

LIFE SCIENCES AND PUBLIC HEALTH DUAL DEGREE PHD/MPH

Degree Requirements

The following requirements are in addition to, or further elaborate upon, those requirements outlined in The Graduate School Policy Guide (<https://catalogs.northwestern.edu/tgs/academic-policies-procedures/>).

PhD/MPH

Total Units Required for the combined PhD/MPH Degree: 22

Courses Required by DGP for PhD Component

Total DGP courses: 6

Course	Title
Core Courses	
DGP 402-0	Fundamentals of Biomedical Sciences 1
DGP 404-0	Fundamentals of Biomedical Sciences 2
DGP 484-0	Quantitative Biology: Statistics and Data Analysis for Life Scientists
DGP 496-3	Introduction to Life Science Research
Elective Courses	
MPH classes for which DGP credit is given	
Three DGP electives of the student's choice in consultation with their adviser(s)	

Courses Required by Public Health for MPH Component

Total MPH course units: 16

Course	Title
Required Courses	
PUB_HLTH 301-0	Behavior, Society & Health
PUB_HLTH 302-0	Introduction to Biostatistics
PUB_HLTH 303-0	Environmental Health Sciences
PUB_HLTH 304-0	Introduction to Epidemiology
PUB_HLTH 310-0	Foundations of Public Health I
PUB_HLTH 311-0	Foundations of Public Health II
PUB_HLTH 312-0	Foundations of Public Health III
PUB_HLTH 418-0	Applied Practice Experience I
PUB_HLTH 419-0	Applied Practice Experience II
PUB_HLTH 420-0	Introduction to US Health Care System
PUB_HLTH 560-0	Culminating Experience
Intermediate Level Course Requirement	
One of the following:	
PUB_HLTH 421-0	Intermediate Biostatistics
PUB_HLTH 422-0	Intermediate Epidemiology
Methodology Course Requirement	
One of the following:	
PUB_HLTH 416-0	Program Evaluation
PUB_HLTH 425-0	Introduction to GIS and Spatial Analysis for Public Health
PUB_HLTH 431-0	Basic Decision Analysis and Models of Medical Decision Making
PUB_HLTH 435-0	Health Services Research Design & Analysis Strategies: Technology Assessment
PUB_HLTH 438-0	Survey Design & Methodology

PUB_HLTH 439-0	Qualitative Research Methods
Electives	
Two of the following: ¹	
DGP 403-0	Advanced Immunology
DGP 433-0	Advanced Microbial Pathogenesis
DGP 442-0	Microbiology
DGP 450-0	Tumor Cell Biology
DGP 475-0	Virology
DGP 480-0	Molecular Mechanisms of Carcinogenesis
The remaining five electives must be chosen from among the following MPH courses in consultation with the MPH adviser:	
PUB_HLTH 390-0	Introduction to International Public Health
PUB_HLTH 391-0	Global Health Care Service Delivery
PUB_HLTH 393-0	Introduction to Health and Human Rights
PUB_HLTH 411-0	Assessment, Planning & Evaluation in Community Health
PUB_HLTH 412-0	Infection Disease Epidemiology and Prevention
PUB_HLTH 414-0	Injury and Violence Prevention
PUB_HLTH 415-0	Disease Prevention and Health Promotion: Principles and Application
PUB_HLTH 417-0	Public Health Law: Promoting Healthy Youth Development
PUB_HLTH 430-0	Global Health Research Practicum
PUB_HLTH 441-0	Ethical Issues in Clinical Research
PUB_HLTH 444-0	Advanced Decision Analysis
PUB_HLTH 445-0	Writing and Peer Reviewing for Scientific Publication
PUB_HLTH 448-0	Introduction to Maternal Child Health
PUB_HLTH 449-0	Public Health Policy
PUB_HLTH 490-0	Advanced Global Public Health
PUB_HLTH 499-0	Independent Study
PUB_HLTH 520-0	Artificial Epidemics and Changes in Human Culture
PUB_HLTH 521-0	Artificial Epidemics and Changes in Human Culture II
PUB_HLTH 524-0	Cardiovascular Disease Epidemiology

¹ Two of these DGP courses may be double counted toward both the PhD and MPH degrees.

Other PhD Degree Requirements

- **Examinations:** PhD qualifying examinations during second year of study
- **Research/Projects:** laboratory research based on dissertation research proposal
- **Thesis prospectus:** written thesis proposal and presentation to thesis committee in Fall of third year
- **PhD Dissertation:** written dissertation; annual presentation of research-in-progress to thesis
- **Publication:** portion of PhD thesis work in peer-reviewed journal
- **Final Evaluation:** dissertation defense, consisting of written dissertation, public presentation of research accomplishments, and oral defense of dissertation to thesis committee
- **Other:** three laboratory rotations in first year, intended to assist student in selecting dissertation research advisers; regular participation in seminars and journal clubs; teaching assignment one quarter in third year.