

Department of Epidemiology  
Student Handbook  
2014-2015

# Table of Contents

## Information about the Department of Epidemiology

<a href="#">Mission and Goals</a> .....	4
<a href="#">Department Organization</a> .....	4
<a href="#">Student Organizations</a> .....	5
<a href="#">Resources for Students</a> .....	6
<a href="#">Admission Requirements</a> .....	8
<a href="#">Financial Support</a> .....	9

## Important Academic Policies for Students

<a href="#">Academic Conduct Standards &amp; Procedures</a> .....	11
<a href="#">Academic Advising</a> .....	12
<a href="#">Academic Standards</a> .....	13
<a href="#">Registration</a> .....	13
<a href="#">Grading</a> .....	14
<a href="#">Plan of Study</a> .....	15
<a href="#">Graduation</a> .....	16

## Core Competencies

<a href="#">Core Competencies for Epidemiology Students</a> .....	18-19
---	-------

## MPH – Epidemiology

<a href="#">Degree Objectives</a> .....	20
<a href="#">Course Requirements</a>	
<a href="#">Non-Course Program Requirements</a>	
<a href="#">MPH Academic Standing</a>	

## MS in Epidemiology

<a href="#">Degree Objectives</a> .....	23
<a href="#">Course Requirements</a>	

[MS Non-Course Program Requirements](#)

[MS Academic Standing](#)

[MS Degree without Thesis](#)

[MS Degree with Thesis](#)

## **MS in Clinical Investigation**

[Degree Objectives](#) ..... 29

[Curriculum](#)

[Admissions](#)

[Required Courses](#)

## **PhD in Epidemiology**

[Degree Objectives](#) ..... 31

[Required Courses](#)

[Non-Course Program Requirements](#)

[PhD Academic Standing](#)

[PhD Qualifying Exam](#)

[PhD Comprehensive Exam](#)

[PhD Dissertation](#)

[Three-manuscript Dissertation Option](#)

## **Appendices**

[Appendix A – Faculty Directory](#) ..... 45

[Appendix B – Executive Staff Directory](#) ..... 46

[Appendix C – Scientific Poster Guidelines](#) ..... 47

[Appendix D - Academic Success](#) ..... 48

[Appendix E – Procedures for Addressing Alleged Academic Misconduct](#) ..... 51

[Appendix F – Centers in Epidemiology](#) ..... 52

# Information About the Department of Epidemiology

## Mission and Goals

The Department of Epidemiology's goal is to promote research and training in epidemiology, disease control, and health care evaluation.

**Training:** The didactic focus of the graduate programs in Epidemiology is to achieve epidemiologic, preventive, and health care evaluation skills for application in clinical and community-based settings and to develop qualified, independent research scientists in epidemiology at both the pre- and post-doctoral levels. With this goal in mind, curricula and student evaluation are designed to help students master the competencies in epidemiology and apply them in their future careers.

**Research:** The Department of Epidemiology has a strong research program in which both theoretical and applied research is utilized in achieving high-quality epidemiologic investigations at the forefront of scientific knowledge.

Current disease areas and fields of interest include epidemiology of infectious diseases, molecular epidemiology, reproduction, hospital and clinical practice, injury, aging, nutrition and physical activity, maternal and child health, drug use and outcomes, genetic epidemiology, pharmacoepidemiology, chronic diseases such as cancer, cancer control, cancer etiology, occupational and environmental health epidemiology, cardiovascular disease and mental disease, diseases caused by the environment, and intervention trials.

## Department Organization

The Department of Epidemiology is one of five departments in the College of Public Health: Biostatistics, Community and Behavioral Health, Epidemiology, Health Management and Policy, and Occupational and Environmental Health.

The Head of the Department of Epidemiology is Dr. James Torner, who is responsible for administration of the educational, research, and professional service functions of the department. Dr. Torner also serves as the Associate Head for Admissions and Curriculum, and Dr. Charles Lynch is Associate Head for Research. The department currently has 15 primary faculty members, 55 secondary and adjunct faculty members and 9 emeritus faculty members.

Executive staff includes Department Administrator Cindy Rohret, Human Resources Coordinator Michele Hogue, Contract Administrator Geri Lench and Secretary Marilyn Anderson. The Student Affairs and Curriculum Administrator is Kim Williams. The Epidemiology Research Core is staffed by Linda Rubenstein, PhD and Mike Mueller.

Office and e-mail addresses for primary faculty and support staff can be found in Appendixes A & B.

## Student Organizations

### Epidemiology Student Association

The [Epidemiology Student Association](#) (ESA) is officially chartered with the University of Iowa Student Organization Business Office. Any Epidemiology student is automatically a member and is encouraged to participate in ESA. Epidemiology Student Association officers are elected annually to arrange and conduct meetings and social events and to act as a liaison with departments and colleges.

#### ESA officers for 2014-2015

President .....Brittney Donovan  
Vice President/Secretary ..... Rebecca Ritter  
Treasurer..... Scott Oltman  
Graduate Student Senator .....Spencer Klein

### The College of Public Health Student Association

The College of Public Health Student Association at the University of Iowa was established to expand opportunities in professional development and outreach, discuss student issues, and create a greater sense of community for all students in the College of Public Health. Membership is open to all students enrolled in a CPH degree program.

#### CPHSA officers for 2014-2015

President: .....Pallavi Yadav (MHA)  
Vice President: .....Minh Nguyen (MPH/PharmD)  
Communications Director: .....Zach Weiderspon (MHA)  
Treasurer: .....Alfonza Brown (MPH Epi)  
Co-Social Directors: .....Nicole Westergaard (MPH Policy) & Dan Suh (PhD Epi)  
Student Resources Director: .....Joel Ramirez (PhD OEH)  
Student Mentor-Mentee Program Coordinator: .....Julia Friberg (MPH CBH)

### The Graduate Student Senate

The Graduate Student Senate is the duly constituted collegiate association of the Graduate College and is the primary representative, administrative, and service organization for the graduate students at the University of Iowa. It serves as the voice of the graduate student population to the university administration, faculty, and to all other organizations at the University, and within the Iowa City community. Furthermore, it assists in the administration of resources designated to graduate students, and works to establish and maintain programs and activities of interest to graduate students.

<http://gss.grad.uiowa.edu/about>

## Resources for Students

### Availability of Accommodations for Students with Disabilities

Any student eligible for and needing academic adjustments or accommodations under the Americans with Disabilities Act is requested to notify the Graduate Coordinator and specific course instructor as soon as possible to make appropriate arrangements.

### Computer Labs

The College of Public Health computer lab is on the second floor of our building and is available for use at any time. Students are assigned computer accounts at orientation or they can contact the Office of Information Technology in N148 to apply. Only College of Public Health students can use these facilities. Students can apply for evening and weekend access to the labs by contacting IT in N148. Other university computer labs are available throughout campus, including one at nearby Hardin Library. A complete list of available computer labs is available at [Information Technology Services](#).

### Desk Space

Limited space is available in the CPH building for PhD graduate students and graduate students working as graduate teaching or research assistants. Priority is given to students who are in the PhD program conducting research, graduate research assistants or teaching assistants. Graduate students with office space elsewhere on campus will only be given space if space is available. Space is given in order of request (contact Kim Williams). Space allocations are reviewed each semester and are renewed in August. However, designated space can be reassigned at any time as needed or if space is unused.

### Job and Internship Announcements

Announcements of job and internship opportunities are communicated to students posted to LinkedIn.

### Mailboxes

Every student has a mailbox in the Student Commons. Mailboxes are assigned by box number, and each student will retain the same box number throughout the student's academic career. A current list of all mailbox numbers will be kept posted in the Student Commons. Mail addressed to a student should be addressed as shown in these examples:

#### US Mail

Morgan Smith  
University of Iowa  
College of Public Health  
145 N Riverside Drive  
Iowa City IA 52242

#### Campus Mail

Morgan Smith  
College of Public Health

## **Email**

Every student should apply for a university e-mail account upon enrollment. The student will then be connected to the College of Public Health network individually and as part of the Epidemiology Student Group e-mail list. Students receive course information, seminar announcements, job announcements, and program information via uiowa accounts only. Announcements are not distributed to gmail or hotmail (etc) accounts.

University policy specifies that students are responsible for all official correspondences sent to their standard University of Iowa e-mail address (@uiowa.edu). Students should check this account frequently.

## **Forms**

Commonly used forms are available on the department's website under Information for Current Students, [Forms](#)

## **Student Commons**

The Student Commons is available to all College of Public Health students. Students are welcome to use all facilities in the commons, which include a kitchenette; student mail boxes; a student services area, including graduate coordinator and recruitment services; and distance learning and audio/visual services. All items in the refrigerator, including any containers, are disposed of after 2 p.m. every Friday.

A limited number of lockers are available for students in the Student Commons. Interested students should contact [Katie Boland](#) to be assigned a locker.

## **Travel Funds**

Each year the department has limited funds for student travel to meetings and conferences to give posters or presentations and support for logistical travel for practicum experiences. To request travel funds, submit the [Travel Request Form](#) to Kim Williams.

## **Writing Center**

Good writing is an essential component for success in a career in epidemiology. Because of its importance, the Department of Epidemiology may occasionally offer diagnostic writing exercises allowing students to receive professional evaluation of their writing skills and suggestions for improvement.

It is strongly recommended that students use the resources of the University's Writing Center. The center offers a variety of free services, including regularly scheduled sessions with a writing tutor, one-time sessions with a tutor, and an e-mail tutoring service for three-day feedback on a student's work. The Writing Center is located at 110 English-Philosophy Building (EPB), 335-0188.

## Admission to the Graduate Programs in Epidemiology

### Minimum Requirements for Admission

The faculty takes several factors into consideration when evaluating an application for admission, including GRE scores, grades, letters of recommendation, intent and motivation for graduate study, and research interests. A student with deficiencies in one area may be admitted if all other parts of his or her application are very strong.

The minimum grade-point average requirement is 3.0 for admission to the MPH, MS, or PhD programs. Applicants must have taken the Graduate Record Examination (GRE) general test, Medical College Admission Test (MCAT) or Dental Admission Test (DAT) in the last 3 years with performance above the 50<sup>th</sup> percentile. Students admitted to the program are expected to have a combined Verbal and Quantitative GRE score of at least 303.

The minimum TOEFL requirement is 100. Automatic waivers of the TOEFL requirement are granted for persons who have completed a bachelor's degree (or higher) at an accredited university in the United States, United Kingdom, Canada (excluding French Quebec), Africa (English speaking), Australia, or New Zealand.

Applicants are required to have strong written and oral communication skills. Students with deficiencies may be required to take remedial courses.

For additional information on the application process and admission requirements for the M.S. and Ph.D. degrees in Epidemiology, see the Department of Epidemiology website for [Prospective Students](#).

For information on the application process and admission requirements for the Epidemiology Subtrack of the College's M.P.H. degree program, see the College of Public Health website for [Master of Public Health](#).

### Admission Guidelines for M.S. in Epidemiology

A baccalaureate degree is required. Undergraduate preparation must have included two semesters of biological sciences and mathematics through algebra. Statistics coursework and a computer-programming course is desirable.

### Admission Guidelines for Ph.D. in Epidemiology

Strong preference is given to applicants holding master's degrees in epidemiology or closely-related health sciences, with substantial programmatic experience in health services delivery or administration, and with demonstrated capacity for quantitative research, originality and creativity, and the application of scientific methods.

### Conditional Student Status

Potentially successful students not meeting all criteria may be admitted on a conditional basis. Specially tailored additional stated conditions (e.g. taking remedial courses or maintaining a grade point average for a prescribed length of time) must be met by each student to achieve regular student

status. Regular admission must be reached within two semesters. Failure to achieve this requirement will result in dismissal. The MPH program does not admit students on a conditional basis.

## **Financing your Education**

### **Cost of Tuition**

Tuition and fee tables are posted on the Registrar's website.

### **To apply for financial aid**

Submit the [Free Application for Federal Student Aid \(FAFSA\)](#). The University of Iowa's Federal School Code is 001892. The [Office of Student Financial Aid](#) also provides additional [Information for Graduate Students](#). Questions regarding financial aid should be directed to the Office of Student Financial Aid: 319-335-1450.

### **Employment**

Employment by the department is not guaranteed to admitted students. Students are responsible for finding employment or other means of funding. Students usually have one of three types of jobs at UI: 1) hourly employment; 2) staff employment; 3) graduate research assistantships (GRAs)

Hourly positions are advertised on Jobnet: <http://www.bo.uiowa.edu/~finaid/jobform.html>

Staff – These jobs are advertised on the UI Employment site (search both Merit and Professional/Scientific categories): <http://jobs.uiowa.edu/>

GRAs - If a student has a half-time (50%) graduate research assistantship, the workload is 20 hours a week. In exchange, the student receives a stipend of about \$20,000 per year, and a tuition scholarship of about \$5,000 per year. Students with graduate research or teaching assistantships of at least 10 hours a week (also called quarter-time or 25% assistantships) qualify for resident tuition (also called in-state tuition) during the semesters they hold the position. GRA positions are advertised on the Graduate College's site: <http://www.grad.uiowa.edu/graduate-assistant-job-postings>

Students interested in GRA positions should talk to their advisor and contact Kim Williams. A resume should be sent to their advisor and another to Kim Williams. Advisors can help find open positions and circulate the resume as needed. Kim Williams will post resumes in a centralized location where faculty can peruse if they are looking to hire a student.

### **Guidelines for Graduate Assistantship Work**

All graduate assistantship appointments are governed by the University of Iowa's [contract with UE Local 896/COGS](#).

Generally, students on graduate assistantships (GRAs and GTAs) are required to work, on average, the appropriate amount per week (10 hrs for ¼-time; 20 hrs for ½-time) for the entire duration of their appointment, with the following exceptions:

- Graduate assistants do not have to work on official University holidays, such as Labor Day, Thanksgiving, the day after Thanksgiving, etc.
- Graduate assistants may take up to 15 days vacation per fiscal year (July 1st-June 30th). For example, if an GRA or GTA wants to take the week of Thanksgiving completely off, that person would be using 3 days vacation. In another example, a GRA/GTA who takes time off in November, December, and/or January may cut down or eliminate the possibility of taking a vacation during spring break and/or during the early part of summer.
- Graduate assistants may receive up to 18 days of sick leave per year.

GRAs and GTAs must contact their supervisors regarding their vacation plans and request permission. They should also document their vacation and sick leave usage.

### **Reduced Schedules for Teaching and Research Assistants**

Per Graduate College rules, teaching and research assistants are restricted on the number of semester hours (s.h.) they are allowed to register for per semester:

- 1/2-time appointees may not register for more than 12 s.h. during a semester or 6 s.h. during the 8-week summer session.
- 5/8-time appointees may register for not more than 10 s.h. during a semester or 5 s.h. during the 8-week summer session.
- Two-thirds and 75% appointees may not register for more than 9 s.h. during a semester or 5 s.h. during the 8-week summer session.
- 7/8-time appointees may not register for more than 7 s.h. during a semester or 4 s.h. during the 8-week summer session.
- Full-time appointees may not register for more than 6 s.h. during a semester or 3 s.h. during the 8-week summer session.

## Important Academic Policies for Students

All Epidemiology degrees are conferred through the [Graduate College](#). Therefore, we are governed by Graduate College rules, regulations, and requirements as outlined in the [Manual of Rules and Regulations of the Graduate College](#). It is the student's responsibility to know and adhere to the Graduate College policies.

### Academic Conduct Standards and Procedures

#### Academic Conduct

If an enrolled student commits an act of academic misconduct and is subsequently subject to disciplinary action by the university, the graduate programs within the College of Public Health reserve the right to impose their own disciplinary action which can include, but is not limited to, probation and/or dismissal from the program.

“Academic misconduct is identified as: including the acquisition of honors, awards, certification or professional endorsements, degrees, academic credits, or grades by means of cheating, plagiarism, or falsification, including forgery, with respect to any examination, paper, project, application, recommendation, transcript, or test, or registration document or by any other dishonest means whatsoever, or aiding or abetting another student to do so” (*University of Iowa Operations Manual, Part IV. STUDENTS, CHAPTER 1: GENERAL REGULATIONS APPLYING TO STUDENTS*).

#### Plagiarism and Cheating

Plagiarism is the unacknowledged use of another's ideas expressed in either the author's original words or in a manner similar to the original form. When using ideas, direct quotes, or paraphrases, the source must be footnoted or referenced. This principle applies even if the writer discovers that an idea, initially thought to be his or her own, has already been published by someone else. It is the student's responsibility to seek clarification of any situation in which he/she is uncertain whether plagiarism is/has been involved. Students who are uncertain about what constitutes plagiarism should consult their advisors or other faculty members.

Plagiarism includes, but is not limited to, the following:

- Presentation of ideas of others without credit to the source;
- Use of direct quotations without quotation marks and without credit to the source;
- Paraphrasing without credit to the source;
- Participation in a group project which presents plagiarized materials;
- Failure to provide adequate citation for material obtained through electronic research;
- Downloading and submitting work from electronic databases without citation;
- Submitting materials written by someone else as one's own, including purchased research papers.

Cheating includes but is not limited to the following:

- Accepting credit for a group project without doing one's share;
- Copying from someone else's exam, homework, or laboratory work;
- Allowing someone to copy or submit one's work as her/his own;
- Submitting the same paper in more than one course without instructor approval;
- Using notes or other materials during a test or exam without authorization;
- Not following the guidelines specified by the instructor for a 'take home' test or exam.

See Appendix E for procedures for addressing academic misconduct.

### **Concerns about Faculty Actions**

Students who have a concern about a faculty action should first address the issue with the instructor, then the course supervisor (if there is one), and then the departmental DEO. Students may also contact the Associate Dean for Education and Student Affairs in the College of Public Health. Another resource for students is the Office of the University Ombudsperson. If a complaint cannot be resolved at the departmental and/or collegiate level, students may file a formal complaint utilizing the procedure specified in the Operations Manual (II-29.7)

### **Understanding Sexual Harassment**

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI Comprehensive Guide on Sexual Harassment for assistance, definitions, and the full University policy.

### **Reacting Safely to Severe Weather**

In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit <http://hawkalert.uiowa.edu/>

## **Academic Advising**

### **Changing Advisors**

When an applicant is admitted to the Department of Epidemiology, the student is assigned an academic faculty adviser. If a student wishes to change advisers, the student initiates the change by determining which faculty adviser would be preferred and discussing the possibility with the preferred faculty adviser. Upon approval by the new faculty adviser, the student must then notify the prior adviser and Kim Williams, Program Coordinator.

There is no requirement that a student must remain with the same adviser throughout that student's academic career. The thesis/dissertation adviser may be a different faculty member than the academic adviser.

## Academic Standards

### Academic Standing

MPH students must earn  $\geq$  B- (2.67) on each of the 6 MPH core courses and must earn a  $\geq$  3.00 cumulative GPA on the six MPH core courses. When necessary, a student may repeat a course to meet this requirement. A cumulative GPA of 3.00 or above is required for MPH students to graduate.

MPH students are also required to maintain  $\geq$  3.00 cumulative GPA. A student with less than a 3.00 G.P.A. after 8 or more semester hours of graduate work will be placed on probation by the MPH program. If after completing at least 8 additional semester hours of graduate credit, the student's GPA remains below 3.00, the student will be denied permission to re-register.

MS students are required to earn  $\geq$  2.75 cumulative GPA. A student with less than a 2.75 G.P.A. after 8 or more semester hours of graduate work will be placed on probation by the Graduate College. If after completing at least 8 additional semester hours of graduate credit, the student's GPA remains below 2.75, the Graduate College will deny the student permission to register. Refer to Sec. IV. of the [Manual of Rules and Regulations of the Graduate College](#) for details on probation and dismissal standards, procedures, and appeals.

PhD students are required to earn  $\geq$  3.00 cumulative GPA. A student with less than a 3.00 G.P.A. after 8 or more semester hours of graduate work will be placed on probation by the Graduate College. If after completing at least 8 additional semester hours of graduate credit, the student's GPA remains below 3.00, the Graduate College will deny the student permission to register. Refer to Sec. IV. of the [Manual of Rules and Regulations of the Graduate College](#) for details on probation and dismissal standards, procedures, and appeals.

MS & Ph.D. students who receive more than six semester hours of C+ or lower on College of Public Health and required courses (including any transfer hours) will be dismissed from the program. A student may appeal the dismissal in writing to the head of the department. Student appeals must be voted on by the department faculty within two semesters, including summer session, from the end of the semester in which the last C+ or lower grade was received.

### Restriction on Students on Probation

A student on probation will not be permitted to take the comprehensive or final exam, or receive any graduate degree or certificate.

## Registration

### How to Register for Classes

To register for classes, you need to first contact your faculty advisor, have an agreement on your enrollment, make sure it is aligned with your plan of study. Once this agreement has taken place then your advisor will authorize your registration. You may then register online at [ISIS](#) after the time assigned to you. First-year students will not be authorized to register until they have submitted a [Department Plan of Study](#). You're able to access Plan of Study by using your HawkID and Password.

New students must submit valid health forms to the Student Health Service before being allowed to register. New international students must also participate in an orientation conducted by the Office of International Students and Scholars before being allowed to register for their first session at the University of Iowa.

### **Changing Registration**

Changes in registration are initiated by the student. Students may change registration with no penalty online until midnight the day prior to the start of classes. Beginning the first day of classes, online registration is no longer possible and any change must be done with a [drop/add slip](#) signed by the instructor and the student's adviser. Failure to drop classes by the established deadline will result in a successively increased fees and an increased percentage of tuition fee assessment.

ISIS has a link to a site listing [significant deadlines](#) for each semester, including deadlines for changes or withdrawals and financial penalties involved.

### **Maximum Course Load**

Nine or more semester hours constitutes full-time enrollment during fall and spring semester. Twelve semester hours is considered the standard schedule. A student may not register for more than 15 semester hours per semester during fall and spring semester, 12 s.h. for the combined summer sessions, or 4 s.h. for the four-week summer session.

International students are subject to registration requirements in addition to those listed above. They are generally required to be registered full-time (at least 9 s.h.) in fall and spring semester, and there are restrictions on the number of courses they are allowed to register for via distance learning. International students should contact the Office of International Students and Scholars (OISS) if they have questions about registration requirements in specific situations.

## **Grading**

### **Incompletes**

A grade of Incomplete ("I") is to be used only when a student's work during a session cannot be completed because of illness, accident, or other circumstances beyond the student's control. The student must submit required work with sufficient time for the instructor to review it and submit a grade by the end of the following semester. Failure to do this results in a grade of "F." Students with an "I" have until the end of the following semester to remove the "I" (for example, an I from the fall semester will convert to an "F" at the end of the spring semester). Re-registering for a course does not remove an "I" but instead is treated as a new course on the student's transcript and will leave an "F" permanently.

### **Satisfactory/Unsatisfactory Grading**

S/U grading may be applied to the following courses at the discretion of the instructor:

- 173:300 Thesis or Dissertation
- 173:205 Research in Epidemiology
- 173:195 Preceptorship in Epidemiology

- 173:320 Teaching in Epidemiology

Under S/U grading, the student receives credit if the course is completed satisfactorily, but the course is not included in calculating the grade-point average. Students should discuss grading options prior to registering for these courses.

Grades of S/U may also be used for courses taken outside the major department (Epidemiology) if they are not required for the degree, provided that the course instructor and the student's adviser approve the registration. Arrangements for S/U grading in these courses are accomplished by filing a form with appropriate signatures in the Registrar's Office at the time of registration or no later than the last day of the second week of a semester.

### **Retaking a course**

The Graduate College does not have a 'second-grade only' policy (where re-taking a course replaces an earlier grade). Therefore re-registering for a class will not remove the original grade from a transcript. The two ways to remove a grade from a transcript are to be granted a retroactive withdrawal from the Graduate College (only granted in rare cases) or by the instructor changing the grade.

### **Grades Carrying Graduate Credit**

Grades of A+ through C- and S confer graduate credit. Grades of D+ through F, W, and R do not carry graduate credit (therefore any required course receiving one of these grades must be taken again to fulfill the degree requirement). However, D+ through F grades are used in computing GPAs.

### **Auditing Courses**

With the approval of the instructor and advisor, a student may audit courses for zero credit. However, UI still charges tuition for audited courses (0-1 s.h. fee schedule). UI does not allow students to unofficially "sit in" on classes. In addition, the requirements for auditing a course are determined by the instructor and may still include homework and tests.

### **Plan of Study**

Students are expected to make steady and satisfactory progress toward a degree. A Department Plan of Study must be filed in the first semester of the student's program. MS and PhD students should complete the [Plan of Study](#) and submit it in person to their advisor. MPH students should complete the online [MPH Plan of Study](#).

The purpose of the plan is to ensure that any requested course waivers or transfer credits are approved, and that the student will have completed the appropriate coursework to receive the degree. The Plan of Study should be completed by the student and the student's adviser, and submitted to the graduate program coordinator for review. The student and her/his adviser will then be informed if the plan is approved or returned for modification.

First-year students will not be authorized to register for the spring semester until they have submitted a Plan of Study. All other students will not be authorized to register if they do not have a current Plan of Study on file.

## **Changing a Plan of Study**

MPH students may make changes to their Plan of Study by submitting the online [Request for Plan Change](#) form.

MS and PhD students may make changes to their Plan of Study by submitting a Request for Change in Plan of Study found on the online website.

## **Waiver of Courses**

Students may request to waive a required course. A waiver means the student is not required to enroll in the course but neither does the student receive credit for it. A waiver is usually granted when a student has obtained the knowledge covered in the course some other way. A waiver of a required course that has been taken previously as an undergraduate or not requesting transfer of credit is only granted based upon proof of the subject matter and evaluation. A course syllabus and grade is generally sufficient. All waiver requests are routed through to the Plan of Study Committee.

## **Transfer Credits**

Students may request to transfer credits. A transfer means the student may substitute a course taken at another institution for a required course. Students receive credit for transferred courses.

To request transfer credits, MPH students should request a form from Lexie Just in the MPH office. MS and PhD students make requests on the Plan of Study Form. In addition to the form, they should submit information about the course (institution, course title, number of credit hours and grade) and a course syllabus.

Transfer requests are then evaluated by the Plan of Study Committee. Transfer credits from other colleges and universities are also evaluated by the Graduate Admissions Office. The department cannot approve transfer hours from other institutions unless Graduate Admissions awards graduate credit hours. Undergraduate courses do not qualify for transfer.

The criteria for approval of transfer courses are as follows:

- Content is relevant to degree program
- Content is comparable in quality to courses offered by UI
- The course was taken when the student held graduate student status
- Student received a grade equivalent to “C-” or better
- Courses may not be more than 10 years old at the time of graduation from the program

## **Graduation**

### **Application for Degree**

Students are required to apply for graduation on ISIS by the posted deadline of the session (fall, spring, or summer) the student intends to graduate. Kim Williams will file all other Graduate College forms (excluding dissertation forms) for graduation.

It is the responsibility of the student to ensure that all course and departmental requirements have been met prior to submitting the application for degree.

## 2014-2015 Graduation Deadlines

### Fall 2014

December degree application due .....	Oct. 14
First deposit of thesis/dissertation.....	Nov. 6
Final deposit of thesis/dissertation.....	Dec. 10
Commencement.....	Dec. 19

### Spring 2015

May degree application due.....	Feb. 27
First deposit of thesis/dissertation.....	March 26
Final deposit of thesis/dissertation.....	May 6
Commencement.....	May 15

### Summer 2015

August degree application due.....	June 12
First deposit of thesis/dissertation.....	July 6
Final deposit of thesis/dissertation.....	July 27
Degree conferral.....	Aug. 7

### Registration in Final Semester

The Graduate College requires you to be enrolled during the session in which your degree is conferred. To meet this requirement, M.S. students who have completed all their coursework may register for Master's Final Registration (000:001:000 for 0 hours) or for any course of interest. PhD candidates may register for Doctoral Continual Registration (000:002:000 for 0 hours) or any course of interest.

### Commencement Ceremony

The Graduate College holds two commencement ceremonies each year, one in December and one in May. Students may also graduate at the end of the summer session, but there is no ceremony. The College of Public Health Graduation Ceremony is held in the spring semester only and includes students graduating that academic year.

# Epidemiology Core Competencies

## **Category 1: Basic Knowledge of Public Health Problem:**

- Know the leading diseases responsible for death and disability globally
- Describe risk factors for well-established morbidity and mortality problems and the evidence that supports this
- Identify major historical phases of epidemiology and public health
- Describe the methods and findings from major epidemiologic studies
- Identify principles of screening and surveillance, measures of disease occurrence (incidence, prevalence, standardization, PMR, SMR)
- Describe sources of existing data including census, registries, medical records, vital statistics national population-based surveys, and their strengths and limitations for descriptive epidemiology

## **Category 2: Conceptualize a Research Problem**

- Assess major sources of bias

## **Category 3: Study Design:**

- Identify and evaluate all main study designs including clinical trials with respect to strengths and weaknesses and appropriate applications
- Identify appropriate target population
- Evaluate role of bias, confounding, and variance including direction and magnitude and importance in particular settings

## **Category 4: Research Conduct**

- Recognize ethical issues in epidemiology research
- Manage a study (develop a budget; monitor status, work in the context of a multidisciplinary team)

## **Category 5: Conduct a Study**

- Plan and evaluate recruitment strategies
- Develop project timetable and plan project monitoring system
- Anticipate data collection challenges
- Develop and evaluate data collection instruments (questionnaires, biological measures, etc.) including validity and reliability

## **Category 6: Data Management and Quality Control**

- Describe protocols used to generate a given dataset, (i.e. protocols for data collection, data entry, data management, and quality assurance)
- Review and synthesize results of monitoring systems and design and implement corrective actions

**Category 7: Data Analysis**

- Analyze categorical and continuous data
- Generate and interpret descriptive statistics
- Conduct multivariable linear and logistic regression analysis

**Category 8: Data Interpretation**

- Make inferences from analyses

# Degree Requirements: MPH – Epidemiology Subtrack

## Degree Objectives

The MPH in Public Health Epidemiology is a degree for students who desire to learn the fundamental concepts and methods of epidemiology. The degree provides the methodological skills, knowledge, and practical experience in the public health setting. The focus of the degree is public health data and methods and their utilization in assessment of disease burden in the community. The student will also learn to use evaluation methods to assess the need and outcome of programs and interventions in the community. Upon graduation, the student should be capable of performance in the public health department and healthcare settings.

### Graduates of the MPH - Epidemiology subtrack will be able to:

1. Define the concepts and content of epidemiology
2. Use existing databases to provide background or supportive public health data to determine priorities and formulate public health investigations
3. Use existing questionnaires and measurement instruments in collection of data to determine public health status and priorities and to evaluate interventions
4. Create study aims and objectives needed to address a public health program or investigation
5. Select the appropriate study design for interventions/investigations
6. Describe health and disease measurement in a community population
7. Identify risk or preventive factors that may contribute to outcome and incorporate them into a preventive study
8. Use computers to collect, manage and analyze data for analysis of basic associations
9. Analyze results and compose an understandable and presentable report of the results
10. Identify whom to contact regarding additional clinical, biomedical, statistical and programmatic expertise
11. Interpret results to guide public health policy

## Course Requirements

For MPH students admitted Fall 2014 or later. Students admitted prior to Fall 2014 should refer to the requirements in place the year they were admitted.

CORE (18 s.h.)

<a href="#">BIOS:5110 (171:161)</a> Introduction to Biostatistics	3 s.h.
<a href="#">CBH:5105 (172:101)</a> Introduction to Health Promotion and Disease Prevention	3 s.h.
<a href="#">EPID:4400 (173:140)</a> Epidemiology I: Principles	3 s.h.
<a href="#">MPH:5100 (170:101)</a> Introduction to Public Health	3 s.h.
<a href="#">OEH:4240 (175:197)</a> Global Environmental Health	3 s.h.

One of these:

<a href="#">HMP:4000 (174:102)</a> Introduction to U.S. Health Care System	3 s.h.
--	--------

[HMP:5005 \(174:200\)](#) Introduction to Health Care Organization and Policy 3 s.h.

PRACTICUM (3 s.h.)

[MPH:7000 \(170:299\)](#) M.P.H. Practicum Experience 3 s.h.

SUBTRACK CORE (19-21 s.h.)

[EPID:5241 \(173:241\)](#) Statistical Methods in Epidemiology 4 s.h.

[EPID:5540 \(173:154\)](#) Surveillance Mechanisms and Applications 2 s.h.

[EPID:5580 \(173:158\)](#) Public Health Laboratory Techniques 1 s.h.

[EPID:5600 \(173:160\)](#) Introduction to Epidemiology Data Management and Analysis 3 s.h.

[EPID:6400 \(173:240\)](#) Epidemiology II: Advanced Methods 4 s.h.

One of these:

[EPID:4450 \(173:145\)](#) Public Health Data 2 s.h.

[EPID:4990 \(173:199\)](#) Practicing Evidence-Based Public Health 3 s.h.

One of these (Bioscience):

[PATH:5270 \(069:270\)](#) Pathogenesis of Major Human Diseases 3 s.h.

[PATH:8133 \(069:133\)](#) Introduction to Human Pathology for Graduate Students 4 s.h.

ELECTIVES (2 s.h.)

Students earn at least 2 s.h. in elective courses (or 5 s.h. if they substitute an elective for the bioscience requirement). At least 3 s.h. of elective credit must be earned in courses offered by the Department of Epidemiology (prefix EPID) or in one of the following courses.

[EPID:4120 \(173:134\)](#) Public Health Nutrition 3 s.h.

[EPID:4314 \(173:142\)](#) Field Experiences in Public Health 1 s.h.

[EPID:5200 \(172:120\)](#) Principles of Public Health Informatics 3 s.h.

[EPID:5570 \(173:157\)](#) Zoonotic Diseases 3 s.h.

[EPID:5550 \(173:155\)](#) Diagnostic Microbiology for Epidemiology 3 s.h.

[EPID:5590 \(173:159\)](#) Applied Infectious Disease Epidemiology 2 s.h.

[BIOS:6210 \(171:242\)](#) Applied Survival Analysis 3 s.h.

[BIOS:6310 \(171:174\)](#) Introductory Longitudinal Data Analysis 3 s.h.

## Non-Course Program Requirements

### Epidemiology Seminar

Every week during the academic year, Epidemiology Seminar provides a forum for speakers to present information or research pertaining to diverse topics in epidemiology. Seminars generally will be scheduled Thursdays from 11:30-12:30. The 2014-2015 seminar series is coordinated by Dr. James Torner, Dr. Jennifer Robinson and Kayla Dreeszen (PhD student). Information about the schedule is distributed each semester.

MPH students are required to achieve at least 80% attendance at the Department of Epidemiology Seminar for 3 semesters.

## **Epidemiology Journal Club**

Every other week during the academic year the Journal Club meets to discuss articles of interest in the field. Journal Club will be scheduled on alternate Fridays from 10:30-11:20 a.m. The 2014-2015 Journal Club is coordinated by Dr. Elaine Smith, Dr. Margaret Chorazy, and Caitlin Smith (PhD Student). Information about the schedule is distributed to students each semester.

MPH students are required to achieve at least 80% attendance at the Department of Epidemiology Journal Club for 3 semesters.

## **Scientific Poster Requirement**

Every MPH – Epidemiology subtrack student is required to present at least one scientific poster at the department level and are encouraged to participate in international, national, regional, state, or university level, at some point in the student's program before graduation. The poster must be submitted for review to the student's adviser or thesis/preceptorship mentor a minimum of ten days before the poster session. A Department of Epidemiology poster session is held at the end of the fall and spring semesters. See Appendix C for poster guidelines.

## **MPH Academic Standing**

### **Minimum GPA Requirements**

MPH students must earn  $\geq$  B- (2.67) on each of the 6 MPH core courses and  $\geq$  3.00 cumulative GPA on the six MPH core courses. When necessary, a student may repeat a course to meet this requirement.

MPH students are also required to maintain  $\geq$  3.00 cumulative GPA. A student with less than a 3.00 G.P.A. after 8 or more semester hours of graduate work will be placed on probation by the MPH program. If after completing at least 8 additional semester hours of graduate credit, the student's GPA remains below 3.0, the student will be denied permission to re-register.

A cumulative GPA of 3.00 or above is required for MPH students to graduate.

### **Master's Residence Requirement**

Under most circumstances, a minimum of 24 semester hours must be completed after admission to the department and under the auspices of the University of Iowa. Extramural registration completed after admission may be accepted for residence under specific circumstances. For a listing of these circumstances, refer to the [Manual of Rules and Regulations of the Graduate College, Section X, D](#)

## MS – Epidemiology Degree Information

### Degree Objectives

This program is designed to prepare students for professional careers in which specialized knowledge of epidemiologic methods and analytic techniques are useful. Placement possibilities include local, state, or federal health agencies, academic units within schools of public health or colleges of health sciences, or private enterprise.

Graduates of the Epidemiology M.S. program will be able to:

1. Define the concepts and contents of epidemiology
2. Formulate a research hypothesis
3. Determine study aims, objectives, and appropriate study design to address the hypothesis
4. Describe health and disease measurement in clinical and community populations
5. Identify risk and/or preventive factors that may contribute to outcome to incorporate them into a research study
6. Collect, manage, and analyze data for evaluation of hypotheses
7. Use questionnaires and measurement instruments in collection of data
8. Use existing databases to provide background or supportive data to address research questions
9. Analyze data and compose an understandable and presentable report of the results
10. Perform ethical research

### Required Courses:

#### CORE (30-31 s.h.)

<a href="#">EPID:5241 (173:241)</a> Statistical Methods in Epidemiology	4 s.h.
<a href="#">EPID:4400 (173:140)</a> Epidemiology I: Principles	3 s.h.
<a href="#">EPID:5600 (173:160)</a> Introduction to Epidemiology Data Management and Analysis	3 s.h.
<a href="#">EPID:5610 (173:161)</a> Intermediate Epidemiology Data Analysis with SAS and R	3 s.h.
<a href="#">EPID:6400 (173:240)</a> Epidemiology II: Advanced Methods	4 s.h.
<a href="#">BIOS:5110 (171:161)</a> Introduction to Biostatistics	3 s.h.
<a href="#">MPH:6100 (170:200)</a> Essentials of Public Health	1 s.h.

One of these:

<a href="#">PATH:5270 (069:270)</a> Pathogenesis of Major Human Diseases	3 s.h.
<a href="#">PATH:8133 (069:133)</a> Introduction to Human Pathology for Graduate Students	4 s.h.

One of these:

<a href="#">EPID:6550 (173:255)</a> Epidemiology of Infectious Diseases	3 s.h.
<a href="#">EPID:6600 (173:260)</a> Epidemiology of Chronic Diseases	3 s.h.

One of these:

<a href="#">EPID:5950 (173:195)</a> Preceptorship in Epidemiology (for nonthesis students)	3 s.h.
--	--------

[EPID:7000 \(173:300\)](#) Thesis/Dissertation (for thesis students, may be taken twice) 3 s.h.

## **ELECTIVES (8-9 s.h.)\***

\*Students must earn a minimum of 5 s.h. in elective course work from Department of Epidemiology courses (prefix EPID) and 2 s.h. in additional graduate course work pertinent to the 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.

<a href="#">BIOS:6210 (171:242)</a> Applied Survival Analysis	3 s.h.
<a href="#">BIOS:6310 (171:174)</a> Introductory Longitudinal Data Analysis	3 s.h.
<a href="#">CBH:5220 (172:150)</a> Health Behavior and Health Education	3 s.h.
<a href="#">HMP:4000 (174:102)</a> Introduction to the U.S. Health Care System	3 s.h.
<a href="#">OEH:4240 (175:197)</a> Global Environmental Health	3 s.h.

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

## **Non-Course Program requirements**

### **Epidemiology Department Seminar**

Every week during the academic year, Epidemiology Seminar provides a forum for speakers to present information or research pertaining to diverse topics in epidemiology. Seminars generally will be scheduled Thursdays from 11:30-12:30. The 2014-2015 seminar series is coordinated by Dr. James Torner, Dr. Jennifer Robinson, and Kayla Dreeszen (PhD Student). Information about the schedule is distributed each semester.

M.S. students are required to achieve at least 80% attendance at the Department of Epidemiology Seminar for 3 semesters.

### **Journal Club**

Every other week during the academic year the Journal Club meets to discuss articles of interest in the field. Journal Club will be scheduled on alternate Fridays from 10:30-11:20 a.m. The 2014-2015 Journal Club is coordinated by Dr. Elaine Smith, Dr. Margaret Chorazy, and Caitlin Smith (PhD Student). Information about the schedule is distributed to students each semester. M.S. students are required to achieve at least 80% attendance at the Department of Epidemiology Journal Club for 3 semesters.

### **Scientific Poster Requirement**

Every Epidemiology M.S. 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 in the student's program before graduation. The student's adviser or thesis/preceptorship mentor can help determine the suitability and timeline for the poster presentation.

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

For M.S. thesis students, this 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 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 adviser or thesis/preceptorship mentor a minimum of ten days before the poster session. A Department of Epidemiology poster session is held at the end of the fall and spring semesters.

### **Human Subjects Protections (IRB) Certification**

MS and PhD students are required to provide evidence that they have completed an approved education in human subjects protections program. 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 at the University of Iowa's [Certification in Human Subject Protections](#) website.

### **MS Academic Standing**

#### **Minimum Academic Requirements**

MS students are required to earn  $\geq 2.75$  cumulative GPA. A student with less than a 2.75 G.P.A. after 8 or more semester hours of graduate work will be placed on probation by the Graduate College. If after completing at least 8 additional semester hours of graduate credit, the student's GPA remains below 2.75, the Graduate College will deny the student permission to register. Refer to Sec. IV. of the [Manual of Rules and Regulations of the Graduate College](#) for details on probation and dismissal standards, procedures, and appeals.

M.S. students who receive more than six semester hours of C+ or lower on College of Public Health and required courses (including any transfer hours) will be dismissed from the program. A student may appeal the dismissal in writing to the head of the department. Student appeals must be voted on by the department faculty within two semesters, including summer session, from the end of the semester in which the last C+ or lower grade was received.

#### **Master's Residence Requirement**

Under most circumstances, a minimum of 24 semester hours must be completed after admission to the department and under the auspices of the University of Iowa. Extramural registration completed after admission may be accepted for residence under specific circumstances. For a listing of these circumstances, refer to the [Manual of Rules and Regulations of the Graduate College, Section X, D](#)

#### **Changing thesis/non-thesis designation**

A student will remain in the M.S. program designation (thesis or non-thesis) to which the student was admitted unless the student petitions the department to change designations, and approval is granted. This must be done prior to the semester when the student takes the M.S. Final Examination. A student wishing to petition should contact Kim Williams.

## MS Degree without Thesis

### Rules for Preceptorship Credit

Preceptorships are guided learning experiences through a quantitative, research-oriented project and not an independent study activity. Topics and activities must be within the domains of public health and epidemiology and they must be in line with the general plans and goals of the student. Preceptorships are not limited to any particular geographic site.

Preceptorships should have a minimum of 30 hours of total activity for each semester-hour of credit sought (minimum of 3 credits [i.e. 90 hours of activity]).

#### Preceptorship course director

One member of the Epidemiology faculty is designated each year to oversee preceptorship experiences. Dr. Audrey Saftlas is the Preceptorship Course Director for the 2014-2015 academic year.

#### Preceptorship advisor

The preceptorship advisor is the faculty member who directly supervises the student's project. It is preferred that the advisor be a primary faculty member in the Department of Epidemiology (see Appendix A for the list of primary faculty). However, a secondary faculty member or non-Epidemiology faculty member may be the advisor as long as a primary faculty member agrees to jointly advise the project. In this case, the primary faculty member is designated the "advisor-of-record". It is the student's responsibility to find advisor(s). The student registers for the preceptorship under the advisor-of-record's instructor number.

#### Prior to starting the preceptorship

The student completes a [preceptorship prospectus](#) proposal form which must be approved by her/his preceptorship advisor. Items to be included are: goals, specific aims, the name of the preceptor, the sponsor of the preceptor, the amount of time each week devoted to the activity and to meeting with the preceptor, the general nature of the activities, and the expected outcome or product at the end of the preceptorship. A copy of the prospectus should be submitted to Kim Williams and approved by the Preceptorship Director before the student begins the preceptorship.

The student will produce a publication-quality report summarizing his/her experience with epidemiologic research and data analysis. After the advisor receives the report, he/she will complete the preceptorship evaluation form and submit it to Kim Williams.

#### Grading

The student, with the advisor's agreement, will select the grading preference on the prospectus form (S/U or letter grade). At the end of the preceptorship the preceptorship advisor or advisor-of-record will assign the final grade.

## Master’s Final Examination

The master’s examination is a written in-class examination that is 2-3 hours in length and is multiple choice, short essay, and problem solving. The examination is offered twice per year, and is typically taken during the semester the student plans to receive the degree. The examination may be repeated once. Failing the examination twice will result in dismissal from the program.

### 2014-2015 MS Exam Schedule

Fall exam.....	Nov. 5
Spring exam.....	April 1

The examination is a test over competencies expected of graduates at the M.S. level. Core competencies are listed on pp. 19 of this student handbook. It is recommended that students review material from epidemiology core courses (EPID:4400 Epidemiology I; EPID:6400 Epidemiology II; EPID:5241 Statistical Methods in Epidemiology and/or BIOS: Applied Categorical Data Analysis; and BIOS: Design & Analysis of Biomedical Studies). You may contact Dr. Lynch two weeks prior to the exam to access the ICON Epi I coursework to review before the exam.

## MS Degree with Thesis

The goal of the thesis is a document that is publishable in a peer-reviewed journal. Original thought is required in the formulation and conduct of the research, although neither data collection nor data analysis is strictly required.

The student is required to comply with Graduate College guidelines with regard to preparation of the thesis and meeting Graduate College thesis deadlines. Students should refer to the Graduate College [Thesis Resources](#) for regulations and resources for preparation of the master’s thesis. Thesis costs are the responsibility of the student, including associated costs such as copying.

## Examining Committee

The student is responsible for obtaining a thesis adviser who is interested in the area of research. The thesis adviser must be a Department of Epidemiology primary or secondary faculty member, but not necessarily the student’s academic adviser. An adjunct faculty who is a member of the graduate faculty may serve as a co-thesis adviser with a primary or secondary faculty member.

The thesis committee for the master’s degree consists of at least three faculty members (typically defined as faculty with the title of assistant professor, associate professor, or professor) as recommended by the student and approved by the student’s academic advisor. The committee must include:

- At least two faculty members who have primary appointments in Epidemiology. (Note: must be tenure track)
- At least one faculty member who does not hold a primary appointment in Epidemiology.

This committee must approve the topic area and provide direction during the preparation of the thesis by participation in the evaluation, revision, and approval of the thesis prospectus.

### **Thesis Prospectus**

The thesis prospectus describes the rationale for the proposed research and outlines its basic methods. It should be no more than 25 pages. The prospectus is submitted to the committee members prior to initiation of the research and at least one week prior to committee evaluation of the prospectus. A special meeting of the student's committee to evaluate the prospectus and unanimous, written approval by all committee members is required on a [Thesis Prospectus Approval form](#).

### **Thesis Format**

The format of the thesis document should comply with all Graduate College guidelines. Refer to the [Graduate College Thesis Manual](#).

### **Thesis Defense**

The M.S. thesis defense is an oral presentation of the purpose, methods, and results of the thesis research. It is scheduled by the student in consultation with the adviser and committee members. A copy of the thesis must be delivered to the committee members two weeks prior to the defense. A failure on the M.S. thesis defense is interpreted as an insufficient attempt at the thesis. The committee may encourage the student to polish the thesis or to abandon it. The thesis defense may be repeated once.

If the thesis defense receives a passing evaluation, the student must make any corrections and modifications to the thesis as required by the examining committee and obtain the signatures of the examining committee on the thesis. The thesis can then be submitted to the Graduate College to meet the final deposit requirement.

### **Thesis Deadlines**

The following timeline must be adhered to for successful completion of a dissertation

- a. At least 4 weeks before the final deposit the dissertation defense should be held
- c. At least 3 weeks before the final deposit the committee should receive the proposed final draft with track changes and a description of responses to committee questions.
- d. At least 1 week prior to the final deposit the complete dissertation and signed abstract and signature page must be submitted to the Department. **[The student is responsible to submit the final copies of all paperwork to the Grad College. This has always been the rules/regulations and can also be found in the Graduate College Thesis Manual]**

Deadlines are set by the Graduate College for the initial and final submissions of the thesis to the Graduate College in Gilmore Hall:

## Fall 2014

First Deposit .....Nov. 6

Final Deposit .....Dec. 10

## Spring 2015

First Deposit .....March 26

Final Deposit .....May 6

## Summer 2015

First Deposit .....July 6

Final Deposit .....July 27

## Degree Requirements: M.S. - Clinical Investigation

The program, which is offered in collaboration with the University's [Institute for Clinical and Translational Science](#), is designed for clinicians interested in pursuing careers in clinical research. It includes in-depth training in biostatistics, epidemiology, research ethics, and academic survival skills as well as didactic training applicable to clinical research careers. Graduates of the program are able to critically evaluate clinical literature, write competitive grant proposals, design and conduct clinical research projects, work effectively with other researchers and support staff, and disseminate research results through manuscripts and presentations.

The Master of Science program in clinical investigation requires 30 s.h. of graduate credit. In addition to completing the program's required course work, M.S. students must write a thesis in the form of a manuscript, or a grant proposal for a National Institutes of Health (NIH) career award or its equivalent, with oral defense

### Admissions

Admission to the MS in Clinical Investigation program requires, at a minimum either (1) receipt of a doctoral-level degree (MD, DO, DDS, PhD, PharmD, DVM) in a clinical discipline and admission for graduate study at The University of Iowa's College of Public Health or (2) classification as a candidate within the Medical Scholars Training Program (MSTP). Admission to the CPH requires a bachelor's degree with at least a 3.0 GPA (or, in case of foreign-trained applicants, an outstanding doctoral training record), a statement of interest, and three letters of recommendation. The applicant will also be required to take GRE, MCAT or DAT exams with performance assessed by the Admissions Committee. Eligible prospective students will also need to submit a CV and a personal statement outlining their career and research goals.

Applicants will be accepted into the MS in Clinical Investigation program based on credentials, prior training, and research training plans. Individuals with superior academic backgrounds, commitment to clinical research training, available time for research and coursework, and departmental commitment will be preferentially admitted to the program. If a prospective student has deficiencies in any one of the admission criteria, but is exceptionally strong in all other areas, admission may still be considered.

## Course Requirements

Applicants to the program must have completed the following course work.

BIOS:5110 (171:161) Introduction to Biostatistics (or equivalent)	3 s.h.
EPID:4400 (173:140) Epidemiology I: Principles (or equivalent)	3 s.h.
Courses in pathology, physiology, and/or pharmacology	6 s.h.

Students who are admitted to the program with deficiencies in the required 6 s.h. of pathology, physiology, and/or pharmacology may complete courses that fulfill the requirement once they have enrolled in the program.

## CORE COURSES

Students must complete all of the following core courses (20 s.h.).

EPID:5241 (173:241) Statistical Methods in Epidemiology	4 s.h.
EPID:5500 (173:150) Introduction to Clinical Epidemiology	3 s.h.
EPID:5610 (173:161) Intermediate Epidemiology Data Analysis with SAS and R	3 s.h.
EPID:6000 (173:200) Independent Study in Epidemiology	2 s.h.
EPID:6150 (173:215) Writing for Medical Journals	1 s.h.
EPID:6400 (173:240) Epidemiology II: Advanced Methods	4 s.h.
EPID:6950 (173:295) Clinical Research Ethics	2 s.h.
MPH:6100 (170:200) Essentials of Public Health	1 s.h.

## ELECTIVES

Students must earn a minimum of 10 s.h. in elective course work, which must include at least 3 s.h. in focus area electives. In addition to the focus area electives, the following courses are recommended as elective course work.

EPID:5214 (173:214) Meta-Analysis of Epidemiologic Studies	3 s.h.
--	--------

EPID:6100 (173:210) Writing a Research Protocol	3 s.h.
EPID:6900 (173:290) Design of Intervention and Clinical Trials	3 s.h.
EPID:6910 (173:291) Pharmacoepidemiology	3 s.h.

## Focus Area Electives

Students must complete at least 3 s.h. chosen from the following focus area electives.

Health Services Epidemiology  
 Nutrition Sciences  
 Epidemiology  
 Informatics  
 Community Studies  
 Statistical Methods  
 Outcomes in Health Services Research  
 Pharmacy Science

## Degree Requirements: Ph.D. – Epidemiology

The Ph.D. in Epidemiology is constructed to meet the department's philosophy of training. There is a substantial contribution from the Biostatistics Department so that the candidate is well-grounded in quantitative and analytical techniques as well as design and conduct of epidemiologic studies, demographic methods, and the management of large data sets. Courses in medical physiology and pathology are required to provide a basic understanding of disease processes. In addition, each student works with an adviser to develop an emphasis area that ensures substantive knowledge in a specific area which will generate important original research. An independent but finite research experience is required aside from the dissertation. Finally, relevant courses from elsewhere in the university, particularly in other College of Public Health departments, are encouraged.

### Degree Objectives

The primary goal of the doctoral program in the Department of Epidemiology is to prepare graduates for professional careers as scientists, teachers, and practitioners of epidemiologic methods. Career opportunities in epidemiology exist in academic institutions, local, state, and federal health agencies, and in commercial enterprises.

Graduates with the Ph.D. in Epidemiology will be able to:

- Master the M.S. degree objectives.
- Understand and be capable of using advanced statistical analysis methods appropriate for the study design and to control for confounding.
- Manage data collection and quality control in research data, including development of a questionnaire.
- Understand and demonstrate risk factors and disease processes in a specialized area.

- Review literature and conceptualize theoretical models of disease and causation and develop hypotheses building upon prior research.
- Conduct independent research including design, data collection, analysis, and translation into applied and theoretical constructs.
- Demonstrate the ability to write a proposal for grant funding.
- Demonstrate in writing and by oral presentation knowledge of epidemiological concepts and methods.
- Demonstrate in writing and by oral presentation the ability to explain research study design and results of student-initiated research and to defend the results and implications.

## Required Courses

NOTE: Modifications have been made in the Ph.D. requirements from previous years. The requirements listed here are for students who began their Ph.D. programs Fall 2014 or later. Students who began prior to 2014 should follow the requirements for the year they entered the program.

### CORE (39-41 s.h.)

EPID:5241 (173:241) Statistical Methods in Epidemiology	4 s.h.
EPID:4400 (173:140) Epidemiology I: Principles	3 s.h.
EPID:5600 (173:160) Introduction to Epidemiology Data Management and Analysis	3 s.h.
EPID:5610 (173:161) Intermediate Epidemiology Data Analysis with SAS and R	3 s.h.
EPID:6050 (173:205) Research in Epidemiology	3 s.h.
EPID:6100 (173:210) Writing a Research Protocol	3 s.h.
EPID:6400 (173:240) Epidemiology II: Advanced Methods	4 s.h.
EPID:7400 (173:340) Epidemiology III: Theories	3 s.h.
BIOS:5110 (171:161) Introduction to Biostatistics	3 s.h.
BIOS:6210 (171:242) Applied Survival Analysis	3 s.h.
AND/OR	
BIOS:6310 (171:174) Longitudinal Data Analysis	3 s.h.
MPH:6100 (170:200) Essentials of Public Health	1 s.h.

One of these:

PATH:5270 (069:270) Pathogenesis of Major Human Diseases	3 s.h.
PATH:8133 (069:133) Introduction to Human Pathology for Graduate Students	4 s.h.

One of these:

HHP:3500 (027:130) Human Physiology	3 s.h.
MPB:5153 (072:153) Graduate Physiology	4 s.h.

### ELECTIVES (23-26 s.h.)

Declared emphasis area (approved by advisor and PhD Plan of Study Committee)	20-23 s.h.
Epidemiology elective outside emphasis area	3 s.h.

## DISSERTATION (10-18 s.h.)

EPID:7000 (173:300) Dissertation

10-18 s.h.

**TOTAL HOURS REQUIRED (minimum): 78 s.h.**

### **Emphasis Areas**

The student must declare an emphasis area. With the emphasis area coordinator, the student will develop a plan of study that insures substantive knowledge in a specific area in order to generate important original research. At the discretion of the emphasis area coordinator and Plan of Study Committee, the emphasis area “electives” may be partitioned into required emphasis area courses and a menu of discretionary courses. The department has several areas of specialization for our PhD students. These specialty areas are; Cancer Control, Cancer Etiology, Infectious Disease, Occupational and Environmental Epidemiology, and Pharmacoepidemiology. The coursework required for these emphasis areas can be found at:

### **Non-Course Program Requirements**

#### **Preceptorship Requirement**

Doctoral students who did not complete the M.S. Epidemiology program at UI will be required to take EPID:5950 Preceptorship or demonstrate that an equivalent course has been completed. This requirement must be fulfilled within one year of admission to the PhD program.

#### **Department of Epidemiology Seminar**

Every week during the academic year, Epidemiology Seminar provides a forum for speakers to present information or research pertaining to diverse topics in epidemiology. Seminars generally will be scheduled Thursdays from 11:30-12:30. The 2014-2015 seminar series is coordinated by Dr. James Torner, Dr. Jennifer Robinson, and Kayla Dreeszen (PhD Student). Information about the schedule is distributed each semester to the students.

PhD students are required to achieve at least 80% attendance at the Department of Epidemiology Seminar for 5 semesters. Attendance earned while enrolled as a MS student **does not** count towards the required 5 semesters.

#### **Journal Club**

Every other week during the academic year the Journal Club meets to discuss articles of interest in the field. Journal Club will be scheduled on alternate Fridays from 10:30-11:30 a.m. The 2014-2015 Journal Club is coordinated by Dr. Elaine Smith, Dr. Margaret Chorazy and Caitlin Smith (PhD Student). Information about the schedule is distributed to students each semester.

PhD students are required to achieve at least 80% attendance for 5 semesters. Attendance earned while enrolled as a MS student **does not** count towards the required 5 semesters.

## **Scientific Poster Requirement**

Every Epidemiology Ph.D. 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. The student's advisor or dissertation mentor can help determine the suitability and timeline for the poster presentation.

## **Seminar Presentations**

In addition to the dissertation defense, students are required to make a presentation at a Department of Epidemiology Seminar. It is recommended that the student do 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**

PhD students are required to provide evidence that they have completed an approved education in human subjects protections program. 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 at the University of Iowa's [Certification in Human Subject Protections](#) website.

## **PhD Academic Standing**

### **Minimum GPA Requirements**

PhD students are required to earn  $\geq 3.0$  cumulative GPA. A student with less than a 3.0 G.P.A. after 8 or more semester hours of graduate work will be placed on probation by the Graduate College. If after completing at least 8 additional semester hours of graduate credit, the student's GPA remains below 3.00, the Graduate College will deny the student permission to register. Refer to Sec. IV. of the [Manual of Rules and Regulations of the Graduate College](#) for details on probation and dismissal standards, procedures, and appeals.

Ph.D. students who receive more than six semester hours of C+ or lower on College of Public Health and required courses (including any transfer hours) will be dismissed from the program. A student may appeal the dismissal in writing to the head of the department. Student appeals must be voted on by the department faculty within two semesters, including summer session, from the end of the semester in which the last C+ or lower grade was received.

### **Restrictions on Students on Probation**

A student on probation will not be permitted to take the comprehensive or final exam, or receive any graduate degree or certificate.

### **Residence Requirement**

Following the first 24 semester hours of graduate work, a Ph.D. student must complete at the University of Iowa either (1) two full-time semesters of graduate work (9 or more s.h. each) *or* (2) three semesters of at least 6 s.h. each while the student holds an assistantship of at least one-third time which must be certified by the department as contributing to the student's doctoral program.

## PhD Qualifying Examination

Before being permitted to proceed to advanced courses in epidemiology, PhD students must qualify for the program by passing a PhD Qualifying Examination. The exam should be taken within one semester of admission to the Ph.D. program OR after the student has completed the epidemiology core courses (EPID:4400 Epidemiology I; EPID:6400 Epidemiology II; BIOS: Applied Categorical Data Analysis; or EPID:5241 Statistical Methods in Epidemiology and BIOS: Design & Analysis of Biomedical Studies).

The first component of the Qualifying Exam is the same as the M.S. final exam, which tests knowledge of the core competencies at the M.S. level. The core competencies are listed on pp. 25-26 of this handbook. It is expected that students will have achieved these competencies through courses and research experiences.

Students may only take the examination twice as a graduate student either as the M.S. Final Examination or as the Ph.D. Qualifying Examination.

The second component of the Qualifying Examination is the essay examination. This is a proctored examination in which the candidate responds to one or more essay questions that require demonstration of an understanding of epidemiological concepts, analytic thinking, and clear scientific writing.

Both examination components are considered by the faculty when making an overall pass/fail determination. If a candidate fails the Ph.D. Qualifying Examination on the first attempt, a candidate may be permitted to repeat either the first component or the second component, or both at the discretion of the faculty. Failing the examination on two occasions will result in disqualification or dismissal from the Ph.D. program.

To prepare for the exam, students are encouraged to review the 8 core competencies. The exam takes place on one day with the 3-hour exam in the morning and the 3-hour essay in the afternoon.

### Timetable

The examination is offered twice per year (fall semester and spring semester), in November and April. Students wishing to sit for the examination must inform Kim Williams by September 1 (for fall semester) or February 1 (for spring semester)

#### 2014-2015 PhD Qualifying Exam Schedule

Fall exam.....	Nov. 5
Spring exam.....	April 1

## Ph.D. Comprehensive Examination

The comprehensive examination can be taken after all required courses and most of the elective coursework has been completed for the Ph.D. degree.

The examination tests the student's ability to integrate, synthesize, and apply major epidemiologic and biostatistical concepts. This is accomplished by a take-home examination with two components: 1) the application of epidemiologic methods to the critique of 2-3 published articles; and 2) a synthesis of epidemiologic methods and concepts into the selection and defense of a study design within the student's emphasis area. An oral examination will follow the written take-home examination.

(See also Section XII K. in the [Manual of Rules and Regulations of the Graduate College](#).)

### Examining Committee

The student, in consultation with her/his adviser, will determine membership of the comprehensive examination committee.

- The committee must consist of at least five graduate faculty members (typically defined as faculty with the title of assistant professor, associate professor, or professor) which includes the adviser as chair.
  - At least three must be primary, secondary, or adjunct Epidemiology faculty
  - At least one must be a non-Epidemiology faculty member and have a primary affiliation in another College of Public Health department

Through the committee chair, the student will inform the committee of his/her chosen emphasis area. This may be a formal emphasis area or one that has been discerned as part of preparing for the dissertation. The committee will meet to:

- 1) Select 2-3 articles for the article critique.
  - a. The chair of the examination committee, in consultation with the committee, will select the 2-3 articles which will form the basis of the article critique portion of the examination. These articles should be about diverse topics and are not intended to reflect the student's emphasis area.
- 2) Pose a hypothetical research question and develop examination questions about the design and data analysis of a study to address the research question. Students will typically receive the examination articles and questions during the third week of October (for fall semester) or the fourth week of March (for spring semester).
  - a. The committee will pose a hypothetical research question and select 4-6 examination questions about study design and data analysis relevant to the hypothetical research question which the student will answer as part of the study design and analysis component of the examination. The student will have two weeks to complete the take-home examination.

The oral examination will follow within two weeks. It is the student's responsibility to schedule the time and place of the oral examination and confirm this with committee members. The intent to have the exam during the semester requires completion of a form in collaboration with the Graduate Coordinator and requires approval of the Graduate College. This form is to be completed at the beginning of the semester.

### **Content of the Examination**

There are two components to the take-home examination: I. article critique, and II. study design and analysis. The examination must be typewritten, double-spaced, with 1-inch margins and 12-point font. For component I, the student should provide 3-5 pages of typewritten critique per article. For component II, a 15-20 page paper is expected. Each component of the examination is described below.

Component I: Broadly apply epidemiological methods to the critique of 2-3 published articles.

The critique should include the following items as relevant:

- Identify the study design.
- Describe the strengths and weaknesses of the design as applied to the particular research topic.
- Describe the types of potential biases that may exist given the design and the particular research topic.
- Discuss the appropriateness of the statistical methods.
- Draws biological plausibility for any effect modification, if presented.
- Describe/identify the authors' main findings.
- Agree/disagree with the conclusions of the article based on the main findings and potential biases identified.
- In all cases, cite and summarize other literature that supports the student's logic.

Component II: Synthesize epidemiological methods and concepts into the selection and defense of a study design within the student's emphasis area. A full research proposal is *not* expected. Rather, committee members should identify 4-6 of the following topics to have the student specifically address in the 15-20 page document.

- Selection and defense of study design (including frequency of exposures and outcomes)
- Selection of subjects
- Sampling and recruitment
- Measurement of exposures and outcomes
- Definition and conceptualization of key variables
- Identification and justification of covariates, confounders, effect modifiers, and their corresponding measures
- Quality assurance
- Statistical methods – propose and defend model building to examine confounders, effect modifiers, and mediating variables

- Sample size/power/ or minimal detectable effect size
- Human Subjects/IRB

Oral examination. Committee members will typically ask the student questions to further probe aspects of the written document.

### **Timetable**

The comprehensive examination should be taken in the fall or spring semesters only. The student must be registered when you take the exam. It is up to the student to identify the committee members and determine the willingness to serve on the committee, as well as a mutually agreeable schedule for the exam. If the student plans to take your Ph.D. Comprehensive Examination the student must submit an [intent form](#) to Kim Williams at the beginning of the semester. It is the student's responsibility to schedule the time and place of the oral examination and confirm this with committee members and the Graduate Coordinator. The written exam in total is due at least one week before the oral exam and not greater than two weeks. Moving the date of the oral exam will require approval in advance.

### **Final Grade**

After the oral examination, the student's examination committee will recommend a grade of satisfactory, reservations, or unsatisfactory for the full examination (take-home plus oral). If the committee has reservations, additional requirements will be identified by the committee in writing to the student and the dean of the Graduate College. The committee will also establish a timeline for the removal of the reservations.

### **Re-examination**

The examination may be repeated only once.

### **Continuous Registration after Completion of the Comprehensive Examination**

A student is required to register each fall and spring semester after passing the Ph.D. comprehensive examination until the degree is awarded. If a student has no courses to take, the student can fulfill this requirement by registering for Graduate College course 000:002 Doctoral Continuous Registration. Tuition and fees for Doctoral Continuous Registration are the equivalent of 2 s.h. of coursework. For details, see Section XII-L. of the [Manual of Rules and Regulations of the Graduate College](#).

### **PhD Dissertation**

The goal of the dissertation is to produce a document that is publishable in a peer-reviewed journal. Original thought is required in the formulation and conduct of the research, although neither original data collection nor data analysis is strictly required. Students should refer to the Graduate College [Thesis Resources](#) website for specifics on Graduate College regulations and resources for preparation of doctoral dissertations.

The student is required to comply with Graduate College guidelines with regard to format and preparation of the dissertation and meeting Graduate College dissertation deadlines for graduation.

For this reason, the student should consult the [Manual of Rules and Regulations of the Graduate College](#) and posted deadlines, and refer to the [Graduate College Thesis Resources](#).

Dissertation costs are the responsibility of the student, including associated costs such as copying.

### **Examining Committee & Dissertation Guidelines**

The student is responsible for obtaining a dissertation adviser who is interested in the intended area of research. The dissertation adviser must be a graduate faculty member of the Department of Epidemiology (primary or secondary), but not necessarily the student's academic adviser. Adjunct faculty members may serve as a co-dissertation adviser with a primary or secondary faculty member, as long as the adjunct faculty member is a member of the graduate faculty (typically defined as having the title of assistant professor, associate professor, or professor).

The dissertation committee must consist of at least five members (4 of these members must be University of Iowa tenure/tenure track and 2 of the four must be from the student's home dept.) as recommended by the student and approved by the student's dissertation adviser. Anyone not on the tenure track line has to be approved by the grad college to serve on the committee. These members shall include:

- at least two members who hold primary appointments in the Department of Epidemiology
- at least one member with either a primary or secondary appointment in one of the other departments in the College of Public Health; At least one member-s must have no appointment in the Department of Epidemiology. It is advisable that the dissertation committee be formed early in the student's PhD course of study and it is anticipated that the committee will meet several times.

The dissertation committee must approve the topic area and provide direction during the preparation of the dissertation by participation in the evaluation, revision, and approval of the dissertation prospectus. The committee will also decide whether the three-manuscript option is chosen.

### **Dissertation Prospectus**

The dissertation prospectus describes the rationale for the proposed research and outlines its basic methods. It should be no more than 25 pages (single spaced). The prospectus is submitted to the committee members prior to initiation of the research and at least one week prior to committee evaluation of the prospectus. Unanimous, written approval of the prospectus is required on the [Thesis/Dissertation Prospectus Approval form](#) at a special meeting of the student's committee to evaluate the prospectus.

## **Dissertation Format**

Students should refer to the Graduate College [Thesis Manual](#) for formatting templates and specifics on Graduate College regulations and resources for preparation of doctoral dissertations.

## **Dissertation Defense**

The work for the degree culminates in a final oral examination (dissertation defense) administered on campus. This defense should include;

- 1) a critical inquiry into the purposes, methods, and results of the investigation—not a mere recapitulation of the procedures followed
- 2) intensive questioning on areas of knowledge constituting the immediate context of the investigation.

A copy of the dissertation should be delivered to committee members at least two weeks prior to the examination.

The final examination (dissertation defense) may not be held until the next session after passing the comprehensive examination nor until the dissertation is accepted for the first deposit by the Graduate College; however, a student must pass the final examination no later than five years after passing the comprehensive examination. Failure to meet this deadline will result in reexamination of the student to determine his or her qualifications for taking the final examination.

The duration of dissertation defense should be scheduled for a minimum of 3 hours instead of the traditional 2 hours.

Final examinations for the doctorate are open to the public. Members of faculty of the Graduate College are especially invited to attend and, subject to the approval of the chair, to participate in the examination.

The report of the final examination is due in the Graduate College office not later than 48 hours after the examination. The final examination will be evaluated as satisfactory or unsatisfactory. Two unsatisfactory votes will make the committee report unsatisfactory. In case of a report of unsatisfactory in the final examination, the candidate may not present himself or herself for reexamination until the next session. The examination may be repeated only once.

If the dissertation defense receives a passing evaluation, the student must make any corrections and modifications to the dissertation as required by the examining committee, and obtain the signatures of the examining committee on the dissertation. The dissertation can then be submitted to the Graduate College to meet the final deposit requirement.

## Timeline

The following timeline must be adhered to for successful completion of a dissertation

- a. At least 6 weeks before final deposit the student will do their presentation of their dissertation during seminar hour.
- b. At least 4 weeks before the final deposit the dissertation defense should be held
- c. At least 3 weeks before the final deposit the committee should receive the proposed final draft with track changes and a description of responses to committee questions.
- d. At least 1 week prior to the final deposit the complete dissertation and signed abstract and signature page must be submitted to the Department. **[The student is responsible to submit the final copies of all paperwork to the Grad College. This has always been the rules/regulations and can also be found in the Graduate College Thesis Manual]**

## Submission Deadlines

Deadlines are set by the Graduate College for the initial and final submissions of the dissertation to the Graduate College in Gilmore Hall:

### Fall 2014

First Deposit .....Nov. 6  
Final Deposit .....Dec. 10

### Spring 2015

First Deposit .....March 26  
Final Deposit .....May 6

### Summer 2015

First Deposit .....July 6  
Final Deposit .....July 27

## Three-Manuscript Option

In the Department of Epidemiology, a PhD dissertation may consist of a minimum of three manuscripts on a related theme that the dissertation committee deems suitable for publication. The scope of the manuscripts shall be negotiated with the dissertation committee in advance. Students are encouraged to pursue the three-paper dissertation option in order to obtain maximum publications

### Composition of the three-manuscript dissertation:

The dissertation will contain at least the following three sections:

- An introductory chapter
- Chapters containing the body of publishable manuscripts (one per chapter)
- A concluding chapter

The introductory chapter will:

- Explain the larger problems addressed in the research
- Address the significance of the proposed program of research to the field of epidemiology
- Discuss the purpose and major goals of the research and (if requested)
- Contain a comprehensive literature review of the research area that covers all three manuscripts, a detailed discussion of the methodology relevant to the three manuscripts, and overall description of available data sources/data collection methods.

The concluding chapter will:

- Explain how the manuscripts answer the larger problems mentioned in the introduction
- Report on any aspects of the research not included in the manuscripts but worthy of discussion
- Discuss the potential for future research.

### **Formatting Guidelines:**

In general, all instructions given in the [Thesis Manual](#) published by the University of Iowa Graduate College are to be followed when preparing the dissertation. To satisfy the format-check procedure of the Graduate College, the dissertation must appear in all ways as a typical dissertation. For example:

- A chapter that contains a manuscript must be formatted as if it were a chapter in a typical thesis or dissertation.
- The chapters must each contain a title and be numbered consecutively.
- The format of subheadings must be consistent from chapter to chapter.
- The same referencing style must be used throughout the dissertation regardless of whether the articles are submitted to different journals with different referencing styles.
- There can be only one abstract, at the beginning of the dissertation, and one bibliography, at the end of the dissertation. However, each chapter containing a manuscript could include an initial subheading titled, “Summary of Findings” (or equivalent terminology) that would, in essence, be the abstract included with that article.

The remainder of the policy is expressed as responses to “Frequently Asked Questions” below. The answers to these FAQs should be considered part of the policy.

### **Frequently Asked Questions:**

*Q: How should the student obtain advance permission for the three papers?*

A: Approval for the three paper topics will be obtained in the same way that approval is obtained for the topic area under the traditional dissertation option. This typically involves submitting a written proposal for discussion and approval at one or more proposal meetings with the dissertation committee. It may be desirable to have two such meetings with the goal of the first being to obtain concept approval for the scope of the papers and the second to obtain approval for the detailed methods.

*Q: How does the three-paper option affect the dissertation timeline?*

A: Because the scope of the manuscripts must be negotiated in advance, it is advisable that the proposal meeting be held early in the student's PhD program.

*Q: Will the dissertation committee approve for inclusion in the three-paper dissertation work I have already started while enrolled in the PhD program but before obtaining approval by the Dissertation Committee?*

A: It is possible but unlikely. This is because there are nearly always modifications to design and methods that must be made based on discussions at the proposal meeting(s).

*Q: Can one or more of the papers be something I have already written?*

A: The work for each paper must be completed while enrolled in the Epidemiology PhD degree program.

*Q: Who should be the first author on the papers?*

A: The student is expected to fulfill the role of first author on all three papers. A paper will not qualify for inclusion in a dissertation if it is not possible for the student to lead the research in a way that would justify first authorship.

*Q: Will all dissertation committee members be authors on the three papers?*

A: Authorship by committee members should not be assumed. Paper authorship should be determined by usual authorship guidelines in the professional journals to which the papers are being submitted.

*Q: Can a paper be submitted for publication before my dissertation defense?*

A: It is important that all committee members approve a manuscript before it is submitted for publication. The dissertation committee may decide that extra meetings are required if the student intends to submit one or more papers before the defense.

*Q: Must each paper contain data analysis?*

A: This is for the dissertation committee to decide. It is possible that a nonquantitative research synthesis or a theoretical paper would be accepted, for example.

*Q: Where does my literature review go?*

A: If one of the manuscripts will be a review article the literature review may be one of the three chapters containing the body of publishable manuscripts. If not, the literature review can appear in the introductory chapter or as an additional chapter.

*Q: How long should the three papers be?*

A: Word limits should be compatible with typical journals in the field.

*Q: What does it mean to be "submission-ready"?*

A: The three papers should be in a format ready for submission to a peer-review journal in terms of organization, length, number of tables and figures, etc.

*Q: What about all the supporting tables that I will produce in my research? Where do they go?*

A: Good documentation practices are part of the dissertation experience. Supporting tables should be compiled in accompanying technical reports or appendices.

## Appendix A

### Department of Epidemiology Faculty Directory

Primary Faculty	Title	Office	Phone	Email
Burns, Trudy	Professor	S418 CPHB	384-1550	<a href="mailto:trudy-burns@uiowa.edu">trudy-burns@uiowa.edu</a>
Carnahan, Ryan	Associate Professor	S437 CPHB	384-1556	<a href="mailto:ryan-carnahan@uiowa.edu">ryan-carnahan@uiowa.edu</a>
Charlton, Mary	Assistant Professor	S453 CPHB	384-1561	<a href="mailto:mary-charlton@uiowa.edu">mary-charlton@uiowa.edu</a>
Chorazy, Margaret	Associate	S449 CPHB	384-1559	<a href="mailto:margaret-chorazy@uiowa.edu">margaret-chorazy@uiowa.edu</a>
Chrischilles, Elizabeth	Professor	S424 CPHB	384-1575	<a href="mailto:e-chrischilles@uiowa.edu">e-chrischilles@uiowa.edu</a>
Lynch, Charles	Professor/ Associate Head for Research	S447 CPHB	384-1558	<a href="mailto:charles-lynch@uiowa.edu">charles-lynch@uiowa.edu</a>
Petersen, Christine	Associate Professor	S429 CPHB	384-1573	<a href="mailto:christine-petersen@uiowa.edu">christine-petersen@uiowa.edu</a>
Robinson, Jennifer	Professor	S455CPHB	384-1563	<a href="mailto:jennifer-g-robinson@uiowa.edu">jennifer-g-robinson@uiowa.edu</a>
Romitti, Paul	Professor	S416 CPHB	384-1549	<a href="mailto:paul-romitti@uiowa.edu">paul-romitti@uiowa.edu</a>
Ryckman, Kelli	Assistant Professor	S414 CPHB	384-1546	<a href="mailto:kelli-ryckman@uiowa.edu">kelli-ryckman@uiowa.edu</a>
Saftlas, Audrey	Professor	S427 CPHB	384-1554	<a href="mailto:audrey-saftlas@uiowa.edu">audrey-saftlas@uiowa.edu</a>
Smith, Elaine	Professor	S451 CPHB	384-1560	<a href="mailto:elaine-smith@uiowa.edu">elaine-smith@uiowa.edu</a>
Snetselaar, Linda	Professor	S425 CPHB	384-1553	<a href="mailto:linda-snetselaar@uiowa.edu">linda-snetselaar@uiowa.edu</a>
Torner, James	Professor/ Department Chair	S441A CPHB	384-1542	<a href="mailto:james-torner@uiowa.edu">james-torner@uiowa.edu</a>
Wallace, Robert	Professor	S422 CPHB	384-1551	<a href="mailto:robert-wallace@uiowa.edu">robert-wallace@uiowa.edu</a>

## Appendix B

### Department of Epidemiology Executive Staff

Staff	Office	Phone	Email
<u>Anderson, Marilyn</u> Department Secretary	S441 CPHB	384-1541	<a href="mailto:marilyn-anderson-1@uiowa.edu">marilyn-anderson-1@uiowa.edu</a>
<u>Hogue, Michele</u> Human Resources Coordinator Contact Michele with questions concerning employment and payroll.	S412 CPHB	384-1545	<a href="mailto:michele-hogue@iowa.edu">michele-hogue@iowa.edu</a>
<u>Lenoch, Geri</u> Contracts Administrator	S410 CPHB	384-1576	<a href="mailto:geralyn-lenoch@uiowa.edu">geralyn-lenoch@uiowa.edu</a>
<u>Rohret, Cindy</u> Department Administrator	S445 CPHB	384-1543	<a href="mailto:cindy-rohret@uiowa.edu">cindy-rohret@uiowa.edu</a>
<u>Williams, Kim</u> Student Affairs and Curriculum Administrator Contact Kim with questions regarding curriculum and academic requirements.	S408 CPHB	384-1544	<a href="mailto:kimberly-s-williams@uiowa.edu">kimberly-s-williams@uiowa.edu</a>

## Appendix C

### Guidelines for Poster Presentations

Free standing bulletin boards (4' x 6') and push pins are generally what is available for displaying posters. Lettering, symbols, and graphics should be visible and readable 3-4 feet away.

Poster contents:

1. Aims
2. Background
3. Methods
4. Results
5. Summary or Conclusions

The poster should provide description, definitions, and scientific content to evaluate:

6. What is the question or specific aim of the investigation?
7. Who is studied?
8. What is measured?
9. How is the data analyzed?
10. What are the findings?
11. Are they significant?
12. Who is studied?
13. What did they show?
14. What are the scientific and public health implications?

Evaluation criteria (from the American College of Epidemiology):

1. Purpose: Hypothesis explicitly stated. Study methodology clearly and succinctly described
2. Methods: Exposure and outcome exactly and explicitly described, including any written instruments used to measure exposure or outcome. Analysis clearly and explicitly described
3. Results: If measures of association are estimated, then quantitative results should be shown, including the point estimate with confidence intervals. No abstracts will be accepted of studies which are “going to be done” or do not have at least some preliminary data
4. Conclusions: Conclusions clearly reported for the previously stated hypothesis
5. Clearly written in good English

An additional resource can be found at: <http://www.ncsu.edu/project/posters/>

## Appendix D

### Tips for Academic and Professional Success

Students, faculty, and staff come from many backgrounds and may find it helpful to have the social expectations of an academic and professional environment described. At the graduate level, professional behavior is expected. We want to help you succeed. Consistent lapses in professional behavior, especially after corrective guidance has been provided, reflect poorly on your ability to be successful in your chosen profession.

### Integrity

Your reputation for trustworthiness and integrity is the foundation of your future success. Keeping your word is perhaps most important. Following through is only one of many examples of trust.

Specific recommendations include:

1. Plagiarism is unacceptable and grounds for dismissal from a class, your program, and the University of Iowa. Please be aware of the College of Public Health's policies regarding plagiarism.
2. The faculty and staff are here to help you succeed. In order for us to help you, you need to be honest and forthright about your plans. Violation of trust will likely affect the recommendation a faculty member can provide.

### Teamwork and Timeliness

In the workplace a person's success is almost always dependent on the support and work of others. Respect your colleagues. Your actions should support the team. If you strive for excellence you will likely be rewarded with more opportunities.

- Be on time and work the hours you are scheduled to work. Be conscientious with the hours that you report.
- Complete vacation requests at least one week before you take vacation.
- Work efficiently.
- Keep your workspaces neat and organized.
- Don't wait until the last minute. Things may take a lot longer than you think they will. As a result you will hold up the work of others on the team who are counting on you.
- When a senior team member assigns a task to you, do it in a timely manner. If personal considerations prevent you from completing the task in a timely manner, discuss this with the person who assigned the task to you. If you are not sure what constitutes timely, ask the person assigning the task.
- Some faculty and staff are more direct than others. In general, when a faculty or staff member talks about something needing to be done this is not an optional suggestion, the faculty

member expects you to do it. If you are not clear about the faculty member's expectations, ask for clarification.

- If someone sends you an email asking you for information, you should reply within a day or two. This means checking your email regularly. Be sure the people you are working with have your correct email address. If you do not have an answer to the person's question then you need to reply that you are working on it and will get back to them. If the answer is no then you still need to reply.
- Proofread your work. The documents you submit to your supervisor are expected to be of high quality, with correct grammar and syntax. At a minimum, do not submit a paper without spell and grammar-checking using your word processing program. Contact the Writing Center if you need assistance.
- Acknowledge the work of others on publications. The faculty member with whom you are working will determine who should be included as an author. Refer also to the author guidelines for the journal to which you plan to submit your manuscript.
- All abstracts and articles intended for publication can only be submitted after the faculty member with whom you are working has read it and approved the final version.
- Keep all patient information confidential. It is illegal to discuss or disclose identifiable information with anyone who is not involved in the research study for which it was collected. Under no circumstances should any patient information that is not required in the performance of the job be accessed, read, or copied.
- Patient charts are not to be removed from the clinic. Identifiable information is to be kept in limited access locations (password protected electronic files or locked office and file cabinet for paper documents).
- Keep protocols, analysis plans, and datasets confidential. Do not distribute in any form.
- Protect the intellectual property and resources of your workplace. Let your supervising faculty or staff member deal with outside investigators and technicians.
- Have a positive mental attitude. Spreading rumors, gossiping, being negative overly critical, arrogant, and self-absorbed reflect poorly on your maturity and professionalism. Such behavior is not only unpleasant to be around, it will decrease the likelihood that others will want to reward you with career-advancing opportunities. If you have serious concerns about any aspect of student or staff function, see the "Handling problems at work" section below.
- Take the initiative while working as part of a team. Be creative and don't be afraid to try new things but vet your ideas with others before trying them.

**Behaviors that are considered unprofessional, will prevent you from advancement, and may preclude future employment include:**

- Persistently late to work or appointments
- Unapproved absences
- Lack of pride in work or excitement about work (for example – reading newspapers and magazines, surfing the web, gossiping, frequent complaining, making many personal phone calls, wasting time)
- Sloppy work

**Handling problems at work or in the classroom:**

- Try to solve the problem at the lowest level
  - Talk to your immediate supervisor first
- Propose solutions
  - Take a step back from your emotional response and look at the problem from the other person's perspective
  - Propose solutions that meet the needs of your workplace first
- If you have a problem with your direct supervisor, and you feel that you cannot discuss the problem further with that person, then seek help at the next level, or if your supervisor is a faculty member, from Michele Hogue or Dr. Torner.
- It is not appropriate to disrupt the productivity of your colleagues in the workplace by complaining about your problems. Counseling services are available either through student health or employee services: <http://www.uiowa.edu/~ucs/> You may also contact Michele Hogue if you need further information.
- If the position is not a good fit let your supervisor know and s/he can try to help you find another position.

**Common courtesy**

- Respond when spoken to.
- Do not interrupt others.
- Do not dominate the conversation (unless you are the invited lecturer or the boss).
- When you make a telephone call, identify yourself after the person answers the phone and says hello.
- Emails should include the subject in the header.
- A “Thank You” is always well received.

**Respect for seniority**

Faculty members are extremely busy and have many commitments. They are happy to assist you if you schedule an appointment first. Do not drop in to visit unless the faculty member has said this is acceptable. Be on time for appointments.

## Gifts

University policy prohibits faculty and staff from receiving gifts of more than \$3 from students and advisees.

## Appendix E

### Procedures for Addressing Alleged Academic Misconduct

In the event that academic misconduct is suspected, the following procedures will be followed

1. The instructor will meet as soon as is feasible with the student to clarify the situation.
2. If the meeting results in no sanction or a minor sanction, and the student accepts the sanction, the process will be considered completed. No additional reporting will be required, nor will there be any information related to the situation entered into the student's permanent record.
3. If the situation is either not resolved to the satisfaction of both the instructor and student, or if the resulting sanction is not of a minor nature, the instructor will bring the matter to the department head and graduate programs coordinator. A review committee of 2-3 primary faculty members will be appointed with one member designated as the chair. Once appointed the committee will proceed with all deliberate speed to render their recommendation. All attempts will be made to keep allegations and procedures confidential.
4. The instructor will provide the committee with a written description of the suspected plagiarism or academic misconduct. Information serving to identify the student will be removed from this material.
5. If necessary, a meeting will be convened to allow the student an opportunity to discuss the alleged misconduct. The committee will preside over the meeting with the instructor, student, graduate programs coordinator, and department head in attendance. The department head will serve as a process advisor to ensure that the committee's deliberative process follows departmental and Graduate College guidelines.
6. The committee will determine if academic misconduct has occurred and the resulting sanction. Sanctions may range from no action, re-doing the assignment, lowering the grade, failure of the assignment, to failure of the course. The committee may also recommend to the full departmental faculty that the student be dismissed from the degree program.
7. The student may contest the committee's sanction within 14 calendar days of written notification of that action by appealing in writing, to the Associate Dean for Education and Student Affairs. Students dissatisfied with the resolution of this appeal may seek an audience with the Dean of the Graduate College. A final appeal may be made to the Provost.
8. For students enrolled in degree programs outside the department, the instructor will forward the committee's review of the facts and recommended sanction(s) to the DEO of the department in which the student is currently enrolled.
9. Copies of the final determination document will be given to the student, kept by the department, and furnished to the Associate Dean for Education and Student Affairs.

## APPENDIX F

### Centers in Epidemiology

#### **Center for Emerging Infectious Diseases (CEID)**

Research projects of the [Center for Emerging Infectious Diseases](#) study infectious diseases, often zoonotic, whose incidence in humans has increased over the past two decades or threatens to increase in the near future.

#### **Health Effectiveness Research Center (HERCe)**

[HERCe](#) is a collaborative research enterprise between the Department of Epidemiology and the College of Pharmacy which studies whether particular healthcare treatments or services are over- or under-utilized in practice. To answer this question HERCe researchers study variation in practice patterns and associate outcome differences with this variation. Dr. Elizabeth Chrischilles is director of HERCe.

#### **Nutrition Center**

The [Nutrition Center](#) provides expertise in nutrition and dietary assessment, dietary interventions and nutrition lifestyle change strategies with a focus on the research, teaching and service missions of the Department of Epidemiology and the College of Public Health. These services are available to faculty and students. Dr. Linda Snetselaar directs the center.

#### **Preventive Intervention Center (PIC)**

The [PIC](#) conducts population-based intervention trials to prevent occurrence and recurrence of disease and to promote wellness and health. Trials have focused on major health problems, particularly in elderly men and women, including the Fracture Intervention Trial, the Hormone Estrogen Replacement Study, and the Women's Health Initiative. Drs. Linda Snetselaar and Jeniifer Robinson are the directors of the center. The Lipid Research Clinic specializes in research to promote primary and secondary prevention of cardiovascular disease and provides an interdisciplinary approach to risk factor intervention. It facilitates studies to evaluate the effectiveness of new drugs or interventions designed to prevent occurrence and progression of coronary disease, as well as diseases related to women's health. Dr. Jennifer Robinson is director of the LRC.

#### **State Health Registries of Iowa (SHRI)**

The [Iowa Cancer Registry](#) (ICR) component of SHRI, in cooperation with the Iowa Department of Public Health, collects medical data on every Iowan diagnosed with cancer and compiles survival and mortality data. The ICR, directed by Dr. Charles Lynch, is one of 18 registries nationwide reporting data to the National Cancer Institute.

The [Iowa Registry for Congenital and Inherited Disorders](#) is a component of the SHRI that monitors the occurrence and etiology of birth defects for the entire state. It is directed by Dr. Paul Romitti.