

IU Richard M. Fairbanks School of Public Health

Department of Epidemiology

Doctoral Minor in Epidemiology

The Fairbanks School of Public Health offers a rigorous, highly focused 12-credit hour PhD minor in Epidemiology. The field of epidemiology is growing in national and international importance, is integral to many areas of pursuit, enhances analytic and data-based management skills that are desirable for many doctoral level research projects, offers population-based research perspectives, offers skills that are of interest to the private and public sectors, and formally acknowledges the course work that doctoral students are currently taking as electives through the Department of Epidemiology.

The minor in Epidemiology will provide students with concepts and principles of the research, field, theory and practice of epidemiology so that they will be able to:

- Use epidemiologic methods to collect data, study, analyze, and report the patterns of disease in human populations for diverse audiences.
- Use biostatistics to analyze and report public health data.
- Understand and apply descriptive epidemiology to assess health status and the burden of disease in populations.
- Understand, apply and interpret epidemiologic research methods and findings to the practice of public health.
- Demonstrate the ability to identify and use existing sources of epidemiologic data at the local, state, national and international level.
- Understand the key components of public health surveillance and public health screening programs.
- Develop written and oral presentations based on epidemiologic analysis for both public health professionals and lay audiences.
- Demonstrate a basic level of SAS programming for data set creation, data management and data analysis.

The PhD minor in Epidemiology offers the opportunity to draw together students from health related doctoral programs from many schools, including the Schools of Nursing, Dentistry, Medicine, Health, Physical Education and Recreation, Health and Rehabilitative Sciences, Public and Environmental Affairs, Law, and others. Health Policy and Management faculty at the Fairbanks School of Public Health will serve as advisors for the doctoral minor.

Curriculum:

The curriculum for the 12 credit hour PhD minor in Epidemiology provides students with a rigorous grounding in the background and application of epidemiology.

Required Courses for the 12-hour PhD Minor in Epidemiology:

E517: Fundamentals of Epidemiology

E601: Advanced Epidemiology

Plus two courses from the following:

E609: Infectious Disease Epidemiology
E610: Chronic Disease Epidemiology
E617: Environmental Epidemiology
E618: Cancer Epidemiology
E675: Fundamentals of Injury Epidemiology
E715: Design & Implementation of Observational Studies
E720: Analysis and Interpretation of Observational Studies
E730: Molecular and Genetic Epidemiology
E731: Design & Analysis of Genetic Association
E760: Epidemiologic Surveillance Systems
E765: Nutritional Epidemiology
E770: Occupational Epidemiology
E780: Pharmaco-epidemiology
E795: Cardiovascular Epidemiology

Other courses may be taken if approved by the student's minor advisor. Students who have already completed any of the required courses as part of their MPH or PhD requirements cannot apply these courses toward their minor in Epidemiology. In this case, students must work with their faculty advisor to identify 4 alternate courses in Epidemiology.

Satisfactory completion of the requirements for the minor in Epidemiology will be monitored by the student's minor advisor. Doctoral students must notify the Fairbanks School of Public Health before beginning their course of study for the minor.

For the list of course descriptions, visit [Course Descriptions](#).