Epidemiology, PhD

# **Epidemiology, PhD**

# Requirements

The Doctor of Philosophy program in epidemiology requires a minimum of 78 s.h. of graduate credit. Graduate students in epidemiology must maintain a cumulative grade-point average of at least 3.00. Those who receive a grade of C in 7 s.h. of coursework may be dismissed from the program.

The Doctor of Philosophy with a major in epidemiology requires the following coursework.

### **Core Courses**

Students must take CPH:7270 Principles of Scholarly Integrity: Public Health during their first year in the fall semester (enroll for 0 s.h.) and in the spring semester (enroll for 1 s.h.). They must retake CPH:7270 if they completed the course more than four years ago or if they have changed degree programs.

Students enrolled part time (less than 9 s.h.) who have a graduate research assistantship appointment may choose to register in EPID:5925 Epidemiology Journal Club: Evaluating the Literature for 1 s.h.; however, the credit earned for this course will not be applied toward the minimum semester hours required for the PhD in epidemiology.

Students with a strong biosciences background may choose to substitute PATH:5270 Pathogenesis of Major Human Diseases in place of PATH:8133 Introduction to Human Pathology for Graduate Students if it better complements their training plan. This is an advanced course that requires a strong foundation in molecular biology and related disciplines, but may be suitable for some students.

Course #	Title	Hours
All of these:		
EPID:4400	Epidemiology I: Principles	3
EPID:5241	Statistical Methods in Epidemiology	4
EPID:5600	Introduction to Epidemiology Data Management and Analysis	3
EPID:5610	Intermediate Epidemiology Data Analysis with SAS and R	3
EPID:5925	Epidemiology Journal Club: Evaluating the Literature	0-1
EPID:6050	Research in Epidemiology	3
EPID:6100	Writing a Grant Proposal	3
EPID:6400	Epidemiology II: Advanced Methods	4
EPID:7400	Epidemiology III: Theories	3
BIOS:4120	Introduction to Biostatistics	3
CPH:6100	Essentials of Public Health	2
CPH:7270	Principles of Scholarly Integrity: Public Health (taken first year in the fall semester for 0 s.h. and in the spring semester for 1 s.h.)	0-1
One of these:		
PATH:5270	Pathogenesis of Major Human Diseases	3

PATH:8133	Introduction to Human Pathology for Graduate Students	3-4
One of these:		
BIOS:6210	Applied Survival Analysis	3
BIOS:6310	Introductory Longitudinal Data Analysis	3
One of these:		
HHP:3500	Human Physiology	3
MPB:5153	Graduate Physiology	4

#### **Electives**

#### **Research Interest Area Electives**

Students are encouraged to choose a recommended Epidemiology Research Interest Area to fulfill the research interest area elective requirement (23–25 s.h.). This curricular requirement encompasses student-selected coursework that demonstrates knowledge in an advanced research interest area. Students may select courses from a recommended interest area plan of study from the department's preapproved curricula or they may, in consultation with their faculty advisor and after the approval of the department's plan of study committee, propose a series of courses (23–25 s.h.) that form a customized research interest area. The department's pre-approved plans of study feature areas in clinical and health services, chronic disease/life course, injury, infectious disease, and molecular and genetic epidemiology.

# **Additional Epidemiology Electives**

In addition, students must select at least 3 s.h. from Department of Epidemiology courses (prefix EPID) outside their research interest area.

#### Dissertation

Students must successfully complete a PhD thesis.

Course #	Title	Hours
EPID:7000	Thesis/Dissertation	10-18

# Other Requirements Preceptorship Requirement

Doctoral students who did not complete the MS program in epidemiology at the University of Iowa are required to take EPID:5950 Preceptorship in Epidemiology or demonstrate that an equivalent course has been completed, such as a completed master's thesis at another institution. This requirement must be fulfilled within one year of admission to the PhD program.

# **Department of Epidemiology Seminar**

Every week during fall and spring semesters, the Department of Epidemiology seminar provides a forum for speakers to present information or research pertaining to diverse topics in epidemiology. Students are expected to achieve at least 80% attendance at the seminar during each semester of enrollment.

# **Journal Club for First-Year Students**

Journal Club for first-year students is for those who are new to the department. The focus is for students to gain experience in reading, interpreting, and critically evaluating recently published journal articles. Students should register in EPID:5925 Epidemiology Journal Club: Evaluating the Literature. PhD students who have experience with journal reviews, or who have already completed EPID:4400 Epidemiology I: Principles or received a waiver for EPID:4400, may enroll in the full-year section of Journal Club during their first semester.

# **Journal Club**

Every other week during the academic year, the Journal Club meets to discuss articles of interest in the field. Contact information for the Journal Club coordinators can be found on the Department of Epidemiology website under Preceptorship, Journal Club, and Seminar Contacts. Information about the schedule is distributed to students each semester. Students are required to achieve at least 80% attendance at Journal Club for five semesters during their time in the program. Attendance earned while enrolled as an MS student does not count toward the required five semesters.

## **Scientific Poster Requirement**

Every student is required to present at least one scientific poster at the department level and one poster at the international, national, regional, state, or university level, at some point prior to graduation. A student's advisor or dissertation mentor can help determine the suitability and timeline for the poster presentation.

#### **Seminar Presentation**

In addition to the dissertation defense, students are required to make a presentation at a Department of Epidemiology seminar. It is recommended that students complete the seminar presentation and dissertation defense in the same semester, with the seminar presentation scheduled before the defense so the seminar can serve as preparation for the defense.

# Human Subjects Protections (IRB) Certification

Students are required to provide evidence that they have completed an approved education program in human subjects protections. This should be done at the time of appointment to a graduate research assistantship position, at the start of the preceptorship, or at the start of thesis/dissertation research. More information is available about the human subjects protections certification on the University of Iowa's Human Subjects Office website.

#### **Examinations**

All doctoral students must successfully complete a qualifying examination, a comprehensive examination, a dissertation prospectus, and a dissertation. The research topic and content, which vary depending on the program of study, must be approved by a student's dissertation committee.