Epidemiology, M.S.

Requirements

The Master of Science program in epidemiology requires at least 39 s.h. of graduate credit and is offered with or without thesis. Students who choose to complete the degree without thesis are required to pass a comprehensive examination. All students must maintain a cumulative g.p.a. of at least 3.00. Those who receive a grade of C in 7 s.h. of coursework may be dismissed from the program.

Students are required to attend 80 percent of all Department of Epidemiology seminar meetings and journal club meetings for three semesters. They must present one scientific poster at the departmental level before they may graduate, and the department recommends that they present at the international, national, regional, state, or University level before graduating.

The Master of Science 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 M.S. 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.

Electives

Students must earn a minimum of 5 s.h. in elective coursework from Department of Epidemiology courses (prefix EPID) and 2 s.h. in additional graduate coursework pertinent to a student’s educational goals and background (the additional 2 s.h. may be earned in an epidemiology course or in another graduate course, with the advisor’s approval). The following courses are recommended.

C: One of these:
C: PATH:5270 Pathogenesis of Major Human Diseases 3
C: PATH:8133 Introduction to Human Pathology for Graduate Students 3-4
C: One of these:
C: EPID:6550 Epidemiology of Infectious Diseases 3
C: EPID:6600 Epidemiology of Chronic Diseases 3
C: One of these:
C: EPID:5950 Preceptorship in Epidemiology (for nonthesis students) 3
C: EPID:7000 Thesis/Dissertation (for thesis students; may be taken twice) 3

Students may need additional elective coursework in order to complete the minimum 39 s.h. required for the degree.

Other Requirements

Department of Epidemiology Seminar

Every week during the academic year, the Department of Epidemiology seminar provides a forum for speakers to present information or research pertaining to diverse topics in epidemiology. Contact information for the seminar coordinators is located on the Department of Epidemiology website under Preceptorship, Journal Club, and Seminar Contacts. Information about the schedule is distributed each semester and also is available on the University of Iowa Events Calendar. Students are expected to achieve at least 80 percent 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 and is offered in the fall semester. The focus

All of these:

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOS:4120</td>
<td>Introduction to Biostatistics</td>
<td>3</td>
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<tr>
<td>EPID:4400</td>
<td>Epidemiology I: Principles</td>
<td>3</td>
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<tr>
<td>EPID:5241</td>
<td>Statistical Methods in Epidemiology</td>
<td>4</td>
</tr>
<tr>
<td>EPID:5600</td>
<td>Introduction to Epidemiology Data Management and Analysis</td>
<td>3</td>
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<tr>
<td>EPID:5610</td>
<td>Intermediate Epidemiology Data Analysis with SAS and R</td>
<td>3</td>
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<tr>
<td>EPID:5925</td>
<td>Epidemiology Journal Club: Evaluating the Literature</td>
<td>0-1</td>
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<tr>
<td>EPID:6400</td>
<td>Epidemiology II: Advanced Methods</td>
<td>4</td>
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<tr>
<td>CPH:6100</td>
<td>Essentials of Public Health</td>
<td>2</td>
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<tr>
<td>CPH:7270</td>
<td>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.)</td>
<td>0-1</td>
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- Bios 6210: Applied Survival Analysis 3
- BIOS:6310: Introductory Analysis 3
- CPH:5220: Health Behavior and Health Education 3
- 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
- EPID:6550: Epidemiology of Infectious Diseases 3
- EPID:6600: Epidemiology of Chronic Diseases 3
- EPID:5950: Preceptorship in Epidemiology (for nonthesis students) 3
- EPID:7000: Thesis/Dissertation (for thesis students; may be taken twice) 3
is for students to gain experience reading, in interpretation, and in critically evaluating recently published journal articles. Students should register in EPID:5925 Epidemiology Journal Club: Evaluating the Literature, section 1.

**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 percent attendance at Journal Club for three semesters during their time in the program.

**Scientific Poster Requirement**

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

For nonthesis students, this poster requirement takes the place of an oral seminar presentation as part of the preceptorship requirement. Nonthesis students would typically formulate preceptorship research into a poster presentation, though the requirement may be met by a poster presentation of other research, such as from an independent study or research related to employment.

For thesis students, the poster requirement is in addition to the oral seminar presentation requirement for the thesis. Thesis students would typically formulate thesis research into a poster presentation, though the requirement may be met by a poster presentation of other research, such as from an independent study or research related to employment. The poster must be submitted for review to the student’s advisor or thesis/preceptorship mentor a minimum of 10 days before the poster session. A Department of Epidemiology poster session is held at the end of the fall and spring semesters.

**Master's Final Examination for the M.S. Without Thesis**

The master's examination is a written in-class exam that measures learning of epidemiological concepts and knowledge of epidemiological thoughts as presented in required courses. This exam is offered twice per year.

**Master's Thesis Defense for the M.S. With Thesis**

The master's thesis defense is an oral presentation of the purpose, methods, and results of the thesis research. A specially formed committee thoroughly examines a student's area of knowledge associated with the context of the work. The goal of the thesis is a document that is publishable in a peer-reviewed journal.