

Epidemiology PhD Plan of Study
Effective Fall 2020

PhD Core Curriculum

| Course Number | Course Title | S.H. | Semester(s) offered |
|---|--|--------|--------------------------------|
| CPH:6100 | Essentials of Public Health | 2 s.h. | Fall |
| BIOS:4120 | Introduction to Biostatistics | 3 s.h. | Fall, Spring, Summer** |
| EPID:4400 | Epidemiology I: Principles | 3 s.h. | Fall, Spring, ** Summer** |
| EPID:5241 | Statistical Methods in Epidemiology | 4 s.h. | Spring |
| EPID:5600 | Introduction to Epi Data Management and Analysis | 3 s.h. | Fall |
| EPID:5610 | Intermediate Epi Data Analysis with SAS and R | 3 s.h. | Spring |
| EPID:6050 | Research in Epidemiology | 3 s.h. | Fall, Spring, Summer |
| EPID:6100 | Writing a Grant Proposal | 3 s.h. | Fall |
| EPID:6400 | Epidemiology II: Advanced Methods | 4 s.h. | Spring |
| CPH 7270 | Principles of Scholarly Integrity: Public Health | 1 s.h. | Fall (0 s.h.), Spring (1 s.h.) |
| EPID:7400 | Epidemiology III: Theories | 3 s.h. | Fall odd years |
| PATH:8133 | Introduction to Human Pathology* | 3 s.h. | Fall |
| <i>Choose 1 of the following 2 courses:</i> | | | |
| BIOS:6310 | Introductory Longitudinal Data Analysis | 3 s.h. | Fall |
| BIOS:6210 | Applied Survival Analysis | 3 s.h. | Spring |
| <i>Choose 1 of the following 2 courses:</i> | | | |
| HHP:3500 | Human Physiology | 3 s.h. | Fall, Spring, Summer** |
| MPB:5153 | Graduate Physiology | 4 s.h. | Fall |

*Students with a strong biosciences background may choose to substitute PATH:5270 Pathology and Molecular Medicine for this course if it fits better with 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.

**Offered online only during this semester.

Additional Requirements

- EPID:5925 Epidemiology Journal Club (0 s.h. – offered during fall and spring); 5 semesters of registration/attendance required during the duration of the PhD program.
- Epidemiology Seminar (offered fall and spring); students are expected to achieve at least 80% attendance at the Department of Epidemiology Seminar during each semester of enrollment.

Research Interest Area Electives (23-25 s.h.)

Students are encouraged to choose one of the recommended Research Interest Area Plans of Study. In consultation with their advisor, a student may propose a modified Research Interest Area of the same name. If there is not a good fit with one of the recommended Plans, in consultation with their advisor a student may propose a new Research Interest Area Plan of Study. The student must prepare a proposed name for the new Plan and a brief rationale. Modified and new Research Interest Areas will be reviewed and approved by majority decision by the Plan of Study committee.

Additional Epidemiology Department Electives. (3 s.h.)

In addition, the student must select at least 3 s.h. from Epidemiology course offerings (EPID) outside the student's research interest area. EPID:7200 Teaching in Epidemiology (3 s.h., offered in the fall and spring) is a strongly recommended elective for students interested in a career in academia.

Dissertation Requirement (10-18 s.h.)

EPID:7000 Dissertation

10-18

Total Credit Hours for the PhD in Epidemiology: 78 s.h.

Clinical and Health Services Research Interest Area Electives
Recommended Plan of Study

| Course # | Course Name | S.H. | Semester(s) offered* |
|--|---|--------|-------------------------|
| Students interested in clinical and health services epidemiology will take the following four courses: | | | |
| EPID:5500 | Introduction to Clinical Epidemiology | 3 s.h. | Fall |
| EPID: 6910 | Pharmacoepidemiology and Comparative Effectiveness Research | 3 s.h. | Fall even years |
| EPID:6920 | Applied Administrative Data Analysis | 2 s.h. | Fall |
| HMP:4000 | Introduction to US Healthcare System | 3 s.h. | Spring, Summer (online) |
| In addition, students will complete at least 14 s.h. from the following recommended courses. Students should select courses in consultation with their advisor to reflect their research interest area (e.g. pharmacoepi, comparative effectiveness, clinical trials, health services research, or outcomes research). | | | |
| EPID:5214 | Meta-analysis of Epidemiologic Studies | 3 s.h. | Spring odd years |
| EPID:5560 | Introduction to Molecular Epidemiology | 3 s.h. | Spring odd years |
| EPID:6071 | Social Epidemiology | 3 s.h. | Fall |
| EPID:6900 | Design of Intervention and Clinical Trials | 3 s.h. | Fall |
| BIOS:5310 | Research Data Management | 3 s.h. | Fall, Spring |
| BIOS:6210 | Applied Survival Analysis | 3 s.h. | Spring |
| BIOS:6310 | Introductory Longitudinal Data Analysis | 3 s.h. | Fall |
| EPID:6420 | Survey Design and Analysis | 3 s.h. | Spring even years |
| BIOS:6610 | Statistical Methods in Clinical Trials | 3 s.h. | Spring |
| BIOS:6650 | Causal Inference | 3 s.h. | Spring |
| CBH:6205 | Designing and Implementing Interventions | 3 s.h. | Fall |
| EPLS:5165 | Introduction to Program and Project Evaluation | 3 s.h. | Spring |
| GEOG:4150 | Health and Environment: GIS Applications | 3 s.h. | Fall |
| HMP:7550 | Cost Effectiveness and Decision Analysis | 3 s.h. | Fall even years |
| HMP:7940 | Primary Data and Mixed Methods | 3 s.h. | Spring |
| HMP:7960 | Analytical Issues in Health Services Research I | 3 s.h. | Fall even years |
| HMP:7965 | Analytical Issues in Health Services Research II | 3 s.h. | Spring odd years |
| PCOL:4130 | Drug Mechanisms and Actions | 3 s.h. | Spring |
| PCOL:5136 | Pharmacogenetics and Pharmacogenomics | 1 s.h. | Spring |

*Semester(s) offered subject to change due to enrollment, instructor availability, etc. Students should always check the course schedule at MyUL.uiowa.edu for the most up to date version of the course schedule.

Total Credit Hours for the Clinical and Health Services Research Interest Area: 25 s.h.