POPULATION HEALTH SCIENCE (PHD)

Contacts

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Program Website (https://www.jefferson.edu/academics/colleges-schools-institutes/population-health/degrees-programs/population-health-science-phd.html)

Program Description

Our PhD in Population Health Science prepares leaders to analyze the determinants of health and to develop, implement, and evaluate health interventions, and health policies and systems that improve the health and quality of life of populations.

Program Specializations

Classes are a mix of onsite courses, held at Thomas Jefferson University's Center City campus, and online classes. Onsite courses are offered during the day and evening, accommodating working adults. Online courses are offered asynchronously using best practices and interactive learning, and are taught by faculty with years of experience and recognized expertise.

The PhD in Population Health Science requires completion of a minimum of 62 credits, including competency examination and dissertation. Students specialize in one of five areas:

- Applied Health Economics & Outcomes Research (AHEOR)
- Health Behavior Science
- Health Data Science
- Healthcare Quality & Safety (HQS)

Learning Goals/Outcomes

Graduates of the PhD program are able to:

- Demonstrate advanced knowledge and application of population health frameworks and concepts
- Apply knowledge of the structures, performance, quality, policy, and environmental context of health care to the formulation of solutions to, and prevention of, population health problems
- Formulate population health research questions that are informed by relevant theoretical and conceptual models; systematic reviews of the literature; valid, reliable, and generalizable data; and stakeholder needs
- Select appropriate study designs to address specific population health research questions
- Collect, analyze, and/or interpret data obtained either prospectively (by survey, surveillance, qualitative, or mixed methods) or retrospectively through existing public and private sources to identify determinants of health
- Conduct ethical and responsible research in the design, implementation, and dissemination of population health research through implementation of research protocols with standardized procedures
- Apply appropriate design and analytic methods to clarify associations between variables and to identify causal inferences
- Communicate findings and implications of population health science research through multiple modalities to academic, professional, and lay audience

Curriculum

Code	Title	Credits
Pre-Matriculation Requirements [1]		
Basic Biostatistics		3
Research Methods		3
Core Coursework: Methods		
Select one of the following:		12
	Specialization: AHEOR	
PHS 605	Adv Stats Mthds Data Analysis	
PHS 615	Adv Stat/PH:Multi-Lvl Modeling	
AHE 509	Epi & Evidnc Outcomes Research	
AHE 510	Adv Res Meth for Appl Obs Stud	
Specializations: Required for Health Behavior Science, HQS, and HDS		
	PHS 605	Adv Stats Mthds Data Analysis	
	PHS 615	Adv Stat/PH:Multi-Lvl Modeling	
PBH 606	Advanced Epidemiology	3
	PHS 650	Eval&Outcomes Research&Design	
Core Coursework: Population Health Fundamentals		
HPL 500	US Healthcare Org & Delivery	3
POP 500	Essentials of PopulationHealth	3
AHE 501	Economics of Health Insurance	3
PBH 502	Society,Behavior&Environment	3
PHS 602	Bioethics	1
PHS 620	Teaching/Learning Seminar	3
Integrative & Mentored Research		
PHS 700	Integrative Research Seminar (1 credit each, four times)	4
PHS 660	Mentored Research Experience	1-3
Specialization Coursework		
Select one of the following specializations:		15
	Applied Health Economics Outcomes Research (p. 2)	
	Health Behavior Science (p. 2)	
	Health Policy (p.)	
	Healthcare Quality Safety (p. 2)	
	Health Data Science (p. 2)	
Examination & Dissertation		
PHS 800	Comprehensive Exam Prep	1
PHS 801	Comprehensive Exam	1
PHS 805	Dissertation Proposal Seminar	3
PHS 807	Dissertation Proposal Defense	1
PHS 810	Dissertation Progress	3
PHS 811	Final Dissertation Defense	3
PHS 812	Dissertation Progress (if needed)	1
Total Credits		**70-72**

[1] Grade of B or above

Specialization: Applied Health Economics & Outcomes Research

Code	Title	Credits
Select five of the following:		15
AHE 502	Statistics I	
AHE 505	Statistics II	
AHE 504	Economic Modeling I	
AHE 512	Economic Modeling II	
AHE 506	SubjectiveOutcomesHealthEval	
AHE 507	Claims-Based AHEOR	
AHE 508	Intl Health Tech Assessment	
PHS 650	Eval&Outcomes Research&Design	
HDS 500	Fundamentals of Data Wrangling	
HDS 502	Advanced Data Analysis	

Specialization: Health Behavior Science

Code	Title	Credits
PBH 602	AdvSoc&BehTheory&Int [1]	3
PBH 512	Qualitative Research Methods	3
PBH 515	Cultural Humility & Competence	3
PHS 710	Adv Health Behav Method & Meas	3
PHS 680	Adv Anl Top for Health Beh Sci	3

[1] Prerequisite of PBH 502 Society,Behavior&Environment

Specialization: Healthcare Quality & Safety

Code	Title	Credits
Select five of the following:		15
HQS 500	Intro Healthcare Qual & Safety	
HQS 509	Appl Princ of Healthcare Qulty	
HQS 512	Business Case for Quality	
HQS 515	Appl Princ of Patient Safety	
HQS 505	Adv Tools & Methods for HQS	
HQS 507	Adv Appl of HQS in Clin Set	
OPX 520	Change Management	

Specialization: Health Data Science

Code	Title	Credits
Select five of the following:		15
AHE 502	Statistics I	
AHE 505	Statistics II	
HDS 500	Fundamentals of Data Wrangling	
HDS 502	Advanced Data Analysis	
HDS 532	Data Visualization	
HDS 518	Data Science I	
HDS 519	Data Science II	