an MPH or MSPH degree from a CEPH-accredited school or program of public health may replace PUBH 5010 with an additional 3 credits of elective courses without using Advanced Standing credits

Behavioral Science and Health Equity Concentration

Code	Title	Credits
BSH 5400	Assessment, Intervention Development, and Evaluation I	3

BSH 5410	Assessment, Intervention Development, and Evaluation II	3
PUBH 5030	Methodological Approaches to Understanding Population Health	3
BSH 5450	Introduction to Qualitative Methods	3
Total Credits		12

Biostatistics Concentration

Code	Title	Credits
BST 5020	Theory of Biostatistics	3
BST 5025	Theory of Biostatistics II	3
BST 5030	Statistical Programming and Study Planning: SAS	3
BST 5200	Survival Data Analysis	3
BST 5210	Categorical Data Analysis	3
BST 5220	Multilevel and Longitudinal Data Analysis	3
BST 5400	Applied Data Management	3
PUBH 5030	Methodological Approaches to Understanding Population Health	3
Total Credits		24

Epidemiology Concentration

Code	Title	Credits
BST 5030	Statistical Programming and Study Planning: SAS	3
BST 5220	Multilevel and Longitudinal Data Analysis	3
EPI 5020	Epidemiology Methods II	3
PUBH 5030	Methodological Approaches to Understanding Population Health	3
<i>Select two courses from the following:</i>		6
EPI 5110	Epidemiology of Infectious Disease	
EPI 5120	Chronic Disease Epidemiology	
EPI 5220	Maternal and Child Health Epidemiology	
EPI 5250	Social Epidemiology	
EPI 5270	Cancer Epidemiology	
EPI 5280	Perinatal Epidemiology	
EPI 5500	Environmental and Occupational Epidemiology	
PUBH 5960	Capstone in Public Health Practice	
<i>Select two courses from the following:</i>		6
BST 5200	Survival Data Analysis	
BST 5210	Categorical Data Analysis	
BST 5230	Bayesian Statistics	
BST 5400	Applied Data Management	
BST 5450	Data Visualization	
BST 5500	Statistical Learning	
BST 5600	R for Spatial Analysis	
BST 5610	Spatial Epidemiology and Disease Mapping	
BST 6100	Causal Inference	
Total Credits		24

Health Management and Policy Concentration

Code	Title	Credits
BST 5030	Statistical Programming and Study Planning: SAS	3
EPI 5020	Epidemiology Methods II	3
HMP 5000	Health Care Organization	3
HMP 5200	Health Economics	3
HMP 5500	Health Policy	3
ORES 5160	Data Management	3
ORES 5300	Foundations of Outcomes Research I	3
ORES 5430	Health Outcomes Measurement	3
PUBH 5030	Methodological Approaches to Understanding Population Health	3
Total Credits		27

Continuation Standards

Students must maintain a cumulative grade point average (GPA) of 3.00 in all graduate/professional courses.

Roadmap

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

Courses and milestones designated as critical (marked with !) must be completed in the semester listed to ensure a timely graduation. Transfer credit may change the roadmap.

This roadmap should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.

Behavioral Science and Health Equity Concentration

Course	Title	Credits
Year One		
Fall		
Participation in research symposia, conferences and journal clubs. Responsible Conduct of Research, CITI and IRB trainings		
PHS 6050	Science, Theory and Public Health	3
BST 5100	Introduction to General Linear Modeling	3
PUBH 5030	Methodological Approaches to Understanding Population Health	3
Credits		9
Spring		
Participation in SLU Graduate Research Symposium, Participation in research symposia, conferences and journal clubs		
PHS 6040	Applied Research Skills I: Primary Data Collection	3
PHS 6010	Design and Analysis in Public Health	3
BSH 5450	Introduction to Qualitative Methods	3

Quantitative Methods Course	3
Credits	12
Year Two	
Summer	
PUBH 5010 Mission and Practice of Global Public Health	3
Credits	3
Fall	
Participation in Research Symposia (APHA) and Journal Clubs; Practice for Written Exam	
PHS 6060 Applied Research Skills II: Grant Writing	3
PHS 6900 Professional Development	3
BSH 5400 Assessment, Intervention Development, and Evaluation I	3
! Quantitative Methods or Electives Course *	3
Credits	12
Spring	
Participation in SLU Graduate Research Symposium, Other Professional Conferences; Take Written Comprehensive exam. If passed exam, may begin Dissertation Research and plan for Oral Exam	
BSH 5410 Assessment, Intervention Development, and Evaluation II	3
! Concentration Courses or Electives *	9
Credits	12
Year Three	
Fall	
Participation in Research Symposia, Professional Conferences. Take Written Comprehensive exam. If passed exam, may begin Dissertation Research and plan for Oral Exam	
PHS 6990 Dissertation Research	3
Concentration Courses or Electives *	12
Credits	15
Spring	
Participation in Research Symposia, Professional Conferences. Plan or take Oral Exam	
PHS 6990 Dissertation Research	3
Credits	3
Year Four	
Fall	
Participation in Research Symposia, Professional Conferences. Oral Exam	
PHS 6990 Dissertation Research	3
Credits	3
Spring	
Participation in Professional Conferences; Dissertation Research (if not yet complete); Plan for Dissertation Defense	
PHS 6990 Dissertation Research	3
Credits	3
Total Credits	72

of quantitative methods courses. Examples include courses in: Biostatistics, Outcomes Research, Health Data Science, and Epidemiology.

Biostatistics Concentration

Course	Title	Credits
Year One		
Fall		
Participation in SLU Graduate Research symposium, Journal Clubs, Responsible Conduct of Research, CITI and IRB trainings		
PHS 6050 Science, Theory and Public Health		3
BST 5100 Introduction to General Linear Modeling		3
BST 5020 Theory of Biostatistics		3
PUBH 5030 Methodological Approaches to Understanding Population Health		3
Credits		12
Spring		
Participation in SLU Graduate Research Symposium, Journal Clubs, CITI and IRB Trainings		
PHS 6040 Applied Research Skills I: Primary Data Collection		3
PHS 6010 Design and Analysis in Public Health		3
BST 5025 Theory of Biostatistics II		3
BST 5030 Statistical Programming and Study Planning: SAS		3
Credits		12
Year Two		
Summer		
PUBH 5010 Mission and Practice of Global Public Health		3
Credits		3
Fall		
Participation in Research Symposia, APHA and Professional Conferences, Journal Clubs; Practice for Written Exam		
PHS 6060 Applied Research Skills II: Grant Writing		3
PHS 6900 Professional Development		3
BST 5200 Survival Data Analysis		3
BST 5210 Categorical Data Analysis		3
BST 5400 Applied Data Management		3
Credits		15
Spring		
Participation in SLU Graduate Research Symposium, Other Professional Conferences, Journal Clubs; Practice for Written Exam		
BST 5220 Multilevel and Longitudinal Data Analysis		3
! Concentration Courses or Electives *		3
Credits		6
Year Three		
Fall		
Participation in Symposia and Other Professional Conferences; Take Written Comprehensive exam. If passed exam, may begin Dissertation Research and plan for Oral Exam		

* All 27 elective credits must be taken at a graduate level and be pre-approved by the mentor. Electives must include 9 credits

PHS 6990	Dissertation Research	3
! Concentration Courses or Electives *		12
Credits		15
Spring		
Participation in Symposia and Other Professional Conferences; Plan Oral Exam		
PHS 6990	Dissertation Research	3
Credits		3
Year Four		
Fall		
Participation in Professional Conferences; Dissertation Research. Take Oral Exam		
PHS 6990	Dissertation Research	3
Credits		3
Spring		
Participation in Professional Conferences; Dissertation Research (if not yet complete); Plan for Dissertation Defense		
PHS 6990	Dissertation Research	3
Credits		3
Total Credits		72

* All 15 elective credits must be taken at a graduate level and be pre-approved by the mentor.

Epidemiology Concentration

Course	Title	Credits
Year One		
Fall		
Participation in Research Symposia and Journal Clubs, Responsible Conduct of Research, CITI and IRB trainings		
PHS 6050	Science, Theory and Public Health	3
BST 5100	Introduction to General Linear Modeling	3
PUBH 5030	Methodological Approaches to Understanding Population Health	3
Credits		9
Spring		
Participation in SLU Graduate Research Symposium, and Journal Clubs, Responsible Conduct of Research, CITI and IRB trainings		
PHS 6040	Applied Research Skills I: Primary Data Collection	3
PHS 6010	Design and Analysis in Public Health	3
EPI 5020	Epidemiology Methods II (! (or EPI 5960 Capstone))	3
BST 5030	Statistical Programming and Study Planning: SAS	3
Credits		12
Year Two		
Summer		
PUBH 5010	Mission and Practice of Global Public Health	3
Credits		3

Fall		
Participation in Research Symposia, APHA and Professional Conferences, Journal Clubs; Practice for Written Exam		
PHS 6060	Applied Research Skills II: Grant Writing	3
PHS 6900	Professional Development (! Concentration Courses or Electives) *	6
Credits		9
Spring		
Participation in SLU Graduate Research Symposium, Other Professional Conferences, Journal Clubs; Practice for Written Exam		
BST 5220	Multilevel and Longitudinal Data Analysis	3
! Concentration Courses or Electives *		9
Credits		12
Year Three		
Fall		
Participation in Symposia and Other Professional Conferences; Take Written Comprehensive exam. If passed exam, may begin Dissertation Research and plan for Oral Exam		
PHS 6990	Dissertation Research	3
Concentration Courses or Electives *		12
Credits		15
Spring		
Participation in Symposia and Other Professional Conferences; Take Written Comprehensive exam. If passed exam, may begin Dissertation Research and Plan for Oral Exam		
PHS 6990	Dissertation Research	3
Credits		3
Year Four		
Fall		
Participation in Professional Conferences; Dissertation Research. Take Oral Exam		
PHS 6990	Dissertation Research	3
Credits		3
Spring		
Year Four (Spring): Participation in Professional Conferences; Dissertation Research (if not yet complete); Plan for Dissertation Defense		
PHS 6990	Dissertation Research	3
Credits		3
Total Credits		69

* All 15 elective credits must be taken at a graduate level and be pre-approved by the mentor.

Health Management & Policy Concentration

Course	Title	Credits
Year One		
Fall		
Participation in Research Symposia and Journal Clubs, Responsible Conduct of Research, CITI and IRB trainings		

PHS 6050	Science, Theory and Public Health	3
BST 5100	Introduction to General Linear Modeling	3
HMP 5000	Health Care Organization	3
ORES 5160	Data Management	3

Credits 12

Spring

Participation in SLU Graduate Research Symposium, and Journal Clubs, Responsible Conduct of Research, CITI and IRB trainings

PHS 6040	Applied Research Skills I: Primary Data Collection	3
PHS 6010	Design and Analysis in Public Health	3
ORES 5300	Foundations of Outcomes Research I	3
HMP 5500	Health Policy	3

Credits 12

Year Two

Summer

PUBH 5010	Mission and Practice of Global Public Health	3
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Credits 3

Fall

Participation in Research Symposia, APHA and Professional Conferences, Journal Clubs; Practice for Written Exam

PHS 6060	Applied Research Skills II: Grant Writing	3
PHS 6900	Professional Development	3
ORES 5430	Health Outcomes Measurement	3
PUBH 5030	Methodological Approaches to Understanding Population Health	3

Credits 12

Spring

Participation in SLU Graduate Research Symposium, Other Professional Conferences, Journal Clubs; Practice for Written Exam

EPI 5020	Epidemiology Methods II	3
BST 5030	Statistical Programming and Study Planning: SAS	3
HMP 5200	Health Economics	3

Credits 9

Year Three

Fall

Participation in Symposia and Other Professional Conferences; Plan Oral Exam

PHS 6990	Dissertation Research	3
Concentration Courses or Electives *		12

Credits 15

Spring

Participation in Symposia and Other Professional Conferences; Plan Oral Exam

PHS 6990	Dissertation Research	3
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Credits 3

Year Four

Fall

Participation in Professional Conferences; Dissertation Research. Take Oral Exam

PHS 6990	Dissertation Research	3
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Credits 3

Spring

Participation in Professional Conferences; Dissertation Research (if not yet complete); Plan for Dissertation Defense

PHS 6990	Dissertation Research	3
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Credits 3

Total Credits 72

* All 12 elective credits must be taken at a graduate level and be pre-approved by the mentor.

Contact Us

Apply for Admission (<https://sophas.liaisoncas.com/applicant-ux/#/deeplink/programSearch/organization/6425937835738032128>)

For additional admission questions, please contact:

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